

# Safety Data Sheets

All

All

Fab Shop - GMI

01/11/2022

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# SAFETY DATA SHEET

Cold Fire is an environmentally friendly fire suppressing agent, specially designed to rapidly suppress and extinguish fires, cool down hot surfaces, prevent re-ignition and encapsulate hydrocarbons. Cold Fire is PFAS free, safe to store, handle and use, leaves virtually no residue and is non-toxic, non-corrosive and biodegradable.

## Section 1: Identification

**Manufacturer:** Firefreeze Worldwide, Inc.  
**Address:** 272 Route 46 East, Rockaway, NJ 07866  
**Phone:** 973-627-0722; Fax: 973-627-2982  
**Email:** info@firefreeze.com  
**Product/Trade Name:** Cold Fire  
**Chemical Identifier:** CF-302  
**Product Usage:** UL Listed Wetting Agent for Class A & B fires.  
Can be used for Class D, K and C fires with appropriate extinguishing application & equipment.  
**\*International Certifications:** See regulatory information Section 15.  
**In emergency call 911.**  
**For information about this SDS, contact phone#:** 973-627-0722 or email info@firefreeze.com

## Section 2: Hazard(s) Identification

### Hazardous Materials Identification System:

**Health:** 0

**Flammability:** 0

**Reactivity:** 0

**Personal Protection:** 0

Product may be slippery in concentrate form.

No components are believed to be hazardous or listed in the NIOSH Recommendations for Occupational Safety and Health Standards, 1988, or are listed by SARA, CERCLA, or RCRA. No OSHA PEL's are established for any of the proprietary ingredients.

## Section 3: Composition/ Information on Ingredients

**Formulation is proprietary and components are classified trade secret.**

A proprietary environmentally friendly formulation consisting of water, biodegradable anionic and nonionic surfactants, organic compounds and minerals that have been tested PFAS (Perfluoroalkyl and polyfluoroalkyl substances) free. Cold Fire is clear in composition and has a clean, fresh smell.

## Section 4: First-Aid Measures

**After skin contact:** Rinse skin with water.

**After eye contact:** Immediately flush eyes with water.

**After inhalation:** Negligible.

**After swallowing:** Do not swallow. Not considered to be orally toxic.



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### Section 5: Fire-Fighting Measures

**Non-Flammable:** No hazardous combustion ingredients. Product is water based. Will not ignite.

### Section 6: Accidental Release Measures

**Spill/leak procedure:** Rinse affected area with water and dry.

**Measures for environmental disposal:** Dispose of as non-hazardous waste in accordance with local regulations. PFAS free.

### Section 7: Handling and Storage

**Handling:**

**Respiratory Protection:** not required.

**Ventilation:** under ordinary/normal conditions for intended use, no special ventilation is required.

**Protective gloves:** wear if there is prolonged skin contact as natural surfactants can dry skin.

**Eye Protection:** wear if needed to prevent reasonable probability of eye contact.

**Storage:** Store in temperatures between 32°F to 120°F in closed containers to prevent evaporation and/or deterioration. Freezing will not damage material as long as container remains intact.

### Section 8: Exposure Controls/Personal Protection

**General protective and hygienic measures:** Wash hands prior and after handling as per general hygiene measures. No special protective equipment required.

### Section 9: Physical and Chemical Properties

**Form:** Clear, surfactant blend wetting agent

**Odor:** fresh, clean smell

**pH:** 6.3 in concentrate form. Neutral when diluted.

**Vapor pressure:** same as water

**Specific Gravity:** 1.02 @ 60 degrees Fahrenheit

**Solubility in/Miscibility with water:** 100%; soluble

**Viscosity:** 71 (centipoises)

**Surface Tension:** 30.2 dyne/cm (concentrate)

### Section 10: Stability and Reactivity

**Reactivity:** none

**Incompatibility:** none

**Chemical stability:** Product is stable

**Corrosion:** Product is non-corrosive. Tested in accordance with DOT standard 49 CFR 173.136

**Separation Temperature:** No separation when stored between 32°F and 120°F

**Separation on Standing:** No separation when standing

**Hazardous decomposition products:** Carbon monoxide and carbon dioxide

### Section 11: Toxicological Information

**Toxicity:** In accordance with US EPA Office of Pollution Prevention and Toxics criteria for ranking the acute toxicity of chemicals in the aquatic environment, Cold Fire is considered to be of low concern.

-96 hour acute toxicity versus freshwater algae (*selenastrum capricornutum*) IAW 40 CFR 797.1050 showed Cold Fire was algicidal at concentrations above 750 ppm.

-96 hour acute toxicity versus juvenile rainbow trout (*oncorhynchus mykiss*) IAW 49 CFR 797. 1400 showed an LC50 of 105 ppm.



**FIRE FREEZE**  
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**Section 12: Ecological Information (non-mandatory)**

**Biodegradability:** Product is 100% biodegradable in an active environment within 21 days.  
**Product is PFAS free.**

**Section 13: Disposal Considerations (non-mandatory)**

Dispose of as non-hazardous waste in accordance with local regulations.

**Section 14: Transport Information (non-mandatory)**

**NMFC Code:** 69160  
**US DOT Hazard Class:** Not regulated by DOT  
**US DOT Identification Number:** Not applicable

**Section 15: Regulatory Information (non-mandatory)**

-UL Listed Wetting Agent for Class A & B Fires. Tested in accordance with NFPA 18 Wetting Agents, UL 162 and UL 711.  
-ULC (Canada) Listed Wetting for Class A & B Fires. C-175  
-EPA-SNAP listed as an alternative to halon for fire suppression.  
-PFAS free

**\*International:**

Chile: tested and certified for Class A, B, C, D & K as per CESMEC

**Section 16: Other Information**

**SDS date of preparation/update:** August 10, 2020



**FIRE FREEZE**  
WORLDWIDE INC.

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# SAFETY DATA SHEET

## 1. Identification

**Product number** 1000028751  
**Product identifier** 13 OZ NAPA MAC'S BATTERY TERMINAL CLEANER 1072  
**Company information** NAPA Balkamp  
2601 Stout Heritage Parkway  
Plainfield, IN 46168 United States  
**Company phone** General Assistance 1-317-754-3900  
**Emergency telephone US** 1-866-836-8855  
**Emergency telephone outside US** 1-952-852-4646  
**Version #** 01  
**Recommended use** CLEANER  
**Recommended restrictions** None known.

## 2. Hazard(s) identification

**Physical hazards** Flammable aerosols Category 1  
**Health hazards** Not classified.  
**OSHA defined hazards** Not classified.

### Label elements



**Signal word** Danger  
**Hazard statement** Extremely flammable aerosol.  
**Precautionary statement**  
**Prevention** Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use.  
**Response** Wash hands after handling.  
**Storage** Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.  
**Disposal** Dispose of waste and residues in accordance with local authority requirements.  
**Hazard(s) not otherwise classified (HNOC)** None known.  
**Supplemental information** None.

## 3. Composition/information on ingredients

### Mixtures

Chemical name	Common name and synonyms	CAS number	%
Butane		106-97-8	2.5 - 10
Isopropyl Alcohol		67-63-0	2.5 - 10
Propane		74-98-6	2.5 - 10
Sodium Carbonate Anhydrous		497-19-8	1 - 2.5
Other components below reportable levels			80 - 90

\*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

## 4. First-aid measures

**Inhalation** If symptoms develop move victim to fresh air. Get medical attention if symptoms persist.  
**Skin contact** Wash off with soap and water. Get medical attention if irritation develops and persists.

<b>Eye contact</b>	Rinse with water. Get medical attention if irritation develops and persists.
<b>Ingestion</b>	Rinse mouth. Get medical attention if symptoms occur.
<b>Most important symptoms/effects, acute and delayed</b>	Direct contact with eyes may cause temporary irritation.
<b>Indication of immediate medical attention and special treatment needed</b>	Treat symptomatically.
<b>General information</b>	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

## 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Not available.
<b>Unsuitable extinguishing media</b>	Do not use water jet as an extinguisher, as this will spread the fire.
<b>Specific hazards arising from the chemical</b>	Contents under pressure. Pressurized container may explode when exposed to heat or flame. During fire, gases hazardous to health may be formed.
<b>Special protective equipment and precautions for firefighters</b>	Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.
<b>Fire fighting equipment/instructions</b>	Move containers from fire area if you can do so without risk. Containers should be cooled with water to prevent vapor pressure build up. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out.
<b>Specific methods</b>	Use standard firefighting procedures and consider the hazards of other involved materials. Move containers from fire area if you can do so without risk. Use water spray to cool unopened containers. In the event of fire and/or explosion do not breathe fumes.
<b>General fire hazards</b>	Extremely flammable aerosol.

## 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
<b>Methods and materials for containment and cleaning up</b>	Refer to attached safety data sheets and/or instructions for use. Stop leak if you can do so without risk. Move the cylinder to a safe and open area if the leak is irreparable. Isolate area until gas has dispersed. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. For waste disposal, see section 13 of the SDS.
<b>Environmental precautions</b>	Avoid discharge into drains, water courses or onto the ground.

## 7. Handling and storage

<b>Precautions for safe handling</b>	Pressurized container: Do not pierce or burn, even after use. Do not use if spray button is missing or defective. Do not spray on a naked flame or any other incandescent material. Do not smoke while using or until sprayed surface is thoroughly dry. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. All equipment used when handling the product must be grounded. Do not re-use empty containers. Use only in well-ventilated areas. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.
<b>Conditions for safe storage, including any incompatibilities</b>	Level 1 Aerosol.  Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50°C/122 °F. Do not puncture, incinerate or crush. Do not handle or store near an open flame, heat or other sources of ignition. This material can accumulate static charge which may cause spark and become an ignition source. Store away from incompatible materials (see Section 10 of the SDS).

## 8. Exposure controls/personal protection

### Occupational exposure limits

#### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
Isopropyl Alcohol (CAS 67-63-0)	PEL	980 mg/m3

**US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)**

Components	Type	Value
Propane (CAS 74-98-6)	PEL	400 ppm
		1800 mg/m <sup>3</sup>
		1000 ppm

**US. ACGIH Threshold Limit Values**

Components	Type	Value
Butane (CAS 106-97-8)	STEL	1000 ppm
Isopropyl Alcohol (CAS 67-63-0)	STEL	400 ppm
	TWA	200 ppm

**US. NIOSH: Pocket Guide to Chemical Hazards**

Components	Type	Value
Butane (CAS 106-97-8)	TWA	1900 mg/m <sup>3</sup>
		800 ppm
Isopropyl Alcohol (CAS 67-63-0)	STEL	1225 mg/m <sup>3</sup>
		500 ppm
		980 mg/m <sup>3</sup>
Propane (CAS 74-98-6)	TWA	400 ppm
		1800 mg/m <sup>3</sup>
		1000 ppm

**Biological limit values****ACGIH Biological Exposure Indices**

Components	Value	Determinant	Specimen	Sampling Time
Isopropyl Alcohol (CAS 67-63-0)	40 mg/l	Acetone	Urine	*

\* - For sampling details, please see the source document.

**Appropriate engineering controls**

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

**Individual protection measures, such as personal protective equipment**

**Eye/face protection** Wear safety glasses with side shields (or goggles).

**Skin protection**

**Hand protection** Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier.

**Other** Wear suitable protective clothing.

**Respiratory protection** If permissible levels are exceeded use NIOSH mechanical filter / organic vapor cartridge or an air-supplied respirator.

**Thermal hazards** Wear appropriate thermal protective clothing, when necessary.

**General hygiene considerations**

When using do not smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

**9. Physical and chemical properties****Appearance**

**Physical state** Gas.

**Form** Aerosol.

**Color** Not available.

**Odor** Not available.

**Odor threshold** Not available.

<b>pH</b>	Not available.
<b>Melting point/freezing point</b>	Not available.
<b>Initial boiling point and boiling range</b>	212 °F (100 °C) estimated
<b>Flash point</b>	-156.0 °F (-104.4 °C) PROPELLANT estimated
<b>Evaporation rate</b>	Not available.
<b>Flammability (solid, gas)</b>	Not available.
<b>Upper/lower flammability or explosive limits</b>	
<b>Flammability limit - lower (%)</b>	2.5 % estimated
<b>Flammability limit - upper (%)</b>	12 % estimated
<b>Explosive limit - lower (%)</b>	Not available.
<b>Explosive limit - upper (%)</b>	Not available.
<b>Vapor pressure</b>	60 psig @70F estimated
<b>Vapor density</b>	Not available.
<b>Relative density</b>	Not available.
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	Not available.
<b>Partition coefficient (n-octanol/water)</b>	Not available.
<b>Auto-ignition temperature</b>	Not available.
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	Not available.
<b>Other information</b>	
<b>Explosive properties</b>	Not explosive.
<b>Oxidizing properties</b>	Not oxidizing.
<b>Specific gravity</b>	0.95 @70F estimated

## 10. Stability and reactivity

<b>Reactivity</b>	The product is stable and non-reactive under normal conditions of use, storage and transport.
<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	Hazardous polymerization does not occur.
<b>Conditions to avoid</b>	Avoid temperatures exceeding the flash point. Contact with incompatible materials.
<b>Incompatible materials</b>	Acids. Strong oxidizing agents. Nitrates. Isocyanates. Fluorine. Chlorine.
<b>Hazardous decomposition products</b>	No hazardous decomposition products are known.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Inhalation</b>	No adverse effects due to inhalation are expected.
<b>Skin contact</b>	No adverse effects due to skin contact are expected.
<b>Eye contact</b>	Direct contact with eyes may cause temporary irritation.
<b>Ingestion</b>	Expected to be a low ingestion hazard.

**Symptoms related to the physical, chemical and toxicological characteristics** Direct contact with eyes may cause temporary irritation.

### Information on toxicological effects

#### Acute toxicity

Components	Species	Test Results
Butane (CAS 106-97-8)		
<b>Acute</b>		
<b>Inhalation</b>		
LC50	Mouse	1237 mg/l, 120 Minutes 52 %, 120 Minutes
	Rat	1355 mg/l
Isopropyl Alcohol (CAS 67-63-0)		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rabbit	16.4 ml/kg, 24 Hours
<b>Inhalation</b>		
LC50	Rat	> 10000 ppm, 6 Hours
<b>Oral</b>		
LD50	Rat	5.84 g/kg
Propane (CAS 74-98-6)		
<b>Acute</b>		
<b>Inhalation</b>		
LC50	Mouse	1237 mg/l, 120 Minutes 52 %, 120 Minutes
	Rat	1355 mg/l 658 mg/l/4h
Sodium Carbonate Anhydrous (CAS 497-19-8)		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rabbit	> 2000 mg/kg
<b>Inhalation</b>		
LC50	Guinea pig	800 mg/m3, 2 Hours
<i>Aerosol</i>		
LC50	Mouse	1200 mg/m3, 2 Hours
	Rat	2300 mg/m3, 2 Hours
LC50	Rat	2.3 mg/l, 2 hours supplier
<b>Oral</b>		
LD50	Rat	2800 mg/kg

\* Estimates for product may be based on additional component data not shown.

<b>Skin corrosion/irritation</b>	Prolonged skin contact may cause temporary irritation.
<b>Serious eye damage/eye irritation</b>	Direct contact with eyes may cause temporary irritation.
<b>Respiratory or skin sensitization</b>	
<b>Respiratory sensitization</b>	Not a respiratory sensitizer.
<b>Skin sensitization</b>	This product is not expected to cause skin sensitization.
<b>Germ cell mutagenicity</b>	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
<b>Carcinogenicity</b>	This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.
<b>IARC Monographs. Overall Evaluation of Carcinogenicity</b>	
Not listed.	
<b>OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)</b>	
Not regulated.	
<b>US. National Toxicology Program (NTP) Report on Carcinogens</b>	
Not listed.	
<b>Reproductive toxicity</b>	This product is not expected to cause reproductive or developmental effects.

**Specific target organ toxicity - single exposure** Not classified.

**Specific target organ toxicity - repeated exposure** Not classified.

**Aspiration hazard** Not likely, due to the form of the product.

## 12. Ecological information

**Ecotoxicity** The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Components	Species	Test Results
Isopropyl Alcohol (CAS 67-63-0)		
<b>Aquatic</b>		
Algae	IC50	Algae 1000.0001 mg/L, 72 Hours
Crustacea	EC50	Daphnia 13299 mg/L, 48 Hours
Fish	LC50	Bluegill (Lepomis macrochirus) > 1400 mg/l, 96 hours
Sodium Carbonate Anhydrous (CAS 497-19-8)		
<b>Aquatic</b>		
Crustacea	EC50	Daphnia 265 mg/L, 48 Hours
		Water flea (Ceriodaphnia dubia) 156.6 - 298.9 mg/l, 48 hours
Fish	LC50	Bluegill (Lepomis macrochirus) 300 mg/l, 96 hours

\* Estimates for product may be based on additional component data not shown.

**Persistence and degradability** No data is available on the degradability of this product.

### Bioaccumulative potential

#### Partition coefficient n-octanol / water (log Kow)

Butane	2.89
Isopropyl Alcohol	0.05
Propane	2.36

**Mobility in soil** No data available.

**Other adverse effects** No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

## 13. Disposal considerations

**Disposal instructions** Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Contents under pressure. Do not puncture, incinerate or crush. Dispose of contents/container in accordance with local/regional/national/international regulations.

**Local disposal regulations** Dispose in accordance with all applicable regulations.

**Hazardous waste code** The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

**Waste from residues / unused products** Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

**Contaminated packaging** Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers.

## 14. Transport information

### DOT

<b>UN number</b>	UN1950
<b>UN proper shipping name</b>	Aerosols, flammable, (each not exceeding 1 L capacity)
<b>Transport hazard class(es)</b>	
<b>Class</b>	2.1
<b>Subsidiary risk</b>	-
<b>Label(s)</b>	2.1
<b>Packing group</b>	Not applicable.
<b>Special precautions for user</b>	Read safety instructions, SDS and emergency procedures before handling.
<b>Special provisions</b>	N82



Packaging exceptions 306  
Packaging non bulk None  
Packaging bulk None

**IATA**

UN number UN1950  
UN proper shipping name Aerosols, flammable  
Transport hazard class(es)  
    Class 2.1  
    Subsidiary risk -  
    Label(s) 2.1  
Packing group Not applicable.  
Environmental hazards No.  
ERG Code 10L  
Special precautions for user Read safety instructions, SDS and emergency procedures before handling.  
Other information  
    Passenger and cargo aircraft Allowed with restrictions.  
    Cargo aircraft only Allowed with restrictions.  
Packaging Exceptions LTD QTY

**IMDG**

UN number UN1950  
UN proper shipping name AEROSOLS  
Transport hazard class(es)  
    Class 2.1  
    Subsidiary risk -  
    Label(s) None  
Packing group Not applicable.  
Environmental hazards  
    Marine pollutant No.  
EmS F-D, S-U  
Special precautions for user Read safety instructions, SDS and emergency procedures before handling.  
Packaging Exceptions LTD QTY

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

**DOT**



**IATA; IMDG**



## 15. Regulatory information

**US federal regulations** This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

Not regulated.

**CERCLA Hazardous Substance List (40 CFR 302.4)**

Not listed.

**SARA 304 Emergency release notification**

Not regulated.

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**

Not regulated.

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**Hazard categories** Immediate Hazard - No  
Delayed Hazard - No  
Fire Hazard - Yes  
Pressure Hazard - Yes  
Reactivity Hazard - No

**SARA 302 Extremely hazardous substance**

Not listed.

**SARA 311/312 Hazardous chemical** No

**SARA 313 (TRI reporting)**

Not regulated.

**Other federal regulations**

**Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Not regulated.

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

Butane (CAS 106-97-8)

Propane (CAS 74-98-6)

**Safe Drinking Water Act (SDWA)** Not regulated.

**US state regulations**

**US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)**

Not listed.

**US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))**

Butane (CAS 106-97-8)

Isopropyl Alcohol (CAS 67-63-0)

**US. Massachusetts RTK - Substance List**

Butane (CAS 106-97-8)

Isopropyl Alcohol (CAS 67-63-0)

Propane (CAS 74-98-6)

**US. New Jersey Worker and Community Right-to-Know Act**

Butane (CAS 106-97-8)

Isopropyl Alcohol (CAS 67-63-0)

Propane (CAS 74-98-6)

**US. Pennsylvania Worker and Community Right-to-Know Law**

Butane (CAS 106-97-8)

Isopropyl Alcohol (CAS 67-63-0)

Propane (CAS 74-98-6)

**US. Rhode Island RTK**

Butane (CAS 106-97-8)

Isopropyl Alcohol (CAS 67-63-0)

Propane (CAS 74-98-6)

**US. California Proposition 65**

WARNING: This product contains a chemical known to the State of California to cause cancer.

**US - California Proposition 65 - CRT: Listed date/Carcinogenic substance**

Formaldehyde (CAS 50-00-0)

Listed: January 1, 1988

**International Inventories**

<b>Country(s) or region</b>	<b>Inventory name</b>	<b>On inventory (yes/no)*</b>
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

**16. Other information, including date of preparation or last revision**

**Issue date** 06-27-2016

**Version #** 01

**Disclaimer** The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**Revision information** Product and Company Identification: Product and Company Identification

# SAFETY DATA SHEET

## 1. Identification

**Product number** 1000028751  
**Product identifier** 13 OZ NAPA MAC'S BATTERY TERMINAL CLEANER 1072  
**Company information** NAPA Balkamp  
2601 Stout Heritage Parkway  
Plainfield, IN 46168 United States  
**Company phone** General Assistance 1-317-754-3900  
**Emergency telephone US** 1-866-836-8855  
**Emergency telephone outside US** 1-952-852-4646  
**Version #** 01  
**Recommended use** CLEANER  
**Recommended restrictions** None known.

## 2. Hazard(s) identification

**Physical hazards** Flammable aerosols Category 1  
**Health hazards** Not classified.  
**OSHA defined hazards** Not classified.

### Label elements



**Signal word** Danger  
**Hazard statement** Extremely flammable aerosol.  
**Precautionary statement**  
**Prevention** Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use.  
**Response** Wash hands after handling.  
**Storage** Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.  
**Disposal** Dispose of waste and residues in accordance with local authority requirements.  
**Hazard(s) not otherwise classified (HNOC)** None known.  
**Supplemental information** None.

## 3. Composition/information on ingredients

### Mixtures

Chemical name	Common name and synonyms	CAS number	%
Butane		106-97-8	2.5 - 10
Isopropyl Alcohol		67-63-0	2.5 - 10
Propane		74-98-6	2.5 - 10
Sodium Carbonate Anhydrous		497-19-8	1 - 2.5
Other components below reportable levels			80 - 90

\*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

## 4. First-aid measures

**Inhalation** If symptoms develop move victim to fresh air. Get medical attention if symptoms persist.  
**Skin contact** Wash off with soap and water. Get medical attention if irritation develops and persists.

<b>Eye contact</b>	Rinse with water. Get medical attention if irritation develops and persists.
<b>Ingestion</b>	Rinse mouth. Get medical attention if symptoms occur.
<b>Most important symptoms/effects, acute and delayed</b>	Direct contact with eyes may cause temporary irritation.
<b>Indication of immediate medical attention and special treatment needed</b>	Treat symptomatically.
<b>General information</b>	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

## 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Not available.
<b>Unsuitable extinguishing media</b>	Do not use water jet as an extinguisher, as this will spread the fire.
<b>Specific hazards arising from the chemical</b>	Contents under pressure. Pressurized container may explode when exposed to heat or flame. During fire, gases hazardous to health may be formed.
<b>Special protective equipment and precautions for firefighters</b>	Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.
<b>Fire fighting equipment/instructions</b>	Move containers from fire area if you can do so without risk. Containers should be cooled with water to prevent vapor pressure build up. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out.
<b>Specific methods</b>	Use standard firefighting procedures and consider the hazards of other involved materials. Move containers from fire area if you can do so without risk. Use water spray to cool unopened containers. In the event of fire and/or explosion do not breathe fumes.
<b>General fire hazards</b>	Extremely flammable aerosol.

## 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
<b>Methods and materials for containment and cleaning up</b>	Refer to attached safety data sheets and/or instructions for use. Stop leak if you can do so without risk. Move the cylinder to a safe and open area if the leak is irreparable. Isolate area until gas has dispersed. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. For waste disposal, see section 13 of the SDS.
<b>Environmental precautions</b>	Avoid discharge into drains, water courses or onto the ground.

## 7. Handling and storage

<b>Precautions for safe handling</b>	Pressurized container: Do not pierce or burn, even after use. Do not use if spray button is missing or defective. Do not spray on a naked flame or any other incandescent material. Do not smoke while using or until sprayed surface is thoroughly dry. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. All equipment used when handling the product must be grounded. Do not re-use empty containers. Use only in well-ventilated areas. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.
<b>Conditions for safe storage, including any incompatibilities</b>	Level 1 Aerosol.  Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50°C/122 °F. Do not puncture, incinerate or crush. Do not handle or store near an open flame, heat or other sources of ignition. This material can accumulate static charge which may cause spark and become an ignition source. Store away from incompatible materials (see Section 10 of the SDS).

## 8. Exposure controls/personal protection

### Occupational exposure limits

#### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
Isopropyl Alcohol (CAS 67-63-0)	PEL	980 mg/m3

**US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)**

Components	Type	Value
Propane (CAS 74-98-6)	PEL	400 ppm
		1800 mg/m <sup>3</sup>
		1000 ppm

**US. ACGIH Threshold Limit Values**

Components	Type	Value
Butane (CAS 106-97-8)	STEL	1000 ppm
Isopropyl Alcohol (CAS 67-63-0)	STEL	400 ppm
	TWA	200 ppm

**US. NIOSH: Pocket Guide to Chemical Hazards**

Components	Type	Value
Butane (CAS 106-97-8)	TWA	1900 mg/m <sup>3</sup>
		800 ppm
Isopropyl Alcohol (CAS 67-63-0)	STEL	1225 mg/m <sup>3</sup>
		500 ppm
		980 mg/m <sup>3</sup>
Propane (CAS 74-98-6)	TWA	400 ppm
		1800 mg/m <sup>3</sup>
		1000 ppm

**Biological limit values****ACGIH Biological Exposure Indices**

Components	Value	Determinant	Specimen	Sampling Time
Isopropyl Alcohol (CAS 67-63-0)	40 mg/l	Acetone	Urine	*

\* - For sampling details, please see the source document.

**Appropriate engineering controls**

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

**Individual protection measures, such as personal protective equipment****Eye/face protection**

Wear safety glasses with side shields (or goggles).

**Skin protection****Hand protection**

Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier.

**Other**

Wear suitable protective clothing.

**Respiratory protection**

If permissible levels are exceeded use NIOSH mechanical filter / organic vapor cartridge or an air-supplied respirator.

**Thermal hazards**

Wear appropriate thermal protective clothing, when necessary.

**General hygiene considerations**

When using do not smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

**9. Physical and chemical properties****Appearance****Physical state**

Gas.

**Form**

Aerosol.

**Color**

Not available.

**Odor**

Not available.

**Odor threshold**

Not available.

<b>pH</b>	Not available.
<b>Melting point/freezing point</b>	Not available.
<b>Initial boiling point and boiling range</b>	212 °F (100 °C) estimated
<b>Flash point</b>	-156.0 °F (-104.4 °C) PROPELLANT estimated
<b>Evaporation rate</b>	Not available.
<b>Flammability (solid, gas)</b>	Not available.
<b>Upper/lower flammability or explosive limits</b>	
<b>Flammability limit - lower (%)</b>	2.5 % estimated
<b>Flammability limit - upper (%)</b>	12 % estimated
<b>Explosive limit - lower (%)</b>	Not available.
<b>Explosive limit - upper (%)</b>	Not available.
<b>Vapor pressure</b>	60 psig @70F estimated
<b>Vapor density</b>	Not available.
<b>Relative density</b>	Not available.
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	Not available.
<b>Partition coefficient (n-octanol/water)</b>	Not available.
<b>Auto-ignition temperature</b>	Not available.
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	Not available.
<b>Other information</b>	
<b>Explosive properties</b>	Not explosive.
<b>Oxidizing properties</b>	Not oxidizing.
<b>Specific gravity</b>	0.95 @70F estimated

## 10. Stability and reactivity

<b>Reactivity</b>	The product is stable and non-reactive under normal conditions of use, storage and transport.
<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	Hazardous polymerization does not occur.
<b>Conditions to avoid</b>	Avoid temperatures exceeding the flash point. Contact with incompatible materials.
<b>Incompatible materials</b>	Acids. Strong oxidizing agents. Nitrates. Isocyanates. Fluorine. Chlorine.
<b>Hazardous decomposition products</b>	No hazardous decomposition products are known.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Inhalation</b>	No adverse effects due to inhalation are expected.
<b>Skin contact</b>	No adverse effects due to skin contact are expected.
<b>Eye contact</b>	Direct contact with eyes may cause temporary irritation.
<b>Ingestion</b>	Expected to be a low ingestion hazard.

**Symptoms related to the physical, chemical and toxicological characteristics** Direct contact with eyes may cause temporary irritation.

### Information on toxicological effects

#### Acute toxicity

Components	Species	Test Results
Butane (CAS 106-97-8)		
<b>Acute</b>		
<b>Inhalation</b>		
LC50	Mouse	1237 mg/l, 120 Minutes 52 %, 120 Minutes
	Rat	1355 mg/l
Isopropyl Alcohol (CAS 67-63-0)		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rabbit	16.4 ml/kg, 24 Hours
<b>Inhalation</b>		
LC50	Rat	> 10000 ppm, 6 Hours
<b>Oral</b>		
LD50	Rat	5.84 g/kg
Propane (CAS 74-98-6)		
<b>Acute</b>		
<b>Inhalation</b>		
LC50	Mouse	1237 mg/l, 120 Minutes 52 %, 120 Minutes
	Rat	1355 mg/l 658 mg/l/4h
Sodium Carbonate Anhydrous (CAS 497-19-8)		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rabbit	> 2000 mg/kg
<b>Inhalation</b>		
LC50	Guinea pig	800 mg/m3, 2 Hours
<i>Aerosol</i>		
LC50	Mouse	1200 mg/m3, 2 Hours
	Rat	2300 mg/m3, 2 Hours
LC50	Rat	2.3 mg/l, 2 hours supplier
<b>Oral</b>		
LD50	Rat	2800 mg/kg

\* Estimates for product may be based on additional component data not shown.

<b>Skin corrosion/irritation</b>	Prolonged skin contact may cause temporary irritation.
<b>Serious eye damage/eye irritation</b>	Direct contact with eyes may cause temporary irritation.
<b>Respiratory or skin sensitization</b>	
<b>Respiratory sensitization</b>	Not a respiratory sensitizer.
<b>Skin sensitization</b>	This product is not expected to cause skin sensitization.
<b>Germ cell mutagenicity</b>	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
<b>Carcinogenicity</b>	This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.
<b>IARC Monographs. Overall Evaluation of Carcinogenicity</b>	
Not listed.	
<b>OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)</b>	
Not regulated.	
<b>US. National Toxicology Program (NTP) Report on Carcinogens</b>	
Not listed.	
<b>Reproductive toxicity</b>	This product is not expected to cause reproductive or developmental effects.



**Specific target organ toxicity - single exposure** Not classified.

**Specific target organ toxicity - repeated exposure** Not classified.

**Aspiration hazard** Not likely, due to the form of the product.

## 12. Ecological information

**Ecotoxicity** The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Components	Species	Test Results
Isopropyl Alcohol (CAS 67-63-0)		
<b>Aquatic</b>		
Algae	IC50	Algae 1000.0001 mg/L, 72 Hours
Crustacea	EC50	Daphnia 13299 mg/L, 48 Hours
Fish	LC50	Bluegill (Lepomis macrochirus) > 1400 mg/l, 96 hours
Sodium Carbonate Anhydrous (CAS 497-19-8)		
<b>Aquatic</b>		
Crustacea	EC50	Daphnia 265 mg/L, 48 Hours
		Water flea (Ceriodaphnia dubia) 156.6 - 298.9 mg/l, 48 hours
Fish	LC50	Bluegill (Lepomis macrochirus) 300 mg/l, 96 hours

\* Estimates for product may be based on additional component data not shown.

**Persistence and degradability** No data is available on the degradability of this product.

### Bioaccumulative potential

#### Partition coefficient n-octanol / water (log Kow)

Butane	2.89
Isopropyl Alcohol	0.05
Propane	2.36

**Mobility in soil** No data available.

**Other adverse effects** No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

## 13. Disposal considerations

**Disposal instructions** Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Contents under pressure. Do not puncture, incinerate or crush. Dispose of contents/container in accordance with local/regional/national/international regulations.

**Local disposal regulations** Dispose in accordance with all applicable regulations.

**Hazardous waste code** The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

**Waste from residues / unused products** Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

**Contaminated packaging** Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers.

## 14. Transport information

### DOT

<b>UN number</b>	UN1950
<b>UN proper shipping name</b>	Aerosols, flammable, (each not exceeding 1 L capacity)
<b>Transport hazard class(es)</b>	
<b>Class</b>	2.1
<b>Subsidiary risk</b>	-
<b>Label(s)</b>	2.1
<b>Packing group</b>	Not applicable.
<b>Special precautions for user</b>	Read safety instructions, SDS and emergency procedures before handling.
<b>Special provisions</b>	N82

**Packaging exceptions** 306  
**Packaging non bulk** None  
**Packaging bulk** None

**IATA**

**UN number** UN1950  
**UN proper shipping name** Aerosols, flammable  
**Transport hazard class(es)**  
**Class** 2.1  
**Subsidiary risk** -  
**Label(s)** 2.1  
**Packing group** Not applicable.  
**Environmental hazards** No.  
**ERG Code** 10L  
**Special precautions for user** Read safety instructions, SDS and emergency procedures before handling.  
**Other information**  
**Passenger and cargo aircraft** Allowed with restrictions.  
**Cargo aircraft only** Allowed with restrictions.  
**Packaging Exceptions** LTD QTY

**IMDG**

**UN number** UN1950  
**UN proper shipping name** AEROSOLS  
**Transport hazard class(es)**  
**Class** 2.1  
**Subsidiary risk** -  
**Label(s)** None  
**Packing group** Not applicable.  
**Environmental hazards**  
**Marine pollutant** No.  
**EmS** F-D, S-U  
**Special precautions for user** Read safety instructions, SDS and emergency procedures before handling.  
**Packaging Exceptions** LTD QTY

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not applicable.

**DOT**



**IATA; IMDG**



## 15. Regulatory information

**US federal regulations** This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

Not regulated.

**CERCLA Hazardous Substance List (40 CFR 302.4)**

Not listed.

**SARA 304 Emergency release notification**

Not regulated.

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**

Not regulated.

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**Hazard categories** Immediate Hazard - No  
Delayed Hazard - No  
Fire Hazard - Yes  
Pressure Hazard - Yes  
Reactivity Hazard - No

**SARA 302 Extremely hazardous substance**

Not listed.

**SARA 311/312 Hazardous chemical** No

**SARA 313 (TRI reporting)**

Not regulated.

**Other federal regulations**

**Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Not regulated.

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

Butane (CAS 106-97-8)

Propane (CAS 74-98-6)

**Safe Drinking Water Act (SDWA)** Not regulated.

**US state regulations**

**US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)**

Not listed.

**US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))**

Butane (CAS 106-97-8)

Isopropyl Alcohol (CAS 67-63-0)

**US. Massachusetts RTK - Substance List**

Butane (CAS 106-97-8)

Isopropyl Alcohol (CAS 67-63-0)

Propane (CAS 74-98-6)

**US. New Jersey Worker and Community Right-to-Know Act**

Butane (CAS 106-97-8)

Isopropyl Alcohol (CAS 67-63-0)

Propane (CAS 74-98-6)

**US. Pennsylvania Worker and Community Right-to-Know Law**

Butane (CAS 106-97-8)

Isopropyl Alcohol (CAS 67-63-0)

Propane (CAS 74-98-6)

**US. Rhode Island RTK**

Butane (CAS 106-97-8)

Isopropyl Alcohol (CAS 67-63-0)

Propane (CAS 74-98-6)

**US. California Proposition 65**

WARNING: This product contains a chemical known to the State of California to cause cancer.

**US - California Proposition 65 - CRT: Listed date/Carcinogenic substance**

Formaldehyde (CAS 50-00-0)

Listed: January 1, 1988

**International Inventories**

<b>Country(s) or region</b>	<b>Inventory name</b>	<b>On inventory (yes/no)*</b>
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

**16. Other information, including date of preparation or last revision**

**Issue date** 06-27-2016

**Version #** 01

**Disclaimer** The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**Revision information** Product and Company Identification: Product and Company Identification

# SAFETY DATA SHEET



Date of issue/Date of revision 13 June 2020

Version 9

## Section 1. Identification

**Product name** : 35-310 GRAND DISTINCTION PAINT/PRIMER IN ONE INTERIOR SEMI-GLOSS-WHITE/PASTEL BASE

**Product code** : 00400452

**Other means of identification** : Not available.

**Product type** : Liquid.

### Relevant identified uses of the substance or mixture and uses advised against

**Product use** : Consumer applications, Professional applications.

**Use of the substance/mixture** : Coating.

**Uses advised against** : Not applicable.

**Manufacturer** : PPG Industries, Inc.  
One PPG Place  
Pittsburgh, PA 15272

**Emergency telephone number** : (412) 434-4515 (U.S.)  
(514) 645-1320 (Canada)  
SETIQ Interior de la República: 800-00-214-00 (México)  
SETIQ Ciudad de México: (55) 5559-1588 (México)

**Technical Phone Number** : 1-800-441-9695 (8:00 am to 5:00 pm EST)

## Section 2. Hazards identification

**OSHA/HCS status** : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

**Classification of the substance or mixture** : CARCINOGENICITY - Category 2

Percentage of the mixture consisting of ingredient(s) of unknown acute toxicity: 22.3% (Oral), 22.3% (Dermal), 22.3% (Inhalation)


This product contains TiO<sub>2</sub> which has been classified as a GHS Carcinogen Category 2 based on its IARC 2B classification. For many PPG products, TiO<sub>2</sub> is utilized as a raw material in a liquid coating formulation. In this case, the TiO<sub>2</sub> particles are bound in a matrix with no meaningful potential for human exposure to unbound particles of TiO<sub>2</sub> when the product is applied with a brush or roller. Sanding the coating surface or mist from spray applications may be harmful depending on the duration and level of exposure and require the use of appropriate personal protective equipment and/or engineering controls (see Section 8).

### GHS label elements

United States

Page: 1/12

## Section 2. Hazards identification

Hazard pictograms	:	
Signal word	:	Warning
Hazard statements	:	Suspected of causing cancer.
<b>Precautionary statements</b>		
Prevention	:	Obtain special instructions before use. Wear protective gloves. Wear protective clothing. Wear eye or face protection.
Response	:	If exposed or concerned: Get medical advice or attention.
Storage	:	Store locked up.
Disposal	:	Dispose of contents and container in accordance with all local, regional, national and international regulations.
Supplemental label elements	:	Contains isothiazolinones. May cause allergic reaction. Sanding and grinding dusts may be harmful if inhaled. Emits toxic fumes when heated.
Hazards not otherwise classified	:	None known.

## Section 3. Composition/information on ingredients

Substance/mixture	:	Mixture
Product name	:	35-310 GRAND DISTINCTION PAINT/PRIMER IN ONE INTERIOR SEMI-GLOSS-WHITE/PASTEL BASE

Ingredient name	%	CAS number
Titanium dioxide	≥10 - ≤20	13463-67-7

SUB codes represent substances without registered CAS Numbers.

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

**There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.**

Occupational exposure limits, if available, are listed in Section 8.

## Section 4. First aid measures

If ingestion, irritation, any type of overexposure or symptoms of overexposure occur during or persists after use of this product, contact a POISON CONTROL CENTER, EMERGENCY ROOM OR PHYSICIAN immediately; have Safety Data Sheet information available. Never give anything by mouth to an unconscious or convulsing person.

### Description of necessary first aid measures

Eye contact	:	Remove contact lenses, irrigate copiously with clean, fresh water, holding the eyelids apart for at least 10 minutes and seek immediate medical advice.
Inhalation	:	Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.

## Section 4. First aid measures

- Skin contact** : Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.
- Ingestion** : If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do NOT induce vomiting.

### Most important symptoms/effects, acute and delayed

#### Potential acute health effects

- Eye contact** : No known significant effects or critical hazards.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : No known significant effects or critical hazards.
- Ingestion** : No known significant effects or critical hazards.

#### Over-exposure signs/symptoms

- Eye contact** : No specific data.
- Inhalation** : No specific data.
- Skin contact** : No specific data.
- Ingestion** : No specific data.

### Indication of immediate medical attention and special treatment needed, if necessary


- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

## Section 5. Fire-fighting measures

### Extinguishing media

- Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.
- Unsuitable extinguishing media** : None known.

**Specific hazards arising from the chemical** :  In a fire or if heated, a pressure increase will occur and the container may burst.

**Hazardous thermal decomposition products** : Decomposition products may include the following materials:  
carbon oxides  
metal oxide/oxides

**Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

**Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

### Methods and materials for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

## Section 7. Handling and storage

### Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
- Special precautions** : If this material is part of a multiple component system, read the Safety Data Sheet(s) for the other component or components before blending as the resulting mixture may have the hazards of all of its parts.
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.



## Section 7. Handling and storage

**Conditions for safe storage, including any incompatibilities** : Do not store below the following temperature: 5°C (41°F). Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

## Section 8. Exposure controls/personal protection

### Control parameters

#### Occupational exposure limits

Ingredient name	Exposure limits
Titanium dioxide	<b>OSHA PEL (United States, 5/2018).</b> TWA: 15 mg/m <sup>3</sup> 8 hours. Form: Total dust <b>ACGIH TLV (United States, 3/2019).</b> TWA: 10 mg/m <sup>3</sup> 8 hours.

#### Key to abbreviations

A	= Acceptable Maximum Peak	S	= Potential skin absorption
ACGIH	= American Conference of Governmental Industrial Hygienists.	SR	= Respiratory sensitization
C	= Ceiling Limit	SS	= Skin sensitization
F	= Fume	STEL	= Short term Exposure limit values
IPEL	= Internal Permissible Exposure Limit	TD	= Total dust
OSHA	= Occupational Safety and Health Administration.	TLV	= Threshold Limit Value
R	= Respirable	TWA	= Time Weighted Average
Z	= OSHA 29 CFR 1910.1200 Subpart Z - Toxic and Hazardous Substances		

### Consult local authorities for acceptable exposure limits.

**Recommended monitoring procedures** : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

**Appropriate engineering controls** : If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

**Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

### Individual protection measures

**Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

**Eye/face protection** : Safety glasses with side shields.

## Section 8. Exposure controls/personal protection

### Skin protection

- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary.

## Section 9. Physical and chemical properties

### Appearance

- Physical state** : Liquid.
- Color** : Not available.
- Odor** : Characteristic.
- Odor threshold** : Not available.
- pH** : Not available.
- Melting point** : Not available.
- Boiling point** : >37.78°C (>100°F)
- Flash point** : Closed cup: 113.33°C (236°F) [Product does not sustain combustion.]
- Auto-ignition temperature** : Not available.
- Decomposition temperature** : Not available.
- Flammability (solid, gas)** : Not available.
- Lower and upper explosive (flammable) limits** : Not available.
- Evaporation rate** : Not available.
- Vapor pressure** : Not available.
- Vapor density** : Not available.
- Relative density** : 1.22
- Density ( lbs / gal )** : 10.18
- Solubility** : Soluble in the following materials: cold water.
- Partition coefficient: n-octanol/water** : Not available.
- Viscosity** : Kinematic (40°C (104°F)): >0.21 cm<sup>2</sup>/s (>21 cSt)

Product code 00400452

Date of issue 13 June 2020

Version 9

Product name 35-310 GRAND DISTINCTION PAINT/PRIMER IN ONE INTERIOR SEMI-GLOSS-WHITE/PASTEL BASE

## Section 9. Physical and chemical properties

Volatility : 65% (v/v), 52.927% (w/w)

% Solid. (w/w) : 47.073

## Section 10. Stability and reactivity

Reactivity : No specific test data related to reactivity available for this product or its ingredients.

Chemical stability : The product is stable.

Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid : When exposed to high temperatures may produce hazardous decomposition products. Refer to protective measures listed in sections 7 and 8.

Incompatible materials : Keep away from the following materials to prevent strong exothermic reactions: oxidizing agents, strong alkalis, strong acids.

Hazardous decomposition products : Decomposition products may include the following materials: carbon monoxide, carbon dioxide, smoke, oxides of nitrogen.

## Section 11. Toxicological information

### Information on toxicological effects

#### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Titanium dioxide	LC50 Inhalation Dusts and mists	Rat	>6.82 mg/l	4 hours
	LD50 Dermal	Rabbit	>5000 mg/kg	-
	LD50 Oral	Rat	>5000 mg/kg	-

Conclusion/Summary : There are no data available on the mixture itself.

#### Irritation/Corrosion

##### Conclusion/Summary

Skin : There are no data available on the mixture itself.

Eyes : There are no data available on the mixture itself.

Respiratory : There are no data available on the mixture itself.

#### Sensitization

##### Conclusion/Summary

Skin : There are no data available on the mixture itself.

Respiratory : There are no data available on the mixture itself.

#### Mutagenicity

Conclusion/Summary : There are no data available on the mixture itself.

#### Carcinogenicity

Conclusion/Summary : There are no data available on the mixture itself.

## Section 11. Toxicological information

### Classification

Product/ingredient name	OSHA	IARC	NTP
Titanium dioxide	-	2B	-

#### Carcinogen Classification code:

IARC: 1, 2A, 2B, 3, 4

NTP: Known to be a human carcinogen; Reasonably anticipated to be a human carcinogen

OSHA: +

Not listed/not regulated: -

### Reproductive toxicity

**Conclusion/Summary** : There are no data available on the mixture itself.

### Teratogenicity

**Conclusion/Summary** : There are no data available on the mixture itself.

### Specific target organ toxicity (single exposure)

Not available.

### Specific target organ toxicity (repeated exposure)

Not available.

### Target organs

: Contains material which may cause damage to the following organs: upper respiratory tract.

### Aspiration hazard

Not available.

### Information on the likely routes of exposure

#### Potential acute health effects

**Eye contact** : No known significant effects or critical hazards.

**Inhalation** : No known significant effects or critical hazards.

**Skin contact** : No known significant effects or critical hazards.

**Ingestion** : No known significant effects or critical hazards.

#### Over-exposure signs/symptoms

**Eye contact** : No specific data.

**Inhalation** : No specific data.

**Skin contact** : No specific data.

**Ingestion** : No specific data.

### Delayed and immediate effects and also chronic effects from short and long term exposure

**Conclusion/Summary** : There are no data available on the mixture itself. Contains isothiazolinones. May cause allergic reaction. This product contains TiO<sub>2</sub> which has been classified as a GHS Carcinogen Category 2 based on its IARC 2B classification. For many PPG products, TiO<sub>2</sub> is utilized as a raw material in a liquid coating formulation. In this case, the TiO<sub>2</sub> particles are bound in a matrix with no meaningful potential for human exposure to unbound particles of TiO<sub>2</sub> when the product is applied with a brush or roller. Sanding the coating surface or mist from spray applications may be harmful depending on the duration and level of exposure and require the use of appropriate personal protective equipment and/or engineering controls (see Section 8). If splashed in the eyes, the liquid may cause irritation and reversible damage. Ingestion may cause nausea,

## Section 11. Toxicological information

diarrhea and vomiting. This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

### Short term exposure

**Potential immediate effects** : There are no data available on the mixture itself.

**Potential delayed effects** : There are no data available on the mixture itself.

### Long term exposure

**Potential immediate effects** : There are no data available on the mixture itself.

**Potential delayed effects** : There are no data available on the mixture itself.

### Potential chronic health effects

**General** : No known significant effects or critical hazards.

**Carcinogenicity** : Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.

**Mutagenicity** : No known significant effects or critical hazards.

**Teratogenicity** : No known significant effects or critical hazards.

**Developmental effects** : No known significant effects or critical hazards.

**Fertility effects** : No known significant effects or critical hazards.

## Section 12. Ecological information

### Toxicity

Product/ingredient name	Result	Species	Exposure
Titanium dioxide	Acute LC50 >100 mg/l Fresh water	Daphnia - Daphnia magna	48 hours

### Persistence and degradability

Not available.

### Bioaccumulative potential

Not available.

### Mobility in soil

**Soil/water partition coefficient (K<sub>oc</sub>)** : Not available.

## Section 13. Disposal considerations

**Disposal methods** : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees. Section 6. Accidental release measures

## 14. Transport information

	DOT	IMDG	IATA
UN number	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-
Transport hazard class(es)	-	-	-
Packing group	-	-	-
Environmental hazards	No.	No.	No.
Marine pollutant substances	Not applicable.	Not applicable.	Not applicable.

### Additional information

DOT : None identified.

IMDG : None identified.

IATA : None identified.

**Special precautions for user** : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

**Transport in bulk according to IMO instruments** : Not applicable.

## Section 15. Regulatory information

### United States

**United States inventory (TSCA 8b)** :  At least one component is inactive.

**United States - TSCA 5(e) - Substances consent order:**

partially fluorinated alcohol, reaction products Listed

**United States - TSCA 5(a)2 - Proposed significant new use rules:**

partially fluorinated alcohol, reaction products Listed

### SARA 302/304

**SARA 304 RQ** : Not applicable.

### Composition/information on ingredients

No products were found.

### SARA 311/312

**Classification** : CARCINOGENICITY - Category 2

### Composition/information on ingredients

Name	%	Classification
<input checked="" type="checkbox"/> Titanium dioxide	≥10 - ≤20	CARCINOGENICITY - Category 2

**Additional environmental information** is contained on the Environmental Data Sheet for this product, which can be obtained from your PPG representative.

## Section 16. Other information

### Hazardous Material Information System (U.S.A.)

**Health** : 1 \* **Flammability** : 1 **Physical hazards** : 0

(\*) - Chronic effects

**Caution:** HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings and the associated label are not required on MSDSs or products leaving a facility under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc.

The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.

### National Fire Protection Association (U.S.A.)

**Health** : 1 **Flammability** : 1 **Instability** : 0

**Date of previous issue** : 4/11/2020

**Organization that prepared the MSDS** : EHS

## Section 16. Other information

### Key to abbreviations

: ATE = Acute Toxicity Estimate  
BCF = Bioconcentration Factor  
GHS = Globally Harmonized System of Classification and Labelling of Chemicals  
IATA = International Air Transport Association  
IBC = Intermediate Bulk Container  
IMDG = International Maritime Dangerous Goods  
LogPow = logarithm of the octanol/water partition coefficient  
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)  
N/A = Not available  
SGG = Segregation Group  
UN = United Nations

✔ Indicates information that has changed from previously issued version.

### Disclaimer

*The information contained in this data sheet is based on present scientific and technical knowledge. The purpose of this information is to draw attention to the health and safety aspects concerning the products supplied by PPG, and to recommend precautionary measures for the storage and handling of the products. No warranty or guarantee is given in respect of the properties of the products. No liability can be accepted for any failure to observe the precautionary measures described in this data sheet or for any misuse of the products.*



# SAFETY DATA SHEET



Date of issue/Date of revision 13 June 2020

Version 9

## Section 1. Identification

**Product name** : 35-310 GRAND DISTINCTION PAINT/PRIMER IN ONE INTERIOR SEMI-GLOSS-WHITE/PASTEL BASE

**Product code** : 00400452

**Other means of identification** : Not available.

**Product type** : Liquid.

### Relevant identified uses of the substance or mixture and uses advised against

**Product use** : Consumer applications, Professional applications.

**Use of the substance/mixture** : Coating.

**Uses advised against** : Not applicable.

**Manufacturer** : PPG Industries, Inc.  
One PPG Place  
Pittsburgh, PA 15272

**Emergency telephone number** : (412) 434-4515 (U.S.)  
(514) 645-1320 (Canada)  
SETIQ Interior de la República: 800-00-214-00 (México)  
SETIQ Ciudad de México: (55) 5559-1588 (México)

**Technical Phone Number** : 1-800-441-9695 (8:00 am to 5:00 pm EST)

## Section 2. Hazards identification

**OSHA/HCS status** : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

**Classification of the substance or mixture** : CARCINOGENICITY - Category 2

Percentage of the mixture consisting of ingredient(s) of unknown acute toxicity: 22.3% (Oral), 22.3% (Dermal), 22.3% (Inhalation)


This product contains TiO<sub>2</sub> which has been classified as a GHS Carcinogen Category 2 based on its IARC 2B classification. For many PPG products, TiO<sub>2</sub> is utilized as a raw material in a liquid coating formulation. In this case, the TiO<sub>2</sub> particles are bound in a matrix with no meaningful potential for human exposure to unbound particles of TiO<sub>2</sub> when the product is applied with a brush or roller. Sanding the coating surface or mist from spray applications may be harmful depending on the duration and level of exposure and require the use of appropriate personal protective equipment and/or engineering controls (see Section 8).

### GHS label elements

United States

Page: 1/12

## Section 2. Hazards identification

Hazard pictograms	:	
Signal word	:	Warning
Hazard statements	:	Suspected of causing cancer.
<b>Precautionary statements</b>		
Prevention	:	Obtain special instructions before use. Wear protective gloves. Wear protective clothing. Wear eye or face protection.
Response	:	If exposed or concerned: Get medical advice or attention.
Storage	:	Store locked up.
Disposal	:	Dispose of contents and container in accordance with all local, regional, national and international regulations.
Supplemental label elements	:	Contains isothiazolinones. May cause allergic reaction. Sanding and grinding dusts may be harmful if inhaled. Emits toxic fumes when heated.
Hazards not otherwise classified	:	None known.

## Section 3. Composition/information on ingredients

Substance/mixture	:	Mixture
Product name	:	35-310 GRAND DISTINCTION PAINT/PRIMER IN ONE INTERIOR SEMI-GLOSS-WHITE/PASTEL BASE

Ingredient name	%	CAS number
Titanium dioxide	≥10 - ≤20	13463-67-7

SUB codes represent substances without registered CAS Numbers.

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

**There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.**

Occupational exposure limits, if available, are listed in Section 8.

## Section 4. First aid measures

If ingestion, irritation, any type of overexposure or symptoms of overexposure occur during or persists after use of this product, contact a POISON CONTROL CENTER, EMERGENCY ROOM OR PHYSICIAN immediately; have Safety Data Sheet information available. Never give anything by mouth to an unconscious or convulsing person.

### Description of necessary first aid measures

Eye contact	:	Remove contact lenses, irrigate copiously with clean, fresh water, holding the eyelids apart for at least 10 minutes and seek immediate medical advice.
Inhalation	:	Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.

## Section 4. First aid measures

- Skin contact** : Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.
- Ingestion** : If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do NOT induce vomiting.

### Most important symptoms/effects, acute and delayed

#### Potential acute health effects

- Eye contact** : No known significant effects or critical hazards.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : No known significant effects or critical hazards.
- Ingestion** : No known significant effects or critical hazards.

#### Over-exposure signs/symptoms

- Eye contact** : No specific data.
- Inhalation** : No specific data.
- Skin contact** : No specific data.
- Ingestion** : No specific data.

### Indication of immediate medical attention and special treatment needed, if necessary


- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

## Section 5. Fire-fighting measures

### Extinguishing media

- Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.
- Unsuitable extinguishing media** : None known.

**Specific hazards arising from the chemical** :  In a fire or if heated, a pressure increase will occur and the container may burst.

**Hazardous thermal decomposition products** : Decomposition products may include the following materials:  
carbon oxides  
metal oxide/oxides

**Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

**Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

### Methods and materials for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

## Section 7. Handling and storage

### Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
- Special precautions** : If this material is part of a multiple component system, read the Safety Data Sheet(s) for the other component or components before blending as the resulting mixture may have the hazards of all of its parts.
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

**Product name 35-310 GRAND DISTINCTION PAINT/PRIMER IN ONE INTERIOR SEMI-GLOSS-WHITE/PASTEL BASE**

## Section 7. Handling and storage

**Conditions for safe storage, including any incompatibilities** : Do not store below the following temperature: 5°C (41°F). Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

## Section 8. Exposure controls/personal protection

### Control parameters

#### Occupational exposure limits

Ingredient name	Exposure limits
Titanium dioxide	<b>OSHA PEL (United States, 5/2018).</b> TWA: 15 mg/m <sup>3</sup> 8 hours. Form: Total dust <b>ACGIH TLV (United States, 3/2019).</b> TWA: 10 mg/m <sup>3</sup> 8 hours.

#### Key to abbreviations

A	= Acceptable Maximum Peak	S	= Potential skin absorption
ACGIH	= American Conference of Governmental Industrial Hygienists.	SR	= Respiratory sensitization
C	= Ceiling Limit	SS	= Skin sensitization
F	= Fume	STEL	= Short term Exposure limit values
IPEL	= Internal Permissible Exposure Limit	TD	= Total dust
OSHA	= Occupational Safety and Health Administration.	TLV	= Threshold Limit Value
R	= Respirable	TWA	= Time Weighted Average
Z	= OSHA 29 CFR 1910.1200 Subpart Z - Toxic and Hazardous Substances		

### Consult local authorities for acceptable exposure limits.

**Recommended monitoring procedures** : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

**Appropriate engineering controls** : If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

**Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

### Individual protection measures

**Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

**Eye/face protection** : Safety glasses with side shields.

## Section 8. Exposure controls/personal protection

### Skin protection

- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary.

## Section 9. Physical and chemical properties

### Appearance

- Physical state** : Liquid.
- Color** : Not available.
- Odor** : Characteristic.
- Odor threshold** : Not available.
- pH** : Not available.
- Melting point** : Not available.
- Boiling point** : >37.78°C (>100°F)
- Flash point** : Closed cup: 113.33°C (236°F) [Product does not sustain combustion.]
- Auto-ignition temperature** : Not available.
- Decomposition temperature** : Not available.
- Flammability (solid, gas)** : Not available.
- Lower and upper explosive (flammable) limits** : Not available.
- Evaporation rate** : Not available.
- Vapor pressure** : Not available.
- Vapor density** : Not available.
- Relative density** : 1.22
- Density ( lbs / gal )** : 10.18
- Solubility** : Soluble in the following materials: cold water.
- Partition coefficient: n-octanol/water** : Not available.
- Viscosity** : Kinematic (40°C (104°F)): >0.21 cm<sup>2</sup>/s (>21 cSt)

Product code 00400452

Date of issue 13 June 2020

Version 9

Product name 35-310 GRAND DISTINCTION PAINT/PRIMER IN ONE INTERIOR SEMI-GLOSS-WHITE/PASTEL BASE

## Section 9. Physical and chemical properties

Volatility : 65% (v/v), 52.927% (w/w)

% Solid. (w/w) : 47.073

## Section 10. Stability and reactivity

Reactivity : No specific test data related to reactivity available for this product or its ingredients.

Chemical stability : The product is stable.

Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid : When exposed to high temperatures may produce hazardous decomposition products. Refer to protective measures listed in sections 7 and 8.

Incompatible materials : Keep away from the following materials to prevent strong exothermic reactions: oxidizing agents, strong alkalis, strong acids.

Hazardous decomposition products : Decomposition products may include the following materials: carbon monoxide, carbon dioxide, smoke, oxides of nitrogen.

## Section 11. Toxicological information

### Information on toxicological effects

#### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Titanium dioxide	LC50 Inhalation Dusts and mists	Rat	>6.82 mg/l	4 hours
	LD50 Dermal	Rabbit	>5000 mg/kg	-
	LD50 Oral	Rat	>5000 mg/kg	-

Conclusion/Summary : There are no data available on the mixture itself.

#### Irritation/Corrosion

##### Conclusion/Summary

Skin : There are no data available on the mixture itself.

Eyes : There are no data available on the mixture itself.

Respiratory : There are no data available on the mixture itself.

#### Sensitization

##### Conclusion/Summary

Skin : There are no data available on the mixture itself.

Respiratory : There are no data available on the mixture itself.

#### Mutagenicity

Conclusion/Summary : There are no data available on the mixture itself.

#### Carcinogenicity

Conclusion/Summary : There are no data available on the mixture itself.

## Section 11. Toxicological information

### Classification

Product/ingredient name	OSHA	IARC	NTP
Titanium dioxide	-	2B	-

#### Carcinogen Classification code:

IARC: 1, 2A, 2B, 3, 4

NTP: Known to be a human carcinogen; Reasonably anticipated to be a human carcinogen

OSHA: +

Not listed/not regulated: -

### Reproductive toxicity

**Conclusion/Summary** : There are no data available on the mixture itself.

### Teratogenicity

**Conclusion/Summary** : There are no data available on the mixture itself.

### Specific target organ toxicity (single exposure)

Not available.

### Specific target organ toxicity (repeated exposure)

Not available.

### Target organs

: Contains material which may cause damage to the following organs: upper respiratory tract.

### Aspiration hazard

Not available.

### Information on the likely routes of exposure

#### Potential acute health effects

**Eye contact** : No known significant effects or critical hazards.

**Inhalation** : No known significant effects or critical hazards.

**Skin contact** : No known significant effects or critical hazards.

**Ingestion** : No known significant effects or critical hazards.

#### Over-exposure signs/symptoms

**Eye contact** : No specific data.

**Inhalation** : No specific data.

**Skin contact** : No specific data.

**Ingestion** : No specific data.

#### Delayed and immediate effects and also chronic effects from short and long term exposure

**Conclusion/Summary** : There are no data available on the mixture itself. Contains isothiazolinones. May cause allergic reaction. This product contains TiO<sub>2</sub> which has been classified as a GHS Carcinogen Category 2 based on its IARC 2B classification. For many PPG products, TiO<sub>2</sub> is utilized as a raw material in a liquid coating formulation. In this case, the TiO<sub>2</sub> particles are bound in a matrix with no meaningful potential for human exposure to unbound particles of TiO<sub>2</sub> when the product is applied with a brush or roller. Sanding the coating surface or mist from spray applications may be harmful depending on the duration and level of exposure and require the use of appropriate personal protective equipment and/or engineering controls (see Section 8). If splashed in the eyes, the liquid may cause irritation and reversible damage. Ingestion may cause nausea,



## Section 11. Toxicological information

diarrhea and vomiting. This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

### Short term exposure

**Potential immediate effects** : There are no data available on the mixture itself.

**Potential delayed effects** : There are no data available on the mixture itself.

### Long term exposure

**Potential immediate effects** : There are no data available on the mixture itself.

**Potential delayed effects** : There are no data available on the mixture itself.

### Potential chronic health effects

**General** : No known significant effects or critical hazards.

**Carcinogenicity** : Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.

**Mutagenicity** : No known significant effects or critical hazards.

**Teratogenicity** : No known significant effects or critical hazards.

**Developmental effects** : No known significant effects or critical hazards.

**Fertility effects** : No known significant effects or critical hazards.

## Section 12. Ecological information

### Toxicity

Product/ingredient name	Result	Species	Exposure
Titanium dioxide	Acute LC50 >100 mg/l Fresh water	Daphnia - Daphnia magna	48 hours

### Persistence and degradability

Not available.

### Bioaccumulative potential

Not available.

### Mobility in soil

**Soil/water partition coefficient (K<sub>oc</sub>)** : Not available.

## Section 13. Disposal considerations

**Disposal methods** : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees. Section 6. Accidental release measures

## 14. Transport information

	DOT	IMDG	IATA
UN number	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-
Transport hazard class(es)	-	-	-
Packing group	-	-	-
Environmental hazards	No.	No.	No.
Marine pollutant substances	Not applicable.	Not applicable.	Not applicable.

### Additional information

**DOT** : None identified.

**IMDG** : None identified.

**IATA** : None identified.

**Special precautions for user** : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

**Transport in bulk according to IMO instruments** : Not applicable.

## Section 15. Regulatory information

### United States

**United States inventory (TSCA 8b)** :  At least one component is inactive.

**United States - TSCA 5(e) - Substances consent order:**

partially fluorinated alcohol, reaction products Listed

**United States - TSCA 5(a)2 - Proposed significant new use rules:**

partially fluorinated alcohol, reaction products Listed

### SARA 302/304

**SARA 304 RQ** : Not applicable.

### Composition/information on ingredients

No products were found.

### SARA 311/312

**Classification** : CARCINOGENICITY - Category 2

### Composition/information on ingredients

Name	%	Classification
<input checked="" type="checkbox"/> Titanium dioxide	≥10 - ≤20	CARCINOGENICITY - Category 2

**Additional environmental information** is contained on the Environmental Data Sheet for this product, which can be obtained from your PPG representative.

## Section 16. Other information

### Hazardous Material Information System (U.S.A.)

**Health** : 1 \* **Flammability** : 1 **Physical hazards** : 0

(\*) - Chronic effects

**Caution:** HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings and the associated label are not required on MSDSs or products leaving a facility under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc.

The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.

### National Fire Protection Association (U.S.A.)

**Health** : 1 **Flammability** : 1 **Instability** : 0

**Date of previous issue** : 4/11/2020

**Organization that prepared the MSDS** : EHS

**Product code** 00400452

**Date of issue** 13 June 2020

**Version** 9

**Product name** 35-310 GRAND DISTINCTION PAINT/PRIMER IN ONE INTERIOR SEMI-GLOSS-WHITE/PASTEL BASE

## Section 16. Other information

### Key to abbreviations

: ATE = Acute Toxicity Estimate  
BCF = Bioconcentration Factor  
GHS = Globally Harmonized System of Classification and Labelling of Chemicals  
IATA = International Air Transport Association  
IBC = Intermediate Bulk Container  
IMDG = International Maritime Dangerous Goods  
LogPow = logarithm of the octanol/water partition coefficient  
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)  
N/A = Not available  
SGG = Segregation Group  
UN = United Nations

✔ Indicates information that has changed from previously issued version.

### Disclaimer

*The information contained in this data sheet is based on present scientific and technical knowledge. The purpose of this information is to draw attention to the health and safety aspects concerning the products supplied by PPG, and to recommend precautionary measures for the storage and handling of the products. No warranty or guarantee is given in respect of the properties of the products. No liability can be accepted for any failure to observe the precautionary measures described in this data sheet or for any misuse of the products.*



## Safety Data Sheet

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<b>Document Group:</b>	19-7982-2	<b>Version Number:</b>	6.00
<b>Issue Date:</b>	11/18/14	<b>Supersedes Date:</b>	06/30/09

### SECTION 1: Identification

#### 1.1. Product identifier

3M(TM) Dust Remover AV152A, AV152A-B, AV152B

#### Product Identification Numbers

44-0051-5415-6, 70-0050-0173-3, 70-0050-0269-9, 70-0050-1903-2, 70-0050-2436-2, 70-0050-3890-9, 70-0050-4373-5, 70-0050-4565-6, 70-0050-4715-7, 70-0050-7309-6, 70-0050-7316-1, 70-0050-7986-1, 70-0050-8052-1, 70-0051-0911-4, 70-0051-1956-8, 70-0051-2011-1, 70-0051-2013-7, 70-0051-2070-7, 70-0051-3321-3, 70-0051-4224-8, 70-0051-4480-6, 70-0051-4540-7, 70-0051-6293-1, 70-0051-6628-8, 70-0051-6856-5, 70-0713-0457-3, 70-0713-0458-1, 70-0713-2085-0, 70-0713-2286-4, 70-0713-5096-4, 70-0713-6798-4, 70-0713-7295-0, 70-0713-8144-9, 70-0713-8166-2, 70-0713-9180-2, 70-0713-9333-7, 70-0713-9390-7, 70-0714-1472-9, 70-0714-1595-7, 70-0714-2146-8, 70-0714-2147-6, 70-0714-2212-8, 70-0714-2417-3, 70-0714-2418-1, 70-0714-2419-9, 70-0714-7652-0, 70-0714-8282-5, 70-0714-8283-3, 70-0714-8298-1, 70-0714-8977-0, 70-0714-9081-0, 70-0714-9437-4, 70-0715-0658-1

#### 1.2. Recommended use and restrictions on use

##### Recommended use

Compressed gas duster.

#### 1.3. Supplier's details

<b>MANUFACTURER:</b>	3M
<b>DIVISION:</b>	Stationery and Office Supplies Division
<b>ADDRESS:</b>	3M Center, St. Paul, MN 55144-1000, USA
<b>Telephone:</b>	1-888-3M HELPS (1-888-364-3577)

#### 1.4. Emergency telephone number

1-800-364-3577 or (651) 737-6501 (24 hours)

### SECTION 2: Hazard identification

#### 2.1. Hazard classification

Flammable Aerosol: Category 2.

Specific Target Organ Toxicity (single exposure): Category 1.

Specific Target Organ Toxicity (central nervous system): Category 3.

#### 2.2. Label elements

##### Signal word

Danger

**Symbols**

Flame | Exclamation mark | Health Hazard |

**Pictograms**



**Hazard Statements**

Flammable aerosol.

May cause drowsiness or dizziness.

Causes damage to organs:  
cardiovascular system |

**Precautionary Statements**

**Prevention:**

- Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
- Do not spray on an open flame or other ignition source.
- Pressurized container: Do not pierce or burn, even after use.
- Do not breathe dust/fume/gas/mist/vapors/spray.
- Use only outdoors or in a well-ventilated area.
- Do not eat, drink or smoke when using this product.
- Wash thoroughly after handling.

**Response:**

- IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- IF exposed: Call a POISON CENTER or doctor/physician.
- Specific treatment (see Notes to Physician on this label).

**Storage:**

- Protect from sunlight. Do not expose to temperatures exceeding 50C/122F.
- Store in a well-ventilated place. Keep container tightly closed.
- Store locked up.

**Disposal:**

Dispose of contents/container in accordance with applicable local/regional/national/international regulations.

**Notes to Physician:**

Exposure may increase myocardial irritability. Do not administer sympathomimetic drugs unless absolutely necessary.

**2.3. Hazards not otherwise classified**

May cause frostbite.

**SECTION 3: Composition/information on ingredients**

Ingredient	C.A.S. No.	% by Wt
1,1-DIFLUOROETHANE	75-37-6	> 99.65 Trade Secret *

\*The specific chemical identity and/or exact percentage (concentration) of this composition has been withheld as a trade secret.

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

**Inhalation:**

Remove person to fresh air. Get medical attention.

**Skin Contact:**

Thaw frosted skin with lukewarm water. Do not rub affected area. Get medical attention.

**Eye Contact:**

Immediately flush with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. Get medical attention.

**If Swallowed:**

Rinse mouth. If you feel unwell, get medical attention.

### 4.2. Most important symptoms and effects, both acute and delayed

See Section 11.1. Information on toxicological effects.

### 4.3. Indication of any immediate medical attention and special treatment required

Exposure may increase myocardial irritability. Do not administer sympathomimetic drugs unless absolutely necessary.

## SECTION 5: Fire-fighting measures

### 5.1. Suitable extinguishing media

Use a fire fighting agent suitable for the surrounding fire.

### 5.2. Special hazards arising from the substance or mixture

None inherent in this product.

### Hazardous Decomposition or By-Products

**Substance**

Carbonyl Fluoride  
Carbon monoxide  
Carbon dioxide  
Hydrogen Fluoride

**Condition**

During Combustion  
During Combustion  
During Combustion  
During Combustion

### 5.3. Special protective actions for fire-fighters

When fire fighting conditions are severe and total thermal decomposition of the product is possible, wear full protective clothing, including helmet, self-contained, positive pressure or pressure demand breathing apparatus, bunker coat and pants, bands around arms, waist and legs, face mask, and protective covering for exposed areas of the head.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

Evacuate area. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use only non-sparking tools. Ventilate the area with fresh air. Refer to other sections of this SDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

### 6.2. Environmental precautions

Avoid release to the environment.

**6.3. Methods and material for containment and cleaning up**

If possible, seal leaking container. Place leaking containers in a well-ventilated area, preferably an operating exhaust hood, or if necessary outdoors on an impermeable surface until appropriate packaging for the leaking container or its contents is available. Collect as much of the spilled material as possible using non-sparking tools. Place in a metal container approved for transportation by appropriate authorities. Clean up residue with detergent and water. Seal the container. Dispose of collected material as soon as possible.

**SECTION 7: Handling and storage****7.1. Precautions for safe handling**

Do not breathe thermal decomposition products. Do not use in a confined area with minimal air exchange. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Do not spray on an open flame or other ignition source. Do not pierce or burn, even after use. Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Avoid contact with oxidizing agents (eg. chlorine, chromic acid etc.)

**7.2. Conditions for safe storage including any incompatibilities**

Store in a well-ventilated place. Keep container tightly closed. Protect from sunlight. Do not expose to temperatures exceeding 50C/122F. Store away from acids. Store away from oxidizing agents.

**SECTION 8: Exposure controls/personal protection****8.1. Control parameters****Occupational exposure limits**

If a component is disclosed in section 3 but does not appear in the table below, an occupational exposure limit is not available for the component.

Ingredient	C.A.S. No.	Agency	Limit type	Additional Comments
1,1-DIFLUOROETHANE	75-37-6	CMRG	TWA:1000 ppm	
1,1-DIFLUOROETHANE	75-37-6	AIHA	TWA:2700 mg/m <sup>3</sup> (1000 ppm)	

ACGIH : American Conference of Governmental Industrial Hygienists

AIHA : American Industrial Hygiene Association

CMRG : Chemical Manufacturer's Recommended Guidelines

OSHA : United States Department of Labor - Occupational Safety and Health Administration

TWA: Time-Weighted-Average

STEL: Short Term Exposure Limit

CEIL: Ceiling

**8.2. Exposure controls****8.2.1. Engineering controls**

Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below relevant Exposure Limits and/or control dust/fume/gas/mist/vapors/spray. If ventilation is not adequate, use respiratory protection equipment.

**8.2.2. Personal protective equipment (PPE)****Eye/face protection**

Select and use eye/face protection to prevent contact based on the results of an exposure assessment. The following eye/face protection(s) are recommended:

Indirect Vented Goggles

**Skin/hand protection**

No chemical protective gloves are required.



**Respiratory protection**

Use a positive pressure supplied-air respirator if there is a potential for over exposure from an uncontrolled release, exposure levels are not known, or under any other circumstances where air-purifying respirators may not provide adequate protection. An exposure assessment may be needed to decide if a respirator is required. If a respirator is needed, use respirators as part of a full respiratory protection program. Based on the results of the exposure assessment, select from the following respirator type(s) to reduce inhalation exposure:

Half facepiece or full facepiece supplied-air respirator

For questions about suitability for a specific application, consult with your respirator manufacturer.

**Thermal hazards**

Wear cold insulating gloves/face shield/eye protection.

**SECTION 9: Physical and chemical properties****9.1. Information on basic physical and chemical properties**

<b>General Physical Form:</b>	Gas
<b>Odor, Color, Grade:</b>	Clear, colorless with slight ethereal odor.
<b>Odor threshold</b>	<i>No Data Available</i>
<b>pH</b>	<i>Not Applicable</i>
<b>Melting point</b>	<i>Not Applicable</i>
<b>Boiling Point</b>	-13 °F
<b>Flash Point</b>	< -50 °F [ <i>Details:</i> consumer aerosol does not exhibit a flame projection, therefore it is not determined to be flammable as defined in 16 CFR, Section 1500.3(c)(6)(viii).]
<b>Evaporation rate</b>	<i>Not Applicable</i>
<b>Flammability (solid, gas)</b>	Flammable Aerosol: Category 2.
<b>Flammable Limits(LEL)</b>	3.9 % volume
<b>Flammable Limits(UEL)</b>	16.9 % volume
<b>Vapor Pressure</b>	87 psia [@ 77 °F]
<b>Vapor Density</b>	2.4 [ <i>Ref Std:</i> AIR=1]
<b>Density</b>	0.9 g/cm <sup>3</sup> [ <i>Details:</i> Liquid]
<b>Specific Gravity</b>	0.9 [ <i>Ref Std:</i> WATER=1] [ <i>Details:</i> Liquid]
<b>Solubility In Water</b>	0.28 %
<b>Solubility- non-water</b>	<i>No Data Available</i>
<b>Partition coefficient: n-octanol/ water</b>	<i>No Data Available</i>
<b>Autoignition temperature</b>	849 °F
<b>Decomposition temperature</b>	<i>Not Applicable</i>
<b>Viscosity</b>	<i>Not Applicable</i>

**SECTION 10: Stability and reactivity****10.1. Reactivity**

This material may be reactive with certain agents under certain conditions - see the remaining headings in this section.

**10.2. Chemical stability**

Stable.

**10.3. Possibility of hazardous reactions**

Hazardous polymerization will not occur.

**10.4. Conditions to avoid**

Sparks and/or flames

#### 10.5. Incompatible materials

Alkali and alkaline earth metals

#### 10.6. Hazardous decomposition products

<u>Substance</u>	<u>Condition</u>
None known.	

Refer to section 5.2 for hazardous decomposition products during combustion.

Extreme heat arising from situations such as misuse or equipment failure can generate hydrogen fluoride as a decomposition product.

## SECTION 11: Toxicological information

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. In addition, toxicological data on ingredients may not be reflected in the material classification and/or the signs and symptoms of exposure, because an ingredient may be present below the threshold for labeling, an ingredient may not be available for exposure, or the data may not be relevant to the material as a whole.

### 11.1. Information on Toxicological effects

#### Signs and Symptoms of Exposure

Based on test data and/or information on the components, this material may produce the following health effects:

##### Inhalation:

Respiratory Tract Irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

May cause target organ effects after inhalation.

##### Skin Contact:

Frostbite: Signs/symptoms may include intense pain, discoloration of skin, and tissue destruction.

##### Eye Contact:

Frostbite: Signs/symptoms may include intense pain, clouding of the cornea, redness, swelling, and blindness.

##### Ingestion:

No health effects are expected.

#### Target Organ Effects:

##### Single exposure may cause:

Central Nervous System (CNS) Depression: Signs/symptoms may include headache, dizziness, drowsiness, incoordination, nausea, slowed reaction time, slurred speech, giddiness, and unconsciousness.

Single exposure, above recommended guidelines, may cause:

Cardiac Sensitization: Signs/symptoms may include irregular heartbeat (arrhythmia), faintness, chest pain, and may be fatal.

#### Toxicological Data

If a component is disclosed in section 3 but does not appear in a table below, either no data are available for that endpoint or

the data are not sufficient for classification.

**Acute Toxicity**

Name	Route	Species	Value
Overall product	Inhalation-Gas(4 hr)		No data available; calculated ATE > 50,000 ppm
1,1-DIFLUOROETHANE	Inhalation-Gas (4 hours)	Rat	LC50 > 437,000 ppm
1,1-DIFLUOROETHANE	Ingestion	Rat	LD50 > 1,500 mg/kg

ATE = acute toxicity estimate

**Skin Corrosion/Irritation**

Name	Species	Value
------	---------	-------

**Serious Eye Damage/Irritation**

Name	Species	Value
------	---------	-------

**Skin Sensitization**

Name	Species	Value
------	---------	-------

**Respiratory Sensitization**

Name	Species	Value
------	---------	-------

**Germ Cell Mutagenicity**

Name	Route	Value
1,1-DIFLUOROETHANE	In Vitro	Some positive data exist, but the data are not sufficient for classification
1,1-DIFLUOROETHANE	In vivo	Some positive data exist, but the data are not sufficient for classification

**Carcinogenicity**

Name	Route	Species	Value
1,1-DIFLUOROETHANE	Inhalation	Rat	Some positive data exist, but the data are not sufficient for classification

**Reproductive Toxicity**

**Reproductive and/or Developmental Effects**

Name	Route	Value	Species	Test Result	Exposure Duration
1,1-DIFLUOROETHANE	Inhalation	Not toxic to female reproduction	Rat	NOAEL 25,000 ppm	2 years
1,1-DIFLUOROETHANE	Inhalation	Not toxic to male reproduction	Rat	NOAEL 25,000 ppm	2 years
1,1-DIFLUOROETHANE	Inhalation	Not toxic to development	Rat	NOAEL 50,000 ppm	during organogenesis

**Target Organ(s)**

**Specific Target Organ Toxicity - single exposure**

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
1,1-DIFLUOROETHANE	Inhalation	cardiac sensitization	Causes damage to organs	Human and animal	NOAEL Not available	poisoning and/or abuse
1,1-DIFLUOROETHANE	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human and animal	NOAEL 100,000 ppm	
1,1-DIFLUOROETHANE	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for	Not available	NOAEL Not available	not available

			classification			
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**Specific Target Organ Toxicity - repeated exposure**

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
1,1-DIFLUOROETHANE	Inhalation	hematopoietic system   kidney and/or bladder   respiratory system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 25,000 ppm	2 years

**Aspiration Hazard**

Name	Value
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Please contact the address or phone number listed on the first page of the SDS for additional toxicological information on this material and/or its components.

**SECTION 12: Ecological information**

**Ecotoxicological information**

Please contact the address or phone number listed on the first page of the SDS for additional ecotoxicological information on this material and/or its components.

**Chemical fate information**

Please contact the address or phone number listed on the first page of the SDS for additional chemical fate information on this material and/or its components.

**SECTION 13: Disposal considerations**

**13.1. Disposal methods**

Dispose of contents/ container in accordance with the local/regional/national/international regulations.

Incinerate in a permitted waste incineration facility. Facility must be capable of handling aerosol cans. Combustion products will include halogen acid (HCl/HF/HBr). Facility must be capable of handling halogenated materials. Empty drums/barrels/containers used for transporting and handling hazardous chemicals (chemical substances/mixtures/preparations classified as Hazardous as per applicable regulations) shall be considered, stored, treated & disposed of as hazardous wastes unless otherwise defined by applicable waste regulations. Consult with the respective regulating authorities to determine the available treatment and disposal facilities.

EPA Hazardous Waste Number (RCRA): D001 (Ignitable)

**SECTION 14: Transport Information**

For Transport Information, please visit <http://3M.com/Transportinfo> or call 1-800-364-3577 or 651-737-6501.

**SECTION 15: Regulatory information**

**15.1. US Federal Regulations**

Contact 3M for more information.

**311/312 Hazard Categories:**

Fire Hazard - Yes    Pressure Hazard - Yes    Reactivity Hazard - No    Immediate Hazard - Yes    Delayed Hazard - Yes

## 15.2. State Regulations

Contact 3M for more information.

## 15.3. Chemical Inventories

The components of this product are in compliance with the chemical notification requirements of TSCA.

Contact 3M for more information.

## 15.4. International Regulations

Contact 3M for more information.

**This SDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.**

## SECTION 16: Other information

### NFPA Hazard Classification

**Health: 3 Flammability: 4 Instability: 1 Special Hazards: None**

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel to address the hazards that are presented by short-term, acute exposure to a material under conditions of fire, spill, or similar emergencies. Hazard ratings are primarily based on the inherent physical and toxic properties of the material but also include the toxic properties of combustion or decomposition products that are known to be generated in significant quantities.

### HMIS Hazard Classification

**Health: 3 Flammability: 4 Physical Hazard: 1 Personal Protection: X - See PPE section.**

Hazardous Material Identification System (HMIS® III) hazard ratings are designed to inform employees of chemical hazards in the workplace. These ratings are based on the inherent properties of the material under expected conditions of normal use and are not intended for use in emergency situations. HMIS® III ratings are to be used with a fully implemented HMIS® III program. HMIS® is a registered mark of the American Coatings Association (ACA).

<b>Document Group:</b>	19-7982-2	<b>Version Number:</b>	6.00
<b>Issue Date:</b>	11/18/14	<b>Supersedes Date:</b>	06/30/09

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## Safety Data Sheet

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<b>Document Group:</b>	19-7982-2	<b>Version Number:</b>	6.00
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### SECTION 1: Identification

#### 1.1. Product identifier

3M(TM) Dust Remover AV152A, AV152A-B, AV152B

#### Product Identification Numbers

44-0051-5415-6, 70-0050-0173-3, 70-0050-0269-9, 70-0050-1903-2, 70-0050-2436-2, 70-0050-3890-9, 70-0050-4373-5, 70-0050-4565-6, 70-0050-4715-7, 70-0050-7309-6, 70-0050-7316-1, 70-0050-7986-1, 70-0050-8052-1, 70-0051-0911-4, 70-0051-1956-8, 70-0051-2011-1, 70-0051-2013-7, 70-0051-2070-7, 70-0051-3321-3, 70-0051-4224-8, 70-0051-4480-6, 70-0051-4540-7, 70-0051-6293-1, 70-0051-6628-8, 70-0051-6856-5, 70-0713-0457-3, 70-0713-0458-1, 70-0713-2085-0, 70-0713-2286-4, 70-0713-5096-4, 70-0713-6798-4, 70-0713-7295-0, 70-0713-8144-9, 70-0713-8166-2, 70-0713-9180-2, 70-0713-9333-7, 70-0713-9390-7, 70-0714-1472-9, 70-0714-1595-7, 70-0714-2146-8, 70-0714-2147-6, 70-0714-2212-8, 70-0714-2417-3, 70-0714-2418-1, 70-0714-2419-9, 70-0714-7652-0, 70-0714-8282-5, 70-0714-8283-3, 70-0714-8298-1, 70-0714-8977-0, 70-0714-9081-0, 70-0714-9437-4, 70-0715-0658-1

#### 1.2. Recommended use and restrictions on use

##### Recommended use

Compressed gas duster.

#### 1.3. Supplier's details

<b>MANUFACTURER:</b>	3M
<b>DIVISION:</b>	Stationery and Office Supplies Division
<b>ADDRESS:</b>	3M Center, St. Paul, MN 55144-1000, USA
<b>Telephone:</b>	1-888-3M HELPS (1-888-364-3577)

#### 1.4. Emergency telephone number

1-800-364-3577 or (651) 737-6501 (24 hours)

### SECTION 2: Hazard identification

#### 2.1. Hazard classification

Flammable Aerosol: Category 2.

Specific Target Organ Toxicity (single exposure): Category 1.

Specific Target Organ Toxicity (central nervous system): Category 3.

#### 2.2. Label elements

##### Signal word

Danger

**Symbols**

Flame | Exclamation mark | Health Hazard |

**Pictograms**



**Hazard Statements**

Flammable aerosol.

May cause drowsiness or dizziness.

Causes damage to organs:  
cardiovascular system |

**Precautionary Statements**

**Prevention:**

- Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
- Do not spray on an open flame or other ignition source.
- Pressurized container: Do not pierce or burn, even after use.
- Do not breathe dust/fume/gas/mist/vapors/spray.
- Use only outdoors or in a well-ventilated area.
- Do not eat, drink or smoke when using this product.
- Wash thoroughly after handling.

**Response:**

- IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- IF exposed: Call a POISON CENTER or doctor/physician.
- Specific treatment (see Notes to Physician on this label).

**Storage:**

- Protect from sunlight. Do not expose to temperatures exceeding 50C/122F.
- Store in a well-ventilated place. Keep container tightly closed.
- Store locked up.

**Disposal:**

Dispose of contents/container in accordance with applicable local/regional/national/international regulations.

**Notes to Physician:**

Exposure may increase myocardial irritability. Do not administer sympathomimetic drugs unless absolutely necessary.

**2.3. Hazards not otherwise classified**

May cause frostbite.

**SECTION 3: Composition/information on ingredients**

Ingredient	C.A.S. No.	% by Wt
1,1-DIFLUOROETHANE	75-37-6	> 99.65 Trade Secret *

\*The specific chemical identity and/or exact percentage (concentration) of this composition has been withheld as a trade secret.

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

#### **Inhalation:**

Remove person to fresh air. Get medical attention.

#### **Skin Contact:**

Thaw frosted skin with lukewarm water. Do not rub affected area. Get medical attention.

#### **Eye Contact:**

Immediately flush with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. Get medical attention.

#### **If Swallowed:**

Rinse mouth. If you feel unwell, get medical attention.

### 4.2. Most important symptoms and effects, both acute and delayed

See Section 11.1. Information on toxicological effects.

### 4.3. Indication of any immediate medical attention and special treatment required

Exposure may increase myocardial irritability. Do not administer sympathomimetic drugs unless absolutely necessary.

## SECTION 5: Fire-fighting measures

### 5.1. Suitable extinguishing media

Use a fire fighting agent suitable for the surrounding fire.

### 5.2. Special hazards arising from the substance or mixture

None inherent in this product.

### Hazardous Decomposition or By-Products

<u>Substance</u>	<u>Condition</u>
Carbonyl Fluoride	During Combustion
Carbon monoxide	During Combustion
Carbon dioxide	During Combustion
Hydrogen Fluoride	During Combustion

### 5.3. Special protective actions for fire-fighters

When fire fighting conditions are severe and total thermal decomposition of the product is possible, wear full protective clothing, including helmet, self-contained, positive pressure or pressure demand breathing apparatus, bunker coat and pants, bands around arms, waist and legs, face mask, and protective covering for exposed areas of the head.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

Evacuate area. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use only non-sparking tools. Ventilate the area with fresh air. Refer to other sections of this SDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

### 6.2. Environmental precautions

Avoid release to the environment.



**6.3. Methods and material for containment and cleaning up**

If possible, seal leaking container. Place leaking containers in a well-ventilated area, preferably an operating exhaust hood, or if necessary outdoors on an impermeable surface until appropriate packaging for the leaking container or its contents is available. Collect as much of the spilled material as possible using non-sparking tools. Place in a metal container approved for transportation by appropriate authorities. Clean up residue with detergent and water. Seal the container. Dispose of collected material as soon as possible.

**SECTION 7: Handling and storage****7.1. Precautions for safe handling**

Do not breathe thermal decomposition products. Do not use in a confined area with minimal air exchange. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Do not spray on an open flame or other ignition source. Do not pierce or burn, even after use. Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Avoid contact with oxidizing agents (eg. chlorine, chromic acid etc.)

**7.2. Conditions for safe storage including any incompatibilities**

Store in a well-ventilated place. Keep container tightly closed. Protect from sunlight. Do not expose to temperatures exceeding 50C/122F. Store away from acids. Store away from oxidizing agents.

**SECTION 8: Exposure controls/personal protection****8.1. Control parameters****Occupational exposure limits**

If a component is disclosed in section 3 but does not appear in the table below, an occupational exposure limit is not available for the component.

Ingredient	C.A.S. No.	Agency	Limit type	Additional Comments
1,1-DIFLUOROETHANE	75-37-6	CMRG	TWA:1000 ppm	
1,1-DIFLUOROETHANE	75-37-6	AIHA	TWA:2700 mg/m <sup>3</sup> (1000 ppm)	

ACGIH : American Conference of Governmental Industrial Hygienists

AIHA : American Industrial Hygiene Association

CMRG : Chemical Manufacturer's Recommended Guidelines

OSHA : United States Department of Labor - Occupational Safety and Health Administration

TWA: Time-Weighted-Average

STEL: Short Term Exposure Limit

CEIL: Ceiling

**8.2. Exposure controls****8.2.1. Engineering controls**

Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below relevant Exposure Limits and/or control dust/fume/gas/mist/vapors/spray. If ventilation is not adequate, use respiratory protection equipment.

**8.2.2. Personal protective equipment (PPE)****Eye/face protection**

Select and use eye/face protection to prevent contact based on the results of an exposure assessment. The following eye/face protection(s) are recommended:

Indirect Vented Goggles

**Skin/hand protection**

No chemical protective gloves are required.

**Respiratory protection**

Use a positive pressure supplied-air respirator if there is a potential for over exposure from an uncontrolled release, exposure levels are not known, or under any other circumstances where air-purifying respirators may not provide adequate protection. An exposure assessment may be needed to decide if a respirator is required. If a respirator is needed, use respirators as part of a full respiratory protection program. Based on the results of the exposure assessment, select from the following respirator type(s) to reduce inhalation exposure:

Half facepiece or full facepiece supplied-air respirator

For questions about suitability for a specific application, consult with your respirator manufacturer.

**Thermal hazards**

Wear cold insulating gloves/face shield/eye protection.

**SECTION 9: Physical and chemical properties****9.1. Information on basic physical and chemical properties**

<b>General Physical Form:</b>	Gas
<b>Odor, Color, Grade:</b>	Clear, colorless with slight ethereal odor.
<b>Odor threshold</b>	<i>No Data Available</i>
<b>pH</b>	<i>Not Applicable</i>
<b>Melting point</b>	<i>Not Applicable</i>
<b>Boiling Point</b>	-13 °F
<b>Flash Point</b>	< -50 °F [ <i>Details: consumer aerosol does not exhibit a flame projection, therefore it is not determined to be flammable as defined in 16 CFR, Section 1500.3(c)(6)(viii).</i> ]
<b>Evaporation rate</b>	<i>Not Applicable</i>
<b>Flammability (solid, gas)</b>	Flammable Aerosol: Category 2.
<b>Flammable Limits(LEL)</b>	3.9 % volume
<b>Flammable Limits(UEL)</b>	16.9 % volume
<b>Vapor Pressure</b>	87 psia [@ 77 °F]
<b>Vapor Density</b>	2.4 [ <i>Ref Std: AIR=1</i> ]
<b>Density</b>	0.9 g/cm3 [ <i>Details: Liquid</i> ]
<b>Specific Gravity</b>	0.9 [ <i>Ref Std: WATER=1</i> ] [ <i>Details: Liquid</i> ]
<b>Solubility In Water</b>	0.28 %
<b>Solubility- non-water</b>	<i>No Data Available</i>
<b>Partition coefficient: n-octanol/ water</b>	<i>No Data Available</i>
<b>Autoignition temperature</b>	849 °F
<b>Decomposition temperature</b>	<i>Not Applicable</i>
<b>Viscosity</b>	<i>Not Applicable</i>

**SECTION 10: Stability and reactivity****10.1. Reactivity**

This material may be reactive with certain agents under certain conditions - see the remaining headings in this section.

**10.2. Chemical stability**

Stable.

**10.3. Possibility of hazardous reactions**

Hazardous polymerization will not occur.

**10.4. Conditions to avoid**

Sparks and/or flames

**10.5. Incompatible materials**

Alkali and alkaline earth metals

**10.6. Hazardous decomposition products**

<u>Substance</u>	<u>Condition</u>
None known.	

Refer to section 5.2 for hazardous decomposition products during combustion.

Extreme heat arising from situations such as misuse or equipment failure can generate hydrogen fluoride as a decomposition product.

**SECTION 11: Toxicological information**

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. In addition, toxicological data on ingredients may not be reflected in the material classification and/or the signs and symptoms of exposure, because an ingredient may be present below the threshold for labeling, an ingredient may not be available for exposure, or the data may not be relevant to the material as a whole.

**11.1. Information on Toxicological effects**

**Signs and Symptoms of Exposure**

Based on test data and/or information on the components, this material may produce the following health effects:

**Inhalation:**

Respiratory Tract Irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

May cause target organ effects after inhalation.

**Skin Contact:**

Frostbite: Signs/symptoms may include intense pain, discoloration of skin, and tissue destruction.

**Eye Contact:**

Frostbite: Signs/symptoms may include intense pain, clouding of the cornea, redness, swelling, and blindness.

**Ingestion:**

No health effects are expected.

**Target Organ Effects:**

**Single exposure may cause:**

Central Nervous System (CNS) Depression: Signs/symptoms may include headache, dizziness, drowsiness, incoordination, nausea, slowed reaction time, slurred speech, giddiness, and unconsciousness.

Single exposure, above recommended guidelines, may cause:

Cardiac Sensitization: Signs/symptoms may include irregular heartbeat (arrhythmia), faintness, chest pain, and may be fatal.

**Toxicological Data**

If a component is disclosed in section 3 but does not appear in a table below, either no data are available for that endpoint or

the data are not sufficient for classification.

**Acute Toxicity**

Name	Route	Species	Value
Overall product	Inhalation-Gas(4 hr)		No data available; calculated ATE > 50,000 ppm
1,1-DIFLUOROETHANE	Inhalation-Gas (4 hours)	Rat	LC50 > 437,000 ppm
1,1-DIFLUOROETHANE	Ingestion	Rat	LD50 > 1,500 mg/kg

ATE = acute toxicity estimate

**Skin Corrosion/Irritation**

Name	Species	Value
------	---------	-------

**Serious Eye Damage/Irritation**

Name	Species	Value
------	---------	-------

**Skin Sensitization**

Name	Species	Value
------	---------	-------

**Respiratory Sensitization**

Name	Species	Value
------	---------	-------

**Germ Cell Mutagenicity**

Name	Route	Value
1,1-DIFLUOROETHANE	In Vitro	Some positive data exist, but the data are not sufficient for classification
1,1-DIFLUOROETHANE	In vivo	Some positive data exist, but the data are not sufficient for classification

**Carcinogenicity**

Name	Route	Species	Value
1,1-DIFLUOROETHANE	Inhalation	Rat	Some positive data exist, but the data are not sufficient for classification

**Reproductive Toxicity**

**Reproductive and/or Developmental Effects**

Name	Route	Value	Species	Test Result	Exposure Duration
1,1-DIFLUOROETHANE	Inhalation	Not toxic to female reproduction	Rat	NOAEL 25,000 ppm	2 years
1,1-DIFLUOROETHANE	Inhalation	Not toxic to male reproduction	Rat	NOAEL 25,000 ppm	2 years
1,1-DIFLUOROETHANE	Inhalation	Not toxic to development	Rat	NOAEL 50,000 ppm	during organogenesis

**Target Organ(s)**

**Specific Target Organ Toxicity - single exposure**

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
1,1-DIFLUOROETHANE	Inhalation	cardiac sensitization	Causes damage to organs	Human and animal	NOAEL Not available	poisoning and/or abuse
1,1-DIFLUOROETHANE	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human and animal	NOAEL 100,000 ppm	
1,1-DIFLUOROETHANE	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for	Not available	NOAEL Not available	not available

			classification			
--	--	--	----------------	--	--	--

**Specific Target Organ Toxicity - repeated exposure**

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
1,1-DIFLUOROETHANE	Inhalation	hematopoietic system   kidney and/or bladder   respiratory system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 25,000 ppm	2 years

**Aspiration Hazard**

Name	Value
------	-------

Please contact the address or phone number listed on the first page of the SDS for additional toxicological information on this material and/or its components.

**SECTION 12: Ecological information**

**Ecotoxicological information**

Please contact the address or phone number listed on the first page of the SDS for additional ecotoxicological information on this material and/or its components.

**Chemical fate information**

Please contact the address or phone number listed on the first page of the SDS for additional chemical fate information on this material and/or its components.

**SECTION 13: Disposal considerations**

**13.1. Disposal methods**

Dispose of contents/ container in accordance with the local/regional/national/international regulations.

Incinerate in a permitted waste incineration facility. Facility must be capable of handling aerosol cans. Combustion products will include halogen acid (HCl/HF/HBr). Facility must be capable of handling halogenated materials. Empty drums/barrels/containers used for transporting and handling hazardous chemicals (chemical substances/mixtures/preparations classified as Hazardous as per applicable regulations) shall be considered, stored, treated & disposed of as hazardous wastes unless otherwise defined by applicable waste regulations. Consult with the respective regulating authorities to determine the available treatment and disposal facilities.

EPA Hazardous Waste Number (RCRA): D001 (Ignitable)

**SECTION 14: Transport Information**

For Transport Information, please visit <http://3M.com/Transportinfo> or call 1-800-364-3577 or 651-737-6501.

**SECTION 15: Regulatory information**

**15.1. US Federal Regulations**

Contact 3M for more information.

**311/312 Hazard Categories:**

Fire Hazard - Yes    Pressure Hazard - Yes    Reactivity Hazard - No    Immediate Hazard - Yes    Delayed Hazard - Yes

## 15.2. State Regulations

Contact 3M for more information.

## 15.3. Chemical Inventories

The components of this product are in compliance with the chemical notification requirements of TSCA.

Contact 3M for more information.

## 15.4. International Regulations

Contact 3M for more information.

**This SDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.**

## SECTION 16: Other information

### NFPA Hazard Classification

**Health: 3 Flammability: 4 Instability: 1 Special Hazards: None**

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel to address the hazards that are presented by short-term, acute exposure to a material under conditions of fire, spill, or similar emergencies. Hazard ratings are primarily based on the inherent physical and toxic properties of the material but also include the toxic properties of combustion or decomposition products that are known to be generated in significant quantities.

### HMIS Hazard Classification

**Health: 3 Flammability: 4 Physical Hazard: 1 Personal Protection: X - See PPE section.**

Hazardous Material Identification System (HMIS® III) hazard ratings are designed to inform employees of chemical hazards in the workplace. These ratings are based on the inherent properties of the material under expected conditions of normal use and are not intended for use in emergency situations. HMIS® III ratings are to be used with a fully implemented HMIS® III program. HMIS® is a registered mark of the American Coatings Association (ACA).

<b>Document Group:</b>	19-7982-2	<b>Version Number:</b>	6.00
<b>Issue Date:</b>	11/18/14	<b>Supersedes Date:</b>	06/30/09

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## INDUSTRIAL POLYCHEMICAL SERVICE -- 505 KEY TITE PIPE JOINT COMPOUND -- 8040-00N052839

## ===== Product Identification =====

Product ID:505 KEY TITE PIPE JOINT COMPOUND  
MSDS Date:03/01/1993  
FSC:8040  
NIIN:00N052839  
MSDS Number: BWZKV  
=== Responsible Party ===  
Company Name:INDUSTRIAL POLYCHEMICAL SERVICE  
Address:17109 S MAIN  
Box:379  
City:GARDENA  
State:CA  
ZIP:90248  
Country:US  
Info Phone Num:213-321-6515  
Emergency Phone Num:213-222-3212 800-424-9300(CHEMTREC)  
Preparer's Name:GEORGE BLANCO  
CAGE:17510

## === Contractor Identification ===

Company Name:IPS CORPORATION  
Address:17109 S. MAIN ST.,  
Box:379  
City:GARDENA  
State:CA  
ZIP:90248  
Country:US  
Phone:310-898-3300  
CAGE:17510

## ===== Composition/Information on Ingredients =====

Ingred Name:PIGMENTS(NON-HAZARDOUS)  
Fraction by Wt: 50%  
Other REC Limits:NONE RECOMMENDED

Ingred Name:LINSEED OIL  
CAS:8001-26-1  
RTECS #:OI9690000  
Fraction by Wt: 47%  
Other REC Limits:NONE RECOMMENDED

Ingred Name:XYLENES (O-,M-,P- ISOMERS) (SARA 313) (CERCLA)  
CAS:1330-20-7  
RTECS #:ZE2100000  
Fraction by Wt: 3%  
Other REC Limits:NONE RECOMMENDED  
OSHA PEL:100 PPM  
ACGIH TLV:100 PPM/150STEL;9495  
EPA Rpt Qty:1000 LBS  
DOT Rpt Qty:1000 LBS

Ingred Name:VOLATILE ORGANIC CONTENT<42GM/L  
RTECS #:9999999V0  
Other REC Limits:NONE RECOMMENDED

## ===== Hazards Identification =====

Routes of Entry: Inhalation:NO Skin:YES Ingestion:NO  
Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO  
Health Hazards Acute and Chronic:EYES:MAY CAUSE IRRITATION.SKIN:MAY  
CAUSE IRRITATION.INGEST:LOW ORDER OF TOXICITY.MAY CAUSE GI TRACT

IRRITATION.INHAL:NOT REPORTED.

Explanation of Carcinogenicity:THERE ARE NO INGREDIENTS ABOVE 0.1% WHICH ARE IDENTIFIED AS CARCINOGENS BY NTP,IARC OR OSHA.

Effects of Overexposure:EYES/SKIN:IRRITATION.

Medical Cond Aggravated by Exposure:NONE SPECIFIED BY MANUFACTURER.

=====  
First Aid Measures  
=====

First Aid:SKIN:REMOVE CONTAMINATED CLOTHING;WASH WITH SOAP AND WATER.EYES:FLUSH WITH WATER FOR 15 MINUTES.GET MEDICAL ATTENTION IF IRRITATION PERSISTS.INHAL:REMOVE TO FRESH AIR.GIVE OXYGEN OR ARTIFICIAL RESPIRATION IF NEEDED.INGEST:DO NOT INDUCE VOMITING.GET PROMPT QUALIFIED MEDICAL ATTENTION.IF CONSCIOUS,DRINK PLENTY OF WATER.

=====  
Fire Fighting Measures  
=====

Flash Point Method:COC  
Flash Point:180F,82C  
Extinguishing Media:WATER,DRY CHEMICAL,CARBON DIOXIDE,FOAM.  
Fire Fighting Procedures:USE A SELF-CONTAINED BREATHING APPARATUS AND FULL PROTECTIVE EQUIPMENT.COOL FIRE EXPOSED CONTAINERS WITH WATER FOG.  
Unusual Fire/Explosion Hazard:FIRE CONDITIONS MAY EVOLVE TOXIC FUMES.

=====  
Accidental Release Measures  
=====

Spill Release Procedures:ELIMINATE SOURCES OF IGNITION.USE PROPER RESPIRATORY AND PROTECTIVE EQUIPMENT.VENTILATE AREA.SOAK UP WITH A NON-COMBUSTIBLE INERT ABSORBANT(CLAY,SAND);PLACE IN PROPER CONTAINER FOR DISPOSAL.DO NOT CONTAMINATE GROUND OR WATERWAYS.  
Neutralizing Agent:NOT APPLICABLE.

=====  
Handling and Storage  
=====

Handling and Storage Precautions:STORE IN A COOL,DRY,WELL-VENTILATED PLACE.KEEP CONTAINER CLOSED WHEN NOT IN USE.KEEP AWAY FROM HEAT,SPARKS,FLAMES AND INCOMPATIBLE MATERIALS.  
Other Precautions:GROUND CONTAINERS WHEN TRANSFERRING LIQUID;FLOWING HYDROCARBONS CAN BECOME ELECTROSTATICALLY CHARGED.

=====  
Exposure Controls/Personal Protection  
=====

Respiratory Protection:WHERE ENVIRONMENTAL CONTROLS ARE LACKING OR IN ENCLOSED SPACES USE A SELF-CONTAINED BREATHING APPARATUS.  
Ventilation:LOCAL VENTILATION AT THE WORKSITE;MECHANICAL(GENERAL) VENTILATION TO MAINTAIN TLV/PEL.  
Protective Gloves:RUBBER  
Eye Protection:CHEMICAL SPLASH GOGGLES  
Other Protective Equipment:PROTECTIVE CLOTHING,AS NEEDED.PROVIDE A LOCAL EYE WASH STATION AND SAFETY SHOWER.  
Work Hygienic Practices:WASH HANDS.SEPERATE WORK CLOTHES FROM STREET CLOTHES.LAUNDRER WORK CLOTHES BEFORE REUSE.KEEP FOOD OUT OF THE WORK AREA.  
Supplemental Safety and Health  
PREVIOUS MSDS,DATED 06SEP94,ENTERED BY FP-N WAS REDONE BY HMIS ON THIS DATE.

=====  
Physical/Chemical Properties  
=====

HCC:V4  
Spec Gravity:<1  
Evaporation Rate & Reference:>4 (NO REFERENCE GIVEN)  
Solubility in Water:SLIGHT  
Appearance and Odor:LIQUID,SEMI-SOLID;GREEN;LINSEED OIL ODOR.



=====  
Stability and Reactivity Data  
=====

Stability Indicator/Materials to Avoid: YES

AVOID CONTACT WITH HYDROCARBON SOLVENTS (THIS PRODUCT IS SOLUBLE IN HYDROCARBON SOLVENTS).

Stability Condition to Avoid: HIGH HEAT, SOURCES OF IGNITION.

Hazardous Decomposition Products: CARBON DIOXIDE, CARBON MONOXIDE.

=====  
Disposal Considerations  
=====

Waste Disposal Methods: DISPOSE OF IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS.

Disclaimer (provided with this information by the compiling agencies):

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# SAFETY DATA SHEET



Date of issue/Date of revision 16 November 2019

Version 8.01

## Section 1. Identification

**Product name** : 55-653 PITT BULL SPRAY COLD GALVANIZING  
**Product code** : 00356944  
**Other means of identification** : Not available.  
**Product type** : Aerosol.

### Relevant identified uses of the substance or mixture and uses advised against

**Product use** :  Consumer applications, Professional applications.  
**Use of the substance/ mixture** : Coating.  
**Uses advised against** : Not applicable.

**Manufacturer** : PPG Industries, Inc.  
One PPG Place  
Pittsburgh, PA 15272  
**Emergency telephone number** : (412) 434-4515 (U.S.)  
(514) 645-1320 (Canada)  
01-800-00-21-400 or + 52 55 5559 1588 (Mexico)

**Technical Phone Number** : 1-800-441-9695 (8:00 am to 5:00 pm EST)

## Section 2. Hazards identification

**OSHA/HCS status** : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).  
**Classification of the substance or mixture** : FLAMMABLE AEROSOLS - Category 1  
GASES UNDER PRESSURE - Compressed gas  
SKIN IRRITATION - Category 2  
EYE IRRITATION - Category 2A  
CARCINOGENICITY - Category 2  
TOXIC TO REPRODUCTION (Unborn child) - Category 2  
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3  
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2  
Percentage of the mixture consisting of ingredient(s) of unknown acute toxicity: 56.6% (Oral), 56.6% (Dermal), 31.8% (Inhalation)

### GHS label elements

United States

Page: 1/17

## Section 2. Hazards identification

### Hazard pictograms



### Signal word

: Danger

### Hazard statements

: Extremely flammable aerosol.  
 Contains gas under pressure; may explode if heated.  
 Causes serious eye irritation.  
 Causes skin irritation.  
 Suspected of damaging the unborn child.  
 Suspected of causing cancer.  
 May cause drowsiness or dizziness.  
 May cause damage to organs through prolonged or repeated exposure.

### Precautionary statements

#### General

: Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand.

#### Prevention

: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves. Wear eye or face protection. Wear protective clothing. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not spray on an open flame or other ignition source. Use only outdoors or in a well-ventilated area. Do not breathe dust or mist. Wash hands thoroughly after handling. Pressurized container: Do not pierce or burn, even after use.

#### Response

: Get medical attention if you feel unwell. IF exposed or concerned: Get medical attention. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or physician if you feel unwell. IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.

#### Storage

: Store locked up. Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F. Store in a well-ventilated place.

#### Disposal

: Dispose of contents and container in accordance with all local, regional, national and international regulations.

### Supplemental label elements

: Contents under pressure. In a fire or if heated, a pressure increase will occur and the container may burst or explode. Do not puncture or incinerate. Keep away from heat and direct sunlight. Sanding and grinding dusts may be harmful if inhaled. Avoid contact with skin and clothing. Wash thoroughly after handling. Emits toxic fumes when heated. DANGER - RAGS, STEEL WOOL OR WASTE SOAKED WITH THIS PRODUCT MAY SPONTANEOUSLY CATCH FIRE IF IMPROPERLY DISCARDED. IMMEDIATELY AFTER EACH USE, PLACE RAGS, STEEL WOOL OR WASTE IN A SEALED WATER-FILLED METAL CONTAINER.

### Hazards not otherwise classified

: Prolonged or repeated contact may dry skin and cause irritation.

## Section 3. Composition/information on ingredients

Substance/mixture : Mixture  
 Product name : 55-653 PITT BULL SPRAY COLD GALVANIZING

Ingredient name	%	CAS number
acetone	≥20 - ≤50	67-64-1
toluene	≥10 - ≤20	108-88-3
propane	≥10 - ≤20	74-98-6
butane	≥10 - ≤20	106-97-8
xylene	≥1.0 - ≤5.0	1330-20-7
Solvent naphtha (petroleum), light aromatic	≥1.0 - ≤5.0	64742-95-6
ethylbenzene	<1.0	100-41-4

SUB codes represent substances without registered CAS Numbers.

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

**There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.**

Occupational exposure limits, if available, are listed in Section 8.

## Section 4. First aid measures

If ingestion, irritation, any type of overexposure or symptoms of overexposure occur during or persists after use of this product, contact a POISON CONTROL CENTER, EMERGENCY ROOM OR PHYSICIAN immediately; have Safety Data Sheet information available. Never give anything by mouth to an unconscious or convulsing person.

### Description of necessary first aid measures

- Eye contact** : Remove contact lenses, irrigate copiously with clean, fresh water, holding the eyelids apart for at least 10 minutes and seek immediate medical advice.
- Inhalation** : Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.
- Skin contact** : Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.
- Ingestion** : If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do NOT induce vomiting.

### Most important symptoms/effects, acute and delayed

#### Potential acute health effects

- Eye contact** : Causes serious eye irritation.
- Inhalation** : Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness.
- Skin contact** : Causes skin irritation. Defatting to the skin.
- Ingestion** : Can cause central nervous system (CNS) depression.

#### Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:  
 pain or irritation  
 watering  
 redness

## Section 4. First aid measures

- Inhalation** : Adverse symptoms may include the following:  
respiratory tract irritation  
coughing  
nausea or vomiting  
headache  
drowsiness/fatigue  
dizziness/vertigo  
unconsciousness  
reduced fetal weight  
increase in fetal deaths  
skeletal malformations
- Skin contact** : Adverse symptoms may include the following:  
irritation  
redness  
dryness  
cracking  
reduced fetal weight  
increase in fetal deaths  
skeletal malformations
- Ingestion** : Adverse symptoms may include the following:  
reduced fetal weight  
increase in fetal deaths  
skeletal malformations

### Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

## Section 5. Fire-fighting measures

### Extinguishing media

- Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.
- Unsuitable extinguishing media** : None known.

- Specific hazards arising from the chemical** : Extremely flammable aerosol. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Gas may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back, causing fire or explosion. Bursting aerosol containers may be propelled from a fire at high speed. Runoff to sewer may create fire or explosion hazard. This material is toxic to aquatic life with long lasting

## Section 5. Fire-fighting measures

- effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
- Hazardous thermal decomposition products** : Decomposition products may include the following materials:  
carbon oxides  
metal oxide/oxides
- Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. In the case of aerosols being ruptured, care should be taken due to the rapid escape of the pressurized contents and propellant. If a large number of containers are ruptured, treat as a bulk material spillage according to the instructions in the clean-up section. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

### Methods and materials for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

## Section 7. Handling and storage

### Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use. Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Avoid breathing gas. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Empty containers retain product residue and can be hazardous.
- Special precautions** : Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Vapors are heavier than air and may spread along floors. Materials such as cleaning rags, paper wipes and protective clothing, which are contaminated with the product may spontaneously self-ignite some hours later. To avoid the risks of fires, all contaminated materials should be stored in purpose-built containers or in metal containers with tight-fitting, self-closing lids. Contaminated materials should be removed from the workplace at the end of each working day and be stored outside. If this material is part of a multiple component system, read the Safety Data Sheet(s) for the other component or components before blending as the resulting mixture may have the hazards of all of its parts.
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
- Conditions for safe storage, including any incompatibilities** : Do not store above the following temperature: 50°C (122°F). Store in accordance with local regulations. Store away from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Use appropriate containment to avoid environmental contamination.

## Section 8. Exposure controls/personal protection

### Control parameters

#### Occupational exposure limits

Ingredient name	Exposure limits
acetone	<b>ACGIH TLV (United States, 3/2019).</b> STEL: 500 ppm 15 minutes. TWA: 250 ppm 8 hours. <b>OSHA PEL (United States, 5/2018).</b> TWA: 2400 mg/m <sup>3</sup> 8 hours. TWA: 1000 ppm 8 hours.
toluene	<b>OSHA PEL Z2 (United States, 2/2013).</b> AMP: 500 ppm 10 minutes. CEIL: 300 ppm TWA: 200 ppm 8 hours. <b>ACGIH TLV (United States, 3/2019).</b> TWA: 20 ppm 8 hours.

## Section 8. Exposure controls/personal protection

propane	<p><b>OSHA PEL (United States, 5/2018).</b>                  TWA: 1800 mg/m<sup>3</sup> 8 hours.                  TWA: 1000 ppm 8 hours.  <b>ACGIH TLV (United States, 3/2019). Oxygen Depletion [Asphyxiant]. Explosive potential.</b></p>
butane	<p><b>ACGIH TLV (United States, 3/2019). Explosive potential.</b>                  STEL: 1000 ppm 15 minutes.</p>
xylene	<p><b>ACGIH TLV (United States, 3/2019).</b>                  STEL: 651 mg/m<sup>3</sup> 15 minutes.                  STEL: 150 ppm 15 minutes.                  TWA: 434 mg/m<sup>3</sup> 8 hours.                  TWA: 100 ppm 8 hours.</p>
Solvent naphtha (petroleum), light aromatic ethylbenzene	<p><b>OSHA PEL (United States, 5/2018).</b>                  TWA: 435 mg/m<sup>3</sup> 8 hours.                  TWA: 100 ppm 8 hours.                  None.  <b>ACGIH TLV (United States, 3/2019).</b>                  TWA: 20 ppm 8 hours.  <b>OSHA PEL (United States, 5/2018).</b>                  TWA: 435 mg/m<sup>3</sup> 8 hours.                  TWA: 100 ppm 8 hours.</p>

### Key to abbreviations

A = Acceptable Maximum Peak	S = Potential skin absorption
ACGIH = American Conference of Governmental Industrial Hygienists.	SR = Respiratory sensitization
C = Ceiling Limit	SS = Skin sensitization
F = Fume	STEL = Short term Exposure limit values
IPEL = Internal Permissible Exposure Limit	TD = Total dust
OSHA = Occupational Safety and Health Administration.	TLV = Threshold Limit Value
R = Respirable	TWA = Time Weighted Average
Z = OSHA 29 CFR 1910.1200 Subpart Z - Toxic and Hazardous Substances	

### Consult local authorities for acceptable exposure limits.

**Recommended monitoring procedures** : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

**Appropriate engineering controls** : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

**Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

### Individual protection measures



## Section 8. Exposure controls/personal protection

- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
- Eye/face protection** : Chemical splash goggles.
- Skin protection**
- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
- Gloves** : For prolonged or repeated handling, use the following type of gloves:  
  
Recommended: butyl rubber, polyvinyl alcohol (PVA), Viton®  
May be used: nitrile rubber
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary.

## Section 9. Physical and chemical properties

### Appearance

- Physical state** : Liquid.
- Color** : Not available.
- Odor** : Characteristic.
- Odor threshold** : Not available.
- pH** : Not available.
- Melting point** : Not available.
- Boiling point** : <35°C (<95°F)
- Flash point** : Closed cup: -60°C (-76°F)
- Auto-ignition temperature** : Not available.
- Decomposition temperature** : Not available.
- Flammability (solid, gas)** : Not available.
- Lower and upper explosive (flammable) limits** : Not available.

## Section 9. Physical and chemical properties

Evaporation rate	: Not available.
Vapor pressure	: Not available.
Vapor density	: Not available.
Relative density	: 1.07
Density ( lbs / gal )	: 8.93
Solubility	: Insoluble in the following materials: cold water.
Partition coefficient: n-octanol/water	: Not available.
Viscosity	: Kinematic (40°C (104°F)): >0.21 cm <sup>2</sup> /s (>21 cSt)
Volatility	: 46% (v/v), 76% (w/w)
% Solid. (w/w)	: 24
<b>Aerosol product</b>	
Type of aerosol	: Spray
Heat of combustion	: 26.85 kJ/g

## Section 10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: When exposed to high temperatures may produce hazardous decomposition products. Refer to protective measures listed in sections 7 and 8.
Incompatible materials	: Keep away from the following materials to prevent strong exothermic reactions: oxidizing agents, strong alkalis, strong acids.
Hazardous decomposition products	: Decomposition products may include the following materials: carbon monoxide, carbon dioxide, smoke, oxides of nitrogen.

## Section 11. Toxicological information

### Information on toxicological effects

#### Acute toxicity

**Section 11. Toxicological information**

Product/ingredient name	Result	Species	Dose	Exposure
acetone	LC50 Inhalation Vapor	Rat	76000 mg/m <sup>3</sup>	4 hours
	LD50 Dermal	Rabbit	15.8 g/kg	-
	LD50 Oral	Rat	5800 mg/kg	-
toluene	LC50 Inhalation Vapor	Rat	49 g/m <sup>3</sup>	4 hours
	LD50 Dermal	Rabbit	8.39 g/kg	-
	LD50 Oral	Rat	5580 mg/kg	-
butane	LC50 Inhalation Vapor	Rat	658000 mg/m <sup>3</sup>	4 hours
xylene	LD50 Dermal	Rabbit	>1.7 g/kg	-
	LD50 Oral	Rat	4.3 g/kg	-
Solvent naphtha (petroleum), light aromatic	LD50 Dermal	Rabbit	3.48 g/kg	-
	LD50 Oral	Rat	8400 mg/kg	-
ethylbenzene	LC50 Inhalation Vapor	Rat	17.8 mg/l	4 hours
	LD50 Dermal	Rabbit	17.8 g/kg	-
	LD50 Oral	Rat	3.5 g/kg	-

**Conclusion/Summary** : There are no data available on the mixture itself.

**Irritation/Corrosion**

Product/ingredient name	Result	Species	Score	Exposure	Observation
xylene	Skin - Moderate irritant	Rabbit	-	24 hours 500 mg	-

**Conclusion/Summary**

**Skin** : There are no data available on the mixture itself.

**Eyes** : There are no data available on the mixture itself.

**Respiratory** : There are no data available on the mixture itself.

**Sensitization****Conclusion/Summary**

**Skin** : There are no data available on the mixture itself.

**Respiratory** : There are no data available on the mixture itself.

**Mutagenicity****Conclusion/Summary**

: There are no data available on the mixture itself.

**Carcinogenicity****Conclusion/Summary**

: There are no data available on the mixture itself.

**Classification**

Product/ingredient name	OSHA	IARC	NTP
toluene	-	3	-
xylene	-	3	-
ethylbenzene	-	2B	-

Carcinogen Classification code:

IARC: 1, 2A, 2B, 3, 4

NTP: Known to be a human carcinogen; Reasonably anticipated to be a human carcinogen

OSHA: +

Not listed/not regulated: -

**Reproductive toxicity**

## Section 11. Toxicological information

**Conclusion/Summary** : There are no data available on the mixture itself.

### Teratogenicity

**Conclusion/Summary** : There are no data available on the mixture itself.

### Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
acetone	Category 3	Not applicable.	Narcotic effects
toluene	Category 3	Not applicable.	Narcotic effects
xylene	Category 3	Not applicable.	Respiratory tract irritation
Solvent naphtha (petroleum), light aromatic	Category 3	Not applicable.	Narcotic effects
	Category 3	Not applicable.	Respiratory tract irritation

### Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
toluene	Category 2	Not determined	Not determined
propane	Category 2	Not determined	Not determined
butane	Category 2	Not determined	Not determined
ethylbenzene	Category 2	Not determined	hearing organs

**Target organs** : Contains material which causes damage to the following organs: brain, central nervous system (CNS).  
Contains material which may cause damage to the following organs: blood, kidneys, lungs, the nervous system, the reproductive system, liver, heart, gastrointestinal tract, upper respiratory tract, skin, eye, lens or cornea.

### Aspiration hazard

Name	Result
toluene	ASPIRATION HAZARD - Category 1
xylene	ASPIRATION HAZARD - Category 1
Solvent naphtha (petroleum), light aromatic	ASPIRATION HAZARD - Category 1
ethylbenzene	ASPIRATION HAZARD - Category 1

### Information on the likely routes of exposure

#### Potential acute health effects

**Eye contact** : Causes serious eye irritation.  
**Inhalation** : Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness.  
**Skin contact** : Causes skin irritation. Defatting to the skin.  
**Ingestion** : Can cause central nervous system (CNS) depression.

#### Over-exposure signs/symptoms

**Eye contact** : Adverse symptoms may include the following:  
 pain or irritation  
 watering  
 redness

## Section 11. Toxicological information

**Inhalation** : Adverse symptoms may include the following:  
 respiratory tract irritation  
 coughing  
 nausea or vomiting  
 headache  
 drowsiness/fatigue  
 dizziness/vertigo  
 unconsciousness  
 reduced fetal weight  
 increase in fetal deaths  
 skeletal malformations

**Skin contact** : Adverse symptoms may include the following:  
 irritation  
 redness  
 dryness  
 cracking  
 reduced fetal weight  
 increase in fetal deaths  
 skeletal malformations

**Ingestion** : Adverse symptoms may include the following:  
 reduced fetal weight  
 increase in fetal deaths  
 skeletal malformations

### Delayed and immediate effects and also chronic effects from short and long term exposure

**Conclusion/Summary** : There are no data available on the mixture itself. Exposure to component solvent vapor concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness. Solvents may cause some of the above effects by absorption through the skin. There is some evidence that repeated exposure to organic solvent vapors in combination with constant loud noise can cause greater hearing loss than expected from exposure to noise alone. If splashed in the eyes, the liquid may cause irritation and reversible damage. Ingestion may cause nausea, diarrhea and vomiting. This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

### Short term exposure

**Potential immediate effects** : There are no data available on the mixture itself.

**Potential delayed effects** : There are no data available on the mixture itself.

### Long term exposure

**Potential immediate effects** : There are no data available on the mixture itself.

**Potential delayed effects** : There are no data available on the mixture itself.

### Potential chronic health effects

**General** : May cause damage to organs through prolonged or repeated exposure. Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.

**Carcinogenicity** : Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.

## Section 11. Toxicological information

- Mutagenicity** : No known significant effects or critical hazards.  
**Teratogenicity** : Suspected of damaging the unborn child.  
**Developmental effects** : No known significant effects or critical hazards.  
**Fertility effects** : No known significant effects or critical hazards.

### Numerical measures of toxicity

#### Acute toxicity estimates

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
55-653 PITT BULL SPRAY COLD GALVANIZING	82942.2	16121.8	N/A	333.2	45.4
acetone	5800	15800	N/A	76	N/A
toluene	5580	8390	N/A	49	N/A
butane	N/A	N/A	N/A	658	N/A
xylene	4300	1100	N/A	11	1.5
Solvent naphtha (petroleum), light aromatic	8400	3480	N/A	N/A	N/A
ethylbenzene	3500	17800	N/A	17.8	1.5

## Section 12. Ecological information

### Toxicity

Product/ingredient name	Result	Species	Exposure
Solvent naphtha (petroleum), light aromatic	Acute LC50 8.2 mg/l	Fish	96 hours
ethylbenzene	Acute LC50 150 to 200 mg/l Fresh water	Fish	96 hours

### Persistence and degradability

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
acetone	-	-	Readily
toluene	-	-	Readily
xylene	-	-	Readily
ethylbenzene	-	-	Readily

### Bioaccumulative potential

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
acetone	-0.24	3	low
toluene	2.73	8.32	low
propane	2.36	-	low
butane	2.89	-	low
xylene	3.16	7.4 to 18.5	low
ethylbenzene	3.15	79.43	low

### Mobility in soil

## Section 12. Ecological information

**Soil/water partition coefficient (K<sub>oc</sub>)** : Not available.

## Section 13. Disposal considerations

**Disposal methods** : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Do not puncture or incinerate container.

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees. Section 6. Accidental release measures

## 14. Transport information

	DOT	IMDG	IATA
<b>UN number</b>	UN1950	UN1950	UN1950
<b>UN proper shipping name</b>	AEROSOLS	AEROSOLS	Aerosols, flammable
<b>Transport hazard class (es)</b>	2.1	2.1	2.1
<b>Packing group</b>	-	-	-
<b>Environmental hazards</b>	No.	Yes.	Yes. The environmentally hazardous substance mark is not required.
<b>Marine pollutant substances</b>	Not applicable.	(Zinc powder - zinc dust (stabilized), Solvent naphtha (petroleum), light aromatic)	Not applicable.
<b>Product RQ (lbs)</b>	4444.4	Not applicable.	Not applicable.
<b>RQ substances</b>	(xylene, toluene)	Not applicable.	Not applicable.

### Additional information

- DOT** : Package sizes shipped in quantities less than the product reportable quantity are not subject to the RQ (reportable quantity) transportation requirements.
- IMDG** : The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg.
- IATA** : The environmentally hazardous substance mark may appear if required by other transportation regulations.

## 14. Transport information

**Special precautions for user** : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

## Section 15. Regulatory information

### United States

**United States inventory (TSCA 8b)** : All components are listed or exempted.

#### SARA 302/304

**SARA 304 RQ** : Not applicable.

#### Composition/information on ingredients

No products were found.

#### SARA 311/312

**Classification** : FLAMMABLE AEROSOLS - Category 1  
 GASES UNDER PRESSURE - Compressed gas  
 SKIN IRRITATION - Category 2  
 EYE IRRITATION - Category 2A  
 CARCINOGENICITY - Category 2  
 TOXIC TO REPRODUCTION (Unborn child) - Category 2  
 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3  
 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2  
 HNOC - Defatting irritant

#### Composition/information on ingredients

Name	%	Classification
acetone	≥20 - ≤50	FLAMMABLE LIQUIDS - Category 2 EYE IRRITATION - Category 2A SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 HNOC - Defatting irritant
toluene	≥10 - ≤20	FLAMMABLE LIQUIDS - Category 2 SKIN IRRITATION - Category 2 TOXIC TO REPRODUCTION (Unborn child) - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2 ASPIRATION HAZARD - Category 1
propane	≥10 - ≤20	HNOC - Defatting irritant FLAMMABLE GASES - Category 1 GASES UNDER PRESSURE - Compressed gas SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2
butane	≥10 - ≤20	FLAMMABLE GASES - Category 1 GASES UNDER PRESSURE - Compressed gas SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2



## Section 15. Regulatory information

xylene	≥1.0 - ≤5.0	FLAMMABLE LIQUIDS - Category 3 ACUTE TOXICITY (dermal) - Category 4 ACUTE TOXICITY (inhalation) - Category 4 SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3 ASPIRATION HAZARD - Category 1
Solvent naphtha (petroleum), light aromatic	≥1.0 - ≤5.0	FLAMMABLE LIQUIDS - Category 3 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 ASPIRATION HAZARD - Category 1
ethylbenzene	<1.0	HNOC - Defatting irritant FLAMMABLE LIQUIDS - Category 2 ACUTE TOXICITY (inhalation) - Category 4 CARCINOGENICITY - Category 2 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (hearing organs) - Category 2 ASPIRATION HAZARD - Category 1 HNOC - Defatting irritant

### SARA 313

Supplier notification	Chemical name	CAS number	Concentration
	toluene	108-88-3	10 - 30
	Zinc powder - zinc dust (stabilized)	7440-66-6	10 - 30
	xylene	1330-20-7	1 - 5
	ethylbenzene	100-41-4	0.1 - 1

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

**Additional environmental information is contained on the Environmental Data Sheet for this product, which can be obtained from your PPG representative.**

### California Prop. 65

 **WARNING:** Cancer and Reproductive Harm - [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

## Section 16. Other information

### Hazardous Material Information System (U.S.A.)

**Health :** 2 \* **Flammability :** 4 **Physical hazards :** 1

(\* ) - Chronic effects

**Caution:** HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings and the associated label are not required on MSDSs or products leaving a facility under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc.

**The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.**

### National Fire Protection Association (U.S.A.)

**Health :** 2 **Flammability :** 4 **Instability :** 1

**Product code** 00356944

**Date of issue** 16 November 2019 **Version** 8.01

**Product name** 55-653 PITT BULL SPRAY COLD GALVANIZING

## Section 16. Other information

**Date of previous issue** : 3/7/2019

**Organization that prepared the MSDS** : EHS

**Key to abbreviations** : ATE = Acute Toxicity Estimate  
BCF = Bioconcentration Factor  
GHS = Globally Harmonized System of Classification and Labelling of Chemicals  
IATA = International Air Transport Association  
IBC = Intermediate Bulk Container  
IMDG = International Maritime Dangerous Goods  
LogPow = logarithm of the octanol/water partition coefficient  
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)  
N/A = Not available  
SGG = Segregation Group  
UN = United Nations

✔ Indicates information that has changed from previously issued version.

### Disclaimer

*The information contained in this data sheet is based on present scientific and technical knowledge. The purpose of this information is to draw attention to the health and safety aspects concerning the products supplied by PPG, and to recommend precautionary measures for the storage and handling of the products. No warranty or guarantee is given in respect of the properties of the products. No liability can be accepted for any failure to observe the precautionary measures described in this data sheet or for any misuse of the products.*



# Safety Data Sheet

587

SDS Revision Date:

08/25/2015

## 1. Identification

### 1.1. Product identifier

**Product Identity** 587

**Alternate Names** 587

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

**Intended use** See Technical Data Sheet.

**Application Method** See Technical Data Sheet.

### 1.3. Details of the supplier of the safety data sheet

**Company Name** John Tillman Company  
1300 W. Artesia Blvd.  
Compton, CA 90220. USA

### Emergency

**24 hour Emergency Telephone No.** 310-764-0110

**Customer Service:** 310-764-0110

## 2. Hazard(s) identification

### 2.1. Classification of the substance or mixture

Eye Irrit. 2;H319 May cause eye irritation.

### 2.2. Label elements

Using the Toxicity Data listed in section 11 and 12 the product is labeled as follows.



**Warning**

H319 May cause eye irritation.

### [Prevention]:

P264 Wash thoroughly after handling.

P280 Wear protective gloves / eye protection / face protection.

### [Response]:

P305+351+338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing.

P337+313 If eye irritation persists: Get medical advice / attention.

### [Storage]:



No GHS storage statements

**[Disposal]:**

No GHS disposal statements

### 3. Composition/information on ingredients

This product contains the following substances that present a hazard within the meaning of the relevant State and Federal Hazardous Substances regulations.

Ingredient/Chemical Designations	Weight %	GHS Classification	Notes
Fibrous glass CAS Number: 0065997-17-3	100	Eye Irrit. 2;H319	[1]

In accordance with paragraph (i) of §1910.1200, the specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

[1] Substance classified with a health or environmental hazard.

[2] Substance with a workplace exposure limit.

[3] PBT-substance or vPvB-substance.

\*The full texts of the phrases are shown in Section 16.

### 4. First aid measures

#### 4.1. Description of first aid measures

- General** In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.
- Inhalation** Drink water to clear throat, blow nose to evacuate fibers.
- Eyes** Irrigate copiously with clean water for at least 15 minutes, holding the eyelids apart and seek medical attention.
- Skin** Remove contaminated clothing. Wash skin thoroughly with soap and water or use a recognized skin cleanser.
- Ingestion** If swallowed obtain immediate medical attention. Keep at rest. Do NOT induce vomiting.

#### 4.2. Most important symptoms and effects, both acute and delayed

- Overview** Exposure with the product may cause skin, eye, and respiratory tract irritation. See section 2 for further details.
- Eyes** May cause eye irritation.

### 5. Fire-fighting measures

#### 5.1. Extinguishing media

Water, carbon dioxide, or dry chemical.



**5.2. Special hazards arising from the substance or mixture**

Hazardous decomposition: Carbon monoxide, carbon dioxide

**5.3. Advice for fire-fighters**

Thermal decomposition of fiber coating may produce an Irritating mixture of smoke and fumes. Fire fighters should wear full protective gear including NIOSH approved self-contained breathing apparatus.

ERG Guide No. ----

**6. Accidental release measures**

**6.1. Personal precautions, protective equipment and emergency procedures**

Put on appropriate personal protective equipment (see section 8).

**6.2. Environmental precautions**

Do not allow spills to enter drains or waterways.

Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

**6.3. Methods and material for containment and cleaning up**

Prevent the spread of fiberglass dust & avoid dust generation conditions. Those involved in clean up of particulates should use appropriate personal protective equipment. Vacuum clean dusts. If sweeping is necessary, use a dust suppressant.

**7. Handling and storage**

**7.1. Precautions for safe handling**

See section 2 for further details. - [Prevention]:

**7.2. Conditions for safe storage, including any incompatibilities**

Store and use in a manner that will prevent airborne particulates in the workplace.

Incompatible materials: Strong oxidizing agents.

See section 2 for further details. - [Storage]:

**7.3. Specific end use(s)**

No data available.

**8. Exposure controls and personal protection**

**8.1. Control parameters**

**Exposure**

CAS No.	Ingredient	Source	Value
0065997-17-3	Fibrous glass, glass	OSHA	15 mg/m <sup>3</sup> (as nuisance dust)5 mg/m <sup>3</sup> (respirable fraction)
		ACGIH	10 mg/m <sup>3</sup> (as nuisance dust)5 mg/m <sup>3</sup> (respirable fraction)
		NIOSH	No Established Limit



		Supplier	No Established Limit
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**Carcinogen Data**

CAS No.	Ingredient	Source	Value
0065997-17-3	Fibrous glass, glass	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;

**8.2. Exposure controls**

- Respiratory** Where dust level exceeds the TLV, use NIOSH approved respirator to protect against nuisance dusts.
- Eyes** Safety glasses with side shield goggles.
- Skin** Work aprons or smocks are recommended. Wear loose fitting long sleeved clothing. NIOSH approved air supplied or self contained respirator. Protective Gloves and barrier creams if necessary.
- Engineering Controls** Local Exhaust Recommended for processing machinery where dust generation is apparent. Mechanical exhaust is acceptable where local exhaust is not feasible.
- Other Work Practices** Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

See section 2 for further details. - [Prevention]:

**9. Physical and chemical properties**

<b>Appearance</b>	Plain Weave Heavy Weight Fiberglass Fabric
<b>Odor</b>	No smell
<b>Odor threshold</b>	Not determined
<b>pH</b>	Not Measured
<b>Melting point / freezing point</b>	> 1000°F
<b>Initial boiling point and boiling range</b>	Not Measured
<b>Flash Point</b>	250°C (TOC)
<b>Evaporation rate (Ether = 1)</b>	Not Measured
<b>Flammability (solid, gas)</b>	Not Applicable
<b>Upper/lower flammability or explosive limits</b>	<b>Lower Explosive Limit:</b> Not Measured <b>Upper Explosive Limit:</b> Not Measured
<b>Vapor pressure (Pa)</b>	Not Measured
<b>Vapor Density</b>	Not Measured
<b>Specific Gravity</b>	2.5
<b>Solubility in Water</b>	None
<b>Partition coefficient n-octanol/water (Log Kow)</b>	Not Measured
<b>Auto-ignition temperature</b>	Not Measured
<b>Decomposition temperature</b>	Not Measured
<b>Viscosity (cSt)</b>	Not Measured



**9.2. Other information**

No other relevant information.

**10. Stability and reactivity**

**10.1. Reactivity**

Hazardous Polymerization will not occur.

**10.2. Chemical stability**

Stable under normal circumstances.

**10.3. Possibility of hazardous reactions**

No data available.

**10.4. Conditions to avoid**

No data available.

**10.5. Incompatible materials**

Strong oxidizing agents.

**10.6. Hazardous decomposition products**

Carbon monoxide, carbon dioxide

**11. Toxicological information**

**Acute toxicity**

Ingredient	Oral LD50, mg/kg	Skin LD50, mg/kg	Inhalation Vapor LC50, mg/L/4hr	Inhalation Dust LC50, mg/L/4hr	Inhalation Gas LC50, ppm
Fibrous glass, glass - (65997-17-3)	No data available	No data available	No data available	No data available	No data available

Note: When no route specific LD50 data is available for an acute toxin, the converted acute toxicity point estimate was used in the calculation of the product's ATE (Acute Toxicity Estimate).

Classification	Category	Hazard Description
Acute toxicity (oral)	---	Not Applicable
Acute toxicity (dermal)	---	Not Applicable
Acute toxicity (inhalation)	---	Not Applicable
Skin corrosion/irritation	---	Not Applicable
Serious eye damage/irritation	2	Causes serious eye irritation.
Respiratory sensitization	---	Not Applicable



Skin sensitization	---	Not Applicable
Germ cell mutagenicity	---	Not Applicable
Carcinogenicity	---	Not Applicable
Reproductive toxicity	---	Not Applicable
STOT-single exposure	---	Not Applicable
STOT-repeated exposure	---	Not Applicable
Aspiration hazard	---	Not Applicable

## 12. Ecological information

### 12.1. Toxicity

No additional information provided for this product. See Section 3 for chemical specific data.

### Aquatic Ecotoxicity

Ingredient	96 hr LC50 fish, mg/l	48 hr EC50 crustacea, mg/l	ErC50 algae, mg/l
Fibrous glass, glass - (65997-17-3)	Not Available	Not Available	Not Available

### 12.2. Persistence and degradability

There is no data available on the preparation itself.

### 12.3. Bioaccumulative potential

Not Measured

### 12.4. Mobility in soil

No data available.

### 12.5. Results of PBT and vPvB assessment

This product contains no PBT/vPvB chemicals.

### 12.6. Other adverse effects

No data available.

## 13. Disposal considerations

### 13.1. Waste treatment methods

In most cases, woven fiberglass scrap can be disposed of in a sanitary landfill in accordance with Federal, State, & local regulations. Check with local authorities any questions concerning disposal.

## 14. Transport information

	DOT (Domestic Surface Transportation)	IMO / IMDG (Ocean Transportation)	ICAO/IATA
<b>14.1. UN number</b>	Not Applicable	Not Regulated	Not Regulated





<b>14.2. UN proper shipping name</b>	Not Regulated	Not Regulated	Not Regulated
<b>14.3. Transport hazard class(es)</b>	<b>DOT Hazard Class:</b> Not Applicable	<b>IMDG:</b> Not Applicable <b>Sub Class:</b> Not Applicable	<b>Air Class:</b> Not Applicable
<b>14.4. Packing group</b>	Not Applicable	Not Applicable	Not Applicable
<b>14.5. Environmental hazards</b>			
<b>IMDG</b>	Marine Pollutant: No		
<b>14.6. Special precautions for user</b>			
No further information			

**15. Regulatory information**

**Regulatory Overview** The regulatory data in Section 15 is not intended to be all-inclusive, only selected regulations are represented.

**Toxic Substance Control Act (TSCA)** All components of this material are either listed or exempt from listing on the TSCA Inventory.

**WHMIS Classification** D2B

**US EPA Tier II Hazards**

**Fire:** No  
**Sudden Release of Pressure:** No  
**Reactive:** No  
**Immediate (Acute):** Yes  
**Delayed (Chronic):** No

**EPCRA 311/312 Chemicals and RQs:**  
To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

**EPCRA 302 Extremely Hazardous:**  
To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

**EPCRA 313 Toxic Chemicals:**  
To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

**Proposition 65 - Carcinogens (>0.0%):**  
To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

**Proposition 65 - Developmental Toxins (>0.0%):**  
To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

**Proposition 65 - Female Repro Toxins (>0.0%):**  
To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

**Proposition 65 - Male Repro Toxins (>0.0%):**  
To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

**New Jersey RTK Substances (>1%) :**  
To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

**Pennsylvania RTK Substances (>1%) :**  
To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

**16. Other information**

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein.



**TILLMAN™**  
*The Brand Pros Demand*

## Safety Data Sheet

**587**

**SDS Revision Date:**

**08/25/2015**

We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to our products. Customers/users of this product must comply with all applicable health and safety laws, regulations, and orders.

The full text of the phrases appearing in section 3 is:

H319 Causes serious eye irritation.

End of Document



# Safety Data Sheet (SDS)

Date Prepared/Revised: 12/4/18      Version no.: 04      Supersedes: 9/19/2017

## 1.) Identification of the Mixture and of the Company

Product identifier: **EPS Foam / Concrete Adhesive**

Product name:  
**8178 EPS Foam / Concrete Adhesive**

Relevant identified uses of the substance: :8178 EPS Foam / Concrete Adhesive can be used throughout general industry and construction for bonding EPS to concrete and other EPS surfaces.

Uses advised against: Poorly ventilated areas

CAS No:	<b>Not Applicable (mixture)</b>
EC No:	<b>Not Applicable (mixture)</b>
Index No:	<b>Not Applicable (mixture)</b>
Manufacturer/Supplier:	<b>Aervoe Industries Incorporated</b>
Street address/P.O. Box:	<b>1100 Mark Circle</b>
Country ID/Postcode/Place:	<b>Gardnerville, Nevada 89410</b>
Telephone number:	<b>1-775-782-0100</b>
e-mail:	<b>mailbox@aervoe.com</b>
National contact:	<b>Aervoe industries Incorporated</b>
For Product Information:	<b>1-800-227-0196</b>
Emergency telephone number:	<b>1-800-424-9300 (CHEMTREC – 24 hrs)</b>

## 2. Hazards identification

### Classifications

Physical Hazards:            Aerosol - Category 1  
                                      Flam. Gas 1  
                                      Press. Gas  
                                      Flam. Liq. 2

Health Hazards:             Repr. 2  
                                      Asp. Tox. 1  
                                      STOT RE 2  
                                      Skin Irrit. 2  
                                      STOT SE 3  
                                      Eye Irrit. 2  
                                      Carc. 1B  
                                      Muta. 1B  
                                      Acute Tox. 4

Environmental Hazards:    Aquatic Acute 1  
                                      Aquatic Chronic 1  
                                      Aquatic Chronic 2

### Labeling

Date Prepared/Revised: 12/4/18      Version no.: 04      Supersedes: 9/19/2017

Signal Word:                      Danger

Hazard Statements:            H220 – Extremely flammable gas.  
 H222 – Extremely Flammable Aerosol  
 H225 – Highly flammable liquid and vapour  
 H229 – Pressurized container: may burst if heated  
 H302 – Harmful if swallowed.  
 H304 – May be fatal if swallowed and enters airways  
 H315 – Causes skin irritation  
 H332 – Harmful if inhaled.  
 H336 – May cause drowsiness or dizziness.  
 H340 – May cause genetic defects  
 H350 – May cause cancer  
 H361 – Suspected of damaging fertility or the unborn child .  
 H373 – May cause damage to nervous system through prolonged or repeated exposure(Inhalation)  
 H400 – Very toxic to aquatic life.  
 H410 – Very toxic to aquatic life with long lasting effects.  
 H411 – Toxic to aquatic life with long lasting effects.

Precautionary Statements:    P101 - If medical advice is needed, have product container or label at hand  
 P102 - Keep out of reach of children  
 P103 - Read label before use  
 P210 - Keep away from heat/sparks/open flames/hot surfaces - no smoking  
 P211 - Do not spray on an open flame or other ignition source  
 P251 - Pressurized container: Do not pierce or burn, even after use  
 P261 - Avoid breathing dust/fume/gas/mist/vapours/spray  
 P262 - Do not get in eyes, on skin, or on clothing  
 P264 - Wash ... thoroughly after handling  
 P280 - Wear protective gloves/eye protection/face protection

P303+P361+P353 - If on skin or hair, remove/takeoff immediately all contaminated clothing. Rinse skin with water/shower.  
 P410+P412 - Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F  
 P501 - Dispose of contents/container in accordance with local/regional/national/international regulation

Symbols/Pictograms:





# Safety Data Sheet (SDS)

Date Prepared/Revised: 12/4/18      Version no.: 04      Supersedes: 9/19/2017

### 3. Composition / Information on Ingredients

#### Composition

Chemical	Synonyms	CAS Number	EINECS Number	Weight Percent	Hazard Category	H-Code
Dimethyl Ether	D.M.E.	115-10-6	204-065-8	15-40%	Flam. Gas 1 Press. Gas	H220
Hexane	n-Hexane	110-54-3	203-777-6	10-30%	Flam. Liq. 2 Repr. 2 Asp. Tox. 1 STOT RE 2 * Skin Irrit. 2 STOT SE 3 Aquatic Chronic 2	H225 H361f H304 H373 H315 H336 H411
Aliphatic Hydrocarbon	Petroleum Distillate	8052-41-3	232-489-3	10-30%	Carc. 1B Muta. 1B Asp. Tox. 1	H350 H340 H304
Cyclohexane	Hexanaphthene	110-82-7	203-806-2	1-5%	Flam. Liq. 2 Asp. Tox. 1 Skin Irrit. 2 STOT SE 3 Aquatic Acute 1 Aquatic Chronic 1	H225 H304 H315 H336 H400 H410
Benzyl Alcohol	Phenylcarbinol	100-51-6	202-859-9	1-5%	Acute Tox. 4	H332 H302

#### Other Product Information

Chemical Identity: Mixture

### 4.) First Aid Measures

**General Advice:**

If symptoms persist, always call a doctor.

**Inhalation First Aid:**

Remove victim to fresh air and provide oxygen if breathing is difficult. If not breathing, give artificial respiration, preferably mouth to mouth. Get medical attention immediately.

**Skin Contact First Aid:**

Wash with soap and water. Remove contaminated clothing and shoes. Get medical attention immediately. Wash clothing before reuse.

**Eye Contact First Aid:**

If contact with eyes, immediately flush eyes with plenty of water for at least 15 minutes, while holding eyelids open. Get medical attention immediately.

**Ingestion First Aid:**

If swallowed, wash out mouth with water provided the person is conscious. Do not induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention immediately.

**Most Important Symptoms/Effects:**

Exposure may cause slight irritation to the skin, eyes, and respiratory tract. Excessive exposure may cause central nervous system effects.



# Safety Data Sheet (SDS)

Date Prepared/Revised: 12/4/18      Version no.: 04      Supersedes: 9/19/2017

## 5. Fire Fighting Measures

Flammable Properties:	Aerosol
Auto Ignition Temperature:	Not Available
Suitable extinguishing media:	Carbon dioxide, dry chemical, water spray.
Unsuitable extinguishing media:	None known
Special hazards arising from the substance or mixture:	None known
Hazardous combustion products:	Carbon dioxide, Carbon monoxide
Fire & Explosion Hazards:	Closed Containers may rupture due to the buildup of pressure from extreme temperatures.

Precautions for fire-fighters: Use water spray to cool containers exposed to heat or fire to prevent pressure build up. In the event of a fire, wear full protective clothing and NIOSH- approved self-contained breathing apparatus with full face piece operated in the pressure demand or other positive pressure mode.

## 6. Accidental Release Measures

### PERSONAL PRECAUTIONARY MEASURES:

- 1) Follow personal protective equipment recommendations found in section 8.
- 2) Maintain adequate ventilation.

### SPILL CLEAN-UP PROCEDURES:

- 1.) Evacuate unprotected personnel from the area.
- 2.) Remove sources of ignition if safe to do so.
- 3.) Pickup spilled materials using non-sparking tools and place in an appropriate container for disposal.
- 4.) Contain spill to prevent material from entering sewage or ground water systems.
- 5.) Always dispose of waste materials in accordance with all EU, National and Local Regulations.

## 7. Handling and Storage

### Handling:

Flammable Aerosol, use in a well ventilated area.  
Do not use near sources of ignition.  
Do not to eat, drink and smoke while working with this material.  
Wash hands after use.

### Conditions for safe storage, including any incompatibilities:

Store out of direct sunlight.  
Storage Temperature: 32° to 120°F (0° to 49°C).  
No known incompatibilities.

## 8. Exposure Controls / Personal Protection



# Safety Data Sheet (SDS)

Date Prepared/Revised: 12/4/18      Version no.: 04      Supersedes: 9/19/2017

### Appropriate engineering controls:

Ensure adequate ventilation. A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits.

Keep away from sources of ignition.

Take precautionary measures against static discharge.

### Personal Protection:

Eye & face protection devices such as safety glasses, safety goggles or face shield are recommended.

### Skin protection

Wear the appropriate protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

### Respiratory protection:

Use only in an adequately ventilated area. For unknown vapor concentrations use a positive-pressure, pressure-demand, self-contained breathing apparatus (SCBA).

Hazardous Ingredient	CAS Number	ACGIH TLV (TWA)	ACGIH TLV (STEL)	OSHA PEL (TWA)	OSHA PEL (STEL)
Aliphatic Hydrocarbon	8052-41-3	100ppm	N/AV	500ppm	N/AV
Dimethyl Ether	115-10-6	N/AV	N/AV	N/AV	N/AV
Hexane	110-54-3	50ppm	N/AV	500ppm	N/AV
Cyclohexane	110-82-7	100ppm	N/AV	300ppm	N/AV
Benzyl Alcohol	100-51-6	N/AV	N/AV	N/AV	N/AV

\*Values are based on the 2014 Guide to Occupational Exposure Values by ACGIH

## 9. Information on Basic Physical and Chemical Properties

Appearance: Amber, clear	Odor: Solvent odor
Odor Threshold: N/AV	pH: Not Applicable (solvent Base)
Melting Point: N/AV	Freezing Point: N/AV
Initial Boiling Point: N/AV	Boiling Point Range: N/AV
Flash Point: <0° F (-18° C)	Evaporation Rate: Faster than n-Butyl Acetate
Flammability Solid/Gas: Flammable gas	LEL: N/AV UEL: N/AV
Vapor Pressure: N/AV	Vapor Density: Heavier Than Air
Relative Density: N/AV	Solubility: Negligible
Partition Coefficient: n-octanol/ water: N/AV	Auto-ignition Temperature: N/AV
Decomposition Temperature: N/AV	Viscosity: N/AV
Explosive Properties: N/AV	Oxidizing Properties: N/AV

## 10. Stability & Reactivity



# Safety Data Sheet (SDS)

Date Prepared/Revised: 12/4/18      Version no.: 04      Supersedes: 9/19/2017

Possibility of hazardous reactions: Hazardous polymerization will not occur under normal conditions  
Chemical stability: Stable under normal conditions  
Conditions to avoid: Heat and ignition sources  
Incompatible materials: Strong Oxidizing Agents  
Hazardous decomposition products: Will not occur

## 11. Toxicological Information

Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage. Repeated overexposure can also damage kidneys, lungs, liver, heart and blood

Routes of exposure: Eyes, skin, ingestion, and/or inhalation

Acute toxicological data: (Hexane) LD50: 2870mg/kg (Rat - Oral)  
(Cyclohexane) LD50: >5g/kg (Rat-Oral)  
(DME) LC50: 1644,000 ppm/4 hr  
(Benzyl Alcohol) 1230 mg/kg (Rat-Oral)

Eye irritation data: N/AV

Skin irritation/sensitization/absorption data: N/AV

Reproductive toxicity data: N/AV

Mutagenicity data: Muta. 1B

Symptoms associated with physical contact: N/AV

Acute/chronic effects from short/long term exposure: Irritating to skin. Prolonged/repeated contact may cause defatting of the skin which can lead to dermatitis. Not expected to be a skin sensitizer.

Known reportable carcinogens via the following agencies:

NTP: N/AV

IARC: N/AV

OSHA: N/AV

\* Petroleum distillates may contain chemical carcinogens in limited quantities (< 0.01%). These quantities are determined by the supplier/fraction/purity of the distillate during the manufacturing process. Chemicals that may be present within distillates are listed on California's prop 65 list such as ETHYLBENZENE, BENZENE, and TOLUENE.

## 12. Ecological Information





# Safety Data Sheet (SDS)

Date Prepared/Revised: 12/4/18      Version no.: 04      Supersedes: 9/19/2017

Ecotoxicity: **No Data Available**  
Persistence and degradability: **No Data Available**  
Bioaccumulative potential: **No Data Available**  
Mobility in soil: **No Data Available**  
Results of PBT and vPvB assessment: **No Data Available**  
Other adverse effects: **No Data Available**

## 13. Disposal Considerations

**Waste Disposal:** Dispose of material in accordance with EU, national and local requirements. For proper disposal of used material, an assessment must be completed to determine the proper and permissible waste management options permitted under applicable rules, regulations and/or laws governing your location.

**Product / Packaging disposal:** Dispose of packaging in accordance with federal, state and local requirements, regulations and/or laws governing your location.

## 14. Transportation Information

### US DOT

UN Number	Proper Shipping Name	Hazard Class	Packing Group	Marine Pollutant	Special Provisions
UN1950	Aerosols	2.1	Not Applicable	Not Applicable	Reference 49 CFR 172.101

### IMDG

UN Number	Proper Shipping Name	Hazard Class	Packing Group	Marine Pollutant	Special Provisions
UN1950	Aerosols	2.1	Not Applicable	Not Applicable	Reference IMDG code part 3

### IATA:

UN Number	Proper Shipping Name	Hazard Class	Packing Group	Marine Pollutant	Special Provisions
UN1950	Aerosols, Flammable	2.1	Not Applicable	Not Applicable	Reference IATA Dangerous Goods Regulation

## 15. Regulatory Information

### Workplace classification:

This product is considered hazardous under the OSHA Hazard Communication Standard (29 CFR 1910.1200). The Occupational Safety and Health Administration's interpretation of the product's hazard to workers.

### SARA Title 3:

Section 311/312 Categorizations (40 CFR 372): This product is a hazardous chemical under 29 CFR 1910.1200, and is categorized as an immediate and delayed health, and flammability physical hazard.



# Safety Data Sheet (SDS)

Date Prepared/Revised: 12/4/18      Version no.: 04      Supersedes: 9/19/2017

Superfund Amendment and Reauthorization Act (SARA) category. SARA requires reporting any spill of any hazardous substance.

**TSCA status:** All chemicals in this product are listed, or are exempt from listing, on the TSCA Inventory.

**WHMIS:** This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the (M)SDS contains all of the information required by the CPR.

**PROP 65 (CA):** WARNING: Reproductive Harm – [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

## 16. Other Information

This SDS has been completed in accordance with GHS Rev04 (2011): U.S OSHA, CMA, ANSI, Canadian WHMIS standards, and European Directives.

Date of Preparation/Revision: 12/4/18

Supersedes: (9/19/2017)

To the best of our knowledge, the information contained herein is believed to be accurate. However, the above data does not imply any guarantee or warranty of any kind, expressed or implied. The final determination of the suitability of any material is the sole responsibility of the user. All materials made present un-known hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee these are the only hazards existing.



# Safety Data Sheet (SDS)

Date Prepared/Revised: 12/4/18      Version no.: 04      Supersedes: 9/19/2017

## 1.) Identification of the Mixture and of the Company

Product identifier: **EPS Foam / Concrete Adhesive**

Product name:  
**8178 EPS Foam / Concrete Adhesive**

Relevant identified uses of the substance: :8178 EPS Foam / Concrete Adhesive can be used throughout general industry and construction for bonding EPS to concrete and other EPS surfaces.

Uses advised against: Poorly ventilated areas

CAS No:	<b>Not Applicable (mixture)</b>
EC No:	<b>Not Applicable (mixture)</b>
Index No:	<b>Not Applicable (mixture)</b>
Manufacturer/Supplier:	<b>Aervoe Industries Incorporated</b>
Street address/P.O. Box:	<b>1100 Mark Circle</b>
Country ID/Postcode/Place:	<b>Gardnerville, Nevada 89410</b>
Telephone number:	<b>1-775-782-0100</b>
e-mail:	<b>mailbox@aervoe.com</b>
National contact:	<b>Aervoe industries Incorporated</b>
For Product Information:	<b>1-800-227-0196</b>
Emergency telephone number:	<b>1-800-424-9300 (CHEMTREC – 24 hrs)</b>

## 2. Hazards identification

### Classifications

Physical Hazards:      Aerosol - Category 1  
                                  Flam. Gas 1  
                                  Press. Gas  
                                  Flam. Liq. 2

Health Hazards:      Repr. 2  
                                  Asp. Tox. 1  
                                  STOT RE 2  
                                  Skin Irrit. 2  
                                  STOT SE 3  
                                  Eye Irrit. 2  
                                  Carc. 1B  
                                  Muta. 1B  
                                  Acute Tox. 4

Environmental Hazards:      Aquatic Acute 1  
                                  Aquatic Chronic 1  
                                  Aquatic Chronic 2

### Labeling





# Safety Data Sheet (SDS)

Date Prepared/Revised: 12/4/18      Version no.: 04      Supersedes: 9/19/2017

### 3. Composition / Information on Ingredients

#### Composition

Chemical	Synonyms	CAS Number	EINECS Number	Weight Percent	Hazard Category	H-Code
Dimethyl Ether	D.M.E.	115-10-6	204-065-8	15-40%	Flam. Gas 1 Press. Gas	H220
Hexane	n-Hexane	110-54-3	203-777-6	10-30%	Flam. Liq. 2 Repr. 2 Asp. Tox. 1 STOT RE 2 * Skin Irrit. 2 STOT SE 3 Aquatic Chronic 2	H225 H361f H304 H373 H315 H336 H411
Aliphatic Hydrocarbon	Petroleum Distillate	8052-41-3	232-489-3	10-30%	Carc. 1B Muta. 1B Asp. Tox. 1	H350 H340 H304
Cyclohexane	Hexanaphthene	110-82-7	203-806-2	1-5%	Flam. Liq. 2 Asp. Tox. 1 Skin Irrit. 2 STOT SE 3 Aquatic Acute 1 Aquatic Chronic 1	H225 H304 H315 H336 H400 H410
Benzyl Alcohol	Phenylcarbinol	100-51-6	202-859-9	1-5%	Acute Tox. 4	H332 H302

#### Other Product Information

Chemical Identity: Mixture

### 4.) First Aid Measures

- General Advice:** If symptoms persist, always call a doctor.
- Inhalation First Aid:** Remove victim to fresh air and provide oxygen if breathing is difficult. If not breathing, give artificial respiration, preferably mouth to mouth. Get medical attention immediately.
- Skin Contact First Aid:** Wash with soap and water. Remove contaminated clothing and shoes. Get medical attention immediately. Wash clothing before reuse.
- Eye Contact First Aid:** If contact with eyes, immediately flush eyes with plenty of water for at least 15 minutes, while holding eyelids open. Get medical attention immediately.
- Ingestion First Aid:** If swallowed, wash out mouth with water provided the person is conscious. Do not induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention immediately.

#### Most Important Symptoms/Effects:

Exposure may cause slight irritation to the skin, eyes, and respiratory tract. Excessive exposure may cause central nervous system effects.



# Safety Data Sheet (SDS)

Date Prepared/Revised: 12/4/18      Version no.: 04      Supersedes: 9/19/2017

## 5. Fire Fighting Measures

Flammable Properties:	Aerosol
Auto Ignition Temperature:	Not Available
Suitable extinguishing media:	Carbon dioxide, dry chemical, water spray.
Unsuitable extinguishing media:	None known
Special hazards arising from the substance or mixture:	None known
Hazardous combustion products:	Carbon dioxide, Carbon monoxide
Fire & Explosion Hazards:	Closed Containers may rupture due to the buildup of pressure from extreme temperatures.

Precautions for fire-fighters: Use water spray to cool containers exposed to heat or fire to prevent pressure build up. In the event of a fire, wear full protective clothing and NIOSH- approved self-contained breathing apparatus with full face piece operated in the pressure demand or other positive pressure mode.

## 6. Accidental Release Measures

### PERSONAL PRECAUTIONARY MEASURES:

- 1) Follow personal protective equipment recommendations found in section 8.
- 2) Maintain adequate ventilation.

### SPILL CLEAN-UP PROCEDURES:

- 1.) Evacuate unprotected personnel from the area.
- 2.) Remove sources of ignition if safe to do so.
- 3.) Pickup spilled materials using non-sparking tools and place in an appropriate container for disposal.
- 4.) Contain spill to prevent material from entering sewage or ground water systems.
- 5.) Always dispose of waste materials in accordance with all EU, National and Local Regulations.

## 7. Handling and Storage

### Handling:

Flammable Aerosol, use in a well ventilated area.  
Do not use near sources of ignition.  
Do not to eat, drink and smoke while working with this material.  
Wash hands after use.

### Conditions for safe storage, including any incompatibilities:

Store out of direct sunlight.  
Storage Temperature: 32° to 120°F (0° to 49°C).  
No known incompatibilities.

## 8. Exposure Controls / Personal Protection



# Safety Data Sheet (SDS)

Date Prepared/Revised: 12/4/18      Version no.: 04      Supersedes: 9/19/2017

### Appropriate engineering controls:

Ensure adequate ventilation. A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits.

Keep away from sources of ignition.

Take precautionary measures against static discharge.

### Personal Protection:

Eye & face protection devices such as safety glasses, safety goggles or face shield are recommended.

### Skin protection

Wear the appropriate protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

### Respiratory protection:

Use only in an adequately ventilated area. For unknown vapor concentrations use a positive-pressure, pressure-demand, self-contained breathing apparatus (SCBA).

Hazardous Ingredient	CAS Number	ACGIH TLV (TWA)	ACGIH TLV (STEL)	OSHA PEL (TWA)	OSHA PEL (STEL)
Aliphatic Hydrocarbon	8052-41-3	100ppm	N/AV	500ppm	N/AV
Dimethyl Ether	115-10-6	N/AV	N/AV	N/AV	N/AV
Hexane	110-54-3	50ppm	N/AV	500ppm	N/AV
Cyclohexane	110-82-7	100ppm	N/AV	300ppm	N/AV
Benzyl Alcohol	100-51-6	N/AV	N/AV	N/AV	N/AV

\*Values are based on the 2014 Guide to Occupational Exposure Values by ACGIH

## 9. Information on Basic Physical and Chemical Properties

Appearance: Amber, clear	Odor: Solvent odor
Odor Threshold: N/AV	pH: Not Applicable (solvent Base)
Melting Point: N/AV	Freezing Point: N/AV
Initial Boiling Point: N/AV	Boiling Point Range: N/AV
Flash Point: <0° F (-18° C)	Evaporation Rate: Faster than n-Butyl Acetate
Flammability Solid/Gas: Flammable gas	LEL: N/AV UEL: N/AV
Vapor Pressure: N/AV	Vapor Density: Heavier Than Air
Relative Density: N/AV	Solubility: Negligible
Partition Coefficient: n-octanol/ water: N/AV	Auto-ignition Temperature: N/AV
Decomposition Temperature: N/AV	Viscosity: N/AV
Explosive Properties: N/AV	Oxidizing Properties: N/AV

## 10. Stability & Reactivity



# Safety Data Sheet (SDS)

Date Prepared/Revised: 12/4/18      Version no.: 04      Supersedes: 9/19/2017

Possibility of hazardous reactions: Hazardous polymerization will not occur under normal conditions

Chemical stability: Stable under normal conditions

Conditions to avoid: Heat and ignition sources

Incompatible materials: Strong Oxidizing Agents

Hazardous decomposition products: Will not occur

## 11. Toxicological Information

Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage. Repeated overexposure can also damage kidneys, lungs, liver, heart and blood

Routes of exposure: Eyes, skin, ingestion, and/or inhalation

Acute toxicological data: (Hexane) LD50: 2870mg/kg (Rat - Oral)  
(Cyclohexane) LD50: >5g/kg (Rat-Oral)  
(DME) LC50: 1644,000 ppm/4 hr  
(Benzyl Alcohol) 1230 mg/kg (Rat-Oral)

Eye irritation data: N/AV

Skin irritation/sensitization/absorption data: N/AV

Reproductive toxicity data: N/AV

Mutagenicity data: Muta. 1B

Symptoms associated with physical contact: N/AV

Acute/chronic effects from short/long term exposure: Irritating to skin. Prolonged/repeated contact may cause defatting of the skin which can lead to dermatitis. Not expected to be a skin sensitizer.

Known reportable carcinogens via the following agencies:

NTP: N/AV

IARC: N/AV

OSHA: N/AV

\* Petroleum distillates may contain chemical carcinogens in limited quantities (< 0.01%). These quantities are determined by the supplier/fraction/purity of the distillate during the manufacturing process. Chemicals that may be present within distillates are listed on California's prop 65 list such as ETHYLBENZENE, BENZENE, and TOLUENE.

## 12. Ecological Information





# Safety Data Sheet (SDS)

Date Prepared/Revised: 12/4/18      Version no.: 04      Supersedes: 9/19/2017

Ecotoxicity: **No Data Available**  
Persistence and degradability: **No Data Available**  
Bioaccumulative potential: **No Data Available**  
Mobility in soil: **No Data Available**  
Results of PBT and vPvB assessment: **No Data Available**  
Other adverse effects: **No Data Available**

## 13. Disposal Considerations

**Waste Disposal:** Dispose of material in accordance with EU, national and local requirements. For proper disposal of used material, an assessment must be completed to determine the proper and permissible waste management options permitted under applicable rules, regulations and/or laws governing your location.

**Product / Packaging disposal:** Dispose of packaging in accordance with federal, state and local requirements, regulations and/or laws governing your location.

## 14. Transportation Information

### US DOT

UN Number	Proper Shipping Name	Hazard Class	Packing Group	Marine Pollutant	Special Provisions
UN1950	Aerosols	2.1	Not Applicable	Not Applicable	Reference 49 CFR 172.101

### IMDG

UN Number	Proper Shipping Name	Hazard Class	Packing Group	Marine Pollutant	Special Provisions
UN1950	Aerosols	2.1	Not Applicable	Not Applicable	Reference IMDG code part 3

### IATA:

UN Number	Proper Shipping Name	Hazard Class	Packing Group	Marine Pollutant	Special Provisions
UN1950	Aerosols, Flammable	2.1	Not Applicable	Not Applicable	Reference IATA Dangerous Goods Regulation

## 15. Regulatory Information

### Workplace classification:

This product is considered hazardous under the OSHA Hazard Communication Standard (29 CFR 1910.1200). The Occupational Safety and Health Administration's interpretation of the product's hazard to workers.

### SARA Title 3:

Section 311/312 Categorizations (40 CFR 372): This product is a hazardous chemical under 29 CFR 1910.1200, and is categorized as an immediate and delayed health, and flammability physical hazard.



# Safety Data Sheet (SDS)

Date Prepared/Revised: 12/4/18      Version no.: 04      Supersedes: 9/19/2017

Superfund Amendment and Reauthorization Act (SARA) category. SARA requires reporting any spill of any hazardous substance.

**TSCA status:** All chemicals in this product are listed, or are exempt from listing, on the TSCA Inventory.

**WHMIS:** This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the (M)SDS contains all of the information required by the CPR.

**PROP 65 (CA):** WARNING: Reproductive Harm – [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

## 16. Other Information

This SDS has been completed in accordance with GHS Rev04 (2011): U.S OSHA, CMA, ANSI, Canadian WHMIS standards, and European Directives.

Date of Preparation/Revision: 12/4/18

Supersedes: (9/19/2017)

To the best of our knowledge, the information contained herein is believed to be accurate. However, the above data does not imply any guarantee or warranty of any kind, expressed or implied. The final determination of the suitability of any material is the sole responsibility of the user. All materials made present un-known hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee these are the only hazards existing.



# Safety Data Sheet (SDS)

Date Prepared/Revised: 12/4/18      Version no.: 04      Supersedes: 9/19/2017

## 1.) Identification of the Mixture and of the Company

Product identifier: **EPS Foam / Concrete Adhesive**

Product name:  
**8178 EPS Foam / Concrete Adhesive**

Relevant identified uses of the substance: :8178 EPS Foam / Concrete Adhesive can be used throughout general industry and construction for bonding EPS to concrete and other EPS surfaces.

Uses advised against: Poorly ventilated areas

CAS No:	<b>Not Applicable (mixture)</b>
EC No:	<b>Not Applicable (mixture)</b>
Index No:	<b>Not Applicable (mixture)</b>
Manufacturer/Supplier:	<b>Aervoe Industries Incorporated</b>
Street address/P.O. Box:	<b>1100 Mark Circle</b>
Country ID/Postcode/Place:	<b>Gardnerville, Nevada 89410</b>
Telephone number:	<b>1-775-782-0100</b>
e-mail:	<b>mailbox@aervoe.com</b>
National contact:	<b>Aervoe industries Incorporated</b>
For Product Information:	<b>1-800-227-0196</b>
Emergency telephone number:	<b>1-800-424-9300 (CHEMTREC – 24 hrs)</b>

## 2. Hazards identification

### Classifications

Physical Hazards:      Aerosol - Category 1  
                                  Flam. Gas 1  
                                  Press. Gas  
                                  Flam. Liq. 2

Health Hazards:      Repr. 2  
                                  Asp. Tox. 1  
                                  STOT RE 2  
                                  Skin Irrit. 2  
                                  STOT SE 3  
                                  Eye Irrit. 2  
                                  Carc. 1B  
                                  Muta. 1B  
                                  Acute Tox. 4

Environmental Hazards:      Aquatic Acute 1  
                                  Aquatic Chronic 1  
                                  Aquatic Chronic 2

### Labeling





# Safety Data Sheet (SDS)

Date Prepared/Revised: 12/4/18      Version no.: 04      Supersedes: 9/19/2017

### 3. Composition / Information on Ingredients

#### Composition

Chemical	Synonyms	CAS Number	EINECS Number	Weight Percent	Hazard Category	H-Code
Dimethyl Ether	D.M.E.	115-10-6	204-065-8	15-40%	Flam. Gas 1 Press. Gas	H220
Hexane	n-Hexane	110-54-3	203-777-6	10-30%	Flam. Liq. 2 Repr. 2 Asp. Tox. 1 STOT RE 2 * Skin Irrit. 2 STOT SE 3 Aquatic Chronic 2	H225 H361f H304 H373 H315 H336 H411
Aliphatic Hydrocarbon	Petroleum Distillate	8052-41-3	232-489-3	10-30%	Carc. 1B Muta. 1B Asp. Tox. 1	H350 H340 H304
Cyclohexane	Hexanaphthene	110-82-7	203-806-2	1-5%	Flam. Liq. 2 Asp. Tox. 1 Skin Irrit. 2 STOT SE 3 Aquatic Acute 1 Aquatic Chronic 1	H225 H304 H315 H336 H400 H410
Benzyl Alcohol	Phenylcarbinol	100-51-6	202-859-9	1-5%	Acute Tox. 4	H332 H302

#### Other Product Information

Chemical Identity: Mixture

### 4.) First Aid Measures

**General Advice:**

If symptoms persist, always call a doctor.

**Inhalation First Aid:**

Remove victim to fresh air and provide oxygen if breathing is difficult. If not breathing, give artificial respiration, preferably mouth to mouth. Get medical attention immediately.

**Skin Contact First Aid:**

Wash with soap and water. Remove contaminated clothing and shoes. Get medical attention immediately. Wash clothing before reuse.

**Eye Contact First Aid:**

If contact with eyes, immediately flush eyes with plenty of water for at least 15 minutes, while holding eyelids open. Get medical attention immediately.

**Ingestion First Aid:**

If swallowed, wash out mouth with water provided the person is conscious. Do not induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention immediately.

**Most Important Symptoms/Effects:**

Exposure may cause slight irritation to the skin, eyes, and respiratory tract. Excessive exposure may cause central nervous system effects.



# Safety Data Sheet (SDS)

Date Prepared/Revised: 12/4/18      Version no.: 04      Supersedes: 9/19/2017

## 5. Fire Fighting Measures

Flammable Properties:	Aerosol
Auto Ignition Temperature:	Not Available
Suitable extinguishing media:	Carbon dioxide, dry chemical, water spray.
Unsuitable extinguishing media:	None known
Special hazards arising from the substance or mixture:	None known
Hazardous combustion products:	Carbon dioxide, Carbon monoxide
Fire & Explosion Hazards:	Closed Containers may rupture due to the buildup of pressure from extreme temperatures.

Precautions for fire-fighters: Use water spray to cool containers exposed to heat or fire to prevent pressure build up. In the event of a fire, wear full protective clothing and NIOSH- approved self-contained breathing apparatus with full face piece operated in the pressure demand or other positive pressure mode.

## 6. Accidental Release Measures

### PERSONAL PRECAUTIONARY MEASURES:

- 1) Follow personal protective equipment recommendations found in section 8.
- 2) Maintain adequate ventilation.

### SPILL CLEAN-UP PROCEDURES:

- 1.) Evacuate unprotected personnel from the area.
- 2.) Remove sources of ignition if safe to do so.
- 3.) Pickup spilled materials using non-sparking tools and place in an appropriate container for disposal.
- 4.) Contain spill to prevent material from entering sewage or ground water systems.
- 5.) Always dispose of waste materials in accordance with all EU, National and Local Regulations.

## 7. Handling and Storage

### Handling:

Flammable Aerosol, use in a well ventilated area.  
Do not use near sources of ignition.  
Do not to eat, drink and smoke while working with this material.  
Wash hands after use.

### Conditions for safe storage, including any incompatibilities:

Store out of direct sunlight.  
Storage Temperature: 32° to 120°F (0° to 49°C).  
No known incompatibilities.

## 8. Exposure Controls / Personal Protection



# Safety Data Sheet (SDS)

Date Prepared/Revised: 12/4/18      Version no.: 04      Supersedes: 9/19/2017

### Appropriate engineering controls:

Ensure adequate ventilation. A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits.

Keep away from sources of ignition.

Take precautionary measures against static discharge.

### Personal Protection:

Eye & face protection devices such as safety glasses, safety goggles or face shield are recommended.

### Skin protection

Wear the appropriate protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

### Respiratory protection:

Use only in an adequately ventilated area. For unknown vapor concentrations use a positive-pressure, pressure-demand, self-contained breathing apparatus (SCBA).

Hazardous Ingredient	CAS Number	ACGIH TLV (TWA)	ACGIH TLV (STEL)	OSHA PEL (TWA)	OSHA PEL (STEL)
Aliphatic Hydrocarbon	8052-41-3	100ppm	N/AV	500ppm	N/AV
Dimethyl Ether	115-10-6	N/AV	N/AV	N/AV	N/AV
Hexane	110-54-3	50ppm	N/AV	500ppm	N/AV
Cyclohexane	110-82-7	100ppm	N/AV	300ppm	N/AV
Benzyl Alcohol	100-51-6	N/AV	N/AV	N/AV	N/AV

\*Values are based on the 2014 Guide to Occupational Exposure Values by ACGIH

## 9. Information on Basic Physical and Chemical Properties

Appearance: Amber, clear	Odor: Solvent odor
Odor Threshold: N/AV	pH: Not Applicable (solvent Base)
Melting Point: N/AV	Freezing Point: N/AV
Initial Boiling Point: N/AV	Boiling Point Range: N/AV
Flash Point: <0° F (-18° C)	Evaporation Rate: Faster than n-Butyl Acetate
Flammability Solid/Gas: Flammable gas	LEL: N/AV UEL: N/AV
Vapor Pressure: N/AV	Vapor Density: Heavier Than Air
Relative Density: N/AV	Solubility: Negligible
Partition Coefficient: n-octanol/ water: N/AV	Auto-ignition Temperature: N/AV
Decomposition Temperature: N/AV	Viscosity: N/AV
Explosive Properties: N/AV	Oxidizing Properties: N/AV

## 10. Stability & Reactivity



# Safety Data Sheet (SDS)

Date Prepared/Revised: 12/4/18      Version no.: 04      Supersedes: 9/19/2017

Possibility of hazardous reactions: Hazardous polymerization will not occur under normal conditions  
Chemical stability: Stable under normal conditions  
Conditions to avoid: Heat and ignition sources  
Incompatible materials: Strong Oxidizing Agents  
Hazardous decomposition products: Will not occur

## 11. Toxicological Information

Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage. Repeated overexposure can also damage kidneys, lungs, liver, heart and blood

Routes of exposure: Eyes, skin, ingestion, and/or inhalation

Acute toxicological data: (Hexane) LD50: 2870mg/kg (Rat - Oral)  
(Cyclohexane) LD50: >5g/kg (Rat-Oral)  
(DME) LC50: 1644,000 ppm/4 hr  
(Benzyl Alcohol) 1230 mg/kg (Rat-Oral)

Eye irritation data: N/AV

Skin irritation/sensitization/absorption data: N/AV

Reproductive toxicity data: N/AV

Mutagenicity data: Muta. 1B

Symptoms associated with physical contact: N/AV

Acute/chronic effects from short/long term exposure: Irritating to skin. Prolonged/repeated contact may cause defatting of the skin which can lead to dermatitis. Not expected to be a skin sensitizer.

Known reportable carcinogens via the following agencies:

NTP: N/AV

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OSHA: N/AV

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# Safety Data Sheet (SDS)

Date Prepared/Revised: 12/4/18      Version no.: 04      Supersedes: 9/19/2017

Ecotoxicity: **No Data Available**  
Persistence and degradability: **No Data Available**  
Bioaccumulative potential: **No Data Available**  
Mobility in soil: **No Data Available**  
Results of PBT and vPvB assessment: **No Data Available**  
Other adverse effects: **No Data Available**

## 13. Disposal Considerations

**Waste Disposal:** Dispose of material in accordance with EU, national and local requirements. For proper disposal of used material, an assessment must be completed to determine the proper and permissible waste management options permitted under applicable rules, regulations and/or laws governing your location.

**Product / Packaging disposal:** Dispose of packaging in accordance with federal, state and local requirements, regulations and/or laws governing your location.

## 14. Transportation Information

### US DOT

UN Number	Proper Shipping Name	Hazard Class	Packing Group	Marine Pollutant	Special Provisions
UN1950	Aerosols	2.1	Not Applicable	Not Applicable	Reference 49 CFR 172.101

### IMDG

UN Number	Proper Shipping Name	Hazard Class	Packing Group	Marine Pollutant	Special Provisions
UN1950	Aerosols	2.1	Not Applicable	Not Applicable	Reference IMDG code part 3

### IATA:

UN Number	Proper Shipping Name	Hazard Class	Packing Group	Marine Pollutant	Special Provisions
UN1950	Aerosols, Flammable	2.1	Not Applicable	Not Applicable	Reference IATA Dangerous Goods Regulation

## 15. Regulatory Information

### Workplace classification:

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# Safety Data Sheet (SDS)

Date Prepared/Revised: 12/4/18      Version no.: 04      Supersedes: 9/19/2017

Superfund Amendment and Reauthorization Act (SARA) category. SARA requires reporting any spill of any hazardous substance.

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**WHMIS:** This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the (M)SDS contains all of the information required by the CPR.

**PROP 65 (CA):** WARNING: Reproductive Harm – [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

## 16. Other Information

This SDS has been completed in accordance with GHS Rev04 (2011): U.S OSHA, CMA, ANSI, Canadian WHMIS standards, and European Directives.

Date of Preparation/Revision: 12/4/18

Supersedes: (9/19/2017)

To the best of our knowledge, the information contained herein is believed to be accurate. However, the above data does not imply any guarantee or warranty of any kind, expressed or implied. The final determination of the suitability of any material is the sole responsibility of the user. All materials made present un-known hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee these are the only hazards existing.

# SAFETY DATA SHEET

## ABC DRY CHEMICAL

### SECTION I. Chemical Product and Company Identification

Product Name: ABC Dry Chemical Fire Extinguishant  
(Fire Extinguishing Agent, Non-pressurized and Pressurized)  
Synonym: Multi-Purpose Dry Chemical  
Manufacturer: Buckeye Fire Equipment Company  
PO Box 428  
Kings Mountain, NC 28086  
Telephone: 704.739.7415  
Web Address: [www.buckeyefire.com](http://www.buckeyefire.com)  
Email Address: [bfec@buckeyef.com](mailto:bfec@buckeyef.com)  
Recommended Use: Fire suppression, not for human or animal drug use.  
Emergency: CHEMTREC 1.800.424.9300  
Revision Date: 08/05//2019

### SECTION II. Hazard Identification

*Note: This SDS covers both pressurized and non-pressurized containers of the product.*

#### **GHS – Classification (Pressurized):**

Hazard Classification: Gas Under Pressure-Compressed Gas

GHS Label Elements:



Hazard Symbols:

Signal Word: WARNING

*Hazard Statements:* Contents Under Pressure: may explode if heated

*Precautionary Statements:* P251 Pressurized container; do not pierce or burn, even after use.

#### **GHS – Classification (Non-pressurized):**

Eye Irritation: Category 2B

Skin Irritation: Category 5

Acute Toxicity-Inhalation: Category 5

GHS Label Elements:



Hazard Symbols:

Signal Word: WARNING

*Hazard Statements:*

H313 May be harmful in contact with skin.

H320 Causes eye irritation

H333 May be harmful if inhaled.

*Precautionary Statements:*

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P234 Keep in original container.

P251 Pressurized container; do not pierce or burn, even after use

P261 Avoid breathing dust

P264 Wash hands and face thoroughly after handling

P270 Do not eat, drink, or smoke when using this product

P281 Use personal protective equipment as required

## SAFETY DATA SHEET ABC DRY CHEMICAL

P285	In case of inadequate ventilation, wear respiratory protection
P301+322+331	If swallowed, drink 2-3 glasses of water and do not induce vomiting
302+352	If on skin, wash with soap and water
304+313+341	If inhaled, and if distress occurs, remove victim to fresh air and keep at rest in a position comfortable for breathing. Seek medical advice/attention.
305+351+338	If in eyes, rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do and continue to rinse.
337+313	If eye irritation persists, get medical advice/attention.
P401+402+403	Store in original container or extinguisher in a dry, well ventilated place.

### SECTION III. Composition/Information on Ingredients

This product is a mixture.

Chemical Name	Weight %*	CAS #
Monoammonium phosphate	85	7722-76-1
Barium Sulfate	8	7727-43-7
Mica	< 3	12001-26-2
Amorphous Silica (non-crystalline)	< 3	112926-00-8 (7631-86-9)
Stannous octoate	< .3	301-10-0
Silicone	< .1	63148-57-2
Pigment	< .1	6358-31-2

Note: Pressurized product uses nitrogen as the expellant 7727-37-9

\* % is rounded to the nearest appropriate number. Values are not to be considered product specifications

### SECTION IV. First Aid Measures

*Eye Exposure-* Flush eyes with water until pain-free. If irritation develops or persists, seek medical attention.

*Skin Exposure-* Wash with plenty of soap and water. If irritation develops or persists, seek medical attention.

*Inhalation-* Move victim to fresh air. If irritation develops or persists, seek medical attention.

*Ingestion-* If victim is conscious and alert, give 2-3 glasses of water to drink. Do not induce vomiting. If vomiting occurs and the victim is conscious, give additional water to further dilute the chemical. Prevent aspiration of swallowed product by laying victim on side with head lower than their waist. Seek medical attention. Do not leave victim unattended.

*Medical Conditions Possibly Aggravated by Exposure-* Inhalation of the product may aggravate existing chronic respiratory conditions such as asthma, emphysema, or bronchitis. Contact with the skin may aggravate an existing skin disease. Chronic overexposure may cause pneumoconiosis ("Dusty Lung" disease).

### SECTION V. Firefighting Measures

*Extinguishing Media:* N/A. This product is an extinguishing agent. It is nonflammable and noncombustible.

*Special Firefighting Procedures:* N/A

*Unusual Fire and Explosion Hazards:* This product may decompose in fire and release oxides of carbon, potassium, and nitrogen (Refer to Section X).

*Sensitivity to Mechanical Impact or Static Discharge:* None

### SECTION VI. Accidental Release Measures

In case of accidental release, use the appropriate respiratory protection. Clean up the product using a vacuum or wet sweep and shovel to minimize the generation of dust. Bag or drum the product for disposal. If the product is used and/or contaminated, use personal protective equipment and containment means that are appropriate for the composition of the mixture. Product should be prevented from entering waterways.

# SAFETY DATA SHEET

## ABC DRY CHEMICAL

### SECTION VII. Handling and Storage

Avoid eye, respiratory, and skin exposure. Use the appropriate personal protective equipment when handling. Wash thoroughly after handling (Refer to Section VIII). Product should be stored in its original container or extinguisher. When the product is contained under pressure (e.g., an extinguisher), inspect the container for rust or damage that may compromise the container integrity. Do not store the product in high humidity and do not mix with other extinguishing agents, particularly potassium bicarbonate-based agents.

### SECTION VIII. Exposure Controls and Personal Protection

#### Exposure Guidelines:

	<u>OSHA PEL</u>	<u>ACGIH TLV</u>
Monoammonium phosphate	Particulates Not Otherwise Classified Total Dust- 15 mg/m <sup>3</sup> Respirable Fraction- 5 mg/m <sup>3</sup>	Particulates Not Otherwise Classified Total Dust- 10 mg/m <sup>3</sup> Respirable Fraction- 3 mg/m <sup>3</sup>
Barium sulfate	Particulates Not Otherwise Classified Total Dust- 15 mg/m <sup>3</sup> Respirable Fraction- 5 mg/m <sup>3</sup>	Particulates Not Otherwise Classified Total Dust- 10 mg/m <sup>3</sup> Respirable Fraction- 3 mg/m <sup>3</sup>
Mica	6 mg/m <sup>3</sup>	3 mg/m <sup>3</sup>
Amorphous Silica	6 mg/m <sup>3</sup>	10 mg/m <sup>3</sup>
Stannous octoate	.1 mg/m <sup>3</sup>	.1 mg/m <sup>3</sup>
Silicone	Not Regulated	Not Regulated
Pigment	Not Regulated	Not Regulated

During the use of this product on fires, exhaust gases and products of incomplete combustion are the main respiratory hazards. In the manufacture of this product, employers and employees must use their collective judgment in determining the on-the-job settings where the use of a dust mask or respirator is prudent. The need for respiratory protection is not likely for short-term use in well-ventilated areas.

*Respiratory Protection:* Use an N-95 dust mask for limited exposures and use air-purifying respirators with high efficiency particulate air filters (HEPA filters) for prolonged exposures.

*Eye Protection:* Wear chemical goggles or full-face air-purifying respirator.

*Skin Protection:* Use nitrile, latex, or similar gloves and coveralls. Good personal hygiene practices are essential. After handling the product, avoid food, tobacco products, or other means of transferring the product from hand to mouth until after thoroughly washing.

### SECTION IX. Physical and Chemical Properties

#### Chemical Agent

*Appearance and Odor:* Light yellow fine powder that is odorless.

*Apparent Density:* 0.82

*Solubility:* The product is coated with water repellent silicone. Not immediately soluble in water.

*pH:* Approximately 4 -5

*Flash Point:* N/A

*Flammability:* N/A

*Vapor Pressure:* N/A

*Boiling Point:* N/A

*Explosive or Oxidizing Properties:* None

#### Expellant- Nitrogen

*Appearance and Odor:* Colorless and odorless.

*Specific Gravity:* 0.075 lb./ft<sup>3</sup>@ 70°F as vapor

*Solubility:* N/A

*pH:* N/A

*Flash Point:* Nonflammable

*Flammability:* Nonflammable

*Vapor Pressure:* N/A

*Boiling Point:* -321°F

*Explosive or Oxidizing Properties:* None

# SAFETY DATA SHEET

## ABC DRY CHEMICAL

### SECTION X. Stability and Reactivity

*Reactivity:* Pressurized containers may rupture or explode if exposed to high heat

*Stability:* Stable

*Incompatibles:* Magnesium, strong oxidizers such as calcium hypochlorite (pool chlorine), strong alkalis, and isocyanic acids.

*Decomposition Products:* This product may decompose in fire and release carbon monoxide, carbon dioxide, and sulfur dioxide. Oxides of phosphorous and ammonia have been reported.

*Hazardous Polymerization:* Will not occur

*Hazardous Reactions:* None

### SECTION XI. Toxicological Information

*Acute Toxicity:* Monoammonium phosphate LD50 (rat): > 1000mg/kg body weight.

Target organs in humans: respiratory system, eyes, and skin. This product is an irritant to epithelial tissue and may aggravate dermatitis. No indication that the product causes sensitization.

*Chronic Toxicity:* Pneumoconiosis, or “Dusty Lung” disease, may result from chronic exposure to any dust.

*Reproductive Toxicity:* This product is not known to have any reproductive effects.

Nitrogen: Simple asphyxiant. Exposure at high concentrations can cause suffocation by reducing the available oxygen.

### SECTION XII. Ecological Information

*Ecotoxicity:* Negative effects are unknown. Provides nutrient nitrogen and phosphorous to plant life.

*Degradability:* Degrades rapidly in wet or humid environment.

*Bioaccumulation:* Unknown extent.

*Mobility in Soil:* Water-soluble. May leech into groundwater.

### SECTION XIII. Disposal Consideration

This product is not a RCRA characteristically hazardous or listed hazardous waste. Dispose of according to state or local laws, which may be more restrictive than federal regulations. Be aware that product used on a fire may be altered or contaminated and thereby require different disposal considerations.

### SECTION XIV. Transportation Information

This product is not defined as a hazardous material under U.S. Department of Transportation 49 CFR 172, or by Transport Canada “Transportation of Dangerous Goods” regulations.

Please Note: Although this material is not considered hazardous, when contained in a stored pressure fire extinguisher pressurized with a nonflammable gas, the extinguisher itself is considered a hazardous material by the U.S. Department of Transportation (USDOT) and Transport Canada (TC). The proper shipping name shall be Fire Extinguisher and the UN Identification Number is UN 1044. The USDOT hazard class is Limited Quantity when pressurized to less than 241 psig and when shipped via highway or rail. For shipment by Air or Water consult the current IATA or IMDG Regulations respectively.

# SAFETY DATA SHEET

## ABC DRY CHEMICAL

### SECTION XV. Regulatory Information

*International Inventory Status:* All ingredients are on the following inventories

<u>Country</u>	<u>Agency</u>	<u>Country</u>	<u>Agency</u>
U.S.A.	TSCA	Australia	AICS
Canada	DSL	Japan	MITI
Europe	EINECS/ELINCS	South Korea	KECL

*European Risk and Safety Phrases:*

EU Classification-		Harmful
R Phrases-	22 36/37/38	Harmful if swallowed Irritating to eyes, respiratory system, and skin.
S Phrases-	26 36	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice Wear suitable protective clothing

*U.S. Federal Regulatory Information:*

Non-pressurized; None of the chemicals in this product are under SARA reporting requirements or have SARA Threshold Planning Quantities or CERCLA Reportable Quantities or are regulated under TSCA 8(d).  
Pressurized: SARA Title III Section 311/312 Categorization is Pressure Hazard

*State Regulatory Information:*

Chemicals in this product are covered under the specific State regulations noted:

Alaska	Designated Toxic and Hazardous Substances- None		
California	Permissible Exposure Limits for Chemical Contaminants- None		
Florida	Substance list- Mica dust	Pennsylvania	Hazardous Substance List- None
Illinois	Toxic Substance List- No	Rhode Island	Hazardous Substance List- Mica dust
Kansas	Section 302/303 List- None	Texas	Hazardous Substance List- No
Massachusetts	Substance list- Mica dust	West Virginia	Hazardous Substance List- None
Minnesota	List of Hazardous Substances- None	Wisconsin	Toxic and Hazardous Substances- None
Missouri	Employer Information/Toxic Substance List- None		
New Jersey	Right to Know Hazardous Substance List- None		
North Dakota	List of Hazardous Chemicals, Reportable Quantities- None		

California Proposition 65- No component is listed on the California Proposition 65 List

### SECTION XVI. Other Information

This Safety Data Sheet prepared in accordance with OSHA's Hazard Communication Standard (29 CFR 1910.1200) and the Globally Harmonized System of Classification and Labelling of Chemicals (GHS)

#### HMIS RATINGS:

Health 1  
Flammability 0  
Reactivity 0  
Personal Protective Equipment: use N-95 dust mask (See Section 8)

#### WHMIS (Canadian Workplace Hazardous Materials Identification)

D2B- May irritate eyes, mucous membranes, and/or skin

Revised on 7/24/19: Page 1, Section II GHS-classification (Non-pressurized) changed (Class) to (Category) Skin Irritation: Class 3 to Category 5, and Inhalations from Class 5 to Category 5. Revised 8/5/19 (Section II) to add "Acute Toxicity" to Inhalation: Category 5

The information contained herein is given in good faith as typical values and not as product specifications. No warranty, either expressed or implied, is hereby made.

**Common Name:** ABC DRY CHEMICAL FIRE EXTINGUISHANT

**Manufacturer:** BUCKEYE FIRE EQUIPMENT

**SDS Revision Date:** 4/1/2015

**SDS Format:** GHS-US

**Grainger Item Number(s):** 2LBP1, 31CA37, 35WT05, 35WT06, 35WT07, 35WT08, 35WT09, 35WT10, 35WT11, 35WT41, 35WT42, 35WT43, 35WT44, 3GRW5, 3GRW6, 3GRW7, 3GRW8, 3GRY3, 3GRY4, 3GRY5, 3GRY6, 3GRY7, 3GRY8, 3GRZ4, 44YZ28, 44YZ29, 44YZ30, 44YZ31, 44YZ33, 44YZ35

**Manufacturer Model Number(s):**

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SAFETY DATA SHEET

ABC DRY CHEMICAL

## SECTION I. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION



PRODUCT NAME: ABC DRY CHEMICAL FIRE EXTINGUISHANT

SYNONYM: MULTI-PURPOSE DRY CHEMICAL

MANUFACTURER:

BUCKEYE FIRE EQUIPMENT COMPANY

110 KINGS ROAD

KINGS MOUNTAIN, NC 28086

TELEPHONE: 704.739.7415

WEB ADDRESS: WWW.BUCKEYEFIRE.COM

EMAIL ADDRESS: BFEC@BUCKEYEF.COM



RECOMMENDED USE: FIRE SUPPRESSION, NOT FOR HUMAN OR ANIMAL DRUG USE.

EMERGENCY:

CHEMTREC: 1.800.424.9300

REVISION DATE: 04/2015

## SECTION II. HAZARD IDENTIFICATION



GHS - CLASSIFICATION:

EYE IRRITATION: CLASS 2B

SKIN IRRITATION: CLASS 3

INHALATION: CLASS 5

GHS LABEL ELEMENTS:

HAZARD SYMBOLS: EXCLAMATION MARK

SIGNAL WORD: WARNING

HAZARD STATEMENTS:

H313: MAY BE HARMFUL IN CONTACT WITH SKIN.

H320: CAUSES EYE IRRITATION

H333: MAY BE HARMFUL IF INHALED.

PRECAUTIONARY STATEMENTS:

P101:

IF MEDICAL ADVICE IS NEEDED, HAVE PRODUCT CONTAINER OR LABEL AT HAND.

P102: KEEP OUT OF REACH OF CHILDREN.

P234: KEEP IN ORIGINAL CONTAINER.

P251: PRESSURIZED CONTAINER; DO NOT PIERCE OR BURN, EVEN AFTER USE

P261: AVOID BREATHING DUST

P264: WASH HANDS AND FACE THOROUGHLY AFTER HANDLING

P270: DO NOT EAT, DRINK, OR SMOKE WHEN USING THIS PRODUCT

P281: USE PERSONAL PROTECTIVE EQUIPMENT AS REQUIRED

P285: IN CASE OF INADEQUATE VENTILATION, WEAR RESPIRATORY PROTECTION

P301+322+331:

IF SWALLOWED, DRINK 2-3 GLASSES OF WATER AND DO NOT INDUCE VOMITING

302+352: IF ON SKIN, WASH WITH SOAP AND WATER

304+313+341:

IF INHALED, AND IF DISTRESS OCCURS, REMOVE VICTIM TO FRESH AIR AND KEEP AT REST IN A POSITION COMFORTABLE FOR BREATHING. SEEK MEDICAL ADVICE/ATTENTION.

305+351+338:

IF IN EYES, RINSE CAUTIOUSLY WITH WATER FOR SEVERAL MINUTES. REMOVE CONTACT LENSES IF PRESENT AND EASY TO DO, AND CONTINUE TO RINSE.

337+313: IF EYE IRRITATION PERSISTS, GET MEDICAL ADVICE/ATTENTION.

P401+402+403:

STORE IN ORIGINAL CONTAINER OR EXTINGUISHER IN A DRY, WELL VENTILATED PLACE.

### SECTION III. COMPOSITION/INFORMATION ON INGREDIENTS



THIS PRODUCT IS A MIXTURE.

CHEMICAL NAME	WEIGHT %*	CAS #
MONOAMMONIUM PHOSPHATE	85	7722-76-1
BARIUM SULFATE	10	7727-43-7
MICA	<3	12001-26-2
SILICA	<2	7631-86-9
STANNOUS OCTOATE	<.3	301-10-0
SILICONE	<.1	63148-57-2
PIGMENT	<.1	6358-31-2

\* % IS ROUNDED TO THE NEAREST APPROPRIATE NUMBER. VALUES ARE NOT TO BE CONSIDERED PRODUCT SPECIFICATIONS

### SECTION IV. FIRST AID MEASURES



EYE EXPOSURE:

FLUSH EYES WITH WATER UNTIL PAIN-FREE. IF IRRITATION DEVELOPS OR PERSISTS, SEEK MEDICAL ATTENTION.

SKIN EXPOSURE:

WASH WITH PLENTY OF SOAP AND WATER. IF IRRITATION DEVELOPS OR PERSISTS, SEEK MEDICAL ATTENTION.

INHALATION:

MOVE VICTIM TO FRESH AIR. IF IRRITATION DEVELOPS OR PERSISTS, SEEK MEDICAL ATTENTION.

INGESTION:

IF VICTIM IS CONSCIOUS AND ALERT, GIVE 2-3 GLASSES OF WATER TO DRINK. DO NOT INDUCE VOMITING. IF VOMITING OCCURS AND THE VICTIM IS CONSCIOUS, GIVE ADDITIONAL WATER TO FURTHER DILUTE THE CHEMICAL. PREVENT ASPIRATION OF SWALLOWED PRODUCT BY LAYING VICTIM ON SIDE WITH HEAD LOWER THAN THEIR WAIST. SEEK MEDICAL ATTENTION. DO NOT LEAVE VICTIM UNATTENDED.

MEDICAL CONDITIONS POSSIBLY AGGRAVATED BY EXPOSURE:

INHALATION OF THE PRODUCT MAY AGGRAVATE EXISTING CHRONIC RESPIRATORY CONDITIONS SUCH AS ASTHMA, EMPHYSEMA, OR BRONCHITIS. CONTACT WITH THE SKIN MAY AGGRAVATE AN EXISTING SKIN DISEASE. CHRONIC OVEREXPOSURE MAY CAUSE PNEUMOCONIOSIS ("DUSTY LUNG" DISEASE).

### SECTION V. FIREFIGHTING MEASURES



**EXTINGUISHING MEDIA:**

N/A. THIS PRODUCT IS AN EXTINGUISHING AGENT. IT IS NONFLAMMABLE AND NONCOMBUSTIBLE.

**SPECIAL FIREFIGHTING PROCEDURES:** N/A

**UNUSUAL FIRE AND EXPLOSION HAZARDS:**

THIS PRODUCT MAY DECOMPOSE IN FIRE AND RELEASE OXIDES OF CARBON, POTASSIUM, AND NITROGEN (REFER TO SECTION X).

**SENSITIVITY TO MECHANICAL IMPACT OR STATIC DISCHARGE:** NONE

**SECTION VI. ACCIDENTAL RELEASE MEASURES**



IN CASE OF ACCIDENTAL RELEASE, USE THE APPROPRIATE RESPIRATORY PROTECTION. CLEAN UP THE PRODUCT USING A VACUUM OR WET SWEEP AND SHOVEL TO MINIMIZE THE GENERATION OF DUST. BAG OR DRUM THE PRODUCT FOR DISPOSAL. IF THE PRODUCT IS USED AND/OR CONTAMINATED, USE PERSONAL PROTECTIVE EQUIPMENT AND CONTAINMENT MEANS THAT ARE APPROPRIATE FOR THE COMPOSITION OF THE MIXTURE. PRODUCT SHOULD BE PREVENTED FROM ENTERING WATERWAYS.

**SECTION VII. HANDLING AND STORAGE**



AVOID EYE, RESPIRATORY, AND SKIN EXPOSURE. USE THE APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT WHEN HANDLING. WASH THOROUGHLY AFTER HANDLING (REFER TO SECTION VIII). PRODUCT SHOULD BE STORED IN ITS ORIGINAL CONTAINER OR EXTINGUISHER. WHEN THE PRODUCT IS CONTAINED UNDER PRESSURE (E.G., AN EXTINGUISHER), INSPECT THE CONTAINER FOR RUST OR DAMAGE THAT MAY COMPROMISE THE CONTAINER INTEGRITY. DO NOT STORE THE PRODUCT IN HIGH HUMIDITY AND DO NOT MIX WITH OTHER EXTINGUISHING AGENTS, PARTICULARLY POTASSIUM BICARBONATE BASED AGENTS.

**SECTION VIII. EXPOSURE CONTROLS AND PERSONAL PROTECTION**



**EXPOSURE GUIDELINES:**

	OSHA PEL	ACGIH TLV
MONOAMONIUM PHOSPHATE	PARTICULATES NOT OTHERWISE CLASSIFIED	PARTICULATES NOT OTHERWISE CLASSIFIED
	TOTAL DUST: 15 MG/M3	TOTAL DUST: 10 MG/M3
	RESPIRABLE FRACTION: 5 MG/M3	RESPIRABLE FRACTION: 3 MG/M3
BARIUM SULFATE	PARTICULATES NOT OTHERWISE CLASSIFIED	PARTICULATES NOT OTHERWISE CLASSIFIED
	TOTAL DUST: 15 MG/M3	TOTAL DUST: 10 MG/M3
	RESPIRABLE FRACTION: 5 MG/M3	RESPIRABLE FRACTION: 3 MG/M3
MICA	6 MG/M3	3 MG/M3

SILICA	6 MG/M3	10 MG/M3
STANNOUS OCTOATE	.1 MG/M3	.1 MG/M3
SILICONE	NOT REGULATED	NOT REGULATED
PIGMENT	NOT REGULATED	NOT REGULATED

DURING THE USE OF THIS PRODUCT ON FIRES, EXHAUST GASES AND PRODUCTS OF INCOMPLETE COMBUSTION ARE THE MAIN RESPIRATORY HAZARDS. IN THE MANUFACTURE OF THIS PRODUCT, EMPLOYERS AND EMPLOYEES MUST USE THEIR COLLECTIVE JUDGMENT IN DETERMINING THE ON-THE-JOB SETTINGS WHERE THE USE OF A DUST MASK OR RESPIRATOR IS PRUDENT. THE NEED FOR RESPIRATORY PROTECTION IS NOT LIKELY FOR SHORT-TERM USE IN WELL-VENTILATED AREAS.

**RESPIRATORY PROTECTION:**

USE AN N-95 DUST MASK FOR LIMITED EXPOSURES AND USE AIR-PURIFYING RESPIRATORS WITH HIGH EFFICIENCY PARTICULATE AIR FILTERS (HEPA FILTERS) FOR PROLONGED EXPOSURES.

**EYE PROTECTION:**

WEAR CHEMICAL GOGGLES OR FULL-FACE AIR-PURIFYING RESPIRATOR.

**SKIN PROTECTION:**

USE NITRILE, LATEX, OR SIMILAR GLOVES AND COVERALLS. GOOD PERSONAL HYGIENE PRACTICES ARE ESSENTIAL. AFTER HANDLING THE PRODUCT, AVOID FOOD, TOBACCO PRODUCTS, OR OTHER MEANS OF TRANSFERRING THE PRODUCT FROM HAND TO MOUTH UNTIL AFTER THOROUGHLY WASHING.

**SECTION IX. PHYSICAL AND CHEMICAL PROPERTIES**



APPEARANCE AND ODOR: LIGHT YELLOW FINE POWDER THAT IS ODORLESS.

APPARENT DENSITY: 0.82

**SOLUBILITY:**

THE PRODUCT IS COATED WITH WATER REPELLANT SILICONE. NOT IMMEDIATELY SOLUBLE IN WATER.

PH: APPROXIMATELY 4 -5

FLASH POINT: N/A

FLAMMABILITY: N/A

VAPOR PRESSURE: N/A

BOILING POINT: N/A

EXPLOSIVE OR OXIDIZING PROPERTIES: NONE

**SECTION X. STABILITY AND REACTIVITY**



STABILITY: STABLE

**INCOMPATIBLES:**

MAGNESIUM, STRONG OXIDIZERS SUCH AS CALCIUM HYPOCHLORITE (POOL CHLORINE), STRONG ALKALIS, AND ISOCYANURIC ACIDS.

DECOMPOSITION PRODUCTS:

THIS PRODUCT MAY DECOMPOSE IN FIRE AND RELEASE CARBON MONOXIDE, CARBON DIOXIDE, AND SULFUR DIOXIDE. OXIDES OF PHOSPHOROUS AND AMMONIA HAVE BEEN REPORTED.

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

HAZARDOUS REACTIONS: NONE

## **SECTION XI. TOXICOLOGICAL INFORMATION**



ACUTE TOXICITY:

MONOAMMONIUM PHOSPHATE LD50 (RAT): >1000 MG/KG BODY WEIGHT.

TARGET ORGANS IN HUMANS:

RESPIRATORY SYSTEM, EYES, AND SKIN. THIS PRODUCT IS AN IRRITANT TO EPITHELIAL TISSUE AND MAY AGGRAVATE DERMATITIS. NO INDICATION THAT THE PRODUCT CAUSES SENSITIZATION.

CHRONIC TOXICITY:

PNEUMOCONIOSIS, OR "DUSTY LUNG" DISEASE, MAY RESULT FROM CHRONIC EXPOSURE TO ANY DUST.

REPRODUCTIVE TOXICITY:

THIS PRODUCT IS NOT KNOWN TO HAVE ANY REPRODUCTIVE EFFECTS.

## **SECTION XII. ECOLOGICAL INFORMATION**



ECOTOXICITY:

NEGATIVE EFFECTS ARE UNKNOWN. PROVIDES NUTRIENT NITROGEN AND PHOSPHOROUS TO PLANT LIFE.

DEGRADABILITY: DEGRADES RAPIDLY IN WET OR HUMID ENVIRONMENT.

BIOACCUMULATION: UNKNOWN EXTENT.

MOBILITY IN SOIL: WATER-SOLUBLE. MAY LEECH IN TO GROUNDWATER.

## **SECTION XIII. DISPOSAL CONSIDERATION**



THIS PRODUCT IS NOT A RCRA CHARACTERISTICALLY HAZARDOUS OR LISTED HAZARDOUS WASTE. DISPOSE OF ACCORDING TO STATE OR LOCAL LAWS, WHICH MAY BE MORE RESTRICTIVE THAN FEDERAL REGULATIONS. BE AWARE THAT PRODUCT USED ON A FIRE MAY BE ALTERED OR CONTAMINATED AND THEREBY REQUIRE DIFFERENT DISPOSAL CONSIDERATIONS.

## **SECTION XIV. TRANSPORTATION INFORMATION**



THIS PRODUCT IS NOT DEFINED AS A HAZARDOUS MATERIAL UNDER U.S. DEPARTMENT OF TRANSPORTATION 49 CFR 172, OR BY TRANSPORT CANADA "TRANSPORTATION OF DANGEROUS GOODS" REGULATIONS.

PLEASE NOTE:

ALTHOUGH THIS MATERIAL IS NOT CONSIDERED HAZARDOUS, WHEN CONTAINED IN A STORED PRESSURE FIRE EXTINGUISHER PRESSURIZED WITH A NONFLAMMABLE GAS, THE EXTINGUISHER ITSELF IS CONSIDERED A HAZARDOUS MATERIAL BY THE U.S. DEPARTMENT OF TRANSPORTATION (USDOT) AND TRANSPORT CANADA (TC). THE PROPER SHIPPING NAME SHALL BE FIRE EXTINGUISHER AND THE UN IDENTIFICATION NUMBER IS UN 1044. THE USDOT HAZARD CLASS IS LIMITED QUANTITY WHEN PRESSURIZED TO LESS THAN 241 PSIG AND WHEN SHIPPED VIA HIGHWAY OR RAIL. USE CLASS 2.2, NON-FLAMMABLE GAS, WHEN SHIPPING VIA AIR.

**SECTION XV. REGULATORY INFORMATION**



INTERNATIONAL INVENTORY STATUS:

ALL INGREDIENTS ARE ON THE FOLLOWING INVENTORIES

COUNTRY	AGENCY
U.S.A.	TSCA
CANADA	DSL
EUROPE	EINECS/ELINCS
AUSTRALIA	AICS
JAPAN	MITI
SOUTH KOREA	KECL

EUROPEAN RISK AND SAFETY PHRASES:

EU CLASSIFICATION: HARMFUL

R PHRASES:

22: HARMFUL IF SWALLOWED

36/37/38: IRRITATING TO EYES, RESPIRATORY SYSTEM, AND SKIN.

S PHRASES:

26:

IN CASE OF CONTACT WITH EYES, RINSE IMMEDIATELY WITH PLENTY OF WATER AND SEEK MEDICAL ADVICE

36: WEAR SUITABLE PROTECTIVE CLOTHING

U.S. FEDERAL REGULATORY INFORMATION:

NONE OF THE CHEMICALS IN THIS PRODUCT ARE UNDER SARA REPORTING REQUIREMENTS OR HAVE SARA THRESHOLD PLANNING QUANTITIES OR CERCLA REPORTABLE QUANTITIES, OR ARE REGULATED UNDER TSCA 8(D).

STATE REGULATORY INFORMATION:

CHEMICALS IN THIS PRODUCT ARE COVERED UNDER THE SPECIFIC STATE REGULATIONS NOTED:

ALASKA:

DESIGNATED TOXIC AND HAZARDOUS SUBSTANCES: NONE

CALIFORNIA:

PERMISSIBLE EXPOSURE LIMITS FOR CHEMICAL CONTAMINANTS: NONE

FLORIDA:

SUBSTANCE LIST: MICA DUST

ILLINOIS:

TOXIC SUBSTANCE LIST: NONE

KANSAS:

SECTION 302/303 LIST: NONE

MASSACHUSETTS:

SUBSTANCE LIST: MICA DUST

MINNESOTA:

LIST OF HAZARDOUS SUBSTANCES: NONE

MISSOURI:

EMPLOYER INFORMATION/TOXIC SUBSTANCE LIST: NONE

NEW JERSEY:

RIGHT TO KNOW HAZARDOUS SUBSTANCE LIST: NONE

NORTH DAKOTA:

LIST OF HAZARDOUS CHEMICALS, REPORTABLE QUANTITIES: NONE

PENNSYLVANIA:

HAZARDOUS SUBSTANCE LIST: NONE

RHODE ISLAND:

HAZARDOUS SUBSTANCE LIST: MICA DUST

TEXAS:

HAZARDOUS SUBSTANCE LIST: NO

WEST VIRGINIA:

HAZARDOUS SUBSTANCE LIST: NONE

WISCONSIN:

TOXIC AND HAZARDOUS SUBSTANCES: NONE

CALIFORNIA PROPOSITION 65:

NO COMPONENT IS LISTED ON THE CALIFORNIA PROPOSITION 65 LIST

## SECTION XVI. OTHER INFORMATION



THIS SAFETY DATA SHEET PREPARED IN ACCORDANCE WITH OSHA'S HAZARD COMMUNICATION STANDARD (29 CFR 1910.1200) AND THE GLOBALLY HARMONIZED SYSTEM OF CLASSIFICATION AND LABELLING OF CHEMICALS (GHS)

HMIS RATINGS:

HEALTH

1

FLAMMABILITY

0

REACTIVITY

0

PERSONAL PROTECTIVE EQUIPMENT USE N-95 DUST MASK (SEE SECTION 8)

WHMIS (CANADIAN WORKPLACE HAZARDOUS MATERIALS IDENTIFICATION):

D2B: MAY IRRITATE EYES, MUCOUS MEMBRANES, AND/OR SKIN

THE INFORMATION CONTAINED HEREIN IS GIVEN IN GOOD FAITH AS TYPICAL VALUES AND NOT AS PRODUCT SPECIFICATIONS. NO WARRANTY, EITHER EXPRESSED OR IMPLIED, IS HEREBY MADE.







# SAFETY DATA SHEET

## Section 1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: ABC Dry Chemical Fire Extinguishant  
 Other Identifiers: Multi-purpose Dry Chemical  
 Product Code(s): CH555, F13, F11  
 Model Code(s) of Extinguishers: 402, IS 18ABC, IS35ABC, IS 45ABC, 13ABC, V25ABC, VH25ABC, V30ABC, VH30ABC, V50ABC, VS50ABC, VS75ABC, V250ABC  
 Recommended Use: Fire suppression, not for human or animal drug use.  
 Manufacturer: AMEREX CORPORATION  
 Internet Address: [www.amerex-fire.com](http://www.amerex-fire.com)  
 Address: 7595 Gadsden Highway, P.O. Box 81  
 Trussville, AL 35173-0081  
 Company Telephone: (205) 655-3271  
 E-mail Address: info@amerex-fire.com  
 Emergency Contacts: Chemtrec 1(800) 424-9300 or (703) 527-3887  
 Revised: March 13, 2018

## Section 2. HAZARDS IDENTIFICATION

### GHS – Classification

Health	Environmental	Physical
Acute Toxicity: Category 5	None	None
Skin Corrosion/Irritation: Category 3	None	None
Skin Sensitization: NO	None	None
Eye: Category 2A	None	Warning
STOT – Category 3	None	Warning
Carcinogen: Category None	None	None

**GHS – Label Symbol(s):**   
**If Pressurized: Gas Under Pressure** 

**GHS – Words(s):** **Warning**

**Other Hazards Not Resulting in Classification:** Mica may contain small quantities of quartz (crystalline silica). Prolonged exposure to respirable crystalline silica dust at concentrations exceeding the occupational exposure limits may increase the risk of developing a disabling

lung disease known as silicosis. IARC found limited evidence for pulmonary carcinogenicity of crystalline silica in humans. In the case of normal use of this product, exposure to silica should be nil.

The attapulgite clay used in this product has a fiber length of less than 5µm; therefore, the clay is not considered to be carcinogenic in animals or humans.

### GHS – Hazard Phrases

GHS Hazard	GHS Codes(s)	Code Phrase(s)
Physical	H229	*- Contents under pressure; may explode if heated.
Health	H303 315 319 335	May be harmful if swallowed Causes skin irritation Causes serious eye irritation May cause respiratory irritation
Environmental	None	
<b>Precautionary:</b>		
General	P101	If medical advice is needed, have product container or label at hand
Prevention	P251 261 264 280	Do not pierce or burn, even after use. Avoid breathing dust/fumes/gas/mist/vapours/spray. Wash exposed skin thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection.
Response	P312 321 362 302+352 304+340 305+351+338  332+313 342+311 337+313	Call a doctor if you feel unwell. Specific treatment (see Section 4. First Aid Measures) Take off contaminated clothing. IF ON SKIN: Wash with plenty of water. IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. If skin irritation occurs: Get medical advice/attention. If experiencing respiratory symptoms: Call a doctor. If eye irritation persists get medical advice/attention.
Storage	P410 +403	*- Protect from sunlight. Store in well-ventilated place.
Disposal	P501	Dispose of contents through a licensed disposal company. Contaminated container should be disposed of as unused product.

\*- If under pressure

## Section 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	EC No.	REACH Reg. No.	CAS-No.	Weight %	Classification
Mono-ammonium phosphate	231-764-5	01-2119488166-29	7722-76-1	80-98	NA
Attapulgite clay	601-805-5	Not Available	12174-11-7	3-16	NA
Mica-potassium aluminum silicate	310-1276	Not Available	12001-26-2	1-2	NA
Silicone oil methyl hydrogen polysiloxane	613-152-3	Not Available	63148-57-2	<1	NA
Calcium carbonate	207-439-9	Not Available	1317-65-3	<1	NA
Amorphous silica precipitated synthetic zeolite	231-545-4	01-2119379499-16-0036	7631-86-9	<1	NA
Yellow 14 pigment – di-azo dye	226-789-3	Not Available	5468-75-7	<1	NA

Emergency overview:

Light yellow, fine solid powder, odorless.

Adverse health effects and symptoms:

Mild irritant to the respiratory system. Irritant to eyes, and skin. Symptoms may include coughing,

shortness of breath, and irritation of the lungs, eyes, and skin. Ingestion, although unlikely, may cause cramps, nausea and diarrhea.

## Section 4. FIRST AID MEASURES

Eye Exposure:	May cause irritation. Irrigate eyes with water and repeat until pain free. Seek medical attention if irritation develops, or if vision changes occur.
Skin Exposure:	May cause skin irritation. In case of contact, wash with plenty of soap and water. Seek medical attention if irritation persists.
Inhalation:	May cause irritation, along with coughing. If respiratory irritation or distress occurs remove victim to fresh air. Seek medical attention if irritation persists.
Ingestion:	Overdose symptoms may include numbness or tingling in hands or feet, uneven heart rate, paralysis, feeling faint, chest pain or heavy feeling, pain spreading to the arm or shoulder, nausea, diarrhea, sweating, general ill feeling, or seizure (convulsions). If victim is conscious and alert, give 2-3 glasses of water to drink. If conscious, do not induce vomiting. Seek immediate medical attention. Do not leave victim unattended. To prevent aspiration of swallowed product, lay victim on side with head lower than waist.
Medical conditions possibly aggravated by exposure:	Inhalation of product may aggravate existing chronic respiratory problems such as asthma, emphysema, or bronchitis. Skin contact may aggravate existing skin disease. Chronic overexposure may cause pneumoconiosis ("dusty lung" disease).

## Section 5. FIRE-FIGHTING MEASURES

Flammable Properties:	Not flammable
Flash Point:	Not determined
Suitable Extinguishing Media:	Non-combustible. Use extinguishing media suitable for surrounding conditions.
Hazardous Combustion Products:	Carbon oxides

Explosion Data:

Sensitivity to Mechanical Impact:	Not sensitive
Sensitivity to Static Discharge:	Not sensitive
Unusual fire/explosion hazards:	In a fire this material may decompose, releasing oxides of carbon, potassium and nitrogen (see Section 10).
Protective Equipment and Precautions for Firefighters:	As in any fire, wear self-contained breathing apparatus pressure-demand. NIOSH (approved or equivalent) and full protective gear.

**Section 6. ACCIDENTAL RELEASE MEASURES**

Personal Precautions:	Avoid contact with skin, eyes, and clothing.
Personal Protective Equipment:	Minimum - safety glasses, gloves, and a dust respirator.
Emergency Procedures:	NA
Methods for Containment:	Prevent further leakage or spillage if safe to do so.
Methods for Clean Up:	Avoid dust formation; clean up released material using vacuum or wet sweep and shovel to minimize generation of dust. Bag and transfer to properly labeled containers. Ventilate area and wash spill site after material pickup is complete.
Other:	If product is contaminated, use PPE and containment appropriate to the nature of the most toxic chemical/material in the mixture.

**Section 7. HANDLING AND STORAGE**

Personal Precautions:	Use appropriate PPE when handling or maintaining equipment, and wash thoroughly after handling (see Section 8).
Conditions for Safe Storage:	Keep product in original container or extinguisher. Contents may be under pressure – inspect for extinguisher rust periodically to ensure container integrity.
Incompatible Products:	Do not mix with other extinguishing agents, particularly potassium bicarbonate and sodium bicarbonate. Incompatible with strong oxidizing agents and strong acids. Do not store in high humidity. Do not combine with chlorine compounds.

## Section 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Chemical Name	OSHA PEL	ACGIH TLV	DFG MAK *	EU BLV
Mono-ammonium phosphate	PNOC** Total dust, 15 mg/m <sup>3</sup> Respirable fraction, 5 mg/m <sup>3</sup>	PNOC Total dust, 10 mg/m <sup>3</sup> Respirable fraction, 3 mg/m <sup>3</sup>	PNOC Total dust, 4 mg/m <sup>3</sup> Respirable fraction, 1.5 mg/m <sup>3</sup>	NA
Mica	6 mg/m <sup>3</sup>	3 mg/m <sup>3</sup>	-----	NA
Attapulgite clay	PNOC** Total dust, 15 mg/m <sup>3</sup> Respirable fraction, 5 mg/m <sup>3</sup>	PNOC Total dust, 10 mg/m <sup>3</sup> Respirable fraction, 3 mg/m <sup>3</sup>	PNOC Total dust, 4 mg/m <sup>3</sup> Respirable fraction, 1.5 mg/m <sup>3</sup>	
Silicone oil	NR**	NR		
Calcium carbonate	PNOC Total dust, 15 mg/m <sup>3</sup> Respirable fraction, 5 mg/m <sup>3</sup>	PNOC Total dust, 10 mg/m <sup>3</sup> Respirable fraction, 3 mg/m <sup>3</sup>	-----	NA
Amorphous silica	20mppcf $\frac{80 \text{ mg/m}^3}{\text{or } \% \text{ SiO}_2}$	10 mg/m <sup>3</sup>	4 mg/m <sup>3</sup>	NA
Yellow 14 pigment	NR	NR	NR	NA

\*German regulatory limits \*\*PNOC = Particulates not otherwise classified (ACGIH) also known as Particulates not otherwise regulated (OSHA) \*\*\* NR = Not Regulated. All values are 8 hour time weighted average concentrations.

### Engineering Controls:

Showers  
Eyewash stations  
Ventilation systems

### Personal Protective Equipment – PPE Code E:

The need for respiratory protection is not probable during short-term exposure. During production, the manufacturer should use judgement concerning the need for PPE.



Eye/Face Protection:  
Skin and Body Protection:  
Respiratory Protection:

Tightly fitting safety goggles  
Wear protective gloves/coveralls  
If exposure limits are exceeded or irritation is experienced, NIOSH approved respiratory protection should be worn. Use P100 respirators for limited exposure. Use air-purifying respirator (APR) with high efficiency particulate air (HEPA) filters for prolonged

exposure. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations. The need for respiratory protection is not likely for short-term use in well ventilated areas.

Hygiene Measures:

Good personal hygiene practices essential, such as avoiding food, tobacco products, or other hand-to-mouth contact when handling. Wash thoroughly after handling.

## Section 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Light yellow powder, finely divided odorless solid
Molecular Weight:	NH <sub>4</sub> H <sub>2</sub> PO <sub>4</sub> : 115.03
Odor:	Odorless
Odor Threshold:	No information available
Decomposition Temperature °C:	100 - 120
Freezing Point °C:	No information available
Initial Boiling Point °C:	No information available
Physical State:	Crystalline Powder
pH:	Approximately 4.4 to 4.9
Flash Point °C:	None
Autoignition Temperature °C:	None
Boiling Point/Range °C:	No information available
Melting Point/Range °C:	NH <sub>4</sub> H <sub>2</sub> PO <sub>4</sub> : 190
Flammability/Explosion Limits in Air °C:	Upper – None; Lower-None
Explosive Properties:	None
Oxidizing Properties:	None
Volatile Component (%vol)	Not applicable
Evaporation Rate:	No information available
Vapor Density:	No information available
Vapor Pressure:	NH <sub>4</sub> H <sub>2</sub> PO <sub>4</sub> : 1.41 mm/Hg
Specific gravity at 25 °C:	NH <sub>4</sub> H <sub>2</sub> PO <sub>4</sub> : 1.80
Solubility:	40.4 g/100 ml
Partition Coefficient:	NH <sub>4</sub> H <sub>2</sub> PO <sub>4</sub> Est: -4.11
Viscosity:	No information available

NOTE: NH<sub>4</sub>H<sub>2</sub>PO<sub>4</sub> – Monoammonium Phosphate

## Section 10. STABILITY AND REACTIVITY

Stability:	Stable under recommended storage and handling conditions.
Incompatibles:	Strong oxidizing agents; Strong acids; sodium hypochlorite and chlorine compounds. Protect from moisture
Conditions to Avoid:	Storage or handling near incompatibles.
Hazardous Decomposition Products:	Carbon, nitrogen, and potassium oxides. Heat of fire may release carbon monoxide.
Possibility of Hazardous Reactions:	None
Hazardous Polymerization	Does not occur

## Section 11. TOXICOLOGICAL INFORMATION

Likely Routes of Exposure:	Inhalation, skin and eye contact.
Symptoms:	
Inhalation:	Irritation, coughing.
Eyes:	Irritation.
Skin:	Irritation.
Acute Toxicity:	Relatively non-toxic.
Chronic Toxicity:	
Short-term Exposure:	None known.
Long-term Exposure:	As with all dusts, pneumoconiosis, or "dusty lung" disease, may result from chronic exposure.

### Acute Toxicity Values - Health

Chemical Name	LD50		LC50 (Inhalation)
	Oral	Dermal	
Mono-ammonium phosphate	5750 mg/kg (rat)	>7940 mg/kg (rabbit)	Not available
Mica	None	None	None
Attapulgite clay	None	None	None
Silicone oil	None	None	None
Calcium carbonate	6450 mg/kg (rat)	500 mg/24 hr (rabbit)	Not available
Amorphous silica	>5000 mg/kg (rat)	>2000 mg/kg (rabbit)	>2.2 mg/L (rat)
Yellow 14 pigment	>17000 mg/kg (rat)	>3000 mg/kg (rat)	>4448 mg/m3 (rat)

Reproductive Toxicity:	This product's ingredients are not known to have reproductive or teratogenic effects.
Target Organs and Effects (TOST):	Respiratory system (mild irritant). This product is a mild irritant to epithelial tissue, (eyes, mucous membranes, skin) and may aggravate dermatitis. No information was found indicating the product causes sensitization.

## Other Toxicity Categories

Chemical Name	Germ Cell Mutagenicity	Carcinogenicity	Reproductive	TOST Single Exp	TOST Repeated Exp	Aspiration
Mono-ammonium phosphate	None	None	None	Cat 3	None	None
Attapulgite clay	None	None	None	None	None	None
Mica	None	None	None	None	None	None
Silicone oil	None	None	None	None	None	None
Calcium carbonate	None	None	None	None	None	None
Amorphous silica	None	None	None	None	None	None
Yellow 14 pigment	None	None	None	None	None	None

## Section 12. ECOLOGICAL INFORMATION

Ecotoxicity:	Negative effects unknown. Provides nutrient nitrogen and phosphorus to plant life.
Persistence/Degradability:	Degrades rapidly in humid/wet environment.
Probability of rapid biodegradation:	NH <sub>4</sub> H <sub>2</sub> PO <sub>4</sub> Est: 0.693 (Rapid); (NH <sub>4</sub> ) <sub>2</sub> SO <sub>4</sub> : Est: 0.684 (Rapid)
Anaerobic biodegradation probability:	NH <sub>4</sub> H <sub>2</sub> PO <sub>4</sub> Est: 0.398 (Slow); (NH <sub>4</sub> ) <sub>2</sub> SO <sub>4</sub> : Est: 0.398 (Slow)
Bioaccumulation potential:	Low.
Bioconcentration factor:	NH <sub>4</sub> H <sub>2</sub> PO <sub>4</sub> : 3.16 L/kg (wet weight) (Low BCF)
Bioaccumulation factor:	NH <sub>4</sub> H <sub>2</sub> PO <sub>4</sub> : 63.04 L/kg (wet weight)
Mobility in soil:	Slow evaporation rate; water soluble, may leach to groundwater
Log Koc:	NH <sub>4</sub> H <sub>2</sub> PO <sub>4</sub> Est: -1.25
Log Koa:	NH <sub>4</sub> H <sub>2</sub> PO <sub>4</sub> Est: 16.72
Log Kaw:	NH <sub>4</sub> H <sub>2</sub> PO <sub>4</sub> Est: -20.86
NOTE: NH <sub>4</sub> H <sub>2</sub> PO <sub>4</sub> – Mono-ammonium Phosphate	

Other Adverse Ecological Effects: No other known effects at this time

### Aquatic Toxicity Values – Environment – Research

Chemical Name	Acute (LC50)	Chronic (LC50)
Mono-ammonium phosphate	N/A	N/A
Mica	N/A	N/A
Attapulgite clay	N/A	N/A
Silicone oil	N/A	N/A
Calcium carbonate	N/A	N/A
Amorphous silica	N/A	N/A
Yellow 14 pigment	N/A	N/A



## Aquatic Toxicity Values – Environment – Estimates

Chemical Name	Acute (LC50)	EC50
Mono-ammonium phosphate	2,91e+07 mg/L Fish 96 hr; 9.4e+06 mg/l Daphnid 48 hr;	6.70e+05 mg/L Gr. Algae 96 hr
Mica	N/A	N/A
Attapulgite clay	N/A	N/A
Silicone oil	N/A	N/A
Calcium carbonate	N/A	N/A
Amorphous silica	N/A	N/A
Yellow 14 pigment	N/A	N/A

## Section 13. DISPOSAL CONSIDERATIONS

Safe Handling

Use appropriate PPE when handling, and wash thoroughly after handling (see Section 8).

Waste Disposal Considerations

Dispose in accordance with federal, state, and local regulations.

Contaminated Packaging

Dispose in accordance with federal, state, and local regulations.

### NOTES:

This product is not a RCRA characteristically hazardous or listed hazardous waste. Dispose of according to state or local laws, which may be more restrictive than federal laws or regulations. Used product may be altered or contaminated, creating different disposal considerations.

## Section 14. TRANSPORT INFORMATION

UN Number: NA  
 UN Proper Shipping Name: NA  
 Transport Hazard Class: NA  
 Packing Group: NA  
 Marine Pollutant?: NO

IATA Not regulated

DOT Not regulated

### NOTES:

This product is not defined as a hazardous material under U.S. Department of Transportation (DOT) 49 CFR 172, or by Transport Canada "Transportation of Dangerous Goods" regulations.

### Special Precautions for Shipping:

The transportation information above covers the ABC 555 dry chemical extinguisher agent as shipped in bulk containers and not when contained in fire extinguishers or fire extinguisher systems. If shipped in a stored pressure-type fire extinguisher, and pressurized with a non-flammable, non-toxic

inert expellant gas, the fire extinguisher is considered a hazardous material by the US Department of Transportation and Transport Canada. The proper shipping name shall be FIRE EXTINGUISHER and the UN designation is UN 1044. The DOT hazard class/division is LIMITED QUANTITY when pressurized to less than 241 psig and when shipped via highway or rail. UN Class 2.2. Non-Flammable Gas, when shipping via air. Packing Group – N/A

## Section 15. REGULATORY INFORMATION

**International Inventory Status:** All ingredients are on the following inventories

Country(ies)	Agency	Status
United States of America	TSCA	Yes
Canada	DSL	Yes
Europe	EINECS/ELINCS	Yes
Australia	AICS	Yes
Japan	MITI	Yes
South Korea	KECL	Yes

**REACH Title XVII Restrictions:** No information available

Chemical Name	Dangerous Substances	Organic Solvents	Harmful Substances Whose Names Are to be Indicated on Label	Pollution Release and Transfer Registry (Class II)	Pollution Release and Transfer Registry (Class I)	Poison and Deleterious Substances Control Law
Monoammonium Phosphate	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable

Component	ISHA – Harmful Substances Prohibited for Manufacturing, Importing, Transferring, or Supplying	ISHA – Harmful Substances Requiring Permission	Toxic Chemical Classification Listing (TCCL) – Toxic Chemicals	Toxic Release Inventory (TRI) – Group I	Toxic Release Inventory (TRI) – Group II
Monoammonium Phosphate 7722-76-1	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Attapulgitte clay 12174-11-7 (>3)	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Mica-potassium aluminum silicate 120001-26-2 (>2)	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Calcium carbonate 471-34-1	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Amorphous silica 69012-64-2	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Yellow 14 pigment 5468-75-7	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable

**European Risk and Safety phrases:**

EU Classification:	Xn - Irritant	
R Phrases:	20	Harmful by inhalation.
	36/37/38	Irritating to eyes, respiratory system and skin.
S Phrases:	22	Do not breath dust.
	24/25	Avoid contact with skin and eyes
	26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
	36	Wear suitable protective clothing.

**U.S. Federal Regulatory Information:**

**SARA 313:**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) - This product does not contain and chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

None of the chemicals in this product are under SARA reporting requirements or have SARA threshold planning quantities (TPQs) or CERCLA reportable quantities (RQs), or are regulated under TSCA 8(d).

**SARA 311/312 Hazard Categories:**

Acute Health Hazard	Yes
Chronic Health Hazard	No
Fire Hazard	No
*-Sudden Release of Pressure Hazard	Yes
Reactive Hazard	No

\* - Only applicable if material is in a pressurized extinguisher.

**Clean Water/Clean Air Acts:**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42) or Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61) and Section 112 of the Clean Air Act Amendments of 1990.

**U.S. State Regulatory Information:**

Chemicals in this product are covered under specific State regulations, as denoted below:

**Alaska** - Designated Toxic and Hazardous Substances: None

**California** – Permissible Exposure Limits for Chemical Contaminants: None

**Florida** – Substance List: Mica Dust

**Illinois** – Toxic Substance List: None

**Kansas** – Section 302/303 List: None

**Massachusetts** – Substance List: Mica Dust

**Minnesota** – List of Hazardous Substances: None  
**Missouri** – Employer Information/Toxic Substance List: None  
**New Jersey** – Right to Know Hazardous Substance List: None  
**North Dakota** – List of Hazardous Chemicals, Reportable Quantities: None  
**Pennsylvania** – Hazardous Substance List: None  
**Rhode Island** – Hazardous Substance List: Mica Dust  
**Texas** – Hazardous Substance List: No  
**West Virginia** – Hazardous Substance List: None  
**Wisconsin** – Toxic and Hazardous Substances: None

California Proposition 65: No component is listed on the California Proposition 65 list.

**Other:**

Mexico – Grade	No component listed
Canada – WHMIS Hazard Class	No component listed

<b>Section 16. OTHER INFORMATION</b>
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This SDS conforms to requirements under U.S., U.K., Canadian, Australian, and EU regulations or standards, and conforms to the proposed 2003 ANSI Z400.1 format.

Issuing Date	17-June-2012
Revision Date	13-March-2018
Revision Notes	None

The information herein is given in good faith but no warranty, expressed or implied, is made.  
Updated by William F. Garvin, CIH.

11/10/2020

## AEROKROIL

## SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name:	AEROKROIL
Product Use:	Penetrant/Lubricant for Industrial Use
Manufacturer:	Kano Laboratories, Inc., 1000 E. Thompson Lane Nashville, TN 37211
Emergency Phone Number:	Chemtrec 1 (800) 424-9300
Manufacturer Phone Number:	615-833-4101
Website:	www.kroil.com
SDS Date of Preparation:	November 10, 2020

## SECTION 2: HAZARDS IDENTIFICATION

GHS / HAZCOM 2012 Classification:

HEALTH	PHYSICAL
Skin Irritation Category 2 Eye Irritation Category 2A Aspiration Hazard Category 1 Skin Sensitization Category 1	Flammable Aerosol Category 2 Gas Under Pressure: Compressed Gas

Label Elements

**DANGER!**

Flammable aerosol.

Contains gas under pressure: may explode if heated. Causes skin irritation.

Causes serious eye irritation.

May cause an allergic skin reaction.

May be fatal if swallowed and enters airways.

Keep away from heat, sparks, open flames, and hot surfaces. No smoking. Do not spray on an open flame or other ignition source.

Pressurized container. Do not pierce or burn, even after use.

Wash thoroughly after handling.

Contaminated clothing must not be allowed out of the workplace.

Wear protective gloves and eye protection.

IF SWALLOWED: Immediately call a POISON CENTER. Do NOT induce vomiting.

IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical attention.

Take off contaminated clothing and wash it before reuse.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing. If eye irritation persists: Get medical attention.

In case of fire: Use carbon dioxide, dry chemical or foam to extinguish. Protect from sunlight.

Do not expose to temperatures exceeding 50°C/122°F.

Store locked up.

Dispose of contents and container in accordance with local and national regulations.

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL NAME	CAS#	%
Severely Hydrotreated Petroleum Distillates	64742-52-5 64742-53-6	30-50
LVP Aliphatic Hydrocarbon	64742-47-8	20-40
Proprietary Additive	Proprietary	5-15
Diisobutyl Ketone	108-83-8	5-15
Aliphatic Alcohol #1	123-42-2	1 - <3
Aliphatic Alcohol #2	78-83-1	1 - <3
Carbon Dioxide Propellant	124-38-9	1-5

The exact percentage has been withheld as a trade secret or is a variation in formula.

## SECTION 4: FIRST AID MEASURES

**EYE:** Rinse thoroughly with water for several holding the eye lids open to be sure the material is washed out. Get medical attention if irritation develops or persists.

**SKIN:** Remove contaminated clothing. Wash contact area thoroughly with soap and water. Get medical attention if irritation or symptoms of exposure develop. Launder clothing before re-use.

**INHALATION:** Remove victim to fresh air. Give artificial respiration if needed. If breathing is difficult, oxygen should be administered by qualified personnel. Get medical attention if symptoms develop.

**INGESTION:** DO NOT induce vomiting. Keep the victim calm and warm. Never give anything by mouth to an unconscious or drowsy person. Get immediate medical attention.

**MOST IMPORTANT SYMPTOMS AND EFFECTS, ACUTE AND DELAYED:** May cause eye and skin irritation. Inhalation of vapors or mist may cause respiratory irritation and central nervous system effects such as headache, dizziness, nausea and vomiting. Harmful or fatal if swallowed. Aspiration into the lungs during ingestion or vomiting may cause lung damage. May cause an allergic skin reaction.

**INDICATION OF IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT, IF NEEDED:** If swallowed, get immediate medical attention.

## SECTION 5: FIRE FIGHTING MEASURES

**SUITABLE (AND UNSUITABLE) EXTINGUISHING MEDIA:** Use carbon dioxide, dry chemical or foam. Water may be ineffective but can be used to cool containers and structures.

**SPECIFIC HAZARDS ARISING FROM THE CHEMICAL:** Contents under pressure. Keep away from heat and open flames. Container may rupture or explode in the heat of a fire. Prolonged exposure to temperatures above 120oF may cause cans to burst. Vapors are heavier than air and may travel along surfaces to remote ignition sources and flash back.

Never use welding or cutting torch on or near containers (even empty) because product can ignite explosively. Combustion products may be hazardous: Oxides of carbon, organic compounds, smoke and fumes.

**SPECIAL PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIRE-FIGHTERS:** Wear NIOSH approved positive pressure, self-contained breathing apparatus and full protective clothing. Cool fire exposed containers with water. Protect against bursting cans.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

**PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT, AND EMERGENCY PROCEDURES:** Wear appropriate protective clothing to prevent eye and skin contact including impervious gloves, safety goggles and respirator if needed. Remove all ignition sources such as open flames, spark producing equipment, pilot lights, etc. Ventilate the area with explosion-proof equipment.

**ENVIRONMENTAL PRECAUTIONS:** Avoid release to the environment. Report spills and releases as required to appropriate authorities.

**METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP:** Place leaking can in a pail or pan in a well-ventilated area until the pressure has been released. Cover liquid with an inert absorbent material and collect into an appropriate container for disposal.

## SECTION 7: HANDLING AND STORAGE

**PRECAUTIONS FOR SAFE HANDLING:** Avoid breathing vapors, aerosols and mists. Use with adequate ventilation. Avoid contact with the eyes, skin and clothing. Wash exposed skin thoroughly with soap and water after use. Keep product away from heat, sparks, flames and all other sources of ignition. No smoking in storage or use areas. Do not cut, braze, solder, grind or weld on or near containers. Contents under pressure. Do not puncture or incinerate container.

**CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES:** Store in a cool, well ventilated area at temperatures below 120°F. Do not store in direct sunlight. Store as a Level 3 aerosol.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

CHEMICAL NAME	EXPOSURE LIMITS
Severely Hydrotreated Petroleum Distillates (as mineral oil)	5 mg/m <sup>3</sup> TWA OSHA PEL (as oil mist) 5 mg/m <sup>3</sup> TWA ACGIH TLV (inhalable fraction)
LVP Aliphatic Hydrocarbon	166 ppm TWA Manufacturer Recommended (vapor)
Proprietary Additive	None Established
Diisobutyl Ketone	50 ppm TWA OSHA PEL 25 ppm TWA ACGIH TLV
Aliphatic Alcohol #1	50 ppm OSHA TWA PEL 50 ppm TWA ACGIH TLV
Aliphatic Alcohol #2	100 ppm TWA OSHA PEL 50 ppm TWA ACGIH TLV
Carbon Dioxide Propellant	5000 ppm TWA OSHA PEL 5000 ppm TWA ACGIH TLV 30000 ppm STEL ACGIH TLV

**APPROPRIATE ENGINEERING CONTROLS:** Use with adequate general or local exhaust ventilation to maintain concentrations below the occupational exposure limits. Use explosion proof electrical equipment and wiring where required.

**PERSONAL PROTECTIVE EQUIPMENT:**

**RESPIRATORY PROTECTION:** If the exposure limits listed above are exceeded, a NIOSH approved respirator with organic vapor cartridges may be used. For higher exposures, a supplied air respirator may be required. Respirator selection and use should be based on contaminant type, form and concentration. Follow OSHA 1910.134, ANSI Z88.2 and good Industrial Hygiene practice.

**HAND PROTECTION:** Impervious gloves are recommended when needed to avoid skin contact.

**EYE PROTECTION:** Chemical safety goggles recommended.

**SKIN PROTECTION:** Impervious clothing as required to prevent skin contact and contamination of personal clothing.

**HYGIENE MEASURES:** Suitable eye wash and washing facilities should be available in the work area.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance:</b>	Slightly reddish liquid packaged as an aerosol	<b>Odor:</b>	Solvent
<b>Odor Threshold:</b>	Not available	<b>pH:</b>	Not available
<b>Melting/Freezing Point:</b>	Not available	<b>Boiling Point/Range:</b>	Not available
<b>Flash Point:</b>	132°F (55.5°C) TOC	<b>Evaporation Rate:</b>	Not available
<b>Flammability: (Solid, Gas)</b>	Not applicable	<b>Flammability Limits:</b>	10.9% (aliphatic alcohol #2) LEL: 0.7% (petroleum distillates)
<b>Vapor Pressure:</b>	Not available	<b>Vapor Density:</b>	Not available
<b>Relative Density:</b>	0.8596	<b>Solubilities:</b>	Negligible in Water
<b>Partition Coefficient: (N-Octanol/Water)</b>	Not available	<b>Autoignition Temperature:</b>	Not available
<b>Decomposition Temperature:</b>	Not available	<b>Viscosity:</b>	Not available

## SECTION 10: STABILITY AND REACTIVITY

**REACTIVITY:** None known.

**CHEMICAL STABILITY:** Stable under normal conditions of storage or use.

**POSSIBILITY OF HAZARDOUS REACTIONS:** None known.

**CONDITIONS TO AVOID:** Avoid heat, sparks, flames and all other sources of ignition.

**INCOMPATIBLE MATERIALS:** Avoid strong oxidizing agents, reducing agents, acids and bases.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Combustion will produce oxides of carbon, acetone, acrid fumes and smoke.

## SECTION 11: TOXICOLOGICAL INFORMATION

### POTENTIAL HEALTH EFFECTS:

**EYE:** May cause eye irritation with redness, tearing and stinging.

**SKIN:** May cause irritation with redness, rash, swelling. Prolonged or repeated contact may result in defatting and dermatitis. Repeated skin contact may cause sensitization (allergic skin reaction) in some individuals.

**INHALATION:** Inhalation of vapors or mists may cause mucous membrane and upper respiratory tract irritation and central nervous system depression. Symptoms may include coughing, wheezing, shortness of breath, headache, dizziness, drowsiness, nausea, fatigue and unconsciousness.

**INGESTION:** Ingestion is an unlikely route of exposure for aerosol products. Swallowing may cause gastrointestinal irritation with abdominal pain, nausea, vomiting and diarrhea and central nervous system depression with symptoms including headache, dizziness, intoxication, weakness, nausea, and vomiting. Aspiration into the lungs during ingestion or vomiting may cause lung damage.

**CHRONIC HAZARDS:** Aliphatic Alcohol #1 is suspected of damaging fertility or the unborn child.

**CARCINOGEN STATUS:** None of the components of this product at greater than 0.1% are listed as carcinogens by OSHA, IARC or NTP.



**ACUTE TOXICITY:** Toxicological testing has not been performed on this product as a mixture.

LVP Aliphatic Hydrocarbon: Oral rat LD50 > 5000 mg/kg; Dermal rat LD50 > 5000 mg/kg; Inhalation rat LC50 > 2.18 mg/L/4 hr.

Severely Hydrotreated Petroleum Distillates: Oral rat LD50 >5000 mg/kg, Inhalation rat LC50 >5.28 mg/L/4 hr, Dermal rabbit LD50 >2000 mg/kg

Proprietary Additive: Oral rat LD50 3200 mg/kg; Dermal rabbit LD50 5000 mg/kg

Diisobutyl Ketone: Oral rat LD50 5233 mg/kg; Dermal rat LD50 > 2000 mg/kg; Inhalation rat LC50 14.5 mg/L/4 hr.

Aliphatic Alcohol #1: Oral rat LD50 3002 mg/kg; Dermal rat LD50 > 1875 mg/kg; Inhalation rat LC50 > 7.6 mg/L/4 hr.

Aliphatic Alcohol #2: Oral rat LD50 > 2830 mg/kg; Inhalation rat LC50 24.6 mg/L/4 hr; Dermal rabbit LD50 > 2000 mg/kg

Carbon Dioxide: Inhalation rat LC50 167857 ppm/4 hr

## SECTION 12: ECOLOGICAL INFORMATION

**ECOTOXICITY:** No toxicity data available for the product.

LVP Aliphatic Hydrocarbon: 96 hr. LC50 Pimephales promelas > 100 mg/L; 48 hr. EC50 daphnia magna >1000 mg/L; 72 hr.

EC50 Pseudokirchnerella subcapitata > 100 mg/L

Severely Hydrotreated Petroleum Distillates: 96 hr LL50 Oncorhynchus mykiss 2.5 mg/kg, 48 hr EL50 daphnia magna 1.4 mg/L, 72 hr

EL50 Pseudokirchnerella subcapitata 1.3 mg/L

Proprietary Ingredient: 48 hr. LC50 daphnia magna 17-28 mg/L

Diisobutyl Ketone: 96 hr. LC50 Oncorhynchus mykiss 30 mg/L; 48 hr. EC50 daphnia magna 37.2 mg/L, 72 hr.

Aliphatic Alcohol #1: 96 hr. LC50 Oryzias latipes >100 mg/L; 48 hr. EC50 daphnia magna >1000 mg/L; 72 hr. EC50 Pseudokirchnerella subcapitata >1000 mg/L

Aliphatic Alcohol #2: 96 hr LC50 Pimephales promelas 1430 mg/L; 48 hr EC50 daphnia pulex 1100 mg/L; 72 hr EC50 Pseudokirchnerella subcapitata 1799 mg/L

Carbon Dioxide: 96 hr LC50 Oncorhynchus mykiss 35 mg/L

**PERSISTENCE AND DEGRADABILITY:** Aliphatic Alcohol #1 and Aliphatic Alcohol #2 are readily biodegradable.

**BIOACCUMULATIVE POTENTIAL:** No data available.

**MOBILITY IN SOIL:** No data available

**OTHER ADVERSE EFFECTS:** None known

## SECTION 13: DISPOSAL INFORMATION

**DISPOSAL INSTRUCTIONS:** Dispose of product in accordance with all local, state/provincial and federal regulations.

Do not puncture or incinerate.

**CONTAMINATED PACKAGING:** Offer empty packaging material to local recycling facilities.

## SECTION 14: TRANSPORT INFORMATION

	UN NUMBER	PROPER SHIPPING NAME	HAZARD CLASS	PACKING GROUP	ENVIRONMENTAL HAZARD
<b>DOT / 49 CFR GROUND</b>		Limited Quantity			
<b>DOT AIR</b>	UN1950	Aerosols, Flammable, Limited Quantity	2.1	None	None
<b>IMDG</b>	UN1950	Aerosols, Limited Quantity	2.1	None	None
<b>IATA</b>	UN1950	Aerosols, Flammable, Limited Quantity	2.1	None	None

**Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code):** Not applicable - product is transported only in packaged form.

**Special precautions:** None known.

## SECTION 15: REGULATORY INFORMATION

### U.S. FEDERAL REGULATIONS:

**CERCLA 103 Reportable Quantity:** This product has a Reportable Quantity (RQ) of 166,666 lbs. (based on the RQ for Aliphatic alcohol #2 of 5,000 lbs present at 3%) maximum. Releases above the RQ must be reported to the National Response Center. Many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations

### STATE REPORTING REGULATIONS:

**Massachusetts Right To Know:** Diacetone Alcohol 123-42-2, Isbutanol 78-83-1, Diisobutyl Ketone 108-83-8, Carbon Dioxide 124-38-9

**New Jersey Right To Know:** Isbutanol 78-83-1, Diisobutyl Ketone 108-83-8, Carbon Dioxide 124-38-9, Pine Oil 8002-09-3

**Pennsylvania Right To Know:** Diacetone Alcohol 123-42-2, Isbutanol 78-83-1, Diisobutyl Ketone 108-83-8, Carbon Dioxide 124-38-9

**California Proposition 65:**  **WARNING:** This product can expose you to chemicals including beta-myrcene, which is known to the State of California to cause cancer. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

### SARA TITLE III:

**Hazard Category for Section 311/312:** Refer to Section 2 for the OSHA Hazard Classification

**Section 313 Toxic Chemicals:** This product contains the following chemicals subject to SARA Title III Section 313 Reporting requirements: None.

**Section 302 Extremely Hazardous Substances (TPQ):** None

**EPA Toxic Substances Control Act (TSCA) Status:** All of the components of this product are listed on the TSCA inventory.

**Canadian DSL:** All of the components of this product are listed on the Canadian Domestic Substances List

## SECTION 16: OTHER INFORMATION

**HMIS RATINGS:** Health - 2                      Flammability - 4                      Physical Hazard - 0

**NFPA RATINGS:** Health - 1                      Flammability - 2                      Instability - 0

**SDS REVISION HISTORY:** Updated formulation - Section 15

**DATE OF PREPARATION:** November 20, 2020

**DATE OF LAST REVISION:** July 01, 2020

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The information contained herein has been developed based upon current available scientific data. New information may be developed from time to time which may render the conclusions of this report obsolete. Therefore, no warranty is extended as to the applicability of this information to the user's intended purpose or the consequences of its use or misuse.

11/10/2020

## AEROKROIL

## SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name:	AEROKROIL
Product Use:	Penetrant/Lubricant for Industrial Use
Manufacturer:	Kano Laboratories, Inc., 1000 E. Thompson Lane Nashville, TN 37211
Emergency Phone Number:	Chemtrec 1 (800) 424-9300
Manufacturer Phone Number:	615-833-4101
Website:	www.kroil.com
SDS Date of Preparation:	November 10, 2020

## SECTION 2: HAZARDS IDENTIFICATION

GHS / HAZCOM 2012 Classification:

HEALTH	PHYSICAL
Skin Irritation Category 2 Eye Irritation Category 2A Aspiration Hazard Category 1 Skin Sensitization Category 1	Flammable Aerosol Category 2 Gas Under Pressure: Compressed Gas

Label Elements

**DANGER!**

Flammable aerosol.

Contains gas under pressure: may explode if heated. Causes skin irritation.

Causes serious eye irritation.

May cause an allergic skin reaction.

May be fatal if swallowed and enters airways.

Keep away from heat, sparks, open flames, and hot surfaces. No smoking. Do not spray on an open flame or other ignition source.

Pressurized container. Do not pierce or burn, even after use.

Wash thoroughly after handling.

Contaminated clothing must not be allowed out of the workplace.

Wear protective gloves and eye protection.

IF SWALLOWED: Immediately call a POISON CENTER. Do NOT induce vomiting.

IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical attention.

Take off contaminated clothing and wash it before reuse.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing. If eye irritation persists: Get medical attention.

In case of fire: Use carbon dioxide, dry chemical or foam to extinguish. Protect from sunlight.

Do not expose to temperatures exceeding 50°C/122°F.

Store locked up.

Dispose of contents and container in accordance with local and national regulations.

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL NAME	CAS#	%
Severely Hydrotreated Petroleum Distillates	64742-52-5 64742-53-6	30-50
LVP Aliphatic Hydrocarbon	64742-47-8	20-40
Proprietary Additive	Proprietary	5-15
Diisobutyl Ketone	108-83-8	5-15
Aliphatic Alcohol #1	123-42-2	1 - <3
Aliphatic Alcohol #2	78-83-1	1 - <3
Carbon Dioxide Propellant	124-38-9	1-5

The exact percentage has been withheld as a trade secret or is a variation in formula.

## SECTION 4: FIRST AID MEASURES

**EYE:** Rinse thoroughly with water for several holding the eye lids open to be sure the material is washed out. Get medical attention if irritation develops or persists.

**SKIN:** Remove contaminated clothing. Wash contact area thoroughly with soap and water. Get medical attention if irritation or symptoms of exposure develop. Launder clothing before re-use.

**INHALATION:** Remove victim to fresh air. Give artificial respiration if needed. If breathing is difficult, oxygen should be administered by qualified personnel. Get medical attention if symptoms develop.

**INGESTION:** DO NOT induce vomiting. Keep the victim calm and warm. Never give anything by mouth to an unconscious or drowsy person. Get immediate medical attention.

**MOST IMPORTANT SYMPTOMS AND EFFECTS, ACUTE AND DELAYED:** May cause eye and skin irritation. Inhalation of vapors or mist may cause respiratory irritation and central nervous system effects such as headache, dizziness, nausea and vomiting. Harmful or fatal if swallowed. Aspiration into the lungs during ingestion or vomiting may cause lung damage. May cause an allergic skin reaction.

**INDICATION OF IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT, IF NEEDED:** If swallowed, get immediate medical attention.

## SECTION 5: FIRE FIGHTING MEASURES

**SUITABLE (AND UNSUITABLE) EXTINGUISHING MEDIA:** Use carbon dioxide, dry chemical or foam. Water may be ineffective but can be used to cool containers and structures.

**SPECIFIC HAZARDS ARISING FROM THE CHEMICAL:** Contents under pressure. Keep away from heat and open flames. Container may rupture or explode in the heat of a fire. Prolonged exposure to temperatures above 120oF may cause cans to burst. Vapors are heavier than air and may travel along surfaces to remote ignition sources and flash back.

Never use welding or cutting torch on or near containers (even empty) because product can ignite explosively. Combustion products may be hazardous: Oxides of carbon, organic compounds, smoke and fumes.

**SPECIAL PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIRE-FIGHTERS:** Wear NIOSH approved positive pressure, self-contained breathing apparatus and full protective clothing. Cool fire exposed containers with water. Protect against bursting cans.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

**PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT, AND EMERGENCY PROCEDURES:** Wear appropriate protective clothing to prevent eye and skin contact including impervious gloves, safety goggles and respirator if needed. Remove all ignition sources such as open flames, spark producing equipment, pilot lights, etc. Ventilate the area with explosion-proof equipment.

**ENVIRONMENTAL PRECAUTIONS:** Avoid release to the environment. Report spills and releases as required to appropriate authorities.

**METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP:** Place leaking can in a pail or pan in a well-ventilated area until the pressure has been released. Cover liquid with an inert absorbent material and collect into an appropriate container for disposal.

## SECTION 7: HANDLING AND STORAGE

**PRECAUTIONS FOR SAFE HANDLING:** Avoid breathing vapors, aerosols and mists. Use with adequate ventilation. Avoid contact with the eyes, skin and clothing. Wash exposed skin thoroughly with soap and water after use. Keep product away from heat, sparks, flames and all other sources of ignition. No smoking in storage or use areas. Do not cut, braze, solder, grind or weld on or near containers. Contents under pressure. Do not puncture or incinerate container.

**CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES:** Store in a cool, well ventilated area at temperatures below 120°F. Do not store in direct sunlight. Store as a Level 3 aerosol.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

CHEMICAL NAME	EXPOSURE LIMITS
Severely Hydrotreated Petroleum Distillates (as mineral oil)	5 mg/m <sup>3</sup> TWA OSHA PEL (as oil mist) 5 mg/m <sup>3</sup> TWA ACGIH TLV (inhalable fraction)
LVP Aliphatic Hydrocarbon	166 ppm TWA Manufacturer Recommended (vapor)
Proprietary Additive	None Established
Diisobutyl Ketone	50 ppm TWA OSHA PEL 25 ppm TWA ACGIH TLV
Aliphatic Alcohol #1	50 ppm OSHA TWA PEL 50 ppm TWA ACGIH TLV
Aliphatic Alcohol #2	100 ppm TWA OSHA PEL 50 ppm TWA ACGIH TLV
Carbon Dioxide Propellant	5000 ppm TWA OSHA PEL 5000 ppm TWA ACGIH TLV 30000 ppm STEL ACGIH TLV

**APPROPRIATE ENGINEERING CONTROLS:** Use with adequate general or local exhaust ventilation to maintain concentrations below the occupational exposure limits. Use explosion proof electrical equipment and wiring where required.

**PERSONAL PROTECTIVE EQUIPMENT:**

**RESPIRATORY PROTECTION:** If the exposure limits listed above are exceeded, a NIOSH approved respirator with organic vapor cartridges may be used. For higher exposures, a supplied air respirator may be required. Respirator selection and use should be based on contaminant type, form and concentration. Follow OSHA 1910.134, ANSI Z88.2 and good Industrial Hygiene practice.

**HAND PROTECTION:** Impervious gloves are recommended when needed to avoid skin contact.

**EYE PROTECTION:** Chemical safety goggles recommended.

**SKIN PROTECTION:** Impervious clothing as required to prevent skin contact and contamination of personal clothing.

**HYGIENE MEASURES:** Suitable eye wash and washing facilities should be available in the work area.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance:</b>	Slightly reddish liquid packaged as an aerosol	<b>Odor:</b>	Solvent
<b>Odor Threshold:</b>	Not available	<b>pH:</b>	Not available
<b>Melting/Freezing Point:</b>	Not available	<b>Boiling Point/Range:</b>	Not available
<b>Flash Point:</b>	132°F (55.5°C) TOC	<b>Evaporation Rate:</b>	Not available
<b>Flammability: (Solid, Gas)</b>	Not applicable	<b>Flammability Limits:</b>	10.9% (aliphatic alcohol #2) LEL: 0.7% (petroleum distillates)
<b>Vapor Pressure:</b>	Not available	<b>Vapor Density:</b>	Not available
<b>Relative Density:</b>	0.8596	<b>Solubilities:</b>	Negligible in Water
<b>Partition Coefficient: (N-Octanol/Water)</b>	Not available	<b>Autoignition Temperature:</b>	Not available
<b>Decomposition Temperature:</b>	Not available	<b>Viscosity:</b>	Not available

## SECTION 10: STABILITY AND REACTIVITY

**REACTIVITY:** None known.

**CHEMICAL STABILITY:** Stable under normal conditions of storage or use.

**POSSIBILITY OF HAZARDOUS REACTIONS:** None known.

**CONDITIONS TO AVOID:** Avoid heat, sparks, flames and all other sources of ignition.

**INCOMPATIBLE MATERIALS:** Avoid strong oxidizing agents, reducing agents, acids and bases.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Combustion will produce oxides of carbon, acetone, acrid fumes and smoke.

## SECTION 11: TOXICOLOGICAL INFORMATION

### POTENTIAL HEALTH EFFECTS:

**EYE:** May cause eye irritation with redness, tearing and stinging.

**SKIN:** May cause irritation with redness, rash, swelling. Prolonged or repeated contact may result in defatting and dermatitis. Repeated skin contact may cause sensitization (allergic skin reaction) in some individuals.

**INHALATION:** Inhalation of vapors or mists may cause mucous membrane and upper respiratory tract irritation and central nervous system depression. Symptoms may include coughing, wheezing, shortness of breath, headache, dizziness, drowsiness, nausea, fatigue and unconsciousness.

**INGESTION:** Ingestion is an unlikely route of exposure for aerosol products. Swallowing may cause gastrointestinal irritation with abdominal pain, nausea, vomiting and diarrhea and central nervous system depression with symptoms including headache, dizziness, intoxication, weakness, nausea, and vomiting. Aspiration into the lungs during ingestion or vomiting may cause lung damage.

**CHRONIC HAZARDS:** Aliphatic Alcohol #1 is suspected of damaging fertility or the unborn child.

**CARCINOGEN STATUS:** None of the components of this product at greater than 0.1% are listed as carcinogens by OSHA, IARC or NTP.

**ACUTE TOXICITY:** Toxicological testing has not been performed on this product as a mixture.

LVP Aliphatic Hydrocarbon: Oral rat LD50 > 5000 mg/kg; Dermal rat LD50 > 5000 mg/kg; Inhalation rat LC50 > 2.18 mg/L/4 hr.

Severely Hydrotreated Petroleum Distillates: Oral rat LD50 >5000 mg/kg, Inhalation rat LC50 >5.28 mg/L/4 hr, Dermal rabbit LD50 >2000 mg/kg

Proprietary Additive: Oral rat LD50 3200 mg/kg; Dermal rabbit LD50 5000 mg/kg

Diisobutyl Ketone: Oral rat LD50 5233 mg/kg; Dermal rat LD50 > 2000 mg/kg; Inhalation rat LC50 14.5 mg/L/4 hr.

Aliphatic Alcohol #1: Oral rat LD50 3002 mg/kg; Dermal rat LD50 > 1875 mg/kg; Inhalation rat LC50 > 7.6 mg/L/4 hr.

Aliphatic Alcohol #2: Oral rat LD50 > 2830 mg/kg; Inhalation rat LC50 24.6 mg/L/4 hr; Dermal rabbit LD50 > 2000 mg/kg

Carbon Dioxide: Inhalation rat LC50 167857 ppm/4 hr

## SECTION 12: ECOLOGICAL INFORMATION

**ECOTOXICITY:** No toxicity data available for the product.

LVP Aliphatic Hydrocarbon: 96 hr. LC50 Pimephales promelas > 100 mg/L; 48 hr. EC50 daphnia magna >1000 mg/L; 72 hr.

EC50 Pseudokirchnerella subcapitata > 100 mg/L

Severely Hydrotreated Petroleum Distillates: 96 hr LL50 Oncorhynchus mykiss 2.5 mg/kg, 48 hr EL50 daphnia magna 1.4 mg/L, 72 hr

EL50 Pseudokirchnerella subcapitata 1.3 mg/L

Proprietary Ingredient: 48 hr. LC50 daphnia magna 17-28 mg/L

Diisobutyl Ketone: 96 hr. LC50 Oncorhynchus mykiss 30 mg/L; 48 hr. EC50 daphnia magna 37.2 mg/L, 72 hr.

Aliphatic Alcohol #1: 96 hr. LC50 Oryzias latipes >100 mg/L; 48 hr. EC50 daphnia magna >1000 mg/L; 72 hr. EC50 Pseudokirchnerella subcapitata >1000 mg/L

Aliphatic Alcohol #2: 96 hr LC50 Pimephales promelas 1430 mg/L; 48 hr EC50 daphnia pulex 1100 mg/L; 72 hr EC50 Pseudokirchnerella subcapitata 1799 mg/L

Carbon Dioxide: 96 hr LC50 Oncorhynchus mykiss 35 mg/L

**PERSISTENCE AND DEGRADABILITY:** Aliphatic Alcohol #1 and Aliphatic Alcohol #2 are readily biodegradable.

**BIOACCUMULATIVE POTENTIAL:** No data available.

**MOBILITY IN SOIL:** No data available

**OTHER ADVERSE EFFECTS:** None known

## SECTION 13: DISPOSAL INFORMATION

**DISPOSAL INSTRUCTIONS:** Dispose of product in accordance with all local, state/provincial and federal regulations.

Do not puncture or incinerate.

**CONTAMINATED PACKAGING:** Offer empty packaging material to local recycling facilities.

## SECTION 14: TRANSPORT INFORMATION

	UN NUMBER	PROPER SHIPPING NAME	HAZARD CLASS	PACKING GROUP	ENVIRONMENTAL HAZARD
<b>DOT / 49 CFR GROUND</b>		Limited Quantity			
<b>DOT AIR</b>	UN1950	Aerosols, Flammable, Limited Quantity	2.1	None	None
<b>IMDG</b>	UN1950	Aerosols, Limited Quantity	2.1	None	None
<b>IATA</b>	UN1950	Aerosols, Flammable, Limited Quantity	2.1	None	None

**Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code):** Not applicable - product is transported only in packaged form.

**Special precautions:** None known.

## SECTION 15: REGULATORY INFORMATION

### U.S. FEDERAL REGULATIONS:


**CERCLA 103 Reportable Quantity:** This product has a Reportable Quantity (RQ) of 166,666 lbs. (based on the RQ for Aliphatic alcohol #2 of 5,000 lbs present at 3%) maximum. Releases above the RQ must be reported to the National Response Center. Many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations

### STATE REPORTING REGULATIONS:

**Massachusetts Right To Know:** Diacetone Alcohol 123-42-2, Isbutanol 78-83-1, Diisobutyl Ketone 108-83-8, Carbon Dioxide 124-38-9

**New Jersey Right To Know:** Isbutanol 78-83-1, Diisobutyl Ketone 108-83-8, Carbon Dioxide 124-38-9, Pine Oil 8002-09-3

**Pennsylvania Right To Know:** Diacetone Alcohol 123-42-2, Isbutanol 78-83-1, Diisobutyl Ketone 108-83-8, Carbon Dioxide 124-38-9

**California Proposition 65:**  **WARNING:** This product can expose you to chemicals including beta-myrcene, which is known to the State of California to cause cancer. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

### SARA TITLE III:

**Hazard Category for Section 311/312:** Refer to Section 2 for the OSHA Hazard Classification

**Section 313 Toxic Chemicals:** This product contains the following chemicals subject to SARA Title III Section 313 Reporting requirements: None.

**Section 302 Extremely Hazardous Substances (TPQ):** None

**EPA Toxic Substances Control Act (TSCA) Status:** All of the components of this product are listed on the TSCA inventory.

**Canadian DSL:** All of the components of this product are listed on the Canadian Domestic Substances List

## SECTION 16: OTHER INFORMATION

**HMIS RATINGS:** Health - 2                      Flammability - 4                      Physical Hazard - 0

**NFPA RATINGS:** Health - 1                      Flammability - 2                      Instability - 0

**SDS REVISION HISTORY:** Updated formulation - Section 15

**DATE OF PREPARATION:** November 20, 2020

**DATE OF LAST REVISION:** July 01, 2020

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The information contained herein has been developed based upon current available scientific data. New information may be developed from time to time which may render the conclusions of this report obsolete. Therefore, no warranty is extended as to the applicability of this information to the user's intended purpose or the consequences of its use or misuse.



# Safety Data Sheet

Anchorlube G-771

8/26/2018

## SECTION 1: IDENTIFICATION

**Product Name:** ANCHORLUBE G-771

**Manufacturer:** Anchor Chemical Company  
777 Canterbury Road  
Westlake, OH 44145

**Information Phone Number:** (440) 871-1660

**Fax:** (440) 871-0665

**Emergency Phone Number:** (440) 871-1660

**Product Use:** Metalworking lubricant/coolant for cutting metals

**Restriction on Use:** None known

**SDS Date of Preparation:** 8/26/2018

## SECTION 2: HAZARDS IDENTIFICATION

**GHS Classification (Hazcom-2012):**

Physical	Health
Not Hazardous	Not Hazardous

**Labeling Elements:**

None required

**Hazard statement(s)**  
None

**Precautionary statement(s)**  
None

**Other Hazards:** None

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS#	%
Non-hazardous Ingredients	Proprietary	100%

The specific identity and/or exact percentage of composition has been withheld as a trade secret.

## SECTION 4: FIRST AID MEASURES

**Eye:** Flush eyes with water, holding the eyelids apart. Get medical attention if irritation develops or persists.

**Skin:** Wash thoroughly with plenty of water. Get medical attention if irritation persists.

**Inhalation:** Remove to fresh air and keep comfortable for breathing. If irritation occurs, get medical attention.

**Ingestion:** If large amounts ingested, seek medical attention.

# Safety Data Sheet

Anchorlube G-771

8/26/2018

**Most Important symptoms and effects, both acute and delayed:** May cause slight eye and skin irritation. Inhalation of vapors or mist may cause respiratory irritation.

**Indication of any immediate medical attention and special treatment needed:** Immediate medical attention generally not required.

## SECTION 5: FIRE-FIGHTING MEASURES

**Suitable and Unsuitable Extinguishing Media:** Use media that is suitable for the surrounding fire.

**Special Hazards Arising from the Chemical:** This product is not classified as combustible. Thermal decomposition may yield oxides of carbon and unidentified compounds.

**Special Equipment and Precautions for Fire-Fighters:** Wear NIOSH approved positive pressure, self-contained breathing apparatus and full protective clothing. Cool fire exposed containers with water.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

**Personal Precautions, Protective Equipment and Emergency Procedures:** Wear appropriate personal protective equipment. Use caution: slip hazard.

**Environmental Hazards:** Report spills and releases as required to appropriate authorities.

**Methods and Material for Containment and Cleaning Up:** Because of its viscous nature, this product is not expected to leak or spill. Collect liquid spill with an inert absorbent material and place into a suitable container for disposal. Clean area thoroughly.

## SECTION 7: HANDLING AND STORAGE

**Precautions for Safe Handling:** Avoid contact with eyes. Avoid prolonged skin contact. Avoid inhalation of vapor or mist. Do not transfer to unlabeled containers.

**Conditions for Safe Storage, Including any Incompatibilities:** Store at room temperature away from extreme heat and open flames.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Chemical Name	Exposure Limits
Non-hazardous Ingredients	None Established

**Appropriate Engineering Controls:** Use with adequate general or local exhaust ventilation to minimize exposure levels. If the product is used at high temperatures, local exhaust ventilation may be required.

### Individual Protection Measures:

**Respiratory Protection:** In operations where exposures are excessive, a NIOSH approved respirator with organic vapor/particulate cartridges or supplied air respirator appropriate for the form and concentration of the contaminants should be used. Selection and use of respiratory equipment must be in accordance with OSHA 1910.134 and good industrial hygiene practice.

**Skin Protection:** If skin irritation occurs, impervious gloves such as rubber or nitrile recommended where needed to avoid skin contact

**Eye Protection:** Safety glasses or goggles recommended where needed to avoid eye contact.

# Safety Data Sheet

Anchorlube G-771

8/26/2018

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance:</b> Green semi paste	<b>Vapor Density (air = 1):</b> Not available
<b>Odor:</b> Slight almond odor	<b>Specific Gravity:</b> 1.0365
<b>Odor Threshold:</b> Not established	<b>Water Solubility:</b> Dispersable
<b>pH:</b> 6.0-6.5	<b>Octanol/Water Partition Coefficient:</b> Not available
<b>Melting Point/Freezing Point:</b> 0°C (32°F)	<b>Autoignition Temperature:</b> N/A
<b>Boiling Point:</b> 107.22° (225°F)	<b>Decomposition Temperature:</b> Not available
<b>Flash Point:</b> N/A	<b>Viscosity:</b> Not available
<b>Evaporation Rate:</b> Not available	<b>Explosion Properties:</b> Not explosive
<b>Flammable Limits:</b> LEL: Not established UEL: Not established	<b>Oxidizing Properties:</b> Not oxidizing
<b>Vapor Pressure:</b> Not established	<b>Flammability (solid, gas):</b> N/A

## SECTION 10: STABILITY AND REACTIVITY

**Reactivity:** Not reactive under normal conditions of use.

**Chemical Stability:** Stable under normal storage and handling conditions.

**Possibility of Hazardous Reactions:** None known

**Conditions to Avoid:** Extreme heat and freezing.

**Incompatible Materials:** Avoid magnesium as this product is water based.

**Hazardous Decomposition Products:** Thermal decomposition may yield oxides of carbon and other unidentified compounds.

## SECTION 11: TOXICOLOGICAL INFORMATION

### Potential Health Effects:

**Eye:** May cause mild irritation.

**Skin:** Prolonged contact may cause irritation and drying of the skin.

**Inhalation:** No adverse effects expected at ambient temperatures. Inhalation of vapors and fumes from thermal decomposition may cause respiratory irritation.

**Ingestion:** Swallowing may cause gastrointestinal irritation, nausea, vomiting, diarrhea.

**Chronic Hazards:** Prolonged skin contact may cause an allergic reaction.

**Carcinogen Status:** None of the other components of this product are listed as carcinogens by OSHA, IARC, NTP, or the EU CLP.

### Acute Toxicity Values:

No data available. Components are not acutely toxic.

# Safety Data Sheet

Anchorlube G-771

8/26/2018

## SECTION 12: ECOLOGICAL INFORMATION

**Ecotoxicity:**

No data available. This product is not expected to be harmful to the environment

**Persistence and Degradability:** Product is degradable. Unsealed will begin to degrade rapidly. Shelf life is three years if stored capped at room temperature.

**Bioaccumulative Potential:** No data available

**Mobility in Soil:** No data available

**Other Adverse Effects:** None known

## SECTION 13: DISPOSAL CONSIDERATIONS

Dispose in accordance with all local, regional and national regulations.

## SECTION 14: TRANSPORT INFORMATION

**DOT Proper Shipping Name:** Not regulated

**DOT Technical Name:** None

**DOT Hazard Class:** None

**UN Number:** None

**DOT Labels Required (49CFR172.101):** None

**IMDG Shipping Description:** Not regulated

**ID Number:** None

**Hazard Class:** None

**Packing Group:** None

**Labels Required:** None

**Marking Required:** None

**Placards Required:** None

## SECTION 15: REGULATORY INFORMATION

**Safety, health, and environmental regulations specific for the product in question.**

**CERCLA Hazardous Substances (Section 103)/RQ:** This product is not subject to CERCLA reporting requirements. Many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.

**SARA Hazard Category (311/312):** Not hazardous

**SARA 313:** This product contains the following chemicals regulated under SARA Title III, section 313: None.

**EPA TSCA Inventory:** All of the components of this product are listed on the TSCA inventory.

**CALIFORNIA PROPOSITION 65:** No listed chemicals.

**This product is not hazardous in accordance with OSHA HAZCOM 2012, GHS and WHMIS 2015.**

# Safety Data Sheet

Anchorlube G-771

8/26/2018

<b>SECTION 16: OTHER INFORMATION</b>
--------------------------------------

**Revision Summary:** New format to comply with OSHA Hazcom 2012

**SDS Date of Preparation/Revision:** 5/6/2015

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**Disclaimer:** Information contained herein is presented in good faith and is based on data believed to be accurate. However no warranty is expressed or implied regarding this information or the results obtained from the use of this Safety Data Sheet, whether it originates with Anchor Chemical name or others. This Safety Data Sheet relates only to the specific material designated herein. It does not relate to use with other material or processes. This information is supplied with the condition that the user will make appropriate determination as to its suitability for their purpose prior to using it.

# Safety Data Sheet

Anchorlube G-771

SDS No. 771.14

Revision: 1/05/15

## Section 1 - Chemical Product and Company Identification

**Product/Chemical Name:** Anchorlube G-771

**Synonyms:** N/A

**General Use:** Metalworking lubricant/coolant for cutting metals

**Manufacturer:** Anchor Chemical Company  
777 Canterbury Road  
Westlake, OH 44145  
Phone (440) 871-1660, Fax (440) 871-1601

**Emergency Phone:** (440) 871-1660

**Date Revised:** 1/5/15

**Preparer:** Sam Firth

## Section 2 - Hazards Identification

**Hazard Pictogram:**



**Hazard Statements:** None

**Precautionary Statements:**

**P280:** Wear eye protection.

**P305+351+338:** IF IN EYES: Rinse continuously with water. Remove contact lenses if present and easy to do-continue rinsing.

**P302+352:** IF ON SKIN: Wash with soap and water.

**HMIS**

**H** 1

**F** 0

**R** 0

**PPE** A

## Section 3 - Composition / Information on Ingredients

**Non-hazardous material.**

The following components, present at a concentration  $\geq 0.1\%$  are listed as carcinogens or potential carcinogens by either the National Toxicology Program (NTP), The International Agency for Research on Cancer (IARC) or OSHA:

None – Not Applicable

## Section 4 - First Aid Measures

**Inhalation:** This would be extremely rare. Smoke from welding parts with residue may irritate throat. If any affects are felt dilute with water. If discomfort is noticed beyond 15 minutes, seek medical advice.

**Eye Contact:** Flush eyes thoroughly for several minutes taking care to rinse under eyelids. Do not scrub. Abrasion may cause irritation. If discomfort continues, continue to wash with water. If irritation persists, consult a physician.

**Skin Contact:** An individual predisposed to irritation caused by animal fats based soaps may experience mild skin irritation. Wash skin with soap and water. Consult a physician if irritation persists.

**Ingestion:** If swallowed, it may cause nausea due to soap base. Dilute with water. IF nausea continues, seek medical advice.

**Most important symptoms and effects, both acute and delayed:** None

**Indication of any immediate medical attention and special treatment needed:** None

## Section 5 - Fire-Fighting Measures

**Flammability Classification:** Non-combustible

**Extinguishing Media:** Use extinguishing measures appropriate to the surrounding fire.

**Unusual Fire or Explosion Hazards:** None known.

**Hazardous Combustion Products:** None.

**Fire-Fighting Instructions:** None

## Section 6 - Accidental Release Measures

**Personal precautions, protective equipment, and emergency procedures:** N/A

**Methods and materials for containment and cleaning up:** Cover with inert, absorbent material and remove to disposal container. Spill area may be slippery. Flush with water.

**Regulatory Requirements:** N/A

## Section 7 - Handling and Storage

**Handling Precautions:** Material freezes and some separation may occur. Freezing will not affect capability of material to perform. Once thawed, stir material until smooth.

**Storage Requirements:** Store at room temperature (40-100 degrees f).

## Section 8 - Exposure Controls / Personal Protection

### Engineering Controls:

**Ventilation:** Provide general or local exhaust ventilation systems to maintain airborne concentrations below OSHA PELs. Local exhaust ventilation is preferred because it prevents contaminant dispersion into the work area by controlling it at its source.

### Administrative Controls:

**Protective Clothing/Equipment:** Wear tightly fitting safety goggles or safety glasses.

**Contaminated Equipment:** Clean equipment with water. Contaminated clothing may be washed with regular street clothes.

**Comments:** Treat this product as you would other animal fat based soaps. Easily cleaned with soapy water and comes of clothing as simple as other soaps.

## Section 9 - Physical and Chemical Properties

**Physical State:** Semi Paste

**Appearance and Odor:** Green Semi Paste with slight almond odor

**Odor Threshold:** n/e

**Vapor Pressure:** n/a

**Vapor Density (Air=1):** n/d

**Formula Weight:** n/a

**Density:** 8.51 Lb/Gal

**Specific Gravity (H<sub>2</sub>O=1, at 4 °C):** 1.0365

**pH:** 6.0-6.5

**Flash Point:** >

**Flash Point Method:** Not flammable.

**Burning Rate:** Does not burn.

**Auto-ignition Temperature:** Does not ignite.

**Explosive properties:** Non-explosive.

**Water Solubility:** Dispersible

**Boiling Point:** F: 225 C: 107.22

**Freezing/Melting Point:** 0 C/32 C

**Refractive Index:** n/a

**Surface Tension:** n/a

**% Volatile:** n/a

**Evaporation Rate:** n/a

## Section 10 - Stability and Reactivity

**Stability:** Stable at room temperature in closed containers under normal storage and handling conditions.

**Polymerization:** Hazardous polymerization cannot occur.

**Chemical Incompatibilities:** Avoid Magnesium as it is water based.

**Reactivity with Heat:** When exposed to fire or heat, Anchorlube loses its water and dries out leaving a waxy film.

**Hazardous Decomposition Products:** None known.

## Section 11- Toxicological Information

### Toxicity Data:\*

**Eye:** May cause irritation.

**Skin:** May cause irritation.

**Ingestion:** Unlikely.

**Acute Oral Effects:** None known.

**Chronic Effects:** None known.

**Carcinogenicity:** Neither this product nor any of its components are considered carcinogenic by OSHA, IARC, NTP, or ACGIH.

**Contains no oil, silicone, sulfur, chlorine or vocs.**

## Section 12 - Ecological Information

**Not known.**

**Persistence and degradability:** Product is biodegradable. Sealed shelf life is a minimum of two years. Unsealed will begin to degrade rapidly.

**Bioaccumulative potential:** Not applicable

**Mobility in soil:** Not applicable.

### Section 13 - Disposal Considerations

**Disposal:** This substance is inert and does not require special disposal methods. Small amounts may be flushed into sanitary sewer. Large amounts follow applicable Federal, state, and local regulations.

### Section 14 - Transport Information

**DOT Transportation Data:** This product is not classified as dangerous under the transport regulations for road, rail, sea, or air transport.

### Section 15 - Regulatory Information

**EPA Regulations:**

RCRA Hazardous Waste Number: (40 CFR 261.33): Not listed

RCRA Hazardous Waste Classification (40 CFR 261): Not classified

CERCLA Hazardous Substance (40 CFR 302.4) Not listed

SARA Toxic Chemical (40 CFR 372.65): Not listed

SARA EHS (Extremely Hazardous Substance) (40 CFR 355): Not listed

**OSHA Regulations:**

Air Contaminant (29 CFR 1910.1000, Table Z-1, Z-1-A): Not listed

OSHA Specifically Regulated Substance (29CFR 1910): Not Listed

All ingredients in this product are listed on the TSCA inventory or are not required to be listed on the TSCA inventory.

**International Regulations:**

Regulation (EC) No 2037/2000 (Ozone Depleting Substances): Not applicable

Regulation (EC) No 850/2004 (Persistent Organic Pollutants): Not applicable

Regulation (EC) No 689/2008 (Export and Import of Dangerous Substances): Not applicable

Directive 2002/95/EC (RoHS): Not applicable

Directive 2002/96/EC (WEEE): Not applicable

Directive 1999/13/EC (VOC): Not applicable

Restrictions according to TITLE VIII of the Regulation (EC) No 1907/2006 (REACH): None

S-phrases:

S39: Wear eye protection.

RoHS: Not applicable

### Section 16 - Other Information

**Prepared By:** Sam Firth

**Revision Notes:** Updated to GHS

**Disclaimer:** Information contained herein is presented in good faith and is based on data believed to be accurate. However no warranty is expressed or implied regarding this information or the results obtained from the use of this Safety Data Sheet, whether it originates with Anchor Chemical name or others. This Safety Data Sheet relates only to the specific material designated herein. It does not relate to use with other material or processes. This information is supplied with the condition that the user will make appropriate determination as to its suitability for their purpose prior to using it.





## Safety Data Sheet

This safety data sheet complies with the requirements of: 2012 OSHA Hazard Communication Standard ( 29CFR 1910.1200)

**Product name** ANSUL ABC Multipurpose Dry Chemical Agent - Stored Pressure System

### 1. Identification

#### 1.1. Product Identifier

**Product name** ANSUL ABC Multipurpose Dry Chemical Agent - Stored Pressure System

#### 1.2. Other means of identification

**Product code** 435028  
**UN/ID no** UN1044  
**Synonyms** None  
**Chemical Family** No information available

#### 1.3. Recommended use of the chemical and restrictions on use

**Recommended use** No information available.  
**Uses advised against** Consumer use.

#### 1.4. Details of the Supplier of the Safety Data Sheet

**Company Name** Tyco Fire Protection Products  
One Stanton Street  
Marinette, WI 54143-2542  
Telephone: 715-735-7411  
**Contact point** Product Stewardship at 1-715-735-7411  
**E-mail address** psra@tycofp.com

#### 1.5. Emergency Telephone Number

**Emergency telephone** CHEMTREC 001-800-424-9300 or 001-703-527-3887

### 2. Hazards Identification

#### Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Simple asphyxiants  
Gases Under Pressure - Compressed Gas

#### 2.2. Label Elements

##### Signal Word

WARNING

##### Hazard Statements

May displace oxygen and cause rapid suffocation  
Contains gas under pressure; may explode if heated





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## Precautionary Statements

### Storage

Protect from sunlight. Store in a well-ventilated place.

### 2.3. Hazards Not Otherwise Classified (HNOC)

Not Applicable.

### 2.4. Other Information

## 3. Composition/information on Ingredients

### 3.1. Mixture

The following component(s) in this product are considered hazardous under applicable OSHA(USA)

Chemical name	CAS No.	weight-%
Attapulgate	12174-11-7	1 - 5
Calcium carbonate	471-34-1	1 - 5

## 4. First aid measures

### 4.1. Description of first aid measures

#### General Advice

Call 911 or emergency medical service. Remove and isolate contaminated clothing and shoes.

#### Eye Contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If eye irritation persists: Get medical advice/attention.

#### Skin contact

In case of contact with liquefied gas, thaw frosted parts with lukewarm water.

#### Inhalation

Move victim to fresh air. If breathing is irregular or stopped, administer artificial respiration. Administer oxygen if breathing is difficult.

#### Ingestion

If swallowed: Call a POISON CENTER or doctor/physician if you feel unwell.

#### Self-Protection of the First Aider

Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

### 4.2. Most Important Symptoms and Effects, Both Acute and Delayed

#### Symptoms

None known.

### 4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

#### Note to physicians

Keep victim warm and quiet.

## 5. Fire-fighting measures

### 5.1. Suitable Extinguishing Media

Use extinguishing agent suitable for type of surrounding fire. Dry chemical or CO2. Water spray, fog or regular foam.



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### **5.2. Unsuitable Extinguishing Media**

None.

### **5.3. Specific Hazards Arising from the Chemical**

Ruptured cylinders may rocket. Some may burn but none ignite readily.

### **5.4. Explosion Data**

**Sensitivity to Mechanical Impact** None.

**Sensitivity to Static Discharge** None.

### **5.5. Protective Equipment and Precautions for Firefighters**

Move containers from fire area if you can do it without risk. Damaged cylinders should be handled only by specialists.

## **6. Accidental release measures**

### **6.1. Personal precautions, protective equipment and emergency procedures**

**Personal Precautions** Do not touch or walk through spilled material. Stop leak if you can do it without risk.

**OTHER INFORMATION** Ventilate the area.

**For emergency responders** Use personal protection recommended in Section 8.

### **6.2. Environmental Precautions**

**Environmental Precautions** Use water spray to reduce vapors or divert vapor cloud drift. Avoid allowing water runoff to contact spilled material. Prevent entry into waterways, sewers, basements or confined areas. See Section 12 for additional Ecological Information.

### **6.3. Methods and material for containment and cleaning up**

**Methods for Containment** If possible, turn leaking containers so that gas escapes rather than liquid. Allow substance to evaporate.

**Methods for Cleaning Up** Use personal protective equipment as required. Cover powder spill with plastic sheet or tarp to minimize spreading and keep powder dry. Take up mechanically, placing in appropriate containers for disposal. Avoid creating dust. Clean contaminated surface thoroughly.

## **7. Handling and Storage**

### **7.1. Precautions for Safe Handling**

**Advice on safe handling** Avoid generation of dust. Do not breathe dust/fume/gas/mist/vapors/spray. Use with local exhaust ventilation. Use personal protective equipment as required. Wash thoroughly after handling.

### **7.2. Conditions for safe storage, including any incompatibilities**

**Storage Conditions** Store in a well-ventilated place. Keep cool. Keep container tightly closed. Guard against dust accumulation of material. Use care in handling/storage. Pressurized extinguishers



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should be properly stored and secured to prevent falling or being knocked over.

**Incompatible Materials** Strong acids.

**8. Exposure Controls/Personal Protection**

**8.1. Control Parameters**

**Exposure guidelines**

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH	Mexico OEL
Attapulgit 12174-11-7	TWA: 1 mg/m <sup>3</sup> respirable particulate matter	-	-	-
Calcium carbonate 471-34-1	-	-	TWA: 10 mg/m <sup>3</sup> total dust TWA: 5 mg/m <sup>3</sup> respirable dust	-

ACGIH (American Conference of Governmental Industrial Hygienists) OSHA (Occupational Safety and Health Administration of the US Department of Labor): NIOSH IDLH Immediately Dangerous to Life or Health

**8.2. Appropriate Engineering Controls**

**Engineering controls** Ensure adequate ventilation, especially in confined areas.

**8.3. Individual protection measures, such as personal protective equipment**

**Eye/Face Protection** Avoid contact with eyes. Tight sealing safety goggles.

**Skin and Body Protection** No special precautions are needed in handling this material.

**Respiratory Protection** In case of insufficient ventilation, wear suitable respiratory equipment.

**Ventilation** Use local exhaust or general dilution ventilation to control exposure with applicable limits

**8.4. General hygiene considerations**

Do not eat, drink or smoke when using this product. Handle in accordance with good industrial hygiene and safety practice.

**9. Physical and Chemical Properties**

**9.1. Information on basic physical and chemical properties**

<b>Physical State</b>	powder	<b>Color</b>	Yellow
<b>Odor</b>	odorless		
<b>Odor Threshold</b>	No data available		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	No data available	
Melting point/freezing point	No data available	
Boiling point / boiling range	No data available	
Flash Point	No data available	
Evaporation Rate	No data available	
Flammability (solid, gas)	No data available	
Flammability limit in air		
Upper flammability limit:	No data available	
Lower flammability limit:	No data available	



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Vapor Pressure	No data available
Vapor Density	No data available
Specific gravity	No data available
Water Solubility	No data available
Solubility in Other Solvents	No data available
Partition coefficient	No data available
Autoignition Temperature	No data available
Decomposition Temperature	No data available
Kinematic viscosity	No data available

## 10. Stability and Reactivity

### 10.1. Chemical Stability

Stable under recommended storage conditions.

### 10.2. Reactivity

No data available

### 10.3. Possibility of hazardous reactions

Hazardous polymerization does not occur.

<b>Hazardous Polymerization</b>	Hazardous polymerization does not occur.
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### 10.4. Conditions to Avoid

None known based on information supplied.

### 10.5. Incompatible Materials

Strong acids.

### 10.6. Hazardous decomposition products

Carbon oxides. Nitrogen oxides (NO<sub>x</sub>).

## 11. Toxicological Information

### 11.1. Information on Likely Routes of Exposure

#### Product information

<b>Inhalation</b>	May cause irritation of respiratory tract.
<b>Eye Contact</b>	May cause irritation.
<b>Skin contact</b>	May cause irritation.
<b>Ingestion</b>	Ingestion may cause irritation to mucous membranes.

#### Component Information

##### Acute Toxicity



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Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Calcium carbonate 471-34-1	= 6450 mg/kg ( Rat )	-	-

**11.2. Information on Toxicological Effects**

**Symptoms** No information available.

**11.3.** Delayed and immediate effects as well as chronic effects from short and long-term exposure

**Carcinogenicity** Attapulgit (palygorskite fibers) is a hydrated magnesium aluminum silicate. Long palygorskite (attapulgit) fibers (>5 micrometers) are possibly carcinogenic to humans (Group 2B). Short palygorskite (attapulgit) fibers (<5 micrometers) cannot be classified as to their carcinogenicity to humans (Group 3). The attapulgit present in this product contains fibers 0.5-2.5 um range, so would be considered by IARC as Group 3. This product contains crystalline silica (quartz) in a non-respirable form. Inhalation of crystalline silica is unlikely to occur from exposure to this product.

Chemical name	ACGIH	IARC	NTP	OSHA
Attapulgit 12174-11-7	-	Group 3	-	X

*IARC (International Agency for Research on Cancer)*

*Group 3 - Not Classifiable as to Carcinogenicity in Humans*

*OSHA (Occupational Safety and Health Administration of the US Department of Labor)*

*X - Present*

**Reproductive Toxicity** No information available.  
**STOT - Single Exposure** No information available.  
**STOT - Repeated Exposure** No information available.  
**Target organ effects** Eyes, Respiratory System, Skin.  
**Aspiration Hazard** No information available.

**11.4. Numerical Measures of Toxicity - Product information**

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (dermal) 8156 mg/kg

**12. Ecological Information**

**12.1. Ecotoxicity**

Not classified.

Chemical name	Algae/aquatic plants	Fish	Crustacea
Ammonium sulfate, technical 7783-20-2	-	LC50 96 h 460 - 1000 mg/L Leuciscus idus static; LC50 96 h 123 - 128 mg/L Poecilia reticulata semi-static; LC50 96 h = 126 mg/L Poecilia reticulata; LC50 96 h > 100 mg/L Pimephales promelas; LC50 96 h 32.2 - 41.9 mg/L Oncorhynchus mykiss flow-through; LC50 96 h 5.2 - 8.2 mg/L Oncorhynchus mykiss static; LC50 96 h = 18 mg/L Cyprinus carpio; LC50 96 h = 480 mg/L Brachydanio rerio flow-through; LC50 96 h = 420 mg/L Brachydanio rerio semi-static; LC50 96 h = 250 mg/L Brachydanio rerio	LC50 48 h = 14 mg/L Daphnia magna; EC50 24 h = 423 mg/L Daphnia magna
Silicic Acid/silica gel, Amorphous	EC50 (72h) = 440 mg/L	LC50 (96h) static = 5000 mg/L	EC50 (48h) = 7600 mg/L



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7631-86-9	Pseudokirchneriella subcapitata	Brachydanio rerio	Ceriodaphnia dubia
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**12.2. Persistence and Degradability**

No information available.

**12.3. Bioaccumulation**

No information available.

**12.4. Other Adverse Effects**

No information available

**13. Disposal Considerations**

**13.1. Waste Treatment Methods**

**Disposal of wastes**

This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local regulations for additional requirements.

**Contaminated Packaging**

Do not reuse container. Pressurized container: Do not pierce or burn, even after use.

**14. Transport Information**

**DOT**

UN/ID no	UN1044
Proper Shipping Name	Fire extinguishers
Description	UN1044, Fire extinguishers, 2.2
Hazard class	2.2
Special Provisions	18, 110
Emergency Response Guide Number	126

**TDG**

UN/ID no	UN1044
Description	UN1044, Fire extinguishers, 2.2
Proper Shipping Name	Fire extinguishers
Hazard class	2.2

**MEX**

UN/ID no	UN1044
Description	UN1044, Fire extinguishers, 2.2
Proper Shipping Name	Fire extinguishers
Hazard class	2.2

**ICAO (air)**

UN/ID no	UN1044
Description	UN1044, Fire extinguishers, 2.2



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**Proper Shipping Name** Fire extinguishers  
**Hazard class** 2.2  
**Special Provisions** A19

**IATA**

**UN/ID no** UN1044  
**Description** UN1044, Fire extinguishers, 2.2  
**Proper Shipping Name** Fire extinguishers  
**Hazard class** 2.2  
**ERG Code** 2L  
**Special Provisions** A19

**IMDG**

**UN/ID no** UN1044  
**Description** UN1044, Fire extinguishers, 2.2  
**Proper Shipping Name** Fire extinguishers  
**Hazard class** 2.2  
**EmS-No** F-C, S-V  
**Special Provisions** 225

**15. Regulatory Information**

**15.1. International Inventories**

**TSCA** Complies  
**DSL/NDSL** Complies  
**ENCS** Does not comply  
**IECSC** Complies  
**KECL** Does not comply  
**PICCS** Complies  
**AICS** Complies

**Legend:**

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory  
**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List  
**ENCS** - Japan Existing and New Chemical Substances  
**IECSC** - China Inventory of Existing Chemical Substances  
**KECL** - Korean Existing and Evaluated Chemical Substances  
**PICCS** - Philippines Inventory of Chemicals and Chemical Substances  
**AICS** - Australian Inventory of Chemical Substances

**15.2. US Federal Regulations**

**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical name	SARA 313 - Threshold Values %
Ammonium dihydrogen phosphate - 7722-76-1	1.0
Ammonium sulfate, technical - 7783-20-2	1.0

**SARA 311/312 Hazard Categories**

**Acute Health Hazard** No  
**Chronic health hazard** No  
**Fire Hazard** No  
**Sudden Release of Pressure Hazard** Yes  
**Reactive Hazard** No





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**CWA (Clean Water Act)**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

**CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

**15.3. US State Regulations**

**California Proposition 65**

This product contains the following Proposition 65 chemicals

Chemical name	California Proposition 65
Attapulgite - 12174-11-7	Carcinogen

**U.S. State Right-to-Know Regulations**

Chemical name	New Jersey	Massachusetts	Pennsylvania
Silicic Acid/silica gel, Amorphous 7631-86-9	-	X	X
Magnesium carbonate 546-93-0	X	X	-

**16. Other information, including date of preparation of the last revision**

<b>NFPA</b>	Health Hazards 0	Flammability 0	Instability 0	Physical and chemical properties -
<b>HMIS</b>	Health Hazards 0	Flammability 0	Physical Hazards 3	Personal Protection X

Revision date 13-Feb-2019

Revision note No information available.

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet

## MATERIAL SAFETY DATA SHEET

This MSDS complies with OSHA'S Hazard Communication Standard 29 `CFR 1910, 1200 and OSHA Form 174

### IDENTITY AND DISTRIBUTOR'S INFORMATION

NFPA Rating: Health-2; Flammability-3; Reactivity-0; Special-- Manufactured for: Adhesive Products Company 9635 Park Davis Drive Indianapolis, IN 46236 Phone #317-899-0565 Emergency Response Number: #800-255-3924	HMIS Rating: Health-2; Flammability-3; Reactivity-0; Personal Protection-B DOT Hazard Classification: ORM-D Product Identity: APC #79 HI-PERFORMANCE SPRAY ADHESIVE Date Prepared: 1/1/11      Prepared By: DR Information Calls 317-899-0565
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### SECTION 1 - MATERIAL IDENTIFICATION AND INFORMATION

COMPONENTS-CHEMICAL NAMES (Hazardous Components 1% or greater; Carcinogens 0.1% or greater)	CAS Number	SARA 111 list	OSHA PEL (ppm)	ACGIH TLV(ppm)	Carcinogen Ref. Source*
ACETONE	67-64-1	NO	1000	750	D*
HEPTANE	142-82-5	NO	500	400	D*
ISOBUTANE/PROPANE BLEND	75-28-5	NO	800	800	D*
	74-98-6	NO	1000	1000	D*

### SECTION 2 - PHYSICAL/CHEMICAL CHARACTERISTICS

Boiling Point: N/A Vapor Pressure: PSIG @ 70 F (Aerosols): Max 80 Vapor Density (Air = 1): N/E Solubility in Water: Partial Volatile Organic Compound = 54.90% by weight	Specific Gravity (H2O=1): Concentrate Only = .853 Vapor Pressure (Non-Aerosols)(mm Hg and Temp): N/A Evaporation Rate( =1): N/E Water Reactive: No Appearance and Odor: Straw colored liquid with ketone solvent odor.
--	--

### SECTION 3 - FIRE AND EXPLOSION HAZARD DATA

FLAMMABILITY as per USA FLAME PROJECTION TEST (aerosols) <b>EXTREMELY FLAMMABLE</b>	Auto Ignition Temperature Flammability N/E	Flammability Limits in Air by % in Volume % LEL: N/E      %UEL: N/E
FLASH POINT AND METHOD USED (non-aerosols): N/A	<b>SPECIAL FIRE FIGHTING PROCEDURES:</b> Self-contained breathing apparatus. Use water fog to cool containers to prevent rupturing & exploding containers. Provide shielding for personnel.	
<b>EXTINGUISHING MEDIA:</b> Foam, dry chemical, carbon dioxide, water.		
<b>UNUSUAL FIRE &amp; EXPLOSION HAZARDS:</b> Do not expose aerosols to temperatures above 130 F or the container may rupture.		

### SECTION 4 - REACTIVITY HAZARD DATA

STABILITY [X] STABLE [ ] UNSTABLE Incompatibility (Mat. to avoid): Strong oxidizing agents Hazardous Decomposition Products: Carbon dioxide, carbon monoxide.	HAZARDOUS POLYMERIZATION [ ] WILL [X] WILL NOT OCCUR Conditions to avoid: Open flame, welding arcs, heat, sparks.
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### SECTION 5 - HEALTH HAZARD DATA

**PRIMARY ROUTES OF ENTRY:** [X] INHALATION [ ] INGESTION [X] SKIN ABSORPTION [ ] EYE [ ] NOT HAZARDOUS

**ACUTE EFFECTS**  
**Inhalation:** Excessive inhalation of vapors can cause nasal & respiratory irritation, dizziness, weakness, nausea, headache, possible unconsciousness or asphyxiation  
**Eye Contact:** Irritation  
**Skin Contact:** Irritation due to defatting of skin  
**Ingestion:** Possible chemical pneumonitis if aspirated into lungs.

**CHRONIC EFFECTS:** (Effects due to excessive exposure to the raw materials of this mixture). Excessive inhalation of solvents may cause Brain and other nervous system damage.  
**Medical Conditions Generally Aggravated by Exposure:** May aggravate existing eye, skin, or upper respiratory conditions.

### EMERGENCY FIRST AID PROCEDURES

**Eye Contact:** Flush with water for 15 minutes. If irritated, seek medical attention.  
**Skin Contact:** Wash with soap and water. If irritated, seek medical attention.  
**Inhalation:** Remove to fresh air. Resuscitate if necessary. Get medical attention.  
**Ingestion: DO NOT INDUCE VOMITING.** Drink two large glasses of water. Get immediate medical attention.

### SECTION 6 - CONTROL AND PROTECTIVE MEASURES

**Respiratory Protection (specific type):** If vapor concentration exceeds TLV, use respirator approved by NIOSH in positive pressure mode.  
**Protection Gloves:** Neoprene  
**Eye Protection:** Safety glasses recommended  
**Ventilation Requirements:** Adequate ventilation to keep vapor concentration below TLV.  
**Other Protective Clothing & Equipment:** None  
**Hygienic Work Practice:** Wash with soap and water before handling food. Remove contaminated clothing.

### SECTION 7 - PRECAUTIONS FOR SAFE HANDLING AND USE

**Steps to be taken if material is spilled or Released:** Absorb with suitable medium. Incinerate or landfill according to local, state, or federal regulations. DO NOT FLUSH TO SEWER.  
**Waste Disposal Methods:** Aerosol cans when vented to atmospheric pressure through normal use, pose no disposal hazard.  
**Precautions To Be Taken In Handling & Storage:** Do not puncture or incinerate containers. Do not store at temperatures above 130 F  
**Other Precautions &/or Special Hazards: KEEP OUT OF REACH OF CHILDREN.** Avoid food contamination. Avoid breathing vapors. Remove ignition sources.

We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind.

\*Chemical Listed as Carcinogen or Potential Carcinogen. [a]NTP [b]ARC Monograph [c]OSHA [d]NOT LISTED [e]animal data only

Infosafe No™ LQ3HB

Issue Date October 2019

ISSUED by MILL-ROSE

Product Name **Blue Monster PTFE Thread Seal Tape**

## 1. Identification

**GHS Product Identifier** Blue Monster PTFE Thread Seal Tape

**Company Name** Mill-Rose  
**Address** 7310 Corporate Blvd  
 Mentor,  
 Ohio 44060  
 USA

**Telephone/Fax Number**  
 Tel: (440)9746730  
 Fax: (440)2551072

**Recommended use of the chemical and restrictions on use** Industrial tape.

## 2. Hazard Identification

**Classification of the substance or mixture** Not classified as Hazardous according to the Globally Harmonised System of Classification and labelling of Chemicals (GHS) including Work, Health and Safety regulations , Australia.  
 Not classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. (7th edition)

## 3. Composition/information on ingredients

**Information on Composition** This product contains the following ingredients: -Polytetrafluoroethylene  
 -Distillates (petroleum), hydrotreated light  
 -Pigment

Ingredients	Name	CAS	Proportion
	Ingredients determined		100%
	not to be hazardous		

## 4. First-aid measures

**Inhalation** Not considered a potential route of exposure. However, if inhaled, remove affected person from contaminated area. Keep at rest until recovered. If symptoms develop and/or persist seek medical attention .

**Ingestion** Unlikely due to form of product. However, if ingested, do not induce vomiting. Wash out mouth thoroughly with water. If symptoms develop seek medical attention.

**Skin** Wash affected area thoroughly with soap and water. If symptoms develop seek medical attention.

**Eye contact** Not considered a potential route of exposure. However if in eyes, hold eyelids apart and flush the eyes continuously with running water. Continue flushing for several minutes until all contaminants are washed out completely. If symptoms develop and persist seek medical attention.

**First Aid Facilities** Eyewash and normal washroom facilities.

**Advice to Doctor** Treat symptomatically.

**Other Information** For advice in an emergency, contact a Poisons Information Centre (Phone: Australia 131 126) or a doctor.

## 5. Fire-fighting measures

**Suitable extinguishing media** Use carbon dioxide, dry chemical or foam.

**Hazards from Combustion Products** Under fire conditions this product may emit toxic and/or irritating fumes, smoke and gases including carbon monoxide, carbon dioxide, hydrogen fluoride and oxides of nitrogen.

**Specific hazards arising from the chemical** Combustible. This product will readily burn under fire conditions.

**Decomposition Temp.** Not available

**Precautions in connection with Fire** Fire fighters should wear Self-Contained Breathing Apparatus (SCBA) operated in positive pressure mode and full protective clothing to prevent exposure to vapours or fumes. Water spray may be used to cool down heat-exposed

# Safety Data Sheet



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Product Name **Blue Monster PTFE Thread Seal Tape**

containers . Fight fire from safe location. This product should be prevented from entering drains and watercourses.

## 6. Accidental release measures

**Personal precautions, protective equipment and emergency procedures** Wear appropriate personal protective equipment and clothing to prevent exposure. Collect the material and place into a suitable labelled container. Dispose of waste according to the applicable local and national regulations. If contamination of sewers or waterways occurs inform the local water and waste management authorities in accordance with local regulations.

## 7. Handling and storage

**Precautions for Safe Handling** Avoid exposure. Use only in a well ventilated area. Keep containers tightly closed. Prevent the build up of dusts, mists or vapours in the work atmosphere. Maintain high standards of personal hygiene i.e. Washing hands prior to eating, drinking, smoking or using toilet facilities.

**Conditions for safe storage, including any incompatibilities** Store in a cool, dry, well-ventilated area, out of direct sunlight. Ensure that storage conditions comply with applicable local and national regulations.

**Handling Temperatures** Recommended operating temperatures: -260°C to +260°C

**Storage Temperatures** Store below 260°C.

## 8. Exposure controls/personal protection

**Occupational exposure limit values** No exposure value assigned for this material by Safe Work, Australia. However, the available exposure limits for decomposition products are given below:

Safe Work, Australia Exposure Standards:

Substance	TWA		STEL		NOTICES
	ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>	
Hydrogen fluoride	3	2.6			Peak Limitation

TWA (Time Weighted Average) The average airborne concentration of a particular substance when calculated over a normal eight-hour working day, for a five-day week.

STEL (Short Term Exposure Limit): The average airborne concentration over a 15 minute period which should not be exceeded at any time during a normal eight-hour workday.

Peak Limitation: A ceiling concentration which should not be exceeded over a measurement period which should be as short as possible but not exceeding 15 minutes.

**Biological Limit Values** No biological limits allocated.

**Appropriate engineering controls** Use with good general ventilation.

**Respiratory Protection** None required, when used as intended.

**Eye Protection** None required, when used as intended.

**Hand Protection** None required, when used as intended.

**Body Protection** Suitable protective work wear, e.g. cotton overalls buttoned at neck and wrist is recommended.

## 9. Physical and chemical properties

**Appearance** Solid polymeric film

**Colour** Blue

**Odour** Odourless

**Decomposition Temperature** Not available

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Product Name **Blue Monster PTFE Thread Seal Tape**

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<b>Melting Point</b>	Not available
<b>Boiling Point</b>	Not available
<b>Solubility in Water</b>	Insoluble
<b>Specific Gravity</b>	2.1
<b>pH</b>	Not applicable
<b>Vapour Pressure</b>	Not applicable
<b>Vapour Density (Air=1)</b>	Not available
<b>Evaporation Rate</b>	Not available
<b>Odour Threshold</b>	Not available
<b>Viscosity</b>	Not applicable
<b>Partition Coefficient: n-octanol/water</b>	Not available
<b>Flash Point</b>	Not applicable
<b>Flammability</b>	Not flammable
<b>Auto-Ignition Temperature</b>	Not self igniting
<b>Explosion Limit • Upper</b>	Not applicable
<b>Explosion Limit • Lower</b>	Not applicable

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## 10. Stability and reactivity

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<b>Reactivity</b>	Reacts with incompatible materials.
<b>Chemical Stability</b>	Stable under normal conditions of storage and handling.
<b>Conditions to Avoid</b>	Heat and sources of ignition. Temperatures >260°C without adequate ventilation.
<b>Incompatible Materials</b>	Strong oxidising agents. Alkali metals, extremely potent oxidisers e.g. fluorine, chlorine tri-fluoride, 80% NaOH or KOH, metal hydrides such as boranes (e.g. B <sub>2</sub> H <sub>6</sub> ) aluminium chloride, ammonia, certain amines (R-NH <sub>2</sub> ) imines (RH-NH) and 70% nitric acid at temperatures near 260°C. Do not use on oxygen lines.
<b>Hazardous Decomposition Products</b>	Thermal decomposition may result in the release of toxic and/or irritating fumes including carbon monoxide, hydrogen fluoride and carbon dioxide. Carbonyl fluoride is the main decomposition product formed when PTFE is subjected to extended exposure at normal sintering temperatures (400°C). Carbonyl fluoride is immediately converted to highly corrosive hydrogen fluoride in the presence of moist air.
<b>Possibility of hazardous reactions</b>	Reacts with incompatible materials.

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## 11. Toxicological Information

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<b>Toxicology Information</b>	No toxicology data available for this product.
<b>Ingestion</b>	No toxicity was observed in male/female rats fed PTFE (up to 25%) for 90 days. Local sarcomas were induced in mice and rats implanted subcutaneously or intraperitoneally with PTFE. However, this is not considered relevant to normal industrial usage.
<b>Inhalation</b>	Ingestion unlikely due to form of product. Ingestion of this product may irritate the gastric tract causing nausea and vomiting. No adverse effects expected. The material is not normally an inhalation hazard at temperatures below 260°C as it remains an inert solid. However, exposure to thermal degradation products at temperatures above 260°C or fumes from tobacco contaminated with particles of the product may result in polymer fume fever or influenza-like symptoms (chills, headaches, difficulty in breathing and fever) Symptoms may appear several hours after exposure but will disappear within

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<b>Skin</b>	24-48 hours . There are exposure standards for decomposition products. May be irritating to skin. The symptoms may include redness, itching and swelling.
<b>Eye</b>	Eye contact may cause mechanical irritation. May result in mild abrasion.
<b>Respiratory sensitisation</b>	Not expected to be a respiratory sensitiser .
<b>Skin Sensitisation</b>	Not expected to be a skin sensitiser.
<b>Germ cell mutagenicity</b>	Not considered to be a mutagenic hazard.
<b>Carcinogenicity</b>	Polytetrafluoroethylene is listed as a Group 3: Not classifiable as to carcinogenicity to humans according to International Agency for Research on Cancer (IARC).
<b>Reproductive Toxicity STOT-single exposure</b>	Not considered to be toxic to reproduction.
<b>STOT-repeated exposure</b>	Not expected to cause toxicity to a specific target organ.
<b>Aspiration Hazard</b>	Not expected to cause toxicity to a specific target organ.
	Not considered to be an aspiration hazard.

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## **12. Ecological information**

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<b>Ecotoxicity</b>	No ecological data are available for this material.
<b>Persistence and degradability</b>	Not available
<b>Mobility</b>	Not available
<b>Bioaccumulative Potential</b>	Not available
<b>Other Adverse Effects</b>	Not available
<b>Environmental Protection</b>	Prevent this material entering waterways, drains and sewers.

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## **13. Disposal considerations**

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<b>Disposal Considerations</b>	The disposal of the spilled or waste material must be done in accordance with applicable local and national regulations.
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## **14. Transport information**

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<b>Transport Information</b>	Road and Rail Transport Not classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG Code) (7th edition). Marine Transport (IMO/IMDG): Not classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea. Air Transport (ICAO/IATA): Not classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air. No
<b>IMDG Marine pollutant</b>	

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## **15. Regulatory information**

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<b>Regulatory Information</b>	Not classified as Hazardous according to the Globally Harmonised System of Classification and labelling of Chemicals (GHS) including Work, Health and Safety regulations, Australia. Not classified as a Scheduled Poison according to the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP).
<b>Poisons Schedule</b>	Not Scheduled

# Safety Data Sheet



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## **16. Other Information**

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**Date of** SDS Created: October 2019

**preparation or last  
revision of SDS**

**Literature**

**References**

Preparation of Safety Data Sheets for Hazardous Chemicals Code of Practice. Standard for the Uniform Scheduling of Medicines and Poisons. Australian Code for the Transport of Dangerous Goods by Road & Rail. Model Work Health and Safety Regulations, Schedule 10: Prohibited carcinogens , restricted carcinogens and restricted hazardous chemicals. Workplace exposure standards for airborne contaminants, Safe work Australia. American Conference of Industrial Hygienists (ACGIH). Globally Harmonised System of classification and labelling of chemicals. ...End Of MSDS...



# SAFETY DATA SHEET

Cold Fire is an environmentally friendly fire suppressing agent, specially designed to rapidly suppress and extinguish fires, cool down hot surfaces, prevent re-ignition and encapsulate hydrocarbons. Cold Fire is PFAS free, safe to store, handle and use, leaves virtually no residue and is non-toxic, non-corrosive and biodegradable.

## Section 1: Identification

**Manufacturer:** Firefreeze Worldwide, Inc.  
**Address:** 272 Route 46 East, Rockaway, NJ 07866  
**Phone:** 973-627-0722; Fax: 973-627-2982  
**Email:** info@firefreeze.com  
**Product/Trade Name:** Cold Fire  
**Chemical Identifier:** CF-302  
**Product Usage:** UL Listed Wetting Agent for Class A & B fires.  
Can be used for Class D, K and C fires with appropriate extinguishing application & equipment.  
**\*International Certifications:** See regulatory information Section 15.  
**In emergency call 911.**  
**For information about this SDS, contact phone#:** 973-627-0722 or email info@firefreeze.com

## Section 2: Hazard(s) Identification

### Hazardous Materials Identification System:

**Health:** 0

**Flammability:** 0

**Reactivity:** 0

**Personal Protection:** 0

Product may be slippery in concentrate form.

No components are believed to be hazardous or listed in the NIOSH Recommendations for Occupational Safety and Health Standards, 1988, or are listed by SARA, CERCLA, or RCRA. No OSHA PEL's are established for any of the proprietary ingredients.

## Section 3: Composition/ Information on Ingredients

**Formulation is proprietary and components are classified trade secret.**

A proprietary environmentally friendly formulation consisting of water, biodegradable anionic and nonionic surfactants, organic compounds and minerals that have been tested PFAS (Perfluoroalkyl and polyfluoroalkyl substances) free. Cold Fire is clear in composition and has a clean, fresh smell.

## Section 4: First-Aid Measures

**After skin contact:** Rinse skin with water.

**After eye contact:** Immediately flush eyes with water.

**After inhalation:** Negligible.

**After swallowing:** Do not swallow. Not considered to be orally toxic.



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### Section 5: Fire-Fighting Measures

**Non-Flammable:** No hazardous combustion ingredients. Product is water based. Will not ignite.

### Section 6: Accidental Release Measures

**Spill/leak procedure:** Rinse affected area with water and dry.

**Measures for environmental disposal:** Dispose of as non-hazardous waste in accordance with local regulations. PFAS free.

### Section 7: Handling and Storage

**Handling:**

**Respiratory Protection:** not required.

**Ventilation:** under ordinary/normal conditions for intended use, no special ventilation is required.

**Protective gloves:** wear if there is prolonged skin contact as natural surfactants can dry skin.

**Eye Protection:** wear if needed to prevent reasonable probability of eye contact.

**Storage:** Store in temperatures between 32°F to 120°F in closed containers to prevent evaporation and/or deterioration. Freezing will not damage material as long as container remains intact.

### Section 8: Exposure Controls/Personal Protection

**General protective and hygienic measures:** Wash hands prior and after handling as per general hygiene measures. No special protective equipment required.

### Section 9: Physical and Chemical Properties

**Form:** Clear, surfactant blend wetting agent

**Odor:** fresh, clean smell

**pH:** 6.3 in concentrate form. Neutral when diluted.

**Vapor pressure:** same as water

**Specific Gravity:** 1.02 @ 60 degrees Fahrenheit

**Solubility in/Miscibility with water:** 100%; soluble

**Viscosity:** 71 (centipoises)

**Surface Tension:** 30.2 dyne/cm (concentrate)

### Section 10: Stability and Reactivity

**Reactivity:** none

**Incompatibility:** none

**Chemical stability:** Product is stable

**Corrosion:** Product is non-corrosive. Tested in accordance with DOT standard 49 CFR 173.136

**Separation Temperature:** No separation when stored between 32°F and 120°F

**Separation on Standing:** No separation when standing

**Hazardous decomposition products:** Carbon monoxide and carbon dioxide

### Section 11: Toxicological Information

**Toxicity:** In accordance with US EPA Office of Pollution Prevention and Toxics criteria for ranking the acute toxicity of chemicals in the aquatic environment, Cold Fire is considered to be of low concern.

-96 hour acute toxicity versus freshwater algae (*selenastrum capricornutum*) IAW 40 CFR 797.1050 showed Cold Fire was algicidal at concentrations above 750 ppm.

-96 hour acute toxicity versus juvenile rainbow trout (*oncorhynchus mykiss*) IAW 49 CFR 797. 1400 showed an LC50 of 105 ppm.



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**Section 12: Ecological Information (non-mandatory)**

**Biodegradability:** Product is 100% biodegradable in an active environment within 21 days.  
**Product is PFAS free.**

**Section 13: Disposal Considerations (non-mandatory)**

Dispose of as non-hazardous waste in accordance with local regulations.

**Section 14: Transport Information (non-mandatory)**

**NMFC Code:** 69160  
**US DOT Hazard Class:** Not regulated by DOT  
**US DOT Identification Number:** Not applicable

**Section 15: Regulatory Information (non-mandatory)**

-UL Listed Wetting Agent for Class A & B Fires. Tested in accordance with NFPA 18 Wetting Agents, UL 162 and UL 711.  
-ULC (Canada) Listed Wetting for Class A & B Fires. C-175  
-EPA-SNAP listed as an alternative to halon for fire suppression.  
-PFAS free

**\*International:**

Chile: tested and certified for Class A, B, C, D & K as per CESMEC

**Section 16: Other Information**

**SDS date of preparation/update:** August 10, 2020



**FIRE FREEZE**  
WORLDWIDE INC.

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# SAFETY DATA SHEET

CPI CP-Moly 1500 Chain & Cable  
Apr 01, 2015

## SECTION 1) CHEMICAL PRODUCT AND SUPPLIER'S IDENTIFICATION

**Product ID :** CPI CP-Moly 1500 Chain & Cable  
**Product Name :** CPI CP-Moly 1500 Chain & Cable  
**Revision Date :** Apr 01, 2015 **Date Printed :** May 01, 2015  
**Version:** 1.0 **Supersedes Date :** N.A.  
**Distributor's Name :** CORRELATED PRODUCTS, INC.  
**Address :** 5616 PROGRESS ROAD – INDIANAPOLIS, IN 46241 USA  
**Emergency Phone :** 1-800-535-5053  
**Information Phone :** (317) 243-3248  
**Fax :**  
**Product/Recommended Uses:** Chain and Cable Lube

## SECTION 2) HAZARDS IDENTIFICATION

### Classification:

Aerosol - Category 1

### Pictograms:



### Signal Word:

Warning

### Hazardous Statements - Physical:

H222, H229 - Extremely flammable aerosol, Pressurized container may burst if heated

### Precautionary Statements - General:

P101 - If medical advice is needed, have product container or label at hand.  
P102 - Keep out of reach of children.  
P103 - Read label before use.

### Precautionary Statements - Prevention:

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P211 - Do not spray on an open flame or other ignition source.  
P251 - Do not pierce or burn, even after use.

### Precautionary Statements - Response:

No precautionary statement available.

### Precautionary Statements - Storage:

P410 - Protect from sunlight.  
P412 - Do not expose to temperatures exceeding 50°C/122°F.

### Precautionary Statements - Disposal:

No precautionary statement available.

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**SECTION 3) COMPOSITION / INFORMATION ON INGREDIENTS**

---

CAS	Chemical Name	% by Weight
0064742-65-0	MINERAL OIL, PETROLEUM DISTILLATES, SOLVENT-DEWAXED HEAVY PARAFFINIC	49% - 86%
0000074-98-6	PROPANE	6% - 13%
0000106-97-8	BUTANE	3% - 7%
0000075-28-5	ISOBUTANE	2% - 4%
0001317-33-5	MOLYBDENUM (IV) SULFIDE	0.1% - 1.9%

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**SECTION 4) FIRST-AID MEASURES**

---

**Inhalation:**

Remove source of exposure or move person to fresh air and keep comfortable for breathing.

If exposed/feel unwell/concerned: Call a POISON CENTER/doctor.

Eliminate all ignition sources if safe to do so.

**Eye Contact:**

Remove source of exposure or move person to fresh air. Rinse eyes cautiously with lukewarm, gently flowing water for several minutes, while holding the eyelids open. Remove contact lenses, if present and easy to do. Continue rinsing for a duration of 15-20 minutes. Take care not to rinse contaminated water into the unaffected eye or onto the face. If eye irritation persists: Get medical advice/attention.

**Skin Contact:**

Take off immediately all contaminated clothing, shoes and leather goods (e.g. watchbands, belts). Gently blot or brush away excess product. Wash with plenty of lukewarm, gently flowing water for a duration of 15-20 minutes. Call a POISON CENTER/doctor if you feel unwell. Store contaminated clothing under water and wash before reuse or discard.

**Ingestion:**

Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER/doctor. If vomiting occurs naturally, lie on your side, in the recovery position.

Never give anything by mouth to an unconscious or convulsing victim. Keep person warm and quiet.

---

**SECTION 5) FIRE-FIGHTING MEASURES**

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**Suitable Extinguishing Media:**

Use water, fog, dry chemical, or carbon dioxide.

Carbon dioxide can displace oxygen. Use caution when applying carbon dioxide in confined spaces. Simultaneous use of foam and water on the same surface is to be avoided as water destroys the foam.

**Unsuitable Extinguishing Media:**

Water may be ineffective but can be used to cool containers exposed to heat or flame.

**Specific Hazards in Case of Fire:**

Contents under pressure. Keep away from ignition sources and open flames. Exposure of containers to extreme heat and flames can cause them to rupture often with violent force.

Aerosol cans may rupture when heated.

Heated cans may burst.

In fire, will decompose to carbon dioxide, carbon monoxide

**Fire-Fighting Procedures:**

Isolate immediate hazard area and keep unauthorized personnel out. Stop spill/release if it can be done safely. Move undamaged containers from immediate hazard area if it can be done safely. Water spray may be useful in minimizing or dispersing vapors and to protect personnel.

Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

**Special Protective Actions:**

Wear protective pressure self-contained breathing apparatus (SCBA) and full turnout gear.

Care should always be exercised in dust/mist areas.

---

**SECTION 6) ACCIDENTAL RELEASE MEASURES**

---

**Emergency Procedure:**

Flammable/combustible material.

ELIMINATE all ignition sources (no smoking, flares, sparks, or flames in immediate area). Stay upwind; keep out of low areas. Immediately turn off or isolate any source of ignition. Keep unnecessary people away; isolate hazard area and deny entry. Do not touch or walk through spilled material. Clean up immediately. Use absorbent sweeping compound to soak up material and put into suitable container for proper disposal.

**Recommended Equipment:**

Positive pressure, full-face piece self-contained breathing apparatus(SCBA), or positive pressure supplied air respirator with escape SCBA (NIOSH approved).

**Personal Precautions:**

ELIMINATE all ignition sources (no smoking, flares, sparks, or flames in immediate area). Use explosion proof equipment. Avoid breathing vapor. Avoid contact with skin, eye or clothing. Do not touch damaged containers or spilled materials unless wearing appropriate protective clothing.

**Environmental Precautions:**

Stop spill/release if it can be done safely. Prevent spilled material from entering sewers, storm drains, other unauthorized drainage systems and natural waterways by using sand, earth, or other appropriate barriers.

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## SECTION 7) HANDLING AND STORAGE

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**General:**

For industrial and institutional use only.  
For use by trained personnel only.  
Keep away from children.  
Wash hands after use.  
Do not get in eyes, on skin or on clothing.  
Do not breathe vapors or mists.  
Use good personal hygiene practices.  
Eating, drinking and smoking in work areas is prohibited.  
Remove contaminated clothing and protective equipment before entering eating areas.  
Eyewash stations and showers should be available in areas where this material is used and stored.

**Ventilation Requirements:**

Use only with adequate ventilation to control air contaminants to their exposure limits. The use of local ventilation is recommended to control emissions near the source.

**Storage Room Requirements:**

Keep container(s) tightly closed and properly labeled. Store in cool, dry, well-ventilated areas away from heat, direct sunlight and incompatibilities. Store in approved containers and protect against physical damage. Keep containers securely sealed when not in use. Indoor storage should meet OSHA standards and appropriate fire codes. Containers that have been opened must be carefully resealed to prevent leakage. Empty container retain residue and may be dangerous.

Do not cut, drill, grind, weld, or perform similar operations on or near containers. Do not pressurize containers to empty them. Ground all structures, transfer containers and equipment to conform to the national electrical code. Use procedures that prevent static electrical sparks. Static electricity may accumulate and create a fire hazard.

Store at temperatures below 120°F.

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## SECTION 8) EXPOSURE CONTROLS, PERSONAL PROTECTION

---

**Eye Protection:**

Chemical goggles, safety glasses with side shields or vented/splash proof goggles. Contact lenses may absorb irritants. Particles may adhere to lenses and cause corneal damage.

**Skin Protection:**

Wear gloves, long sleeved shirt, long pants and other protective clothing as required to minimize skin contact.

Use of gloves approved to relevant standards made from the following materials may provide suitable chemical protection: PVC, neoprene or nitrile rubber gloves. Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, glove thickness, dexterity. Always seek advice from glove suppliers. Contaminated gloves should be replaced. Chemical-resistant clothing is recommended to avoid prolonged contact. Avoid unnecessary skin contact.

**Respiratory Protection:**

If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker, a respiratory protection program that meets or is equivalent to OSHA 29 CFR 1910.134 and ANSI Z88.2 should be followed. Check with respiratory protective equipment suppliers. Where air-filtering respirators are suitable, select an appropriate combination of mask and filter. Select a filter suitable for combined particulate/organic gases and vapors.

When spraying more than one half can continuously or more than one can consecutively, use NIOSH approved respirator.

Chemical Name	OSHA TWA (ppm)	OSHA TWA (mg/m3)	OSHA STEL (ppm)	OSHA STEL (mg/m3)	OSHA- Tables- Z1,2,3	OSHA Carcinogen	OSHA Skin designation	NIOSH TWA (ppm)	NIOSH TWA (mg/m3)	NIOSH STEL (ppm)	NIOSH STEL (mg/m3)	NIOSH Carcinogen
---------------	----------------------	------------------------	-----------------------	-------------------------	----------------------------	--------------------	-----------------------------	-----------------------	-------------------------	------------------------	--------------------------	---------------------

BUTANE							800	1900			
ISOBUTANE							800	1900			
MINERAL OIL, PETROLEUM DISTILLATES, SOLVENT-DEWAXED HEAVY PARAFFINIC	500	2000			1						
MOLYBDENUM (IV) SULFIDE		5									
PROPANE	1000	1800			1		1000	1800			

Chemical Name	ACGIH TWA (ppm)	ACGIH TWA (mg/m3)	ACGIH STEL (ppm)	ACGIH STEL (mg/m3)
BUTANE	1000			
ISOBUTANE	1000			
MINERAL OIL, PETROLEUM DISTILLATES, SOLVENT-DEWAXED HEAVY PARAFFINIC				
MOLYBDENUM (IV) SULFIDE		[0.5 (R)]; [10 (I), 3 (R)];		
PROPANE	See Appendix F: Minimal Oxygen Content			

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## SECTION 9) PHYSICAL AND CHEMICAL PROPERTIES

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### Physical and Chemical Properties

Density	7.34401 lb/gal
Density VOC	1.43203 lb/gal
% VOC	19.49926%
VOC Actual	1.43203 lb/gal
VOC Actual	171.60000 g/l
VOC Regulatory	1.43203 lb/gal
VOC Regulatory	171.60000 g/l
<hr/>	
Appearance	N.A.
Odor Threshold	N.A.
Odor Description	N.A.
pH	N.A.
Water Solubility	Nil
Flammability	Flashpoint below 73 °F
Flash Point Symbol	N.A.
Flash Point	N.A.
Viscosity	N.A.
Lower Explosion Level	1.9
Upper Explosion Level	9.5
Melting Point	N.A.
Vapor Density	Slower than ether
Freezing Point	N.A.

Low Boiling Point	0 °F
High Boiling Point	300 °F
Decomposition Pt	0
Auto Ignition Temp	N.A.
Evaporation Rate	Slower than ether

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## SECTION 10) STABILITY AND REACTIVITY

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### Stability:

Stable.

### Conditions to Avoid:

High temperatures.

### Incompatible Materials:

None known.

### Hazardous Reactions/Polymerization:

Will not occur.

### Hazardous Decomposition Products:

In fire, will decompose to carbon dioxide, carbon monoxide.

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## SECTION 11) TOXICOLOGICAL INFORMATION

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### Skin Corrosion/Irritation:

Overexposure will cause defatting of skin.

### Serious Eye Damage/Irritation:

Overexposure will cause redness and burning sensation.

### Carcinogenicity:

No data available

### Germ Cell Mutagenicity:

No data available

### Reproductive Toxicity:

No data available

### Respiratory/Skin Sensitization:

No data available

### Specific Target Organ Toxicity - Single Exposure:

No data available

### Specific Target Organ Toxicity - Repeated Exposure:

No data available

### Aspiration Hazard:

No data available

### Acute Toxicity:

Inhalation: effect of overexposure include irritation of respiratory tract, headache, dizziness, nausea, and loss of coordination. Extreme overexposure may result in unconsciousness and possibly death.

0064742-65-0 MINERAL OIL, PETROLEUM DISTILLATES, SOLVENT-DEWAXED HEAVY PARAFFINIC

LD50 (Rodent - rat, Oral) : >5000 mg/kg, Toxic effects : Details of toxic effects not reported other than lethal dose value.

LD50 (Rodent - rabbit, Administration onto the skin) : 5000 mg/kg, Toxic effects : Details of toxic effects not reported other tha

0000075-28-5 ISOBUTANE

LC50 (mouse, inhalation): 520,000 ppm (52%); 2-hour exposure.(4)

0000106-97-8 BUTANE

LC50 (mouse): 202000 ppm (481000 mg/m3) (4-hour exposure); cited as 680 mg/L (2-hour exposure) (9)

LC50 (rat): 276000 ppm (658000 mg/m3) (4-hour exposure); cited as 658 mg/L (4- hour exposure) (9)

## SECTION 12) ECOLOGICAL INFORMATION

### Toxicity:

No data available.

### Persistence and Degradability:

No data available.

### Bio-Accumulative Potential:

No data available.

### Mobility in Soil:

No data available.

### Other Adverse Effects:

No data available.

#### Bio-accumulative Potential

0064742-65-0 MINERAL OIL, PETROLEUM DISTILLATES, SOLVENT-DEWAXED HEAVY PARAFFINIC

Contains constituents with the potential to bioaccumulate.

#### Mobility in Soil

0064742-65-0 MINERAL OIL, PETROLEUM DISTILLATES, SOLVENT-DEWAXED HEAVY PARAFFINIC

Liquid under most environmental conditions. Floats on water. If it enters soil, it will adsorb to soil particles and will not be mobile.

## SECTION 13) DISPOSAL CONSIDERATIONS

### Water Disposal:

Under RCRA, it is the responsibility of the user of the product, to determine at the time of disposal whether the product meets RCRA criteria for hazardous waste. Waste management should be in full compliance with federal, state, and local laws.

Empty containers retain product residue which may exhibit hazards of material, therefore do not pressurize, cut, glaze, weld or use for any other purposes. Return drums to reclamation centers for proper cleaning and reuse.

## SECTION 14) TRANSPORT INFORMATION

### U.S. DOT Information:

Consumer Commodity, ORM-D

### IMDG Information:

Consumer Commodity, ORM-D

### IATA Information:

Consumer Commodity, ORM-D

## SECTION 15) REGULATORY INFORMATION

CAS	Chemical Name	% By Weight	Regulation List
0000074-98-6	PROPANE	6% - 13%	SARA312,VOC,TSCA,ACGIH,OSHA
0000075-28-5	ISOBUTANE	2% - 4%	SARA312,VOC,TSCA,ACGIH
0000106-97-8	BUTANE	3% - 7%	SARA312,VOC,TSCA,ACGIH
0001317-33-5	MOLYBDENUM (IV) SULFIDE	0.1% - 1.9%	SARA312,TSCA,ACGIH,OSHA
0064742-65-0	MINERAL OIL, PETROLEUM DISTILLATES, SOLVENT- DEWAXED HEAVY PARAFFINIC	49% - 86%	SARA312,TSCA,OSHA

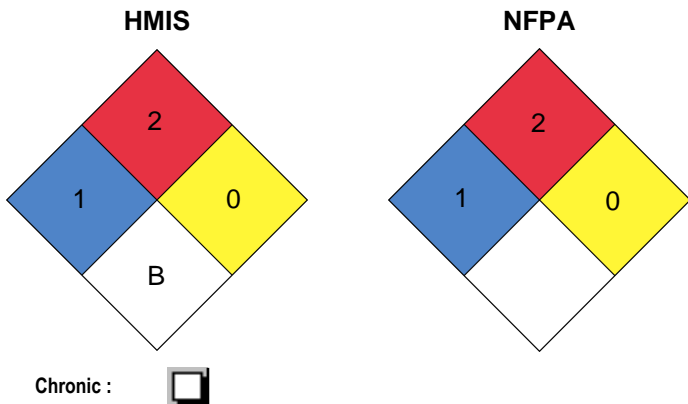
## SECTION 16) OTHER INFORMATION



**Glossary:**

\* There are points of differences between OSHA GHS and UN GHS. In 90% of the categories, they can be used interchangeably, but for the Skin Corrosion/Irritant Category and the Specific Target Organ Toxicity (Single and Repeated Exposure) Categories. In these cases, our system will say UN GHS.

ACGIH- American Conference of Governmental Industrial Hygienists; ANSI- American National Standards Institute; Canadian TDG- Canadian Transportation of Dangerous Goods; CAS- Chemical Abstract Service; Chemtrec- Chemical Transportation Emergency Center (US); CHIP- Chemical Hazard Information and Packaging; DSL- Domestic Substances List; EC- Equivalent Concentration; EH40 (UK)- HSE Guidance Note EH40 Occupational Exposure Limits; EPCRA- Emergency Planning and Community Right-To-Know Act; ESL- Effects screening levels; HMIS- Hazardous Material Information Service; LC- Lethal Concentration; LD- Lethal Dose; NFPA- National Fire Protection Association; OEL- Occupational Exposure Limits; OSHA- Occupational Safety and Health Administration, US Department of Labor; PEL- Permissible Exposure Limit; SARA (Title III)- Superfund Amendments and Reauthorization Act; SARA 313- Superfund Amendments and Reauthorization Act, Section 313; SCBA- Self-Contained Breathing Apparatus; STEL- Short Term Exposure Limit; TCEQ - Texas Commission on Environmental Quality; TLV- Threshold Limit Value; TSCA- Toxic Substances Control Act Public Law 94-469; TWA - Time Weighted Value; US DOT- US Department of Transportation; WHMIS- Workplace Hazardous Materials Information System.



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**DISCLAIMER**

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist. The above information pertains to this product as currently formulated, and is based on the information available at this time. Addition of reducers or other additives to this product may substantially alter the composition and hazards of the product. Since conditions of use are outside our control, we make no warranties, express or implied, and assume no liability in connection with any use of this information.

# SAFETY DATA SHEET

CPI CP-Moly 1500 Chain & Cable  
Apr 01, 2015

## SECTION 1) CHEMICAL PRODUCT AND SUPPLIER'S IDENTIFICATION

**Product ID :** CPI CP-Moly 1500 Chain & Cable  
**Product Name :** CPI CP-Moly 1500 Chain & Cable  
**Revision Date :** Apr 01, 2015 **Date Printed :** May 01, 2015  
**Version:** 1.0 **Supersedes Date :** N.A.  
**Distributor's Name :** CORRELATED PRODUCTS, INC.  
**Address :** 5616 PROGRESS ROAD – INDIANAPOLIS, IN 46241 USA  
**Emergency Phone :** 1-800-535-5053  
**Information Phone :** (317) 243-3248  
**Fax :**  
**Product/Recommended Uses:** Chain and Cable Lube

## SECTION 2) HAZARDS IDENTIFICATION

### Classification:

Aerosol - Category 1

### Pictograms:



### Signal Word:

Warning

### Hazardous Statements - Physical:

H222, H229 - Extremely flammable aerosol, Pressurized container may burst if heated

### Precautionary Statements - General:

P101 - If medical advice is needed, have product container or label at hand.  
P102 - Keep out of reach of children.  
P103 - Read label before use.

### Precautionary Statements - Prevention:

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P211 - Do not spray on an open flame or other ignition source.  
P251 - Do not pierce or burn, even after use.

### Precautionary Statements - Response:

No precautionary statement available.

### Precautionary Statements - Storage:

P410 - Protect from sunlight.  
P412 - Do not expose to temperatures exceeding 50°C/122°F.

### Precautionary Statements - Disposal:

No precautionary statement available.

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**SECTION 3) COMPOSITION / INFORMATION ON INGREDIENTS**

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CAS	Chemical Name	% by Weight
0064742-65-0	MINERAL OIL, PETROLEUM DISTILLATES, SOLVENT-DEWAXED HEAVY PARAFFINIC	49% - 86%
0000074-98-6	PROPANE	6% - 13%
0000106-97-8	BUTANE	3% - 7%
0000075-28-5	ISOBUTANE	2% - 4%
0001317-33-5	MOLYBDENUM (IV) SULFIDE	0.1% - 1.9%

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**SECTION 4) FIRST-AID MEASURES**

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**Inhalation:**

Remove source of exposure or move person to fresh air and keep comfortable for breathing.

If exposed/feel unwell/concerned: Call a POISON CENTER/doctor.

Eliminate all ignition sources if safe to do so.

**Eye Contact:**

Remove source of exposure or move person to fresh air. Rinse eyes cautiously with lukewarm, gently flowing water for several minutes, while holding the eyelids open. Remove contact lenses, if present and easy to do. Continue rinsing for a duration of 15-20 minutes. Take care not to rinse contaminated water into the unaffected eye or onto the face. If eye irritation persists: Get medical advice/attention.

**Skin Contact:**

Take off immediately all contaminated clothing, shoes and leather goods (e.g. watchbands, belts). Gently blot or brush away excess product. Wash with plenty of lukewarm, gently flowing water for a duration of 15-20 minutes. Call a POISON CENTER/doctor if you feel unwell. Store contaminated clothing under water and wash before reuse or discard.

**Ingestion:**

Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER/doctor. If vomiting occurs naturally, lie on your side, in the recovery position.

Never give anything by mouth to an unconscious or convulsing victim. Keep person warm and quiet.

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**SECTION 5) FIRE-FIGHTING MEASURES**

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**Suitable Extinguishing Media:**

Use water, fog, dry chemical, or carbon dioxide.

Carbon dioxide can displace oxygen. Use caution when applying carbon dioxide in confined spaces. Simultaneous use of foam and water on the same surface is to be avoided as water destroys the foam.

**Unsuitable Extinguishing Media:**

Water may be ineffective but can be used to cool containers exposed to heat or flame.

**Specific Hazards in Case of Fire:**

Contents under pressure. Keep away from ignition sources and open flames. Exposure of containers to extreme heat and flames can cause them to rupture often with violent force.

Aerosol cans may rupture when heated.

Heated cans may burst.

In fire, will decompose to carbon dioxide, carbon monoxide

**Fire-Fighting Procedures:**

Isolate immediate hazard area and keep unauthorized personnel out. Stop spill/release if it can be done safely. Move undamaged containers from immediate hazard area if it can be done safely. Water spray may be useful in minimizing or dispersing vapors and to protect personnel.

Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

**Special Protective Actions:**

Wear protective pressure self-contained breathing apparatus (SCBA) and full turnout gear.

Care should always be exercised in dust/mist areas.

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**SECTION 6) ACCIDENTAL RELEASE MEASURES**

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**Emergency Procedure:**

Flammable/combustible material.

ELIMINATE all ignition sources (no smoking, flares, sparks, or flames in immediate area). Stay upwind; keep out of low areas. Immediately turn off or isolate any source of ignition. Keep unnecessary people away; isolate hazard area and deny entry. Do not touch or walk through spilled material. Clean up immediately. Use absorbent sweeping compound to soak up material and put into suitable container for proper disposal.

**Recommended Equipment:**

Positive pressure, full-face piece self-contained breathing apparatus(SCBA), or positive pressure supplied air respirator with escape SCBA (NIOSH approved).

**Personal Precautions:**

ELIMINATE all ignition sources (no smoking, flares, sparks, or flames in immediate area). Use explosion proof equipment. Avoid breathing vapor. Avoid contact with skin, eye or clothing. Do not touch damaged containers or spilled materials unless wearing appropriate protective clothing.

**Environmental Precautions:**

Stop spill/release if it can be done safely. Prevent spilled material from entering sewers, storm drains, other unauthorized drainage systems and natural waterways by using sand, earth, or other appropriate barriers.

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## SECTION 7) HANDLING AND STORAGE

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**General:**

For industrial and institutional use only.  
For use by trained personnel only.  
Keep away from children.  
Wash hands after use.  
Do not get in eyes, on skin or on clothing.  
Do not breathe vapors or mists.  
Use good personal hygiene practices.  
Eating, drinking and smoking in work areas is prohibited.  
Remove contaminated clothing and protective equipment before entering eating areas.  
Eyewash stations and showers should be available in areas where this material is used and stored.

**Ventilation Requirements:**

Use only with adequate ventilation to control air contaminants to their exposure limits. The use of local ventilation is recommended to control emissions near the source.

**Storage Room Requirements:**

Keep container(s) tightly closed and properly labeled. Store in cool, dry, well-ventilated areas away from heat, direct sunlight and incompatibilities. Store in approved containers and protect against physical damage. Keep containers securely sealed when not in use. Indoor storage should meet OSHA standards and appropriate fire codes. Containers that have been opened must be carefully resealed to prevent leakage. Empty container retain residue and may be dangerous.

Do not cut, drill, grind, weld, or perform similar operations on or near containers. Do not pressurize containers to empty them. Ground all structures, transfer containers and equipment to conform to the national electrical code. Use procedures that prevent static electrical sparks. Static electricity may accumulate and create a fire hazard.

Store at temperatures below 120°F.

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## SECTION 8) EXPOSURE CONTROLS, PERSONAL PROTECTION

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**Eye Protection:**

Chemical goggles, safety glasses with side shields or vented/splash proof goggles. Contact lenses may absorb irritants. Particles may adhere to lenses and cause corneal damage.

**Skin Protection:**

Wear gloves, long sleeved shirt, long pants and other protective clothing as required to minimize skin contact.

Use of gloves approved to relevant standards made from the following materials may provide suitable chemical protection: PVC, neoprene or nitrile rubber gloves. Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, glove thickness, dexterity. Always seek advice from glove suppliers. Contaminated gloves should be replaced. Chemical-resistant clothing is recommended to avoid prolonged contact. Avoid unnecessary skin contact.

**Respiratory Protection:**

If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker, a respiratory protection program that meets or is equivalent to OSHA 29 CFR 1910.134 and ANSI Z88.2 should be followed. Check with respiratory protective equipment suppliers. Where air-filtering respirators are suitable, select an appropriate combination of mask and filter. Select a filter suitable for combined particulate/organic gases and vapors.

When spraying more than one half can continuously or more than one can consecutively, use NIOSH approved respirator.

Chemical Name	OSHA TWA (ppm)	OSHA TWA (mg/m3)	OSHA STEL (ppm)	OSHA STEL (mg/m3)	OSHA- Tables- Z1,2,3	OSHA Carcinogen	OSHA Skin designation	NIOSH TWA (ppm)	NIOSH TWA (mg/m3)	NIOSH STEL (ppm)	NIOSH STEL (mg/m3)	NIOSH Carcinogen
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BUTANE							800	1900			
ISOBUTANE							800	1900			
MINERAL OIL, PETROLEUM DISTILLATES, SOLVENT-DEWAXED HEAVY PARAFFINIC	500	2000			1						
MOLYBDENUM (IV) SULFIDE		5									
PROPANE	1000	1800			1		1000	1800			

Chemical Name	ACGIH TWA (ppm)	ACGIH TWA (mg/m3)	ACGIH STEL (ppm)	ACGIH STEL (mg/m3)
BUTANE	1000			
ISOBUTANE	1000			
MINERAL OIL, PETROLEUM DISTILLATES, SOLVENT-DEWAXED HEAVY PARAFFINIC				
MOLYBDENUM (IV) SULFIDE		[0.5 (R)]; [10 (I), 3 (R)];		
PROPANE	See Appendix F: Minimal Oxygen Content			

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## SECTION 9) PHYSICAL AND CHEMICAL PROPERTIES

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### Physical and Chemical Properties

Density	7.34401 lb/gal
Density VOC	1.43203 lb/gal
% VOC	19.49926%
VOC Actual	1.43203 lb/gal
VOC Actual	171.60000 g/l
VOC Regulatory	1.43203 lb/gal
VOC Regulatory	171.60000 g/l

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Appearance	N.A.
Odor Threshold	N.A.
Odor Description	N.A.
pH	N.A.
Water Solubility	Nil
Flammability	Flashpoint below 73 °F
Flash Point Symbol	N.A.
Flash Point	N.A.
Viscosity	N.A.
Lower Explosion Level	1.9
Upper Explosion Level	9.5
Melting Point	N.A.
Vapor Density	Slower than ether
Freezing Point	N.A.

Low Boiling Point	0 °F
High Boiling Point	300 °F
Decomposition Pt	0
Auto Ignition Temp	N.A.
Evaporation Rate	Slower than ether

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## SECTION 10) STABILITY AND REACTIVITY

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### Stability:

Stable.

### Conditions to Avoid:

High temperatures.

### Incompatible Materials:

None known.

### Hazardous Reactions/Polymerization:

Will not occur.

### Hazardous Decomposition Products:

In fire, will decompose to carbon dioxide, carbon monoxide.

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## SECTION 11) TOXICOLOGICAL INFORMATION

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### Skin Corrosion/Irritation:

Overexposure will cause defatting of skin.

### Serious Eye Damage/Irritation:

Overexposure will cause redness and burning sensation.

### Carcinogenicity:

No data available

### Germ Cell Mutagenicity:

No data available

### Reproductive Toxicity:

No data available

### Respiratory/Skin Sensitization:

No data available

### Specific Target Organ Toxicity - Single Exposure:

No data available

### Specific Target Organ Toxicity - Repeated Exposure:

No data available

### Aspiration Hazard:

No data available

### Acute Toxicity:

Inhalation: effect of overexposure include irritation of respiratory tract, headache, dizziness, nausea, and loss of coordination. Extreme overexposure may result in unconsciousness and possibly death.

0064742-65-0 MINERAL OIL, PETROLEUM DISTILLATES, SOLVENT-DEWAXED HEAVY PARAFFINIC

LD50 (Rodent - rat, Oral) : >5000 mg/kg, Toxic effects : Details of toxic effects not reported other than lethal dose value.

LD50 (Rodent - rabbit, Administration onto the skin) : 5000 mg/kg, Toxic effects : Details of toxic effects not reported other tha

0000075-28-5 ISOBUTANE

LC50 (mouse, inhalation): 520,000 ppm (52%); 2-hour exposure.(4)

0000106-97-8 BUTANE

LC50 (mouse): 202000 ppm (481000 mg/m3) (4-hour exposure); cited as 680 mg/L (2-hour exposure) (9)

LC50 (rat): 276000 ppm (658000 mg/m3) (4-hour exposure); cited as 658 mg/L (4- hour exposure) (9)

## SECTION 12) ECOLOGICAL INFORMATION

### Toxicity:

No data available.

### Persistence and Degradability:

No data available.

### Bio-Accumulative Potential:

No data available.

### Mobility in Soil:

No data available.

### Other Adverse Effects:

No data available.

#### Bio-accumulative Potential

0064742-65-0 MINERAL OIL, PETROLEUM DISTILLATES, SOLVENT-DEWAXED HEAVY PARAFFINIC

Contains constituents with the potential to bioaccumulate.

#### Mobility in Soil

0064742-65-0 MINERAL OIL, PETROLEUM DISTILLATES, SOLVENT-DEWAXED HEAVY PARAFFINIC

Liquid under most environmental conditions. Floats on water. If it enters soil, it will adsorb to soil particles and will not be mobile.

## SECTION 13) DISPOSAL CONSIDERATIONS

### Water Disposal:

Under RCRA, it is the responsibility of the user of the product, to determine at the time of disposal whether the product meets RCRA criteria for hazardous waste. Waste management should be in full compliance with federal, state, and local laws.

Empty containers retain product residue which may exhibit hazards of material, therefore do not pressurize, cut, glaze, weld or use for any other purposes. Return drums to reclamation centers for proper cleaning and reuse.

## SECTION 14) TRANSPORT INFORMATION

### U.S. DOT Information:

Consumer Commodity, ORM-D

### IMDG Information:

Consumer Commodity, ORM-D

### IATA Information:

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## SECTION 15) REGULATORY INFORMATION

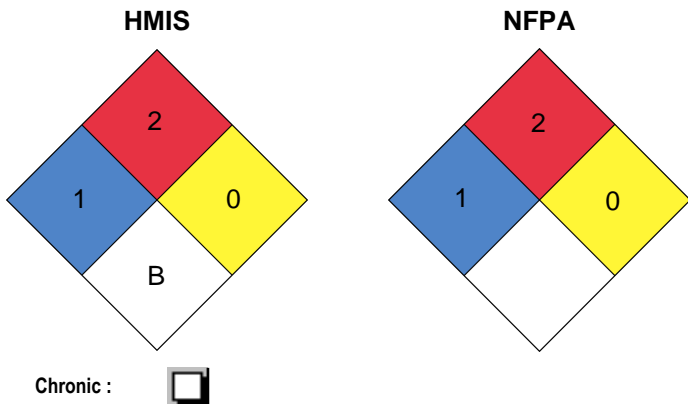
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## SECTION 16) OTHER INFORMATION

**Glossary:**

\* There are points of differences between OSHA GHS and UN GHS. In 90% of the categories, they can be used interchangeably, but for the Skin Corrosion/Irritant Category and the Specific Target Organ Toxicity (Single and Repeated Exposure) Categories. In these cases, our system will say UN GHS.

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COMPANY IDENTITY: Packaging Service Co., Inc.  
PRODUCT IDENTITY: CROWN MEK (METHYL ETHYL KETONE)  
SDS NUMBER: MEK

SDS DATE: 04/04/2013  
REPLACES: 05/20/2011

**SAFETY DATA SHEET**

This Safety Data Sheet conforms to ANSI Z400.5, and to the format requirements and the International Chemical Safety Cards of the Global Harmonizing System. THIS SDS COMPLIES WITH 29 CFR 1910.1200 (HAZARD COMMUNICATION STANDARD) IMPORTANT: Read this SDS before handling & disposing of this product. Pass this information on to employees, customers, & users of this product.

**SECTION 1. IDENTIFICATION OF THE SUBSTANCE OR MIXTURE AND OF THE SUPPLIER**

PRODUCT IDENTITY: CROWN MEK (METHYL ETHYL KETONE)  
COMPANY IDENTITY: Packaging Service Co., Inc.  
COMPANY ADDRESS: 1904 Mykawa Road  
COMPANY CITY: Pearland, TX 77581  
COMPANY PHONE: 1-281-485-5377  
EMERGENCY PHONES: CHEMTREC: 1-800-424-9300 (USA)  
CANUTEC: 1-613-996-6666 (CANADA)



**SECTION 2. HAZARDS IDENTIFICATION**

**DANGER!!**

**HAZARD STATEMENTS:**

- H100s = General, H200s = Physical, H300s = Health, H400s = Environmental
- H225 Highly flammable liquid and vapor.
- H315 Causes skin irritation.
- H320 Causes eye irritation.
- H335 May cause respiratory irritation.
- H336 May cause drowsiness or dizziness.

**PRECAUTIONARY STATEMENTS:**

- P100s = General, P200s = Prevention, P300s = Response, P400s = Storage, P500s = Disposal
- P210 Keep away from heat/sparks/open flames/hot surfaces - No smoking.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.
- P403 Store in a well-ventilated place.

**SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

MATERIAL	CAS#	EINECS#	WT %
Methyl Ethyl Ketone	78-93-3	201-159-0	> 99

Trace components: Trace ingredients (if any) are present in < 1% concentration, (< 0.1% for potential carcinogens, reproductive toxins, respiratory tract mutagens, and sensitizers). None of the trace ingredients contribute significant additional hazards at the concentrations that may be present in this product. All pertinent hazard information has been provided in this document, per the requirements of the Federal Occupational Safety and Health Administration Standard (29 CFR 1910.1200), U.S. State equivalents, and Canadian Hazardous Materials Identification System Standard (CPR 4).

**SEE SECTIONS 8, 11 & 12 FOR TOXICOLOGICAL INFORMATION.**

COMPANY IDENTITY: Packaging Service Co., Inc.  
PRODUCT IDENTITY: CROWN MEK (METHYL ETHYL KETONE)  
SDS NUMBER: MEK

SDS DATE: 04/04/2013  
REPLACES: 05/20/2011

#### SECTION 4. FIRST AID MEASURES

##### GENERAL ADVICE:

First Aid responders should pay attention to self-protection and use the recommended protective clothing (chemical resistant gloves, splash protection). If potential for exposure exists, refer to Section 8 for specific personal protective equipment.

##### EYE CONTACT:

If this product enters the eyes, open eyes while under gently running water. Use sufficient force to open eyelids. "Roll" eyes to expose more surface. Minimum flushing is for 15 minutes. Seek immediate medical attention.

##### SKIN CONTACT:

If the product contaminates the skin, immediately begin decontamination with running water. Minimum flushing is for 15 minutes. Remove contaminated clothing, taking care not to contaminate eyes. If skin becomes irritated and irritation persists, medical attention may be necessary. Wash contaminated clothing before reuse, discard contaminated shoes.

##### INHALATION:

After high vapor exposure, remove to fresh air. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. Keep person warm and at rest. breathing is difficult, give oxygen. If breathing has stopped, trained personnel should immediately begin artificial respiration. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. If the heart has stopped, trained personnel should immediately begin cardiopulmonary resuscitation (CPR). Seek immediate medical attention. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

##### SWALLOWING:

If swallowed, CALL PHYSICIAN OR POISON CONTROL CENTER FOR MOST CURRENT INFORMATION. If professional advice is not available, give two glasses of water to drink. DO NOT INDUCE VOMITING. Never induce vomiting or give liquids to someone who is unconscious, having convulsions, or unable to swallow. Seek immediate medical attention.

##### NOTES TO PHYSICIAN:

There is no specific antidote. Treatment of overexposure should be directed at the control of symptoms and the clinical condition of the patient. Any material aspirated during vomiting may cause lung injury. Therefore, emesis should not be induced mechanically or pharmacologically. If it is considered necessary to evacuate the stomach contents, this should be done by means least likely to cause aspiration (such as: Gastric lavage after endotracheal intubation).

#### SECTION 5. FIRE FIGHTING MEASURES

##### FIRE & EXPLOSION PREVENTIVE MEASURES

NO open flames, NO sparks, & NO smoking. Use a closed system, ventilation, explosion-proof electrical equipment, lighting.

##### EXTINGUISHING MEDIA

Use dry powder, AFFF, foam, carbon dioxide.

##### SPECIAL FIRE FIGHTING PROCEDURES

Water spray may be ineffective on fire but can protect fire-fighters & cool closed containers. Use fog nozzles if water is used. Do not enter confined fire-space without full bunker gear. (Helmet with face shield, bunker coats, gloves & rubber boots). Use NIOSH approved positive-pressure self-contained breathing apparatus.

COMPANY IDENTITY: Packaging Service Co., Inc.  
PRODUCT IDENTITY: CROWN MEK (METHYL ETHYL KETONE)  
SDS NUMBER: MEK

SDS DATE: 04/04/2013  
REPLACES: 05/20/2011

**SECTION 5. FIRE FIGHTING MEASURES (CONTINUED)**

UNUSUAL EXPLOSION AND FIRE PROCEDURES

HIGHLY FLAMMABLE!! VAPORS CAN CAUSE FLASH FIRE

Isolate from oxidizers, heat, sparks, electric equipment & open flame.  
Closed containers may explode if exposed to extreme heat.  
Applying to hot surfaces requires special precautions.  
Empty container very hazardous! Continue all label precautions!

**SECTION 6. ACCIDENTAL RELEASE MEASURES**

SPILL AND LEAK RESPONSE AND ENVIRONMENTAL PRECAUTIONS:

Uncontrolled releases should be responded to by trained personnel using pre-planned procedures. Proper protective equipment should be used. In case of a spill, clear the affected area, protect people, and respond with trained personnel.

PERSONAL PROTECTIVE EQUIPMENT

The proper personal protective equipment for incidental releases (such as: 1 Liter of the product released in a well-ventilated area), use impermeable gloves (triple-gloves (rubber gloves and nitrile gloves, over latex gloves), goggles, face shield, and appropriate body protection. In the event of a large release, use impermeable gloves, specific for the material handled, chemically resistant suit and boots, and hard hat. Self-Contained Breathing Apparatus or respirator may be required where engineering controls are not adequate or conditions for potential exposure exist. When respirators are required, select NIOSH/MSHA approved based on actual or potential airborne concentrations in accordance with latest OSHA and/or ANSI recommendations.

ENVIRONMENTAL PRECAUTIONS:

Stop spill at source. Construct temporary dikes of dirt, sand, or any appropriate readily available material to prevent spreading of the material. Close or cap valves and/or block or plug hole in leaking container and transfer to another container. Keep from entering storm sewers and ditches which lead to waterways, and if necessary, call the local fire or police department for immediate emergency assistance.

CONTAINMENT AND CLEAN-UP MEASURES:

Absorb spilled liquid with polypads or other suitable absorbent materials. If necessary, neutralize using suitable buffering material, (acid with soda ash or base with phosphoric acid), and test area with litmus paper to confirm neutralization. Clean up with non-combustible absorbent (such as: sand, soil, and so on). Shovel up and place all spill residue in suitable containers. dispose of at an appropriate waste disposal facility according to current applicable laws and regulations and product characteristics at time of disposal (see Section 13 - Disposal Considerations).

**SECTION 7. HANDLING AND STORAGE**

HANDLING

Isolate from oxidizers, heat, sparks, electric equipment & open flame.  
Use only with adequate ventilation. Avoid breathing of vapor or spray mist.  
Avoid contact with skin & eyes. Wear OSHA Standard goggles or face shield. Consult Safety Equipment Supplier. Wear goggles, face shield, gloves, apron & footwear impervious to material. Wash clothing before reuse.  
Avoid free fall of liquid. Ground containers when transferring. Do not flame cut, saw, drill, braze, or weld. Empty container very hazardous! Continue all label precautions!

STORAGE

Keep in fireproof surroundings. Keep separated from strong oxidants, strong acids. Keep cool. Do not store above 49 C/120 F.  
Keep container tightly closed & upright when not in use to prevent leakage.

COMPANY IDENTITY: Packaging Service Co., Inc.  
 PRODUCT IDENTITY: CROWN MEK (METHYL ETHYL KETONE)  
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 REPLACES: 05/20/2011

**SECTION 7. HANDLING AND STORAGE (CONTINUED)**

**NONBULK: CONTAINERS:**

Store containers in a cool, dry location, away from direct sunlight, sources of intense heat, or where freezing is possible. Material should be stored in secondary containers or in a diked area, as appropriate. Store containers away from incompatible chemicals (see Section 10, Stability and Reactivity). Post warning and "NO SMOKING" signs in storage and use areas, as appropriate. Empty containers should be handled with care. Never store food, feed, or drinking water in containers which held this product.

**BULK CONTAINERS:**

All tanks and pipelines which contain this material must be labeled. Perform routine maintenance on tanks or pipelines which contain this product. Report all leaks immediately to the proper personnel.

**TANK CAR SHIPMENTS:**

Tank cars carrying this product should be loaded and unloaded in strict accordance with tank-car manufacturer's recommendation and all established on-site safety procedures. Appropriate personal protective equipment must be used (see Section 8, Engineering Controls and Personal Protective Equipment.). All loading and unloading equipment must be inspected, prior to each use. Loading and unloading operations must be attended, at all times. Tank cars must be level, brakes must be set or wheels must be locked or blocked prior to loading or unloading. Tank car (for loading) or storage tanks (for unloading) must be verified to be correct for receiving this product and be properly prepared, prior to starting the transfer operations. Hoses must be verified to be in the correct positions, before starting transfer operations. A sample (if required) must be taken and verified (if required) prior to starting transfer operations. All lines must be blown-down and purged before disconnecting them from the tank car or vessel.

**PROTECTIVE PRACTICES DURING MAINTENANCE OF CONTAMINATED EQUIPMENT:**

Follow practices indicated in Section 6 (Accidental Release Measures). Make certain application equipment is locked and tagged-out safely. Always use this product in areas where adequate ventilation is provided. Collect all rinsates and dispose of according to applicable Federal, State, Provincial, or local procedures.

**SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

MATERIAL	CAS#	EINECS#	TWA (OSHA)	TLV (ACGIH)
Methyl Ethyl Ketone	78-93-3	201-159-0	200 ppm	200 ppm

MATERIAL	CAS#	EINECS#	CEILING	STEL (OSHA/ACGIH)	HAP
Methyl Ethyl Ketone	78-93-3	201-159-0	None Known	300 ppm	No

This product contains no EPA Hazardous Air Pollutants (HAP) in amounts > 0.1%.

**RESPIRATORY EXPOSURE CONTROLS**

Seek professional advice prior to respirator selection and use. Maintain airborne contaminant concentrations below exposure limits given above. If respiratory protection is needed, use only protection authorized in 29 CFR 1910.134, European Standard EN 149, or applicable State regulations. If adequate ventilation is not available or there is potential for airborne exposure above the exposure limits, a respirator may be worn up to the respirator exposure limitations, check with respirator equipment manufacturer's recommendations/limitations. For a higher level of protection, use positive pressure supplied air respiration protection or Self-Contained Breathing Apparatus or if oxygen levels are below 19.5% or are unknown.

**EMERGENCY OR PLANNED ENTRY INTO UNKNOWN CONCENTRATIONS OR IDLH CONDITIONS**

Positive pressure, full-face piece Self-Contained Breathing Apparatus; or positive pressure, full-face piece Self-Contained Breathing Apparatus with an auxilliary positive pressure Self-Contained Breathing Apparatus.

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**SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION (CONTINUED)**

**VENTILATION**

LOCAL EXHAUST: Necessary                      MECHANICAL (GENERAL): Necessary  
 SPECIAL: None                                      OTHER: None  
 Please refer to ACGIH document, "Industrial Ventilation, A Manual of Recommended Practices", most recent edition, for details.

**EYE PROTECTION:**

Splash goggles or safety glasses. Face-shields are recommended when the operation can generate splashes, sprays or mists.

**HAND PROTECTION:**

Wear appropriate impervious gloves for routine industrial use. Use impervious gloves for spill response, as stated in Section 6 of this SDS (Accidental Release Measures).

NOTICE: The selection of a specific glove for a particular application and duration of use in a workplace should also take into account all relevant workplace factors such as, but not limited to: Other chemicals which may be handled, physical requirements (cut/puncture protection, dexterity, thermal protection), potential body reactions to glove materials, as well as the instructions/specifications provided by the glove supplier.

**BODY PROTECTION:**

Use body protection appropriate for task. Cover-all, rubber aprons, or chemical protective clothing made from impervious materials are generally acceptable, depending on the task.

**WORK & HYGIENIC PRACTICES:**

Provide readily accessible eye wash stations & safety showers. Wash at end of each shift & before eating, smoking or using the toilet. Remove clothing that becomes contaminated. Destroy contaminated leather articles. Launder or discard contaminated clothing.

**SECTION 9. PHYSICAL & CHEMICAL PROPERTIES**

APPEARANCE:	Liquid, Water-White
ODOR:	Ketone
ODOR THRESHOLD:	Not Available
pH (Neutrality):	Not Applicable
MELTING POINT/FREEZING POINT:	Not Available
BOILING RANGE (IBP,50%,Dry Point):	77 79 81 C / 172 175 178 F
FLASH POINT (TEST METHOD):	-2 C / 28 F (TCC)
EVAPORATION RATE (n-BUTYL ACETATE=1):	3.6
FLAMMABILITY CLASSIFICATION:	Class I B
LOWER FLAMMABLE LIMIT IN AIR (% by vol):	1.8
UPPER FLAMMABLE LIMIT IN AIR (% by vol):	10.0
VAPOR PRESSURE (mm of Hg)@20 C	70.0
VAPOR DENSITY (air=1):	2.5
GRAVITY @ 68/68 F / 20/20 C:	
SPECIFIC GRAVITY (Water=1):	0.805
POUNDS/GALLON:	6.706
WATER SOLUBILITY:	Appreciable
PARTITION COEFFICIENT (n-Octane/Water):	Not Available
AUTO IGNITION TEMPERATURE:	515 C / 960 F
DECOMPOSITION TEMPERATURE:	Not Available
VOCs (>0.044 Lbs/Sq In) :	100.0 Vol% / 805.0 g/L / 6.7 Lbs/Gal
TOTAL VOC'S (TVOC)*:	100.0 Vol% / 805.0 g/L / 6.7 Lbs/Gal
NONEXEMPT VOC'S (CVOC)*:	100.0 Vol% / 805.0 g/L / 6.7 Lbs/Gal
HAZARDOUS AIR POLLUTANTS (HAPS):	0.0 Wt% / 0.0 g/L / 0.000 Lbs/Gal
NONEXEMPT VOC PARTIAL PRESSURE (mm of Hg @ 20 C)	70.0

\* Using California Air Resources Board (CARB) Rule 310.

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### SECTION 10. STABILITY & REACTIVITY

#### STABILITY

Stable under normal conditions.

#### CONDITIONS TO AVOID

Isolate from oxidizers, heat, sparks, electric equipment & open flame.

#### MATERIALS TO AVOID

Reacts with strong oxidants, causing fire & explosion hazard.

#### HAZARDOUS DECOMPOSITION PRODUCTS

Carbon Monoxide, Carbon Dioxide from burning.

#### HAZARDOUS POLYMERIZATION

Will not occur.

### SECTION 11. TOXICOLOGICAL INFORMATION

#### ACUTE HAZARDS

##### EYE & SKIN CONTACT:

Primary irritation to skin, defatting, dermatitis.  
Primary irritation to eyes, redness, tearing, blurred vision.  
Liquid can cause eye irritation. Wash thoroughly after handling.

##### INHALATION:

Anesthetic. Irritates respiratory tract. Acute overexposure can cause serious nervous system depression. Vapor harmful.

##### SWALLOWING:

Swallowing can cause abdominal irritation, nausea, vomiting & diarrhea.

#### SUBCHRONIC HAZARDS/CONDITIONS AGGRAVATED

##### CONDITIONS AGGRAVATED

Persons with severe skin, liver or kidney problems should avoid use.

#### CHRONIC HAZARDS

##### CANCER, REPRODUCTIVE & OTHER CHRONIC HAZARDS:

This product has no carcinogens listed by IARC, NTP, NIOSH, OSHA or ACGIH, as of this date, greater or equal to 0.1%.

IRRITANCY OF PRODUCT: This product is irritating to contaminated tissue.

SENSITIZATION TO THE PRODUCT: No component of this product is known to be a sensitizer.

MUTAGENICITY: This product is not reported to produce mutagenic effects in humans.

EMBRYOTOXICITY: This product is not reported to produce embryotoxic effects in humans.

TERATOGENICITY: This product is not reported to produce teratogenic effects in humans.

REPRODUCTIVE TOXICITY: This product is not reported to cause reproductive effects in humans.

A mutagen is a chemical which causes permanent changes to genetic material (DNA) such that the changes will propagate through generational lines. An embryotoxin is a chemical which causes damage to a developing embryo (such as: within the eight weeks of pregnancy in humans), but the damage does not propagate across generational lines. A teratogen is a chemical which causes damage to a developing fetus, but the damage does not propagate across generational lines. A reproductive toxin is any substance which interferes in any way with the reproductive process.

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## SECTION 11. TOXICOLOGICAL INFORMATION (CONTINUED)

### MAMMALIAN TOXICITY INFORMATION

MATERIAL	CAS#	EINECS#	LOWEST KNOWN LETHAL DOSE DATA
Methyl Ethyl Ketone	78-93-3	201-159-0	LOWEST KNOWN LD50 (ORAL) 3400.0 mg/kg(Rats)
Methyl Ethyl Ketone	78-93-3	201-159-0	LOWEST KNOWN LC50 (VAPORS) 2000 ppm (Rats)
Methyl Ethyl Ketone	78-93-3	201-159-0	LOWEST KNOWN LD50 (SKIN) 12600.0 mg/kg (Rabbits)

## SECTION 12. ECOLOGICAL INFORMATION

ALL WORK PRACTICES MUST BE AIMED AT ELIMINATING ENVIRONMENTAL CONTAMINATION.

### EFFECT OF MATERIAL ON PLANTS AND ANIMALS:

This product may be harmful or fatal to plant and animal life if released into the environment. Refer to Section 11 (Toxicological Information) for further data on the effects of this product's components on test animals.

### EFFECT OF MATERIAL ON AQUATIC LIFE:

The most sensitive known aquatic group to any component of this product is: Fish exposed to 5120 ppm or mg/L are adversely affected by components of this product. Keep out of sewers and natural water supplies.

### MOBILITY IN SOIL

This material is a mobile liquid.

### DEGRADABILITY

This product is completely biodegradable.

### ACCUMULATION

This product does not accumulate or biomagnify in the environment.

## SECTION 13. DISPOSAL CONSIDERATIONS

Processing, use or contamination may change the waste management options. Recycle / dispose of observing national, regional, state, provincial and local health, safety & pollution laws. If in doubt, contact appropriate agencies.

## SECTION 14. TRANSPORT INFORMATION

IF > 5000 LB / 2272 KG OF THIS PRODUCT IS IN 1 CONTAINER, IT EXCEEDS THE RQ OF METHYL ETHYL KETONE. "RQ" MUST BE PUT BEFORE THE DOT SHIPPING NAME.

DOT/TDG SHIP NAME: UN1193, Methyl Ethyl Ketone, 3, PG-II  
 DRUM LABEL: (FLAMMABLE LIQUID)  
 IATA / ICAO: UN1193, Methyl Ethyl Ketone, 3, PG-II  
 IMO / IMDG: UN1193, Methyl Ethyl Ketone, 3, PG-II  
 EMERGENCY RESPONSE GUIDEBOOK NUMBER: 127

## SECTION 15. REGULATORY INFORMATION

### EPA REGULATION:

SARA SECTION 311/312 HAZARDS: Acute Health, Fire



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**SECTION 15. REGULATORY INFORMATION (CONTINUED)**

All components of this product are on the TSCA list.  
This material contains no known products restricted under SARA Title III,  
Section 313 in amounts greater or equal to 1%.

SARA TITLE III INGREDIENTS	CAS#	EINECS#	WT% (REG.SECTION)	RQ(LBS)
Methyl Ethyl Ketone	78-93-3	201-159-0	95-100 (311,312)	5000

Any release equal to or exceeding the RQ must be reported to the National Response Center (800-424-8802) and appropriate state and local regulatory agencies as described in 40 CFR 302.6 and 40 CFR 355.40 respectively. Failure to report may result in substantial civil and criminal penalties. State & local regulations may be more restrictive than federal regulations.

**STATE REGULATIONS:**

THIS PRODUCT MEETS REQUIREMENTS OF SOUTHERN CALIFORNIA AQMD RULE 443.1 & SIMILAR REGULATIONS

CALIFORNIA SAFE DRINKING WATER & TOXIC ENFORCEMENT ACT (PROPOSITION 65):  
This product contains no chemicals known to the State of California to cause cancer or reproductive toxicity.

**INTERNATIONAL REGULATIONS**

The components of this product are listed on the chemical inventories of the following countries:  
Australia (AICS), Canada (DSL or NDSL), China (IECSC), Europe (EINECS, ELINCS)G  
Japan (METI/CSCL, MHLW/ISHL), South Korea (KECI), New Zealand (NZIoC),  
Philippines (PICCS), Switzerland (SWISS), Taiwan (NECSI), USA (TSCA).

CANADA: WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM (WHMIS)  
B2: Flammable Liquid.  
D2B: Irritating to skin / eyes.

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all the information required by the CPR.

**SECTION 16. OTHER INFORMATION**

HAZARD RATINGS: HEALTH (NFPA): 1, HEALTH (HMIS): 2, FLAMMABILITY: 3, PHYSICAL HAZARD: 0  
(Personal Protection Rating to be supplied by user based on use conditions.)  
This information is intended solely for the use of individuals trained in the NFPA & HMIS hazard rating systems.

**EMPLOYEE TRAINING**

See Section 2 for Risk & Safety Statements. Employees should be made aware of all hazards of this material (as stated in this SDS) before handling it.

**NOTICE**

The supplier disclaims all expressed or implied warranties of merchantability or fitness for a specific use, with respect to the product or the information provided herein, except for conformation to contracted specifications. All information appearing herein is based upon data obtained from manufacturers and/or recognized technical sources. While the information is believed to be accurate, we make no representations as to its accuracy or sufficiency. Conditions of use are beyond our control, and therefore users are responsible for verifying the data under their own operating conditions to determine whether the product is suitable for their particular purposes and they assume all risks of their handling, and disposal of the product. Users also assume all risks in regards to the publication or use of, or reliance upon information contained herein. This information relates only to the product designated herein, and does not relate to its use in combination with any other material or process.

Unless updated, the Safety Data Sheet is valid until 04/04/2016.





# Dust Destroyer Compressed Gas Duster

## Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012 and the Hazardous Products Regulations (HPR) WHMIS 2015

Date of issue: 04/18/2017

Revision date: 04/18/2017

Version: 1.0

### SECTION 1: Identification

#### 1.1. Product identifier

Substance name : Dust Destroyer Compressed Gas Duster  
Product code : 50-10521, 50-35521, 50-10521C, 50-35522C, 50-07521, 50-07522, 50-07524, 50-07521C, 50-07522C, 50-07524C, 50-075212C, 50-0748, 50-07526, 50-105212RCP, 50-10522C, 50-10524C

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Dust Removal

#### 1.3. Details of the supplier of the safety data sheet

Falcon Safety Products, Inc.  
25 ImClone Drive  
Branchburg, NJ 08876 - USA  
T (908) 707-4900

#### 1.4. Emergency telephone number

Emergency number : (800) 498-7192

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

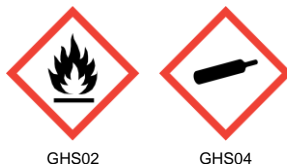
##### GHS-US and GHS-CA classification

Flam. Aerosol Category 2  
Press. Gas (Liquified Gas)

#### 2.2. Label elements

##### GHS-US and GHS-CA labelling

Hazard pictograms (GHS-US/GHS-CA) :



Signal word (GHS-US/GHS-CA) :

Warning

Hazard statements (GHS-US/GHS-CA) :

Flammable aerosol. Contains gas under pressure; may explode if heated.

Precautionary statements (GHS-US/GHS-CA) :

Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use. Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F. Store in a well-ventilated place.

#### 2.3. Other hazards

Do not store in enclosed vehicle.

#### 2.4. Unknown acute toxicity (GHS US/GHS CA)

Not applicable.

### SECTION 3: Composition/information on ingredients

#### 3.1. Substance

Name	Product identifier	%
1,1-Difluoroethane	(CAS No) 75-37-6	100

#### 3.2. Mixture

Not applicable.

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

First-aid measures after inhalation : If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.

First-aid measures after skin contact : In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Call a physician if irritation develops and persists. May cause frostbite.

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- First-aid measures after eye contact : In case of contact, immediately flush eyes with plenty of water. Remove contact lenses, if worn. If irritation persists, get medical attention.
- First-aid measures after ingestion : If swallowed, do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical advice/attention if you feel unwell.

### 4.2. Most important symptoms and effects, both acute and delayed

- Symptoms/injuries after inhalation : May cause respiratory tract irritation. May cause drowsiness, dizziness and central nervous system depression.
- Symptoms/injuries after skin contact : May cause skin irritation. Symptoms may include redness, drying, defatting and cracking of the skin. May cause frostbite on contact with the liquid.
- Symptoms/injuries after eye contact : May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling. May cause frostbite on contact with the liquid.
- Symptoms/injuries after ingestion : Not a normal route of exposure.

### 4.3. Indication of any immediate medical attention and special treatment needed

Symptoms may not appear immediately. In case of accident or if you feel unwell, seek medical advice immediately (show the label or SDS where possible).

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

- Suitable extinguishing media : Water spray, water fog, dry chemical, alcohol resistant foam, carbon dioxide.
- Unsuitable extinguishing media : None known.

### 5.2. Special hazards arising from the substance or mixture

- Fire hazard : Flammable aerosol. Products of combustion may include, and are not limited to: oxides of carbon, hydrofluoric acid, carbonyl fluoride.
- Explosion hazard : Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries.

### 5.3. Advice for firefighters

- Firefighting instructions : DO NOT fight fire when fire reaches explosives. Evacuate area. Vapors are heavier than air and may travel considerable distance to an ignition source and flash back to source of vapors.
- Protection during firefighting : Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA).

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Eliminate sources of ignition.

### 6.2. Methods and material for containment and cleaning up

- For containment : Ventilate the area thoroughly, especially low lying areas (basements, workpits etc).
- Methods for cleaning up : Leave the product to evaporate. Provide ventilation.

### 6.3. Reference to other sections

See section 8 for further information on protective clothing and equipment and section 13 for advice on waste disposal.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

- Additional hazards when processed : Hazardous waste due to potential risk of explosion. Pressurized container: Do not pierce or burn, even after use. Keep away from sources of ignition - No smoking.
- Precautions for safe handling : Do not spray on an open flame or other ignition source. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapors/spray. Do not swallow. Provide local exhaust or general room ventilation. When using do not eat, drink or smoke. Prevent the build-up of electrostatic charge. Use non-sparking tools.
- Hygiene measures : Launder contaminated clothing before reuse. Wash hands before eating, drinking, or smoking.

### 7.2. Conditions for safe storage, including any incompatibilities

- Technical measures : Proper grounding procedures to avoid static electricity should be followed.
- Storage conditions : Keep out of the reach of children. Keep container dry and in a well-ventilated place. Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F. Keep in fireproof place. Store in original container. Do not store in enclosed vehicle.

### 7.3. Specific end use(s)

Not available.

# Dust Destroyer Compressed Gas Duster

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according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012 and the Hazardous Products Regulations (HPR) WHMIS 2015

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

1,1-Difluoroethane (75-37-6)	
ACGIH	Not applicable.
OSHA	Not applicable.
NIOSH	Not applicable.
IDLH	Not applicable.

#### 8.2. Exposure controls

Appropriate engineering controls	: Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, etc.) below recommended exposure limits.
Hand protection	: Wear suitable gloves.
Eye protection	: Safety glasses with side shields.
Skin and body protection	: Wear suitable protective clothing.
Respiratory protection	: In case of insufficient ventilation, wear suitable respiratory equipment. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
Environmental exposure controls	: Maintain levels below Community environmental protection thresholds.
Other information	: Do not eat, smoke or drink where material is handled, processed or stored. Wash hands carefully before eating or smoking. Handle according to established industrial hygiene and safety practices.

### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

Physical state	: Gas
Appearance	: Clear
Color	: Colourless
Odor	: Slight, ether-like
Odor threshold	: No data available
pH	: Neutral
Melting point	: No data available
Freezing point	: No data available
Boiling point	: -13 °F (- 25 °C)
Flash point	: < 58 °F (<14.4 °C)
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: Flammable
Explosion limits	: 3.9-16.9
Explosive properties	: No data available
Oxidizing properties	: No data available
Vapor pressure	: 5960 kPa at 77 °F (25 °C)
Relative density	: 0.91
Relative vapor density at 20 °C	: 2.4 at 77 °F (25 °C)
Specific gravity / density	: 0.9
Solubility	: Slightly
Partition coefficient: n-octanol/water	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available

#### 9.2. Other information

No additional information available.

# Dust Destroyer Compressed Gas Duster

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according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012 and the Hazardous Products Regulations (HPR) WHMIS 2015

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

No dangerous reaction known under conditions of normal use.

#### 10.2. Chemical stability

Stable under normal storage conditions. Flammable aerosol. Contents under pressure. Container may explode if heated. Do not puncture. Do not burn.

#### 10.3. Possibility of hazardous reactions

No dangerous reaction known under conditions of normal use.

#### 10.4. Conditions to avoid

Heat. Incompatible materials. Sources of ignition. Do not expose to temperatures exceeding 50 °C/ 122 °F.

#### 10.5. Incompatible materials

Alkali and alkaline earth metals. Powdered metals. Powdered metallic salts.

#### 10.6. Hazardous decomposition products

May include, and are not limited to: oxides of carbon, hydrofluoric acid, carbonyl fluoride.

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

Acute toxicity : Not classified

Dust Destroyer Compressed Gas Duster	
LD50 oral rat	1500 mg/kg
LD50 dermal rabbit	No data available
LC50 inhalation rat	64000 ppm

Skin corrosion/irritation	: Based on available data, the classification criteria are not met.
Serious eye damage/irritation	: Based on available data, the classification criteria are not met.
Respiratory or skin sensitization	: Based on available data, the classification criteria are not met.
Germ cell mutagenicity	: Based on available data, the classification criteria are not met.
Carcinogenicity	: Based on available data, the classification criteria are not met.
Reproductive toxicity	: Based on available data, the classification criteria are not met.
Specific target organ toxicity (single exposure)	: Based on available data, the classification criteria are not met.
Specific target organ toxicity (repeated exposure)	: Based on available data, the classification criteria are not met.
Aspiration hazard	: Based on available data, the classification criteria are not met.
Symptoms/injuries after inhalation	: May cause respiratory tract irritation. May cause drowsiness, dizziness and central nervous system depression.
Symptoms/injuries after skin contact	: May cause skin irritation. Symptoms may include redness, drying, defatting and cracking of the skin. May cause frostbite on contact with the liquid.
Symptoms/injuries after eye contact	: May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling. May cause frostbite on contact with the liquid.
Symptoms/injuries after ingestion	: Not a normal route of exposure.

### SECTION 12: Ecological information

#### 12.1. Toxicity

Ecology - general : May cause long-term adverse effects in the aquatic environment.

#### 12.2. Persistence and degradability

Dust Destroyer Compressed Gas Duster	
Persistence and degradability	Not established.

#### 12.3. Bioaccumulative potential

Dust Destroyer Compressed Gas Duster	
Bioaccumulative potential	Not established.

#### 12.4. Mobility in soil

No additional information available.

#### 12.5. Other adverse effects

Effect on the global warming : No known ecological damage caused by this product.

# Dust Destroyer Compressed Gas Duster

## Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012 and the Hazardous Products Regulations (HPR) WHMIS 2015

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

- Waste disposal recommendations : This material must be disposed of in accordance with all local, state, provincial, and federal regulations. The generation of waste should be avoided or minimized wherever possible. Container under pressure. Do not drill or burn even after use.
- Additional information : Flammable vapors may accumulate in the container.

### SECTION 14: Transport information

#### Department of Transportation (DOT)

- In accordance with DOT
- UN-No. (DOT) : UN1030
- Proper Shipping Name (DOT) : 1,1-Difluoroethane
- Transport hazard class(es) (DOT) : 2.1
- Hazard labels (DOT) :



- Packaging Exceptions : Falcon Safety Products has been granted a DOT special permit. A copy of DOT Special Permit SP-11516 can be obtained by calling Falcon Safety Products, Inc. at 908-707-4900.

#### Transportation of Dangerous Goods (TDG)

- In accordance with TDG
- UN-No.(TDG) : UN1030
- Proper Shipping Name (TDG) : 1,1-Difluoroethane
- Class (TDG) : 2.1
- Hazard labels (TDG) :



- Packaging Exceptions : TDG Canada: Falcon Safety Products has been granted Equivalency Certificate SU 9211 (ren. 1) by the TCSS, TDGD to offer for transport by road, rail and marine.

#### Transport by sea

- UN-No. (IMDG) : UN1030
- Proper Shipping Name (IMDG) : 1,1-DIFLUOROETHANE (REFRIGERANT GAS R 152a)
- Class (IMDG) : 2.1

#### Air transport

- UN-No. (IATA) : UN1030
- Proper Shipping Name (IATA) : 1,1-Difluoroethane
- Class (IATA) : 2.1

#### Additional information

- Other information : No supplementary information available.
- Special transport precautions : Do not handle until all safety precautions have been read and understood.

### SECTION 15: Regulatory information

#### 15.1. Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

#### 1,1-Difluoroethane (75-37-6)

Listed on the Canadian DSL (Domestic Substances List)

#### 15.2. US State regulations

#### Dust Destroyer Compressed Gas Duster

State or local regulations : This product does not contain a chemical known to the State of California to cause cancer,

# Dust Destroyer Compressed Gas Duster

## Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012 and the Hazardous Products Regulations (HPR) WHMIS 2015

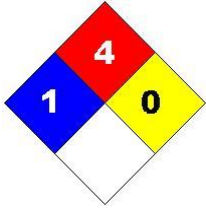
### Dust Destroyer Compressed Gas Duster

birth defects or other reproductive harm.

### SECTION 16: Other information

Date of issue : 04/18/2017  
Revision date : 04/18/2017  
Other information : None.

### Mexico Classification:



**Blue = Health**      **Red = Flammability**      **Yellow = Reactivity**      **White = Special**

**Hazard Rating:** 0 = minimal, 1 = slight, 2 = moderate, 3 = severe, 4 = extreme

*Disclaimer: We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind. The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. It is the user's responsibility to satisfy oneself as to the suitability and completeness of this information for the user's own particular use.*



# Dust Destroyer Compressed Gas Duster

## Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012 and the Hazardous Products Regulations (HPR) WHMIS 2015

Date of issue: 04/18/2017

Revision date: 04/18/2017

Version: 1.0

### SECTION 1: Identification

#### 1.1. Product identifier

Substance name : Dust Destroyer Compressed Gas Duster  
Product code : 50-10521, 50-35521, 50-10521C, 50-35522C, 50-07521, 50-07522, 50-07524, 50-07521C, 50-07522C, 50-07524C, 50-075212C, 50-0748, 50-07526, 50-105212RCP, 50-10522C, 50-10524C

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Dust Removal

#### 1.3. Details of the supplier of the safety data sheet

Falcon Safety Products, Inc.  
25 ImClone Drive  
Branchburg, NJ 08876 - USA  
T (908) 707-4900

#### 1.4. Emergency telephone number

Emergency number : (800) 498-7192

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

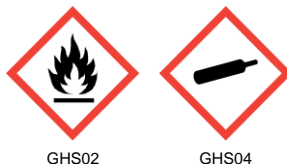
##### GHS-US and GHS-CA classification

Flam. Aerosol Category 2  
Press. Gas (Liquified Gas)

#### 2.2. Label elements

##### GHS-US and GHS-CA labelling

Hazard pictograms (GHS-US/GHS-CA) :



Signal word (GHS-US/GHS-CA) :

Warning

Hazard statements (GHS-US/GHS-CA) :

Flammable aerosol. Contains gas under pressure; may explode if heated.

Precautionary statements (GHS-US/GHS-CA) :

Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use. Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F. Store in a well-ventilated place.

#### 2.3. Other hazards

Do not store in enclosed vehicle.

#### 2.4. Unknown acute toxicity (GHS US/GHS CA)

Not applicable.

### SECTION 3: Composition/information on ingredients

#### 3.1. Substance

Name	Product identifier	%
1,1-Difluoroethane	(CAS No) 75-37-6	100

#### 3.2. Mixture

Not applicable.

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

First-aid measures after inhalation : If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.

First-aid measures after skin contact : In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Call a physician if irritation develops and persists. May cause frostbite.

# Dust Destroyer Compressed Gas Duster

## Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012 and the Hazardous Products Regulations (HPR) WHMIS 2015

- First-aid measures after eye contact : In case of contact, immediately flush eyes with plenty of water. Remove contact lenses, if worn. If irritation persists, get medical attention.
- First-aid measures after ingestion : If swallowed, do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical advice/attention if you feel unwell.

### 4.2. Most important symptoms and effects, both acute and delayed

- Symptoms/injuries after inhalation : May cause respiratory tract irritation. May cause drowsiness, dizziness and central nervous system depression.
- Symptoms/injuries after skin contact : May cause skin irritation. Symptoms may include redness, drying, defatting and cracking of the skin. May cause frostbite on contact with the liquid.
- Symptoms/injuries after eye contact : May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling. May cause frostbite on contact with the liquid.
- Symptoms/injuries after ingestion : Not a normal route of exposure.

### 4.3. Indication of any immediate medical attention and special treatment needed

Symptoms may not appear immediately. In case of accident or if you feel unwell, seek medical advice immediately (show the label or SDS where possible).

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

- Suitable extinguishing media : Water spray, water fog, dry chemical, alcohol resistant foam, carbon dioxide.
- Unsuitable extinguishing media : None known.

### 5.2. Special hazards arising from the substance or mixture

- Fire hazard : Flammable aerosol. Products of combustion may include, and are not limited to: oxides of carbon, hydrofluoric acid, carbonyl fluoride.
- Explosion hazard : Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries.

### 5.3. Advice for firefighters

- Firefighting instructions : DO NOT fight fire when fire reaches explosives. Evacuate area. Vapors are heavier than air and may travel considerable distance to an ignition source and flash back to source of vapors.
- Protection during firefighting : Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA).

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Eliminate sources of ignition.

### 6.2. Methods and material for containment and cleaning up

- For containment : Ventilate the area thoroughly, especially low lying areas (basements, workpits etc).
- Methods for cleaning up : Leave the product to evaporate. Provide ventilation.

### 6.3. Reference to other sections

See section 8 for further information on protective clothing and equipment and section 13 for advice on waste disposal.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

- Additional hazards when processed : Hazardous waste due to potential risk of explosion. Pressurized container: Do not pierce or burn, even after use. Keep away from sources of ignition - No smoking.
- Precautions for safe handling : Do not spray on an open flame or other ignition source. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapors/spray. Do not swallow. Provide local exhaust or general room ventilation. When using do not eat, drink or smoke. Prevent the build-up of electrostatic charge. Use non-sparking tools.
- Hygiene measures : Launder contaminated clothing before reuse. Wash hands before eating, drinking, or smoking.

### 7.2. Conditions for safe storage, including any incompatibilities

- Technical measures : Proper grounding procedures to avoid static electricity should be followed.
- Storage conditions : Keep out of the reach of children. Keep container dry and in a well-ventilated place. Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F. Keep in fireproof place. Store in original container. Do not store in enclosed vehicle.

### 7.3. Specific end use(s)

Not available.



# Dust Destroyer Compressed Gas Duster

## Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012 and the Hazardous Products Regulations (HPR) WHMIS 2015

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

1,1-Difluoroethane (75-37-6)	
ACGIH	Not applicable.
OSHA	Not applicable.
NIOSH	Not applicable.
IDLH	Not applicable.

#### 8.2. Exposure controls

Appropriate engineering controls	: Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, etc.) below recommended exposure limits.
Hand protection	: Wear suitable gloves.
Eye protection	: Safety glasses with side shields.
Skin and body protection	: Wear suitable protective clothing.
Respiratory protection	: In case of insufficient ventilation, wear suitable respiratory equipment. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
Environmental exposure controls	: Maintain levels below Community environmental protection thresholds.
Other information	: Do not eat, smoke or drink where material is handled, processed or stored. Wash hands carefully before eating or smoking. Handle according to established industrial hygiene and safety practices.

### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

Physical state	: Gas
Appearance	: Clear
Color	: Colourless
Odor	: Slight, ether-like
Odor threshold	: No data available
pH	: Neutral
Melting point	: No data available
Freezing point	: No data available
Boiling point	: -13 °F (- 25 °C)
Flash point	: < 58 °F (<14.4 °C)
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: Flammable
Explosion limits	: 3.9-16.9
Explosive properties	: No data available
Oxidizing properties	: No data available
Vapor pressure	: 5960 kPa at 77 °F (25 °C)
Relative density	: 0.91
Relative vapor density at 20 °C	: 2.4 at 77 °F (25 °C)
Specific gravity / density	: 0.9
Solubility	: Slightly
Partition coefficient: n-octanol/water	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available

#### 9.2. Other information

No additional information available.

# Dust Destroyer Compressed Gas Duster

## Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012 and the Hazardous Products Regulations (HPR) WHMIS 2015

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

No dangerous reaction known under conditions of normal use.

#### 10.2. Chemical stability

Stable under normal storage conditions. Flammable aerosol. Contents under pressure. Container may explode if heated. Do not puncture. Do not burn.

#### 10.3. Possibility of hazardous reactions

No dangerous reaction known under conditions of normal use.

#### 10.4. Conditions to avoid

Heat. Incompatible materials. Sources of ignition. Do not expose to temperatures exceeding 50 °C/ 122 °F.

#### 10.5. Incompatible materials

Alkali and alkaline earth metals. Powdered metals. Powdered metallic salts.

#### 10.6. Hazardous decomposition products

May include, and are not limited to: oxides of carbon, hydrofluoric acid, carbonyl fluoride.

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

Acute toxicity : Not classified

Dust Destroyer Compressed Gas Duster	
LD50 oral rat	1500 mg/kg
LD50 dermal rabbit	No data available
LC50 inhalation rat	64000 ppm

Skin corrosion/irritation	: Based on available data, the classification criteria are not met.
Serious eye damage/irritation	: Based on available data, the classification criteria are not met.
Respiratory or skin sensitization	: Based on available data, the classification criteria are not met.
Germ cell mutagenicity	: Based on available data, the classification criteria are not met.
Carcinogenicity	: Based on available data, the classification criteria are not met.
Reproductive toxicity	: Based on available data, the classification criteria are not met.
Specific target organ toxicity (single exposure)	: Based on available data, the classification criteria are not met.
Specific target organ toxicity (repeated exposure)	: Based on available data, the classification criteria are not met.
Aspiration hazard	: Based on available data, the classification criteria are not met.
Symptoms/injuries after inhalation	: May cause respiratory tract irritation. May cause drowsiness, dizziness and central nervous system depression.
Symptoms/injuries after skin contact	: May cause skin irritation. Symptoms may include redness, drying, defatting and cracking of the skin. May cause frostbite on contact with the liquid.
Symptoms/injuries after eye contact	: May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling. May cause frostbite on contact with the liquid.
Symptoms/injuries after ingestion	: Not a normal route of exposure.

### SECTION 12: Ecological information

#### 12.1. Toxicity

Ecology - general : May cause long-term adverse effects in the aquatic environment.

#### 12.2. Persistence and degradability

Dust Destroyer Compressed Gas Duster	
Persistence and degradability	Not established.

#### 12.3. Bioaccumulative potential

Dust Destroyer Compressed Gas Duster	
Bioaccumulative potential	Not established.

#### 12.4. Mobility in soil

No additional information available.

#### 12.5. Other adverse effects

Effect on the global warming : No known ecological damage caused by this product.

# Dust Destroyer Compressed Gas Duster

## Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012 and the Hazardous Products Regulations (HPR) WHMIS 2015

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

- Waste disposal recommendations : This material must be disposed of in accordance with all local, state, provincial, and federal regulations. The generation of waste should be avoided or minimized wherever possible. Container under pressure. Do not drill or burn even after use.
- Additional information : Flammable vapors may accumulate in the container.

### SECTION 14: Transport information

#### Department of Transportation (DOT)

- In accordance with DOT
- UN-No. (DOT) : UN1030
- Proper Shipping Name (DOT) : 1,1-Difluoroethane
- Transport hazard class(es) (DOT) : 2.1
- Hazard labels (DOT) :



- Packaging Exceptions : Falcon Safety Products has been granted a DOT special permit. A copy of DOT Special Permit SP-11516 can be obtained by calling Falcon Safety Products, Inc. at 908-707-4900.

#### Transportation of Dangerous Goods (TDG)

- In accordance with TDG
- UN-No.(TDG) : UN1030
- Proper Shipping Name (TDG) : 1,1-Difluoroethane
- Class (TDG) : 2.1
- Hazard labels (TDG) :



- Packaging Exceptions : TDG Canada: Falcon Safety Products has been granted Equivalency Certificate SU 9211 (ren. 1) by the TCSS, TDGD to offer for transport by road, rail and marine.

#### Transport by sea

- UN-No. (IMDG) : UN1030
- Proper Shipping Name (IMDG) : 1,1-DIFLUOROETHANE (REFRIGERANT GAS R 152a)
- Class (IMDG) : 2.1

#### Air transport

- UN-No. (IATA) : UN1030
- Proper Shipping Name (IATA) : 1,1-Difluoroethane
- Class (IATA) : 2.1

#### Additional information

- Other information : No supplementary information available.
- Special transport precautions : Do not handle until all safety precautions have been read and understood.

### SECTION 15: Regulatory information

#### 15.1. Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

#### 1,1-Difluoroethane (75-37-6)

Listed on the Canadian DSL (Domestic Substances List)

#### 15.2. US State regulations

#### Dust Destroyer Compressed Gas Duster

State or local regulations : This product does not contain a chemical known to the State of California to cause cancer,

# Dust Destroyer Compressed Gas Duster

## Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012 and the Hazardous Products Regulations (HPR) WHMIS 2015

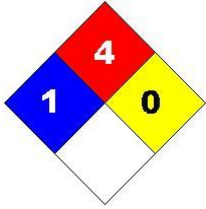
### Dust Destroyer Compressed Gas Duster

birth defects or other reproductive harm.

### SECTION 16: Other information

Date of issue : 04/18/2017  
Revision date : 04/18/2017  
Other information : None.

### Mexico Classification:



**Blue = Health    Red = Flammability    Yellow = Reactivity    White = Special**

**Hazard Rating:** 0 = minimal, 1 = slight, 2 = moderate, 3 = severe, 4 = extreme

*Disclaimer: We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind. The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. It is the user's responsibility to satisfy oneself as to the suitability and completeness of this information for the user's own particular use.*



# Dust Destroyer Compressed Gas Duster

## Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012 and the Hazardous Products Regulations (HPR) WHMIS 2015

Date of issue: 04/18/2017

Revision date: 04/18/2017

Version: 1.0

### SECTION 1: Identification

#### 1.1. Product identifier

Substance name : Dust Destroyer Compressed Gas Duster  
Product code : 50-10521, 50-35521, 50-10521C, 50-35522C, 50-07521, 50-07522, 50-07524, 50-07521C, 50-07522C, 50-07524C, 50-075212C, 50-0748, 50-07526, 50-105212RCP, 50-10522C, 50-10524C

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Dust Removal

#### 1.3. Details of the supplier of the safety data sheet

Falcon Safety Products, Inc.  
25 ImClone Drive  
Branchburg, NJ 08876 - USA  
T (908) 707-4900

#### 1.4. Emergency telephone number

Emergency number : (800) 498-7192

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

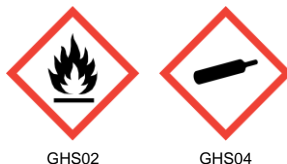
##### GHS-US and GHS-CA classification

Flam. Aerosol Category 2  
Press. Gas (Liquified Gas)

#### 2.2. Label elements

##### GHS-US and GHS-CA labelling

Hazard pictograms (GHS-US/GHS-CA) :



Signal word (GHS-US/GHS-CA) :

Warning

Hazard statements (GHS-US/GHS-CA) :

Flammable aerosol. Contains gas under pressure; may explode if heated.

Precautionary statements (GHS-US/GHS-CA) :

Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use. Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F. Store in a well-ventilated place.

#### 2.3. Other hazards

Do not store in enclosed vehicle.

#### 2.4. Unknown acute toxicity (GHS US/GHS CA)

Not applicable.

### SECTION 3: Composition/information on ingredients

#### 3.1. Substance

Name	Product identifier	%
1,1-Difluoroethane	(CAS No) 75-37-6	100

#### 3.2. Mixture

Not applicable.

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

First-aid measures after inhalation : If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.

First-aid measures after skin contact : In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Call a physician if irritation develops and persists. May cause frostbite.

# Dust Destroyer Compressed Gas Duster

## Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012 and the Hazardous Products Regulations (HPR) WHMIS 2015

- First-aid measures after eye contact : In case of contact, immediately flush eyes with plenty of water. Remove contact lenses, if worn. If irritation persists, get medical attention.
- First-aid measures after ingestion : If swallowed, do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical advice/attention if you feel unwell.

### 4.2. Most important symptoms and effects, both acute and delayed

- Symptoms/injuries after inhalation : May cause respiratory tract irritation. May cause drowsiness, dizziness and central nervous system depression.
- Symptoms/injuries after skin contact : May cause skin irritation. Symptoms may include redness, drying, defatting and cracking of the skin. May cause frostbite on contact with the liquid.
- Symptoms/injuries after eye contact : May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling. May cause frostbite on contact with the liquid.
- Symptoms/injuries after ingestion : Not a normal route of exposure.

### 4.3. Indication of any immediate medical attention and special treatment needed

Symptoms may not appear immediately. In case of accident or if you feel unwell, seek medical advice immediately (show the label or SDS where possible).

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

- Suitable extinguishing media : Water spray, water fog, dry chemical, alcohol resistant foam, carbon dioxide.
- Unsuitable extinguishing media : None known.

### 5.2. Special hazards arising from the substance or mixture

- Fire hazard : Flammable aerosol. Products of combustion may include, and are not limited to: oxides of carbon, hydrofluoric acid, carbonyl fluoride.
- Explosion hazard : Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries.

### 5.3. Advice for firefighters

- Firefighting instructions : DO NOT fight fire when fire reaches explosives. Evacuate area. Vapors are heavier than air and may travel considerable distance to an ignition source and flash back to source of vapors.
- Protection during firefighting : Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA).

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Eliminate sources of ignition.

### 6.2. Methods and material for containment and cleaning up

- For containment : Ventilate the area thoroughly, especially low lying areas (basements, workpits etc).
- Methods for cleaning up : Leave the product to evaporate. Provide ventilation.

### 6.3. Reference to other sections

See section 8 for further information on protective clothing and equipment and section 13 for advice on waste disposal.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

- Additional hazards when processed : Hazardous waste due to potential risk of explosion. Pressurized container: Do not pierce or burn, even after use. Keep away from sources of ignition - No smoking.
- Precautions for safe handling : Do not spray on an open flame or other ignition source. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapors/spray. Do not swallow. Provide local exhaust or general room ventilation. When using do not eat, drink or smoke. Prevent the build-up of electrostatic charge. Use non-sparking tools.
- Hygiene measures : Launder contaminated clothing before reuse. Wash hands before eating, drinking, or smoking.

### 7.2. Conditions for safe storage, including any incompatibilities

- Technical measures : Proper grounding procedures to avoid static electricity should be followed.
- Storage conditions : Keep out of the reach of children. Keep container dry and in a well-ventilated place. Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F. Keep in fireproof place. Store in original container. Do not store in enclosed vehicle.

### 7.3. Specific end use(s)

Not available.

# Dust Destroyer Compressed Gas Duster

## Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012 and the Hazardous Products Regulations (HPR) WHMIS 2015

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

1,1-Difluoroethane (75-37-6)	
ACGIH	Not applicable.
OSHA	Not applicable.
NIOSH	Not applicable.
IDLH	Not applicable.

#### 8.2. Exposure controls

Appropriate engineering controls	: Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, etc.) below recommended exposure limits.
Hand protection	: Wear suitable gloves.
Eye protection	: Safety glasses with side shields.
Skin and body protection	: Wear suitable protective clothing.
Respiratory protection	: In case of insufficient ventilation, wear suitable respiratory equipment. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
Environmental exposure controls	: Maintain levels below Community environmental protection thresholds.
Other information	: Do not eat, smoke or drink where material is handled, processed or stored. Wash hands carefully before eating or smoking. Handle according to established industrial hygiene and safety practices.

### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

Physical state	: Gas
Appearance	: Clear
Color	: Colourless
Odor	: Slight, ether-like
Odor threshold	: No data available
pH	: Neutral
Melting point	: No data available
Freezing point	: No data available
Boiling point	: -13 °F (- 25 °C)
Flash point	: < 58 °F (<14.4 °C)
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: Flammable
Explosion limits	: 3.9-16.9
Explosive properties	: No data available
Oxidizing properties	: No data available
Vapor pressure	: 5960 kPa at 77 °F (25 °C)
Relative density	: 0.91
Relative vapor density at 20 °C	: 2.4 at 77 °F (25 °C)
Specific gravity / density	: 0.9
Solubility	: Slightly
Partition coefficient: n-octanol/water	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available

#### 9.2. Other information

No additional information available.

# Dust Destroyer Compressed Gas Duster

## Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012 and the Hazardous Products Regulations (HPR) WHMIS 2015

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

No dangerous reaction known under conditions of normal use.

#### 10.2. Chemical stability

Stable under normal storage conditions. Flammable aerosol. Contents under pressure. Container may explode if heated. Do not puncture. Do not burn.

#### 10.3. Possibility of hazardous reactions

No dangerous reaction known under conditions of normal use.

#### 10.4. Conditions to avoid

Heat. Incompatible materials. Sources of ignition. Do not expose to temperatures exceeding 50 °C/ 122 °F.

#### 10.5. Incompatible materials

Alkali and alkaline earth metals. Powdered metals. Powdered metallic salts.

#### 10.6. Hazardous decomposition products

May include, and are not limited to: oxides of carbon, hydrofluoric acid, carbonyl fluoride.

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

Acute toxicity : Not classified

Dust Destroyer Compressed Gas Duster	
LD50 oral rat	1500 mg/kg
LD50 dermal rabbit	No data available
LC50 inhalation rat	64000 ppm

Skin corrosion/irritation	: Based on available data, the classification criteria are not met.
Serious eye damage/irritation	: Based on available data, the classification criteria are not met.
Respiratory or skin sensitization	: Based on available data, the classification criteria are not met.
Germ cell mutagenicity	: Based on available data, the classification criteria are not met.
Carcinogenicity	: Based on available data, the classification criteria are not met.
Reproductive toxicity	: Based on available data, the classification criteria are not met.
Specific target organ toxicity (single exposure)	: Based on available data, the classification criteria are not met.
Specific target organ toxicity (repeated exposure)	: Based on available data, the classification criteria are not met.
Aspiration hazard	: Based on available data, the classification criteria are not met.
Symptoms/injuries after inhalation	: May cause respiratory tract irritation. May cause drowsiness, dizziness and central nervous system depression.
Symptoms/injuries after skin contact	: May cause skin irritation. Symptoms may include redness, drying, defatting and cracking of the skin. May cause frostbite on contact with the liquid.
Symptoms/injuries after eye contact	: May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling. May cause frostbite on contact with the liquid.
Symptoms/injuries after ingestion	: Not a normal route of exposure.

### SECTION 12: Ecological information

#### 12.1. Toxicity

Ecology - general : May cause long-term adverse effects in the aquatic environment.

#### 12.2. Persistence and degradability

Dust Destroyer Compressed Gas Duster	
Persistence and degradability	Not established.

#### 12.3. Bioaccumulative potential

Dust Destroyer Compressed Gas Duster	
Bioaccumulative potential	Not established.

#### 12.4. Mobility in soil

No additional information available.

#### 12.5. Other adverse effects

Effect on the global warming : No known ecological damage caused by this product.



# Dust Destroyer Compressed Gas Duster

## Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012 and the Hazardous Products Regulations (HPR) WHMIS 2015

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

- Waste disposal recommendations : This material must be disposed of in accordance with all local, state, provincial, and federal regulations. The generation of waste should be avoided or minimized wherever possible. Container under pressure. Do not drill or burn even after use.
- Additional information : Flammable vapors may accumulate in the container.

### SECTION 14: Transport information

#### Department of Transportation (DOT)

- In accordance with DOT
- UN-No. (DOT) : UN1030
- Proper Shipping Name (DOT) : 1,1-Difluoroethane
- Transport hazard class(es) (DOT) : 2.1
- Hazard labels (DOT) :



- Packaging Exceptions : Falcon Safety Products has been granted a DOT special permit. A copy of DOT Special Permit SP-11516 can be obtained by calling Falcon Safety Products, Inc. at 908-707-4900.

#### Transportation of Dangerous Goods (TDG)

- In accordance with TDG
- UN-No.(TDG) : UN1030
- Proper Shipping Name (TDG) : 1,1-Difluoroethane
- Class (TDG) : 2.1
- Hazard labels (TDG) :



- Packaging Exceptions : TDG Canada: Falcon Safety Products has been granted Equivalency Certificate SU 9211 (ren. 1) by the TCSS, TDGD to offer for transport by road, rail and marine.

#### Transport by sea

- UN-No. (IMDG) : UN1030
- Proper Shipping Name (IMDG) : 1,1-DIFLUOROETHANE (REFRIGERANT GAS R 152a)
- Class (IMDG) : 2.1

#### Air transport

- UN-No. (IATA) : UN1030
- Proper Shipping Name (IATA) : 1,1-Difluoroethane
- Class (IATA) : 2.1

#### Additional information

- Other information : No supplementary information available.
- Special transport precautions : Do not handle until all safety precautions have been read and understood.

### SECTION 15: Regulatory information

#### 15.1. Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

#### 1,1-Difluoroethane (75-37-6)

Listed on the Canadian DSL (Domestic Substances List)

#### 15.2. US State regulations

#### Dust Destroyer Compressed Gas Duster

State or local regulations : This product does not contain a chemical known to the State of California to cause cancer,

# Dust Destroyer Compressed Gas Duster

## Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012 and the Hazardous Products Regulations (HPR) WHMIS 2015

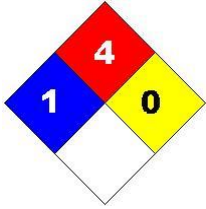
### Dust Destroyer Compressed Gas Duster

birth defects or other reproductive harm.

### SECTION 16: Other information

Date of issue : 04/18/2017  
Revision date : 04/18/2017  
Other information : None.

### Mexico Classification:



**Blue = Health    Red = Flammability    Yellow = Reactivity    White = Special**

**Hazard Rating:** 0 = minimal, 1 = slight, 2 = moderate, 3 = severe, 4 = extreme

*Disclaimer: We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind. The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. It is the user's responsibility to satisfy oneself as to the suitability and completeness of this information for the user's own particular use.*



# SAFETY DATA SHEET

## EchoPure™ Phased Array, Cold Weather, Warm Welds Ultrasonic Couplant

### SECTION 1 – IDENTIFICATION

**Product Name:** EchoPure™ (all viscosities) **Manufacturer:** Echo Ultrasonics™ LLC  
**Recommended Use:** Industrial Ultrasonic Couplant 774 Marine Drive, Bellingham, WA 98225  
-60° to 350°F (-51° to 176°C) 360-671-9121 www.echoultrasonics.com  
**Restrictions on Use:** For Industrial Use Only **Emergency:** US: 1-800-255-3924 Outside US: +1-813-248-0585

### SECTION 2 – HAZARDS

**General Information:** EchoPure is not considered to be hazardous by OSHA HazCom 2012 Criteria. Non-hazardous and non-dangerous in accordance with HOHSC criteria. EchoPure is composed of compounds having a vapor pressure less than 0.1 mm Hg at 20°C.  
**Emergency Overview:** **Color:** Clear, Slight tint  
**Physical State:** Medium to High Viscosity liquid  
**Odor:** Nearly Odorless  
**Hazards:** May cause allergic skin reaction in sensitive individuals.  
**Potential Health Hazards:** **Slippery**  
**Eye:** May cause mild irritation.  
**Skin:** Essentially nonirritating  
**Inhalation:** Not applicable at room temperature. Vapor from high temperatures may cause irritation of upper respiratory tract.  
**Ingestion:** Low toxicity, Ingredients are Generally Recognized as Safe for incidental food contact.  
**LABEL ELEMENTS ACCORDING TO OSHA HazCom 2012: NONE APPLICABLE**

Component	CAS #	WT %
Alpha-Propylene Glycol	57-55-6	Less than 95 %
Polymers	9004-34-6	Less than 5%

### SECTION 4 – FIRST-AID MEASURES

**General Information:** Use good industrial hygiene including eye protection.

Symptoms/Effects	Treatment Recommendations
<b>Eyes:</b> Irritation	Flush eyes with plenty of water. Remove contacts after 1-2 minutes and continue flushing for several minutes.
<b>Skin:</b> None expected	Remove with dry cloth or paper towel and rinse away residue with water.
<b>Inhalation:</b> Irritation	If exposed to excessive vapors or mists, remove to fresh air and get medical attention if cough or other symptoms develop.
<b>Ingestion:</b> None expected	

### SECTION 5 – FIRE-FIGHTING MEASURES

**Suitable Extinguishing Equipment:** All Types.  
**Specific Hazards from Combustion:** None  
**Unusual Hazards:** None  
**NFPA Rating:** Health: 1, Fire: 0, Instability: 0

### SECTION 6 – ACCIDENTAL RELEASE MEASURES

**Personal Precautions:** Spilled material may cause a slipping hazard. Prevent entry into spill area by unauthorized persons.  
**Emergency Procedures:** Keep unnecessary people away. Sprinkle with traction material if spill cannot be cleaned up immediately.  
**Containment Procedures:** Minimize entry of material into storm sewers and drainage systems. Sweep or shovel spilled material into containers, wipe area with wet rags or hose with water to remove completely. EchoPure is slippery.

### SECTION 7 – HANDLING AND STORAGE

**Precautions:** Skin and eye contact should be avoided as a general industrial practice. Gloves are not required, Wearing eye protection is recommended.

Store in original closed containers in a cool, dry area, between 0 – 35° C (32 - 95° F) Keep away from children.

### Recommendations:

### SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

**Permissible Exposure Limits:** None established  
**Engineering Controls:** None required  
**Personal Protection:** **Eyes:** Use safety glasses or other protection.  
**Skin:** None required  
**Respiratory:** Not required  
**Additional:** It is good general practice to provide eyewash stations or rinse bottles.  
**Special Requirements:** None

### SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

**Appearance:** Clear to slight tint medium to high viscosity liquid  
**Odor:** Nearly Odorless  
**Odor Threshold:** No data  
**Solubility:** 100% in water  
**pH:** 7-9  
**Viscosity:** Low fluid to high viscosity



# SAFETY DATA SHEET

## EchoPure™ Phased Array, Cold Weather, Warm Welds Ultrasonic Couplant

**Flammable Limits:** Non Flammable  
**Specific Gravity:** 1.03  
**Vapor Pressure:** Greater than 1  
**Freezing point:** Supercools  
**Boiling Point:** 360F, 182C  
**Evaporation Rate:** No data  
**Flammability:** No data  
**Flash Point:** 220°F / 104°C  
**Auto-Ignition Temperature:** 700°F / 371°C  
**Volatile Organic Compounds (VOC):** Less than 1%

### SECTION 10 – STABILITY AND REACTIVITY

**Reactivity:** Stable  
**Chemical Stability:** Stable  
**Potential Hazards:** No significant hazards expected  
**Conditions to Avoid:** None  
**Incompatible Materials:** None known  
**Hazardous Polymerization:** None known  
**Hazardous Decomposition Products:** None known

### SECTION 11 – TOXICOLOGICAL INFORMATION

**Likely Routes and Effects of Exposure :** See section 2  
**Immediate:** See section 2  
**Delayed or Chronic:** Low potential  
**Symptoms:** None expected  
**Carcinogenicity:** No evidence of being a carcinogen

### SECTION 12 – ECOLOGICAL INFORMATION

**Toxicology Data:** Not expected to be acutely toxic to aquatic organisms  
**Environmental Persistence/Degradation:** Biodegradation is expected  
**Bioaccumulation Potential:** No bioaccumulation is expected  
**Soil to Groundwater Motility:** Not expected  
**Other Adverse Effects:** None expected

### SECTION 13 – DISPOSAL CONSIDERATIONS

**General Information:** All disposal practices must be in compliance with all Federal, State, and Local laws and regulations.  
**Disposal Containers:** Any  
**Disposal Methods:** Landfill, municipal sewer if permissible  
**Physical /Chemical properties affecting disposal:** None  
**Sewage Disposal:** Small quantities generally permissible  
**Special precautions for landfills or incinerators:** None

### SECTION 14 – TRANSPORT INFORMATION

**UN Number and Proper Shipping Name:** Not assigned  
**Transport Hazard Class:** None  
**Packing Group:** None  
**Environmental Hazards or special precautions:** None  
**Bulk Transport Guidance:** None  
**Special Precautions:** Not restricted, not regulated, not hazardous & not dangerous to transport by air by IATA

### SECTION 15 – REGULATORY INFORMATION

**Regulatory Information not included elsewhere:** **TSCA Inventory:** All ingredients listed  
**CEPA:** All ingredients listed on DSL  
Section 311 SARA Title III/CERCLA  
**Immediate (acute):** No  
**Delayed (chronic):** No  
**Fire Hazard:** No  
**Reactive:** No  
**Sudden Release of Pressure:** No  
SARA 313  
This product does not contain chemicals which require reporting nor listing under California Proposition 65.

### SECTION 16 – OTHER INFORMATION

**SDS Preparation Date:** 12 October 2014  
**Last Revision:** 20 August 2018  
**Changes from Last Revision:** Addition of recommended operating range  
**Other Information:** None

All information herein is provided in good faith and believed to be accurate and reliable. However, no warranty, express or implied, is given. Regulatory requirements are subject to change and may differ according to location. It is the buyer's/user's responsibility to ensure that this product is used in compliance with all federal, state, and local laws.



# SAFETY DATA SHEET

## 1. Identification

**Product identifier** Food Grade Anti-Seize & Lubricating Compound

**Other means of identification**

**Product code** SL35905, SL35906

**Recommended use** Anti-seize lubricant

**Recommended restrictions** None known.

**Manufacturer/Importer/Supplier/Distributor information**

**Manufactured or sold by:**

**Company name** CRC Industries, Inc.  
**Address** 885 Louis Dr.  
Warminster, PA 18974 US

**Telephone**

**General Information** 215-674-4300

**Technical Assistance** 800-521-3168

**Customer Service**

800-272-4620

**24-Hour Emergency (CHEMTREC)** 800-424-9300 (US)

703-527-3887 (International)

**Website** www.crcindustries.com

## 2. Hazard(s) identification

**Physical hazards** Not classified.

**Health hazards** Not classified.

**Environmental hazards** Hazardous to the aquatic environment, long-term hazard Category 3

**OSHA defined hazards** Not classified.

**Label elements**

**Hazard symbol** None.

**Signal word** None.

**Hazard statement** Harmful to aquatic life with long lasting effects.

**Precautionary statement**

**Prevention** Use with adequate ventilation. Open doors and windows or use other means to ensure a fresh air supply during use. Observe good industrial hygiene practices. Avoid release to the environment.

**Response** Wash hands after handling.

**Storage** Store away from incompatible materials.

**Disposal** Dispose of contents/container in accordance with local/regional/national regulations.

**Hazard(s) not otherwise classified (HNOC)** None known.

## 3. Composition/information on ingredients

**Mixtures**

Chemical name	Common name and synonyms	CAS number	%
Calcium carbonate		1317-65-3	20 - 30
1-Decene, homopolymer, hydrogenated		68037-01-4	10 - 20
White mineral oil		8042-47-5	10 - 20
Talc (not containing asbestos fibers)		14807-96-6	5 - 10
Zinc oxide		1314-13-2	1 - 3

Chemical name	Common name and synonyms	CAS number	%
Titanium dioxide		13463-67-7	< 1

Specific chemical identity and/or percentage of composition has been withheld as a trade secret.

#### 4. First-aid measures

<b>Inhalation</b>	If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. Call a physician if symptoms develop or persist.
<b>Skin contact</b>	Remove and isolate contaminated clothing and shoes. Wash off immediately with soap and plenty of water. Get medical attention if irritation develops and persists. Wash contaminated clothing before reuse.
<b>Eye contact</b>	Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation develops and persists.
<b>Ingestion</b>	Rinse mouth. Drink plenty of water. Never give anything by mouth to a victim who is unconscious or is having convulsions. Do not induce vomiting without advice from poison control center. Get medical advice/attention if you feel unwell.
<b>Most important symptoms/effects, acute and delayed</b>	Direct contact with eyes may cause temporary irritation.
<b>Indication of immediate medical attention and special treatment needed</b>	Treat symptomatically.
<b>General information</b>	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

#### 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Foam. Dry chemicals. Carbon dioxide (CO <sub>2</sub> ).
<b>Unsuitable extinguishing media</b>	Do not use water jet as an extinguisher, as this will spread the fire.
<b>Specific hazards arising from the chemical</b>	During fire, gases hazardous to health may be formed.
<b>Special protective equipment and precautions for firefighters</b>	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
<b>Fire-fighting equipment/instructions</b>	Cool containers exposed to heat with water spray and remove container, if no risk is involved.
<b>General fire hazards</b>	No unusual fire or explosion hazards noted.

#### 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
<b>Methods and materials for containment and cleaning up</b>	Stop the flow of material, if this is without risk. Prevent product from entering drains. Following product recovery, flush area with water.
<b>Environmental precautions</b>	Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground. Inform appropriate managerial or supervisory personnel of all environmental releases.

#### 7. Handling and storage

<b>Precautions for safe handling</b>	Avoid prolonged or repeated contact with skin. Use only in well-ventilated areas. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. Avoid release to the environment. For product usage instructions, please see the product label.
<b>Conditions for safe storage, including any incompatibilities</b>	Keep away from heat and sources of ignition. Store in original tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

## 8. Exposure controls/personal protection

### Occupational exposure limits

#### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
Calcium carbonate (CAS 1317-65-3)	PEL	5 mg/m <sup>3</sup>	Respirable fraction.
		15 mg/m <sup>3</sup>	Total dust.
Titanium dioxide (CAS 13463-67-7)	PEL	15 mg/m <sup>3</sup>	Total dust.
White mineral oil (CAS 8042-47-5)	PEL	5 mg/m <sup>3</sup>	Mist.
Zinc oxide (CAS 1314-13-2)	PEL	5 mg/m <sup>3</sup>	Respirable fraction.
		5 mg/m <sup>3</sup>	Fume.
		15 mg/m <sup>3</sup>	Total dust.

#### US. OSHA Table Z-3 (29 CFR 1910.1000)

Components	Type	Value	Form
Talc (not containing asbestos fibers) (CAS 14807-96-6)	TWA	0.3 mg/m <sup>3</sup>	Total dust.
		0.1 mg/m <sup>3</sup>	Respirable.
		20 mppcf	Respirable.
		2.4 mppcf	Respirable.

#### US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Talc (not containing asbestos fibers) (CAS 14807-96-6)	TWA	2 mg/m <sup>3</sup>	Respirable fraction.
Titanium dioxide (CAS 13463-67-7)	TWA	10 mg/m <sup>3</sup>	
White mineral oil (CAS 8042-47-5)	TWA	5 mg/m <sup>3</sup>	Inhalable fraction.
Zinc oxide (CAS 1314-13-2)	STEL	10 mg/m <sup>3</sup>	Respirable fraction.
	TWA	2 mg/m <sup>3</sup>	Respirable fraction.

#### US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
Calcium carbonate (CAS 1317-65-3)	TWA	5 mg/m <sup>3</sup>	Respirable.
		10 mg/m <sup>3</sup>	Total
Talc (not containing asbestos fibers) (CAS 14807-96-6)	TWA	2 mg/m <sup>3</sup>	Respirable.
White mineral oil (CAS 8042-47-5)	STEL	10 mg/m <sup>3</sup>	Mist.
	TWA	5 mg/m <sup>3</sup>	Mist.
Zinc oxide (CAS 1314-13-2)	Ceiling	15 mg/m <sup>3</sup>	Dust.
	STEL	10 mg/m <sup>3</sup>	Fume.
	TWA	5 mg/m <sup>3</sup>	Dust.
		5 mg/m <sup>3</sup>	Fume.

#### Biological limit values

No biological exposure limits noted for the ingredient(s).

#### Exposure guidelines

Occupational Exposure Limits are not relevant to the current physical form of the product.

#### Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product.

#### Individual protection measures, such as personal protective equipment

##### Eye/face protection

Wear safety glasses with side shields (or goggles).

##### Skin protection

##### Hand protection

Wear protective gloves such as: Nitrile. Polyvinyl chloride (PVC).

<b>Other</b>	Wear suitable protective clothing.
<b>Respiratory protection</b>	If engineering controls are not feasible or if exposure exceeds the applicable exposure limits, use a NIOSH-approved cartridge respirator with an organic vapor cartridge. Use a self-contained breathing apparatus in confined spaces and for emergencies. Air monitoring is needed to determine actual employee exposure levels.
<b>Thermal hazards</b>	Wear appropriate thermal protective clothing, when necessary.
<b>General hygiene considerations</b>	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

## 9. Physical and chemical properties

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### Appearance

<b>Physical state</b>	Liquid.
<b>Form</b>	Semi-solid paste.
<b>Color</b>	White.
<b>Odor</b>	Petroleum.
<b>Odor threshold</b>	Not available.
<b>pH</b>	Neutral.
<b>Melting point/freezing point</b>	> 449.6 °F (> 232 °C)
<b>Initial boiling point and boiling range</b>	> 500 °F (> 260 °C)
<b>Flash point</b>	> 449.6 °F (> 232 °C) Cleveland Open Cup
<b>Evaporation rate</b>	Slow.
<b>Flammability (solid, gas)</b>	Not available.
<b>Upper/lower flammability or explosive limits</b>	
<b>Flammability limit - lower (%)</b>	Not available.
<b>Flammability limit - upper (%)</b>	Not available.
<b>Vapor pressure</b>	< 0.01 kPa
<b>Vapor density</b>	> 5 (air = 1)
<b>Relative density</b>	1.18
<b>Solubility (water)</b>	Negligible.
<b>Partition coefficient (n-octanol/water)</b>	Not available.
<b>Auto-ignition temperature</b>	> 500 °F (> 260 °C)
<b>Decomposition temperature</b>	Not available.
<b>Viscosity (kinematic)</b>	Not available.
<b>Percent volatile</b>	41 % estimated

## 10. Stability and reactivity

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<b>Reactivity</b>	The product is stable and non-reactive under normal conditions of use, storage and transport.
<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	No dangerous reaction known under conditions of normal use.
<b>Conditions to avoid</b>	Contact with incompatible materials.
<b>Incompatible materials</b>	Acids. Strong oxidizing agents. Fluorine.
<b>Hazardous decomposition products</b>	Carbon oxides. Hydrocarbon fumes and smoke. Halogenated materials. Heavy metal compounds.

## 11. Toxicological information

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### Information on likely routes of exposure

<b>Inhalation</b>	Prolonged inhalation may be harmful.
<b>Skin contact</b>	Prolonged skin contact may cause temporary irritation.



**Eye contact** Direct contact with eyes may cause temporary irritation.

**Ingestion** Expected to be a low ingestion hazard.

**Symptoms related to the physical, chemical and toxicological characteristics** Direct contact with eyes may cause temporary irritation.

**Information on toxicological effects**

**Acute toxicity**

Product	Species	Test Results
Food Grade Anti-Seize & Lubricating Compound		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rabbit	8771 mg/kg estimated
<b>Inhalation</b>		
LC50	Rat	37 mg/l estimated
<b>Oral</b>		
LD50	Rat	2385 mg/kg Acute Toxicity Estimate
<b>Chronic</b>		
<b>Oral</b>		
LD50	Rat	36603 mg/kg estimated

\* Estimates for product may be based on additional component data not shown.

**Skin corrosion/irritation** Prolonged skin contact may cause temporary irritation.

**Serious eye damage/eye irritation** Direct contact with eyes may cause temporary irritation.

**Respiratory sensitization** Not a respiratory sensitizer.

**Skin sensitization** This product is not expected to cause skin sensitization.

**Germ cell mutagenicity** No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

**Carcinogenicity** Not likely, due to the form of the product.

**IARC Monographs. Overall Evaluation of Carcinogenicity**

White mineral oil (CAS 8042-47-5) 3 Not classifiable as to carcinogenicity to humans.

**US. National Toxicology Program (NTP) Report on Carcinogens**

Not available.

**Reproductive toxicity** This product is not expected to cause reproductive or developmental effects.

**Specific target organ toxicity - single exposure** Not classified.

**Specific target organ toxicity - repeated exposure** Not classified.

**Aspiration hazard** Not an aspiration hazard.

**Chronic effects** Prolonged exposure may cause chronic effects.

**12. Ecological information**

**Ecotoxicity** Harmful to aquatic life with long lasting effects.

Product	Species	Test Results
Food Grade Anti-Seize & Lubricating Compound		
<b>Aquatic</b>		
<i>Acute</i>		
Crustacea	EC50 Daphnia	6.5275 mg/l, 48 hours estimated
Fish	LC50 Fish	73.3333 ppm, 96 hours estimated

Components	Species	Test Results
Talc (not containing asbestos fibers) (CAS 14807-96-6)		
<b>Aquatic</b>		
<i>Acute</i>		
Fish	LC50	Zebra danio (Danio rerio) > 100 g/l, 96 hours
Titanium dioxide (CAS 13463-67-7)		
<i>Acute</i>		
Other	EC50	Pseudokirchnerella subcapitata 5.83 mg/l, 72 hours
<i>Chronic</i>		
Other	NOEC	Pseudokirchnerella subcapitata 0.984 mg/l, 72 hours
<b>Aquatic</b>		
<i>Acute</i>		
Crustacea	LC50	Ceriodaphnia dubia 3 mg/l, 48 hours
		Water flea (Daphnia magna) 5.5 ppm, 48 hours
Fish	LC50	Fathead minnow (Pimephales promelas) 1000 mg/l, 96 hours
Zinc oxide (CAS 1314-13-2)		
<b>Aquatic</b>		
<i>Acute</i>		
Crustacea	EC50	Water flea (Daphnia magna) 0.098 mg/l, 48 hours
Fish	LC50	Rainbow trout, donaldson trout (Oncorhynchus mykiss) 1.1 ppm, 96 hours

\* Estimates for product may be based on additional component data not shown.

**Persistence and degradability** No data is available on the degradability of this product.

**Bioaccumulative potential**

**Bioconcentration factor (BCF)**

Titanium dioxide 352

**Mobility in soil** No data available.

**Other adverse effects** No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

**13. Disposal considerations**

**Disposal of waste from residues / unused products** This product is not a RCRA hazardous waste (See 40 CFR Part 261.20 – 261.33). Empty containers may be recycled. Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose in accordance with all applicable regulations.

**Hazardous waste code** Not regulated.

**Contaminated packaging** Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

**14. Transport information**

**DOT**

Not regulated as dangerous goods.

**IATA**

Not regulated as dangerous goods.

**IMDG**

Not regulated as dangerous goods.

**15. Regulatory information**

**US federal regulations** This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

Not regulated.

**US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**

Not listed.

**SARA 304 Emergency release notification**

Not regulated.

**US EPCRA (SARA Title III) Section 313 - Toxic Chemical: Listed substance**

Zinc oxide (CAS 1314-13-2)

**CERCLA Hazardous Substance List (40 CFR 302.4)**

Zinc oxide (CAS 1314-13-2) Listed.

**CERCLA Hazardous Substances: Reportable quantity**

Not listed.

Spills or releases resulting in the loss of any ingredient at or above its RQ require immediate notification to the National Response Center (800-424-8802) and to your Local Emergency Planning Committee.

**Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Not regulated.

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

Not regulated.

**Safe Drinking Water Act (SDWA)** Not regulated.

**Food and Drug Administration (FDA)** Not regulated.

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**Section 311/312 Hazard categories**  
 Immediate Hazard - No  
 Delayed Hazard - No  
 Fire Hazard - No  
 Pressure Hazard - No  
 Reactivity Hazard - No

**SARA 302 Extremely hazardous substance** No

**US state regulations****US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))**

Talc (not containing asbestos fibers) (CAS 14807-96-6)  
 Titanium dioxide (CAS 13463-67-7)

**US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)**  
 Not listed.**US. New Jersey Worker and Community Right-to-Know Act**

Calcium carbonate (CAS 1317-65-3)  
 Talc (not containing asbestos fibers) (CAS 14807-96-6)  
 Zinc oxide (CAS 1314-13-2)  
 White mineral oil (CAS 8042-47-5)

**US. Massachusetts RTK - Substance List**

Calcium carbonate (CAS 1317-65-3)  
 Talc (not containing asbestos fibers) (CAS 14807-96-6)  
 White mineral oil (CAS 8042-47-5)  
 Zinc oxide (CAS 1314-13-2)

**US. Pennsylvania Worker and Community Right-to-Know Law**

Zinc oxide (CAS 1314-13-2)  
 Diphenylamine (CAS 122-39-4)  
 Calcium carbonate (CAS 1317-65-3)  
 Polytetrafluoroethylene (CAS 9002-84-0)  
 Talc (not containing asbestos fibers) (CAS 14807-96-6)  
 White mineral oil (CAS 8042-47-5)

**US. Rhode Island RTK**

Zinc oxide (CAS 1314-13-2)

**US. California Proposition 65**

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

**Volatile organic compounds (VOC) regulations****EPA**

**VOC content (40 CFR 51.100(s))** 0 %

**Consumer products (40 CFR 59, Subpt. C)** Not regulated

**State**

**Consumer products** This product is regulated as an Anti-seize Lubricant (non-aerosol). This product is compliant for use in all 50 states.

**VOC content (CA)** 0 %

**VOC content (OTC)** 0 %

**International Inventories**

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	Yes
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)  
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

**16. Other information, including date of preparation or last revision**

<b>Issue date</b>	07-21-2015
<b>Prepared by</b>	Allison Cho
<b>Version #</b>	01
<b>Further information</b>	Not available.
<b>HMIS® ratings</b>	Health: 1 Flammability: 1 Physical hazard: 0 Personal protection: B
<b>NFPA ratings</b>	Health: 1 Flammability: 1 Instability: 0

**NFPA ratings**



**Disclaimer**

The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. This information is accurate to the best of CRC Industries' knowledge or obtained from sources believed by CRC to be accurate. Before using any product, read all warnings and directions on the label. For further clarification of any information contained on this (M)SDS consult your supervisor, a health & safety professional, or CRC Industries.



# SAFETY DATA SHEET

## 1. Identification

<b>Product identifier</b>	<b>Food Grade Anti-Seize &amp; Lubricating Compound</b>
<b>Other means of identification</b>	
<b>Product Code</b>	No. SL35905 (Item# 1007942)
<b>Recommended use</b>	Anti-seize and lubricating compound
<b>Recommended restrictions</b>	None known.
<b>Manufacturer/Importer/Supplier/Distributor information</b>	
<b>Manufactured or sold by:</b>	
<b>Company name</b>	CRC Industries, Inc.
<b>Address</b>	885 Louis Dr. Warminster, PA 18974 US
<b>Telephone</b>	
<b>General Information</b>	215-674-4300
<b>Technical Assistance</b>	800-521-3168
<b>Customer Service</b>	800-272-4620
<b>24-Hour Emergency (CHEMTREC)</b>	800-424-9300 (US)
<b>Website</b>	www.crcindustries.com

## 2. Hazard(s) identification

<b>Physical hazards</b>	Not classified.
<b>Health hazards</b>	Not classified.
<b>Environmental hazards</b>	Not classified.
<b>OSHA defined hazards</b>	Not classified.
<b>Label elements</b>	
<b>Hazard symbol</b>	None.
<b>Signal word</b>	None.
<b>Hazard statement</b>	The mixture does not meet the criteria for classification.
<b>Precautionary statement</b>	
<b>Prevention</b>	Use with adequate ventilation. Open doors and windows or use other means to ensure a fresh air supply during use and while product is drying. Observe good industrial hygiene practices.
<b>Response</b>	Wash hands after handling.
<b>Storage</b>	Store away from incompatible materials.
<b>Disposal</b>	Dispose of contents/container in accordance with local/regional/national regulations.
<b>Hazard(s) not otherwise classified (HNOC)</b>	None known.
<b>Supplemental information</b>	None.

## 3. Composition/information on ingredients

### Mixtures

<b>Chemical name</b>	<b>Common name and synonyms</b>	<b>CAS number</b>	<b>%</b>
white mineral oil		8042-47-5	30 - 40
calcium carbonate		471-34-1	20 - 30
polyisobutylene		9003-27-4	20 - 30
talc (not containing asbestos fibers)		14807-96-6	10 - 20
amorphous fumed silica		112945-52-5	1 - 3
amorphous silica		7631-86-9	1 - 3

Chemical name	Common name and synonyms	CAS number	%
titanium dioxide		13463-67-7	1 - 3
fumed silica		68611-44-9	< 1

Specific chemical identity and/or percentage of composition has been withheld as a trade secret.

#### 4. First-aid measures

<b>Inhalation</b>	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
<b>Skin contact</b>	Rinse skin with water/shower. Get medical attention if irritation develops and persists.
<b>Eye contact</b>	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.
<b>Ingestion</b>	Rinse mouth. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting without advice from poison control center. Get medical attention if symptoms occur.
<b>Most important symptoms/effects, acute and delayed</b>	Direct contact with eyes may cause temporary irritation.
<b>Indication of immediate medical attention and special treatment needed</b>	Treat symptomatically.
<b>General information</b>	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

#### 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Carbon dioxide (CO2). Water Spray or Fog. Foam.
<b>Unsuitable extinguishing media</b>	None known.
<b>Specific hazards arising from the chemical</b>	During fire, gases hazardous to health may be formed.
<b>Special protective equipment and precautions for firefighters</b>	Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.
<b>Fire-fighting equipment/instructions</b>	Cool containers exposed to heat with water spray and remove container, if no risk is involved. Use standard firefighting procedures and consider the hazards of other involved materials.
<b>Specific methods</b>	Use standard firefighting procedures and consider the hazards of other involved materials.
<b>General fire hazards</b>	No unusual fire or explosion hazards noted.

#### 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	Keep unnecessary personnel away. For personal protection, see section 8 of the SDS.
<b>Methods and materials for containment and cleaning up</b>	The product is immiscible with water and will sediment in water systems.  Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. Sweep up or vacuum up spillage and collect in suitable container for disposal. Stop the flow of material, if this is without risk. Following product recovery, flush area with water. For waste disposal, see section 13 of the SDS.
<b>Environmental precautions</b>	Avoid discharge into drains, water courses or onto the ground.

#### 7. Handling and storage

<b>Precautions for safe handling</b>	Avoid prolonged or repeated contact with skin. Use only in well-ventilated areas. For product usage instructions, see the product label.
<b>Conditions for safe storage, including any incompatibilities</b>	Keep away from heat and sources of ignition. Store in a cool, dry place out of direct sunlight. Keep container tightly closed. Store away from incompatible materials (see Section 10 of the SDS).

## 8. Exposure controls/personal protection

### Occupational exposure limits

#### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
calcium carbonate (CAS 471-34-1)	PEL	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
titanium dioxide (CAS 13463-67-7)	PEL	15 mg/m3	Total dust.
white mineral oil (CAS 8042-47-5)	PEL	5 mg/m3	Mist.

#### US. OSHA Table Z-3 (29 CFR 1910.1000)

Components	Type	Value	Form
amorphous fumed silica (CAS 112945-52-5)	TWA	0.8 mg/m3	
		20 mppcf	
amorphous silica (CAS 7631-86-9)	TWA	0.8 mg/m3	
		20 mppcf	
fumed silica (CAS 68611-44-9)	TWA	0.8 mg/m3	
		20 mppcf	
talc (not containing asbestos fibers) (CAS 14807-96-6)	TWA	0.1 mg/m3	Respirable.
		20 mppcf	
titanium dioxide (CAS 13463-67-7)	TWA	2.4 mppcf	Respirable.
		5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
		50 mppcf	Total dust.
		15 mppcf	Respirable fraction.

#### US. ACGIH Threshold Limit Values

Components	Type	Value	Form
talc (not containing asbestos fibers) (CAS 14807-96-6)	TWA	2 mg/m3	Respirable fraction.
titanium dioxide (CAS 13463-67-7)	TWA	10 mg/m3	
white mineral oil (CAS 8042-47-5)	TWA	5 mg/m3	Inhalable fraction.

#### US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
amorphous fumed silica (CAS 112945-52-5)	TWA	6 mg/m3	
amorphous silica (CAS 7631-86-9)	TWA	6 mg/m3	
calcium carbonate (CAS 471-34-1)	TWA	5 mg/m3	Respirable.
		10 mg/m3	Total
talc (not containing asbestos fibers) (CAS 14807-96-6)	TWA	2 mg/m3	Respirable.
white mineral oil (CAS 8042-47-5)	STEL	10 mg/m3	Mist.

**US. NIOSH: Pocket Guide to Chemical Hazards**

Components	Type	Value	Form
	TWA	5 mg/m3	Mist.
<b>Biological limit values</b>	No biological exposure limits noted for the ingredient(s).		
<b>Exposure guidelines</b>	Occupational Exposure Limits are not relevant to the current physical form of the product.		
<b>Appropriate engineering controls</b>	Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower should be available when handling this product.		
<b>Individual protection measures, such as personal protective equipment</b>			
<b>Eye/face protection</b>	Wear safety glasses with side shields (or goggles).		
<b>Skin protection</b>			
<b>Hand protection</b>	Wear protective gloves such as: Nitrile.		
<b>Other</b>	Wear suitable protective clothing.		
<b>Respiratory protection</b>	If engineering controls are not feasible or if exposure exceeds the applicable exposure limits, use a NIOSH-approved cartridge respirator with an organic vapor cartridge. Use a self-contained breathing apparatus in confined spaces and for emergencies. Wear a dust mask if dust is generated above exposure limits. Air monitoring is needed to determine actual employee exposure levels.		
<b>Thermal hazards</b>	Wear appropriate thermal protective clothing, when necessary.		
<b>General hygiene considerations</b>	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.		

**9. Physical and chemical properties**

<b>Appearance</b>	
<b>Physical state</b>	Solid.
<b>Form</b>	Paste.
<b>Color</b>	Off-white.
<b>Odor</b>	Mild.
<b>Odor threshold</b>	Not available.
<b>pH</b>	Not available.
<b>Melting point/freezing point</b>	3110 °F (1710 °C) estimated
<b>Initial boiling point and boiling range</b>	450 °F (232.2 °C) estimated
<b>Flash point</b>	445 °F (229.4 °C) Cleveland Open Cup
<b>Evaporation rate</b>	Slow.
<b>Flammability (solid, gas)</b>	Not available.
<b>Upper/lower flammability or explosive limits</b>	
<b>Flammability limit - lower (%)</b>	Not available.
<b>Flammability limit - upper (%)</b>	Not available.
<b>Vapor pressure</b>	< 0.01 kPa
<b>Vapor density</b>	Not available.
<b>Relative density</b>	1.21
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	Insoluble.
<b>Partition coefficient (n-octanol/water)</b>	Not available.
<b>Auto-ignition temperature</b>	500 °F (260 °C) estimated
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	Not available.



Percent volatile 57 % estimated

## 10. Stability and reactivity

<b>Reactivity</b>	The product is stable and non-reactive under normal conditions of use, storage and transport.
<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	No dangerous reaction known under conditions of normal use.
<b>Conditions to avoid</b>	Heat, flames and sparks. Contact with incompatible materials.
<b>Incompatible materials</b>	Oxidizing material. Acids.
<b>Hazardous decomposition products</b>	Carbon oxides. Metal oxides.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Inhalation</b>	Prolonged inhalation may be harmful.
<b>Skin contact</b>	No adverse effects due to skin contact are expected.
<b>Eye contact</b>	Direct contact with eyes may cause temporary irritation.
<b>Ingestion</b>	Expected to be a low ingestion hazard.

**Symptoms related to the physical, chemical and toxicological characteristics** Direct contact with eyes may cause temporary irritation.

### Information on toxicological effects

**Acute toxicity** Not known.

<b>Product</b>	<b>Species</b>	<b>Test Results</b>
Food Grade Anti-Seize & Lubricating Compound		
<b>Acute</b>		
<b>Oral</b>		
LD50	Rat	197500 mg/kg
<b>Components</b>		
<b>Species</b>		
<b>Test Results</b>		
amorphous fumed silica (CAS 112945-52-5)		
<b>Acute</b>		
<b>Oral</b>		
LD50	Rat	> 5000 mg/kg
amorphous silica (CAS 7631-86-9)		
<b>Acute</b>		
<b>Oral</b>		
LD50	Rat	> 22500 mg/kg
calcium carbonate (CAS 471-34-1)		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rabbit	> 2000 mg/kg
<b>Inhalation</b>		
LC50	Rat	> 3 mg/l
<b>Oral</b>		
LD50	Rat	6450 mg/kg
titanium dioxide (CAS 13463-67-7)		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rabbit	> 10000 mg/kg
<b>Inhalation</b>		
LC50	Rabbit	> 6.8 mg/l, 4 hours

Components	Species	Test Results
<b>Oral</b> LD50 white mineral oil (CAS 8042-47-5)	Rat	> 10000 mg/kg
<b>Acute</b>		
<b>Dermal</b> LD50	Rabbit	> 2000 mg/kg
<b>Inhalation</b> LC50	Rat	> 5 mg/l, 4 hours
<b>Chronic</b>		
<b>Oral</b> LD50	Rat	> 5000 mg/kg
<b>Skin corrosion/irritation</b>	Prolonged skin contact may cause temporary irritation.	
<b>Serious eye damage/eye irritation</b>	Direct contact with eyes may cause temporary irritation.	
<b>Respiratory or skin sensitization</b>		
<b>Respiratory sensitization</b>	Not a respiratory sensitizer.	
<b>Skin sensitization</b>	This product is not expected to cause skin sensitization.	
<b>Germ cell mutagenicity</b>	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.	
<b>Carcinogenicity</b>	Not classifiable as to carcinogenicity to humans.	
<b>IARC Monographs. Overall Evaluation of Carcinogenicity</b>		
amorphous fumed silica (CAS 112945-52-5)	3 Not classifiable as to carcinogenicity to humans.	
amorphous silica (CAS 7631-86-9)	3 Not classifiable as to carcinogenicity to humans.	
white mineral oil (CAS 8042-47-5)	3 Not classifiable as to carcinogenicity to humans.	
<b>OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)</b>		
Not regulated.		
<b>US. National Toxicology Program (NTP) Report on Carcinogens</b>		
Not listed.		
<b>Reproductive toxicity</b>	This product is not expected to cause reproductive or developmental effects.	
<b>Specific target organ toxicity - single exposure</b>	Not classified.	
<b>Specific target organ toxicity - repeated exposure</b>	Not classified.	
<b>Aspiration hazard</b>	Not an aspiration hazard.	
<b>Chronic effects</b>	Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects.	
<b>Further information</b>	This product has no known adverse effect on human health.	

## 12. Ecological information

<b>Ecotoxicity</b>	The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.	
<b>Persistence and degradability</b>	No data is available on the degradability of any ingredients in the mixture.	
<b>Bioaccumulative potential</b>		
<b>Bioconcentration factor (BCF)</b>		
titanium dioxide	352	
<b>Mobility in soil</b>	No data available.	
<b>Other adverse effects</b>	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.	

## 13. Disposal considerations

<b>Disposal instructions</b>	This product is not a RCRA hazardous waste (See 40 CFR Part 261.20 – 261.33). Empty containers may be recycled. Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose in accordance with all applicable regulations.
<b>Hazardous waste code</b>	Not regulated.

**Contaminated packaging**

Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

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**14. Transport information****DOT**

Not regulated as dangerous goods.

**IATA**

Not regulated as dangerous goods.

**IMDG**

Not regulated as dangerous goods.

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**15. Regulatory information****US federal regulations**

This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

Not regulated.

**SARA 304 Emergency release notification**

Not regulated.

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)**

Not regulated.

**CERCLA Hazardous Substance List (40 CFR 302.4)**

Not listed.

**CERCLA Hazardous Substances: Reportable quantity**

Not listed.

Spills or releases resulting in the loss of any ingredient at or above its RQ require immediate notification to the National Response Center (800-424-8802) and to your Local Emergency Planning Committee.

**Other federal regulations****Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Not regulated.

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

Not regulated.

**Safe Drinking Water Act (SDWA)**

Not regulated.

**Food and Drug Administration (FDA)**

Not regulated.

**Superfund Amendments and Reauthorization Act of 1986 (SARA)****SARA 302 Extremely hazardous substance**

Not listed.

**SARA 313 (TRI reporting)**

Not regulated.

**US state regulations****US. New Jersey Worker and Community Right-to-Know Act**

calcium carbonate (CAS 471-34-1)  
talc (not containing asbestos fibers) (CAS 14807-96-6)  
titanium dioxide (CAS 13463-67-7)

**US. Massachusetts RTK - Substance List**

amorphous fumed silica (CAS 112945-52-5)  
amorphous silica (CAS 7631-86-9)  
calcium carbonate (CAS 471-34-1)  
talc (not containing asbestos fibers) (CAS 14807-96-6)  
titanium dioxide (CAS 13463-67-7)  
white mineral oil (CAS 8042-47-5)

**US. Pennsylvania Worker and Community Right-to-Know Law**

amorphous fumed silica (CAS 112945-52-5)  
amorphous silica (CAS 7631-86-9)  
calcium carbonate (CAS 471-34-1)  
talc (not containing asbestos fibers) (CAS 14807-96-6)

titanium dioxide (CAS 13463-67-7)  
white mineral oil (CAS 8042-47-5)

#### US. Rhode Island RTK

calcium carbonate (CAS 471-34-1)  
talc (not containing asbestos fibers) (CAS 14807-96-6)  
titanium dioxide (CAS 13463-67-7)  
white mineral oil (CAS 8042-47-5)

#### California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 2016 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

#### US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

talc (not containing asbestos fibers) (CAS 14807-96-6)  
titanium dioxide (CAS 13463-67-7)

#### Volatile organic compounds (VOC) regulations

##### EPA

**VOC content (40 CFR 51.100(s))** 2.2 %

**Consumer products (40 CFR 59, Subpt. C)** Not regulated

##### State

**Consumer products** This product is regulated as an Anti-seize Lubricant (non-aerosol). This product is compliant for use in all 50 states.

**VOC content (CA)** 2.2 %

**VOC content (OTC)** 2.2 %

#### International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
Taiwan	Taiwan Chemical Substance Inventory (TCSI)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

## 16. Other information, including date of preparation or last revision

**Issue date** 07-21-2015  
**Revision date** 07-06-2018  
**Prepared by** Allison Yoon  
**Version #** 02

**Disclaimer** The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. This information is accurate to the best of CRC's knowledge or obtained from sources believed by CRC to be accurate. Before using any product, read all warnings and directions on the label. For further clarification of any information contained on this (M)SDS consult your supervisor, a health & safety professional, or CRC Industries, Inc..

**Revision information**

This document has undergone significant changes and should be reviewed in its entirety.

**GOJO® ORIGINAL FORMULA™ Hand Cleaner**

Version 1.1

SDS Number: 400000000198

Revision Date: 02/28/2018

**SECTION 1. IDENTIFICATION**

Product name : GOJO® ORIGINAL FORMULA™ Hand Cleaner

**Manufacturer or supplier's details**

Company name of supplier : GOJO Industries, Inc.

Address : One GOJO Plaza, Suite 500  
Akron, Ohio 44311

Telephone : 1 (330) 255-6000

Emergency telephone number : CHEMTREC 1-800-424-9300  
CHEMTREC +1-703-527-3887: Outside USA & CANADA**Recommended use of the chemical and restrictions on use**

Recommended use : Skin-care

Restrictions on use : This is a personal care or cosmetic product that is safe for consumers and other users under normal and reasonably foreseeable use. Cosmetics and consumer products, specifically defined by regulations around the world, are exempt from the requirement of an SDS for the consumer. While this material is not considered hazardous, this SDS contains valuable information critical to the safe handling and proper use of the product for industrial workplace conditions as well as unusual and unintended exposures such as large spills. This SDS should be retained and available for employees and other users of this product. For specific intended-use guidance, please refer to the information provided on the package or instruction sheet.

**SECTION 2. HAZARDS IDENTIFICATION****GHS Classification**

Serious eye damage : Category 1

**GHS label elements**

Hazard pictograms :



Signal word : Danger

Hazard statements : H318 Causes serious eye damage.


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Precautionary statements : **Prevention:**  
P280 Wear eye protection/ face protection.

**Response:**  
P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/ physician.

**Other hazards**

None known.

**SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**
**Hazardous components**

Chemical name	CAS-No.	Concentration (%)
C11-15 Alkane/cycloalkane	64742-47-8	>= 30 - < 50
Mineral Oil (Paraffinum Liquidum)	8042-47-5	>= 10 - < 20
Trideceth-9	24938-91-8	>= 1 - < 5
Propylene Glycol	57-55-6	>= 1 - < 5
Petrolatum	8009-03-8	>= 1 - < 5
Sodium Hydroxymethylglycinate	70161-44-3	>= 0.1 - < 1
Chloroxylonol	88-04-0	>= 0.1 - < 1

**SECTION 4. FIRST AID MEASURES**

General advice : In the case of accident or if you feel unwell, seek medical advice immediately.  
When symptoms persist or in all cases of doubt seek medical advice.

If inhaled : If inhaled, remove to fresh air.  
If symptoms persist, call a physician.

In case of skin contact : Wash with water and soap as a precaution.  
Get medical attention if irritation develops and persists.

In case of eye contact : In case of contact, immediately flush eyes with plenty of water for at least 15 minutes.  
If easy to do, remove contact lens, if worn.  
Seek medical advice.

If swallowed : If swallowed, DO NOT induce vomiting.  
Rinse mouth with water.  
Obtain medical attention.

Most important symptoms and effects, both acute and delayed : Causes serious eye damage.

Protection of first-aiders : First Aid responders should pay attention to self-protection and use the recommended protective clothing


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**SECTION 5. FIREFIGHTING MEASURES**

- Suitable extinguishing media : Water spray  
Alcohol-resistant foam  
Dry chemical  
Carbon dioxide (CO<sub>2</sub>)
- Unsuitable extinguishing media : None known.
- Hazardous combustion products : Carbon oxides
- Specific extinguishing methods : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.  
Use water spray to cool unopened containers.
- Further information : Collect contaminated fire extinguishing water separately. This must not be discharged into drains.  
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
- Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.  
Use personal protective equipment.

**SECTION 6. ACCIDENTAL RELEASE MEASURES**

- Personal precautions, protective equipment and emergency procedures : Use personal protective equipment.  
Ensure adequate ventilation.  
Evacuate personnel to safe areas.  
Keep people away from and upwind of spill/leak.  
Material can create slippery conditions.
- Environmental precautions : Discharge into the environment must be avoided.  
Prevent further leakage or spillage if safe to do so.  
Prevent spreading over a wide area (e.g. by containment or oil barriers).  
Retain and dispose of contaminated wash water.  
Local authorities should be advised if significant spillages cannot be contained.
- Methods and materials for containment and cleaning up : Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).  
Keep in suitable, closed containers for disposal.  
Clean contaminated floors and objects thoroughly while observing environmental regulations.

**SECTION 7. HANDLING AND STORAGE**

- Advice on safe handling : For personal protection see section 8.  
Do not swallow.



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Avoid contact with eyes.  
Keep container closed when not in use.

Conditions for safe storage : Keep in properly labelled containers.  
Keep container tightly closed in a dry and well-ventilated place.  
Store in accordance with the particular national regulations.

**SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**
**Components with workplace control parameters**

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
C11-15 Alkane/cycloalkane	64742-47-8	TWA (Mist)	5 mg/m <sup>3</sup>	OSHA Z-1
		TWA	200 mg/m <sup>3</sup> (as total hydrocarbon vapor)	ACGIH
		TWA (Mist)	5 mg/m <sup>3</sup>	NIOSH REL
		ST (Mist)	10 mg/m <sup>3</sup>	NIOSH REL
Mineral Oil (Paraffinum Liquidum)	8042-47-5	TWA (Mist)	5 mg/m <sup>3</sup>	OSHA Z-1
		TWA (Inhalable fraction)	5 mg/m <sup>3</sup>	ACGIH
		TWA (Mist)	5 mg/m <sup>3</sup>	NIOSH REL
		ST (Mist)	10 mg/m <sup>3</sup>	NIOSH REL
Propylene Glycol	57-55-6	TWA (Mist)	5 mg/m <sup>3</sup>	OSHA P0
		TWA	10 mg/m <sup>3</sup>	US WEEL
Petrolatum	8009-03-8	TWA (Mist)	5 mg/m <sup>3</sup>	OSHA Z-1
		TWA (Inhalable fraction)	5 mg/m <sup>3</sup>	ACGIH
		TWA (Mist)	5 mg/m <sup>3</sup>	NIOSH REL
		ST (Mist)	10 mg/m <sup>3</sup>	NIOSH REL
		TWA (Mist)	5 mg/m <sup>3</sup>	OSHA P0

**Personal protective equipment**

Respiratory protection : No personal respiratory protective equipment normally required.

Hand protection  
Remarks : No special protective equipment required.

Eye protection : Wear face-shield and protective suit for abnormal processing problems.

Skin and body protection : No special measures necessary provided product is used correctly.

Protective measures : Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to


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the specific work-place.  
Ensure that eye flushing systems and safety showers are located close to the working place.

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice.  
Avoid contact with eyes.

**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

Appearance : liquid

Colour : opaque, white, yellow

Odour : solvent-like

pH : 9.0, (20 °C)

Melting point/freezing point : No data available

Initial boiling point and boiling range : 98 °C

Flash point : > 100 °C

Evaporation rate : No data available

Flammability (solid, gas) : Not applicable

Flammability (liquids) : No data available

Upper explosion limit : No data available

Lower explosion limit : No data available

Vapour pressure : No data available

Relative vapour density : No data available

Density : 0.883 g/cm<sup>3</sup>

Solubility(ies)  
Water solubility : soluble

Partition coefficient: n-octanol/water : Not applicable

Auto-ignition temperature : No data available

Thermal decomposition : The substance or mixture is not classified self-reactive.

Viscosity  
Viscosity, kinematic : > 100000 mm<sup>2</sup>/s (20 °C)


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Explosive properties : Not explosive

Oxidizing properties : The substance or mixture is not classified as oxidizing.

**SECTION 10. STABILITY AND REACTIVITY**

Reactivity : Not classified as a reactivity hazard.

Chemical stability : Stable under normal conditions.

Conditions to avoid : No data available

Incompatible materials : Strong oxidizing agents

Hazardous decomposition products : No hazardous decomposition products are known.

**SECTION 11. TOXICOLOGICAL INFORMATION**
**Information on likely routes of exposure**

Inhalation  
 Eye contact  
 Skin contact

**Acute toxicity**

Not classified based on available information.

**Product:**

Acute oral toxicity : Acute toxicity estimate : > 5,000 mg/kg  
 Method: Calculation method

**Components:**
**C11-15 Alkane/cycloalkane:**

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg

Acute inhalation toxicity : LC50 (Rat): > 5.3 mg/l  
 Exposure time: 4 h  
 Test atmosphere: dust/mist  
 Assessment: The substance or mixture has no acute inhalation toxicity  
 Remarks: Based on data from similar materials

Acute dermal toxicity : LD50 (Rabbit): > 3,160 mg/kg  
 Assessment: The substance or mixture has no acute dermal toxicity

**Mineral Oil (Paraffinum Liquidum):**

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg

Acute inhalation toxicity : LC50 (Rat): > 5 mg/l  
 Exposure time: 4 h  
 Test atmosphere: dust/mist  
 Assessment: The substance or mixture has no acute inhalation toxicity


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Acute dermal toxicity : LD50 (Rabbit): > 2,000 mg/kg  
 Assessment: The substance or mixture has no acute dermal toxicity

**Trideceth-9:**

Acute oral toxicity : LD50 (Rat): > 500 - < 2,000 mg/kg

**Propylene Glycol:**

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg

Acute inhalation toxicity : LC50 (Rabbit): > 159 mg/l, > 51091 ppm  
 Exposure time: 4 h  
 Test atmosphere: dust/mist  
 Assessment: The substance or mixture has no acute inhalation toxicity

Acute dermal toxicity : LD50 (Rabbit): > 2,000 mg/kg  
 Assessment: The substance or mixture has no acute dermal toxicity

**Petrolatum:**

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg  
 Method: OECD Test Guideline 401  
 Remarks: Based on data from similar materials

Acute dermal toxicity : LD50 (Rat): > 2,000 mg/kg  
 Method: OECD Test Guideline 402  
 Assessment: The substance or mixture has no acute dermal toxicity  
 Remarks: Based on data from similar materials

**Sodium Hydroxymethylglycinate:**

Acute oral toxicity : LD50 (Rat): 1,050 mg/kg

**Chloroxylenol:**

Acute oral toxicity : Acute toxicity estimate : 500 mg/kg  
 Method: Expert judgement  
 Remarks: Based on harmonised classification in EU regulation 1272/2008, Annex VI

Acute inhalation toxicity : LC50 (Rat): > 6.29 mg/l  
 Test atmosphere: dust/mist

Acute dermal toxicity : LD50 (Rat): > 2,000 mg/kg

**Skin corrosion/irritation**

Not classified based on available information.

**Components:****C11-15 Alkane/cycloalkane:**

Assessment: Repeated exposure may cause skin dryness or cracking.

**Mineral Oil (Paraffinum Liquidum):**

Species: Rabbit

Result: No skin irritation

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**Trideceth-9:**

Species: Rabbit

Result: No skin irritation

**Propylene Glycol:**

Species: Rabbit

Method: OECD Test Guideline 404

Result: No skin irritation

**Petrolatum:**

Species: Rabbit

Method: OECD Test Guideline 404

Result: No skin irritation

Remarks: Based on data from similar materials

**Sodium Hydroxymethylglycinate:**

Species: Rabbit

Result: Skin irritation

**Chloroxylonol:**

Result: Skin irritation

Remarks: Based on harmonised classification in EU regulation 1272/2008, Annex VI

**Serious eye damage/eye irritation**

Causes serious eye damage.

**Components:****C11-15 Alkane/cycloalkane:**

Species: Rabbit

Result: No eye irritation

**Mineral Oil (Paraffinum Liquidum):**

Species: Rabbit

Result: No eye irritation

**Trideceth-9:**

Species: Rabbit

Result: Irreversible effects on the eye

**Propylene Glycol:**

Species: Rabbit

Result: No eye irritation

Method: OECD Test Guideline 405

**Petrolatum:**

Species: Rabbit

Result: No eye irritation

Method: OECD Test Guideline 405

Remarks: Based on data from similar materials

**Sodium Hydroxymethylglycinate:**

Species: Rabbit

Result: Irritation to eyes, reversing within 21 days

**Chloroxylonol:**

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Result: Irreversible effects on the eye

**Respiratory or skin sensitisation**

Skin sensitisation: Not classified based on available information.

Respiratory sensitisation: Not classified based on available information.

**Product:**

Result: Does not cause skin sensitisation.

Remarks: Patch test on human volunteers did not demonstrate sensitisation properties.

**Components:****C11-15 Alkane/cycloalkane:**

Test Type: Maximisation Test (GPMT)

Exposure routes: Skin contact

Species: Guinea pig

Result: negative

Remarks: Based on data from similar materials

**Mineral Oil (Paraffinum Liquidum):**

Test Type: Buehler Test

Exposure routes: Skin contact

Species: Guinea pig

Result: negative

**Propylene Glycol:**

Test Type: Maximisation Test (GPMT)

Exposure routes: Skin contact

Species: Guinea pig

Result: negative

**Petrolatum:**

Test Type: Buehler Test

Exposure routes: Skin contact

Species: Guinea pig

Result: negative

Remarks: Based on data from similar materials

**Sodium Hydroxymethylglycinate:**

Test Type: Maximisation Test (GPMT)

Exposure routes: Skin contact

Species: Guinea pig

Result: positive

Assessment: Probability or evidence of skin sensitisation in humans

**Chloroxylenol:**

Assessment: Probability or evidence of skin sensitisation in humans

Remarks: Based on harmonised classification in EU regulation 1272/2008, Annex VI

**Germ cell mutagenicity**

Not classified based on available information.

**Components:****C11-15 Alkane/cycloalkane:**

Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)


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Result: negative

Genotoxicity in vivo : Test Type: Chromosomal aberration  
 Test species: Rat  
 Application Route: Intraperitoneal injection  
 Result: negative  
 Remarks: Based on data from similar materials

**Mineral Oil (Paraffinum Liquidum):**

Genotoxicity in vitro : Test Type: In vitro mammalian cell gene mutation test  
 Result: negative

Genotoxicity in vivo : Test Type: Mammalian erythrocyte micronucleus test (in vivo cytogenetic assay)  
 Test species: Mouse  
 Application Route: Intraperitoneal injection  
 Method: OECD Test Guideline 474  
 Result: negative  
 Remarks: Based on data from similar materials

**Propylene Glycol:**

Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)  
 Result: negative

Genotoxicity in vivo : Test Type: In vivo micronucleus test  
 Test species: Mouse  
 Application Route: Intraperitoneal injection  
 Result: negative

**Petrolatum:**

Genotoxicity in vitro : Test Type: Chromosome aberration test in vitro  
 Result: negative  
 Remarks: Based on data from similar materials

Genotoxicity in vivo : Test Type: Mammalian erythrocyte micronucleus test (in vivo cytogenetic assay)  
 Test species: Mouse  
 Application Route: Intraperitoneal injection  
 Method: OECD Test Guideline 474  
 Result: negative  
 Remarks: Based on data from similar materials

**Sodium Hydroxymethylglycinate:**

Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)  
 Result: negative

Genotoxicity in vivo : Test Type: Unscheduled DNA synthesis (UDS) test with mammalian liver cells in vivo  
 Test species: Rat  
 Result: negative

**Chloroxylenol:**

Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)  
 Result: negative

**Carcinogenicity**

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Not classified based on available information.

**Components:****Mineral Oil (Paraffinum Liquidum):**

Species: Rat

Application Route: Ingestion

Exposure time: 24 Months

Result: negative

**Propylene Glycol:**

Species: Rat

Application Route: Ingestion

Exposure time: 2 Years

Result: negative

**Petrolatum:**

Species: Rat

Application Route: Ingestion

Exposure time: 2 Years

Result: negative

**IARC**

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

**OSHA**

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**NTP**

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

**Reproductive toxicity**

Not classified based on available information.

**Components:****C11-15 Alkane/cycloalkane:**

Effects on fertility : Test Type: One-generation reproduction toxicity study  
Species: Rat  
Application Route: Ingestion  
Result: negative  
Remarks: Based on data from similar materials

Effects on foetal development : Test Type: Embryo-foetal development  
Species: Rat  
Application Route: Ingestion  
Result: negative

**Mineral Oil (Paraffinum Liquidum):**

Effects on fertility : Test Type: One-generation reproduction toxicity study  
Species: Rat  
Application Route: Skin contact  
Result: negative




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Effects on foetal development : Test Type: Embryo-foetal development  
Species: Rat  
Application Route: Ingestion  
Result: negative

**Propylene Glycol:**

Effects on fertility : Species: Mouse  
Application Route: Ingestion  
Result: negative

Effects on foetal development : Test Type: Embryo-foetal development  
Species: Mouse  
Application Route: Ingestion  
Result: negative

**Petrolatum:**

Effects on fertility : Test Type: Reproduction/Developmental toxicity screening test  
Species: Rat  
Application Route: Ingestion  
Result: negative  
Remarks: Based on data from similar materials

Effects on foetal development : Test Type: Embryo-foetal development  
Species: Rat  
Application Route: Skin contact  
Result: negative  
Remarks: Based on data from similar materials

**Sodium Hydroxymethylglycinate:**

Effects on foetal development : Species: Rat  
Application Route: Ingestion  
Result: negative

**STOT - single exposure**

Not classified based on available information.

**STOT - repeated exposure**

Not classified based on available information.

**Repeated dose toxicity****Components:****C11-15 Alkane/cycloalkane:**

Species: Rat  
NOAEL: > 10.4 mg/l  
Application Route: inhalation (vapour)  
Exposure time: 90 d  
Remarks: Based on data from similar materials

**Mineral Oil (Paraffinum Liquidum):**

Species: Rat  
LOAEL: 160 mg/kg  
Application Route: Ingestion  
Exposure time: 90 d


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Species: Rat  
 LOAEL:  $\geq$  1 mg/l  
 Application Route: inhalation (dust/mist/fume)  
 Exposure time: 4 w  
 Method: OECD Test Guideline 412

**Propylene Glycol:**

Species: Rat  
 NOAEL: 1,700 mg/kg  
 Application Route: Ingestion  
 Exposure time: 2 y

**Petrolatum:**

Species: Rat  
 NOAEL: 5,000 mg/kg  
 Application Route: Ingestion  
 Exposure time: 2 y

**Chloroxylenol:**

Species: Rabbit  
 LOAEL: 180 mg/kg  
 Application Route: Skin contact  
 Exposure time: 90 d

**Aspiration toxicity**

Not classified based on available information.

**Components:**
**C11-15 Alkane/cycloalkane:**

The substance or mixture is known to cause human aspiration toxicity hazards or has to be regarded as if it causes a human aspiration toxicity hazard.

**Mineral Oil (Paraffinum Liquidum):**

The substance or mixture is known to cause human aspiration toxicity hazards or has to be regarded as if it causes a human aspiration toxicity hazard.

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**SECTION 12. ECOLOGICAL INFORMATION**
**Ecotoxicity**
**Components:**
**C11-15 Alkane/cycloalkane:**

Toxicity to fish	: LL50 (Danio rerio (zebra fish)): > 250 mg/l Exposure time: 96 h Test substance: Water Accommodated Fraction Method: OECD Test Guideline 203
Toxicity to daphnia and other aquatic invertebrates	: EL50 (Acartia tonsa): > 3,193 mg/l Exposure time: 48 h Test substance: Water Accommodated Fraction
Toxicity to algae	: EL50 (Skeletonema costatum (marine diatom)): > 3,200 mg/l Exposure time: 72 h Test substance: Water Accommodated Fraction


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- NOELR (*Skeletonema costatum* (marine diatom)): 993 mg/l  
 Exposure time: 72 h  
 Test substance: Water Accommodated Fraction
- Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOELR (*Ceriodaphnia Dubia* (water flea)): > 70 mg/l  
 Exposure time: 8 d  
 Test substance: Water Accommodated Fraction
- Toxicity to bacteria : EC50: > 100 mg/l  
 Exposure time: 3 h

**Mineral Oil (Paraffinum Liquidum):**

- Toxicity to fish : LC50 (*Oncorhynchus mykiss* (rainbow trout)): > 100 mg/l  
 Exposure time: 96 h  
 Method: OECD Test Guideline 203
- Toxicity to daphnia and other aquatic invertebrates : EC50 (*Daphnia magna* (Water flea)): > 100 mg/l  
 Exposure time: 48 h  
 Method: OECD Test Guideline 202
- Toxicity to algae : NOEC (*Pseudokirchneriella subcapitata* (green algae)): 100 mg/l  
 Exposure time: 72 h  
 Method: OECD Test Guideline 201
- Toxicity to fish (Chronic toxicity) : NOEC (*Oncorhynchus mykiss* (rainbow trout)): 1,000 mg/l  
 Exposure time: 28 d
- Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (*Daphnia magna* (Water flea)): 1,000 mg/l  
 Exposure time: 21 d

**Trideceth-9:**

- Toxicity to fish : LC50 (*Leuciscus idus* (Golden orfe)): > 1 - 10 mg/l  
 Exposure time: 96 h
- Toxicity to daphnia and other aquatic invertebrates : EC50: > 1 - 10 mg/l  
 Exposure time: 48 h
- Toxicity to algae : EC50: > 1 - 10 mg/l  
 Exposure time: 72 h

**Propylene Glycol:**

- Toxicity to fish : LC50 (*Oncorhynchus mykiss* (rainbow trout)): 40,613 mg/l  
 Exposure time: 96 h
- Toxicity to daphnia and other aquatic invertebrates : EC50 (*Ceriodaphnia Dubia* (water flea)): 18,340 mg/l  
 Exposure time: 48 h
- Toxicity to algae : EC50 (*Skeletonema costatum* (marine diatom)): 19,000 mg/l  
 Exposure time: 48 h  
 Method: OECD Test Guideline 201
- Toxicity to fish (Chronic toxicity) : Chronic Toxicity Value: 2,500 mg/l  
 Exposure time: 30 d


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Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Ceriodaphnia Dubia (water flea)): 29,000 mg/l  
Exposure time: 7 d

Toxicity to bacteria : NOEC (Pseudomonas putida): > 20,000 mg/l  
Exposure time: 18 h

**Petrolatum:**

Toxicity to fish : LL50 (Pimephales promelas (fathead minnow)): > 100 mg/l  
Exposure time: 96 h  
Test substance: Water Accommodated Fraction  
Method: OECD Test Guideline 203  
Remarks: Based on data from similar materials

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 10,000 mg/l  
Exposure time: 48 h  
Test substance: Water Accommodated Fraction  
Remarks: Based on data from similar materials

Toxicity to algae : NOEL (Pseudokirchneriella subcapitata (green algae)): >= 100 mg/l  
Exposure time: 72 h  
Test substance: Water Accommodated Fraction  
Method: OECD Test Guideline 201  
Remarks: Based on data from similar materials

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Daphnia magna (Water flea)): 10 mg/l  
Exposure time: 21 d  
Test substance: Water Accommodated Fraction  
Remarks: Based on data from similar materials

**Sodium Hydroxymethylglycinate:**

Toxicity to fish : LC50: > 10 - 100 mg/l  
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia pulex (Water flea)): > 10 - 100 mg/l  
Exposure time: 48 h

Toxicity to algae : ErC50 (Desmodesmus subspicatus (Scenedesmus subspicatus)): > 10 - 100 mg/l  
Exposure time: 72 h

Toxicity to bacteria : EC50: > 100 mg/l  
Exposure time: 120 h

**Chloroxylonol:**

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 0.76 mg/l  
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 7.7 mg/l  
Exposure time: 48 h

M-Factor (Acute aquatic toxicity) : 1

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**Persistence and degradability****Components:****C11-15 Alkane/cycloalkane:**

Biodegradability : Result: Readily biodegradable.  
Biodegradation: 82 %  
Exposure time: 24 d  
Method: OECD Test Guideline 301F

**Mineral Oil (Paraffinum Liquidum):**

Biodegradability : Result: Not readily biodegradable.  
Biodegradation: 31 %  
Exposure time: 28 d

**Trideceth-9:**

Biodegradability : Result: Readily biodegradable.  
Biodegradation: > 60 %  
Exposure time: 28 d

**Propylene Glycol:**

Biodegradability : Result: Readily biodegradable.  
Biodegradation: 98.3 %  
Exposure time: 28 d  
Method: OECD Test Guideline 301F

**Petrolatum:**

Biodegradability : Result: Not readily biodegradable.  
Biodegradation: 31 %  
Exposure time: 28 d  
Method: OECD Test Guideline 301F  
Remarks: Based on data from similar materials

**Sodium Hydroxymethylglycinate:**

Biodegradability : Result: Readily biodegradable.

**Bioaccumulative potential****Components:****Propylene Glycol:**

Partition coefficient: n-octanol/water : log Pow: -1.07

**Sodium Hydroxymethylglycinate:**

Partition coefficient: n-octanol/water : log Pow: < 3

**Chloroxylonol:**

Partition coefficient: n-octanol/water : log Pow: 3.27

**Mobility in soil**

No data available

**Other adverse effects**

No data available


**GOJO® ORIGINAL FORMULA™ Hand Cleaner**

Version 1.1

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**Product:**

Regulation 40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone - CAA Section 602 Class I Substances

Remarks This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

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**SECTION 13. DISPOSAL CONSIDERATIONS**
**Disposal methods**

Waste from residues : Dispose of in accordance with local regulations.

Contaminated packaging : Dispose of as unused product.  
Empty containers should be taken to an approved waste handling site for recycling or disposal.

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**SECTION 14. TRANSPORT INFORMATION**
**International Regulation****IATA-DGR**

Not regulated as a dangerous good

**IMDG-Code**

Not regulated as a dangerous good

**National Regulations****49 CFR**

Not regulated as a dangerous good

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**SECTION 15. REGULATORY INFORMATION**
**EPCRA - Emergency Planning and Community Right-to-Know Act****CERCLA Reportable Quantity**

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
Sodium Hydroxide	1310-73-2	1000	*

\*: Calculated RQ exceeds reasonably attainable upper limit.

**SARA 304 Extremely Hazardous Substances Reportable Quantity**

This material does not contain any components with a section 304 EHS RQ.

**SARA 311/312 Hazards** : Acute Health Hazard

**SARA 302** : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.


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**SARA 313** : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**Clean Air Act**

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 12 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

The following chemical(s) are listed under the U.S. Clean Air Act Section 111 SOCM I Intermediate or Final VOC's (40 CFR 60.489):

Propylene Glycol	57-55-6	1.7691 %
------------------	---------	----------

This product does not contain any VOC exemptions listed under the U.S. Clean Air Act Section 450.

**Clean Water Act**

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

**US State Regulations**
**Massachusetts Right To Know**

C11-15 Alkane/cycloalkane	64742-47-8	30 - 50 %
Mineral Oil (Paraffinum Liquidum)	8042-47-5	10 - 20 %
Petrolatum	8009-03-8	1 - 5 %
Sodium Hydroxymethylglycinate	70161-44-3	0.1 - 1 %

**Pennsylvania Right To Know**

C11-15 Alkane/cycloalkane	64742-47-8	30 - 50 %
Water (Aqua)	7732-18-5	30 - 50 %
Mineral Oil (Paraffinum Liquidum)	8042-47-5	10 - 20 %
Oleic Acid	112-80-1	5 - 10 %
Trideceth-9	24938-91-8	1 - 5 %
Propylene Glycol	57-55-6	1 - 5 %
Petrolatum	8009-03-8	1 - 5 %
Sodium Hydroxide	1310-73-2	0.1 - 1 %
Sodium Hydroxymethylglycinate	70161-44-3	0.1 - 1 %

**New Jersey Right To Know**

C11-15 Alkane/cycloalkane	64742-47-8	30 - 50 %
Water (Aqua)	7732-18-5	30 - 50 %
Mineral Oil (Paraffinum Liquidum)	8042-47-5	10 - 20 %
Oleic Acid	112-80-1	5 - 10 %
Trideceth-9	24938-91-8	1 - 5 %
Propylene Glycol	57-55-6	1 - 5 %
Sodium Hydroxymethylglycinate	70161-44-3	0.1 - 1 %

**California Prop 65**

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

**The components of this product are reported in the following inventories:**

TSCA : On TSCA Inventory

**GOJO® ORIGINAL FORMULA™ Hand Cleaner**

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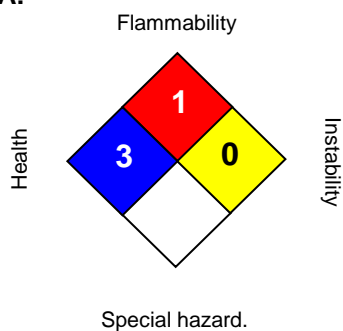
SDS Number: 400000000198

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AICS	: On the inventory, or in compliance with the inventory
DSL	: On the inventory, or in compliance with the inventory
ENCS	: On the inventory, or in compliance with the inventory
ISHL	: On the inventory, or in compliance with the inventory
KECI	: On the inventory, or in compliance with the inventory
PICCS	: On the inventory, or in compliance with the inventory
IECSC	: On the inventory, or in compliance with the inventory
NZIoC	: On the inventory, or in compliance with the inventory

**Inventories**

AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TCSI (Taiwan), TSCA (USA)

**SECTION 16. OTHER INFORMATION**
**Further information**
**NFPA:**

**HMIS III:**

<b>HEALTH</b>	<b>3</b>
<b>FLAMMABILITY</b>	<b>1</b>
<b>PHYSICAL HAZARD</b>	<b>0</b>

0 = not significant, 1 =Slight,  
2 = Moderate, 3 = High  
4 = Extreme, \* = Chronic

Revision Date : 02/28/2018

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.



### 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

#### GHS product identifier

**Product Name** Haynes Lubri-Film

#### Other means of identification

**Product Code(s)** HLF

**Synonyms** Petroleum lubricant

#### Recommended use of the chemical and restrictions on use

**Recommended Use** Lubricating grease for food processing equipment

**Uses advised against** No information available

#### Supplier's details

##### **Supplier Address**

Haynes Mfg Co  
24142 Detroit Road  
Westlake, OH 44145  
TEL: 440-871-2188

#### Emergency telephone number

**Emergency Telephone Number** 440-871-2188 x195  
800-992-2166

### 2. HAZARDS IDENTIFICATION

#### Classification

This chemical is not considered hazardous according to the OSHA Hazard Communication Standard 2012 (29 CFR 1910.1200).

Not classified

#### GHS Label elements, including precautionary statements

#### Emergency Overview

**Signal Word**

None

The product contains no substances which at their given concentration are considered to be hazardous to health

**Appearance** Transparent grease.

**Physical State** Solid (compressed),  
Grease.

**Odor** Odorless.

#### **Precautionary Statements**

##### **Prevention**

- None

**General Advice**

- None

**Storage**

- None

**Disposal**

- None

**Hazard Not Otherwise Classified (HNOC)**

Not applicable.

**Other information**

May cause skin irritation.

7% of the mixture consists of ingredient(s) of unknown toxicity.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Synonyms**

Petroleum lubricant

Chemical Name	CAS-No	Weight %	Trade secret
White mineral oil	8042-47-5	60-100	*

*\*The exact percentage (concentration) of composition has been withheld as a trade secret.*

### 4. FIRST AID MEASURES

**Description of necessary first-aid measures**

<b>Eye Contact</b>	Rinse thoroughly with plenty of water, also under the eyelids. If material is hot, treat for thermal burns and seek immediate medical attention.
<b>Skin Contact</b>	Wash off with warm water and soap. If material is hot and thermal burns are sustained, submerge injured area in cold water. Do not apply ice to injured area. If burns are severe and/or cover a large area of skin, seek immediate medical attention.
<b>Inhalation</b>	Not an expected route of exposure. Clear passages and remove to fresh air.
<b>Ingestion</b>	Clean mouth with water and afterwards drink plenty of water. Call a POISON CENTER or doctor/physician if exposed or you feel unwell.

**Most important symptoms/effects, acute and delayed**

**Most Important Symptoms/Effects** No information available.

**Indication of immediate medical attention and special treatment needed, if necessary**

**Notes to Physician** Treat symptomatically.

### 5. FIRE-FIGHTING MEASURES

**Suitable Extinguishing Media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable Extinguishing Media** No information available.

**Specific Hazards Arising from the Chemical**

No information available.

**Explosion Data**

<b>Sensitivity to Mechanical Impact</b>	None.
<b>Sensitivity to Static Discharge</b>	None.

**Protective Equipment and Precautions for Firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures**

**Personal Precautions** Avoid contact with eyes. Ensure adequate ventilation. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).

**Other Information** Material can create slippery conditions.

**Environmental Precautions**

**Environmental Precautions** Prevent further leakage or spillage if safe to do so. Prevent entry into waterways, sewers, basements or confined areas.

**Methods and materials for containment and cleaning up**

**Methods for Containment** Prevent further leakage or spillage if safe to do so.

**Methods for Cleaning Up** Pick up and transfer to properly labeled containers.

## 7. HANDLING AND STORAGE

**Precautions for safe handling**

**Handling** Handle in accordance with good industrial hygiene and safety practice. Refer to Section 8. Keep away from open flames, hot surfaces and sources of ignition. Ensure adequate ventilation. If spilled, take caution, as material can cause surfaces to become very slippery.

**Conditions for safe storage, including any incompatibilities**

**Storage** Keep containers tightly closed in a dry, cool and well-ventilated place.

**Incompatible Products** None known based on information supplied.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Control parameters****Exposure Guidelines**

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
White mineral oil 8042-47-5	TWA: 5 mg/m <sup>3</sup> inhalable particulate matter excluding metal working fluids, highly & severely refined	TWA: 5 mg/m <sup>3</sup> (vacated) TWA: 5 mg/m <sup>3</sup>	IDLH: 2500 mg/m <sup>3</sup> TWA: 5 mg/m <sup>3</sup> STEL: 10 mg/m <sup>3</sup>

*OSHA PEL: Occupational Safety and Health Administration - Permissible Exposure Limits.*

**Other Exposure Guidelines** Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

**Appropriate engineering controls**

**Engineering Measures** Showers  
Eyewash stations  
Ventilation systems

**Individual protection measures, such as personal protective equipment**

<b>Eye/Face Protection</b>	No special protective equipment required.
<b>Skin and Body Protection</b>	No special protective equipment required.
<b>Respiratory Protection</b>	If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.
<b>Hygiene Measures</b>	Handle in accordance with good industrial hygiene and safety practice.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

<b>Physical State</b>	Solid (compressed), Grease.	<b>Appearance</b>	Transparent grease.
<b>Odor</b>	Odorless.	<b>Odor Threshold</b>	No information available.

<u>Property</u>	<u>Values</u>	<u>Remarks/ - Method</u>
<b>pH</b>	No data available	None known
<b>Melting Point/Range</b>	93 °C / 200 °F	None known
<b>Boiling Point/Boiling Range</b>	No data available	None known
<b>Flash Point</b>	> 148 °C / > 300 °F	None known
<b>Evaporation rate</b>	No data available	None known
<b>Flammability (solid, gas)</b>	No data available	None known
<b>Flammability Limits in Air</b>		
upper flammability limit	No data available	
lower flammability limit	No data available	
<b>Vapor Pressure</b>	No data available	None known
<b>Vapor Density</b>	No data available	None known
<b>Specific Gravity</b>	<1	None known
<b>Water Solubility</b>	Negligible	None known
<b>Solubility in other solvents</b>	No data available	None known
<b>Partition coefficient: n-octanol/water</b>	No data available	None known
<b>Autoignition Temperature</b>	No data available	None known
<b>Decomposition Temperature</b>	No data available	None known
<b>Viscosity</b>	No data available	None known

<b>Flammable Properties</b>	Not flammable
<b>Explosive Properties</b>	No data available
<b>Oxidizing Properties</b>	No data available

### Other information

<b>VOC Content (%)</b>	No data available
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## 10. STABILITY AND REACTIVITY

### Reactivity

No data available.

### Chemical stability

Stable under recommended storage conditions.

### Possibility of hazardous reactions

None under normal processing.

### Hazardous Polymerization

Hazardous polymerization does not occur.

**Conditions to avoid**

Ignitions sources - heat, sparks and open flames.

**Incompatible materials**

None known based on information supplied.

**Hazardous decomposition products**

Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>). Hazardous decomposition products due to incomplete combustion.

## 11. TOXICOLOGICAL INFORMATION

**Information on likely routes of exposure**

<b>Product Information</b>	There is no data available for this product
<b>Inhalation</b>	Inhalation of aerosols: May cause irritation of respiratory tract.
<b>Eye Contact</b>	May cause slight irritation.
<b>Skin Contact</b>	Substance may cause slight skin irritation.
<b>Ingestion</b>	Potential for aspiration if swallowed. May cause gastrointestinal discomfort if consumed in large amounts.

<b>Component Information</b>	No information available.
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**Symptoms related to the physical, chemical and toxicological characteristics**

<b>Symptoms</b>	No information available.
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**Delayed and immediate effects and also chronic effects from short and long term exposure**

<b>Sensitization</b>	No information available.
<b>Mutagenic Effects</b>	No information available.
<b>Carcinogenicity</b>	The table below indicates whether each agency has listed any ingredient as a carcinogen. Mineral oils are known to cause cancer because of carcinogenic components (e.g. benzene). The mineral oil in this product is highly refined and should not be considered a carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA
White mineral oil	A2			

**ACGIH: (American Conference of Governmental Industrial Hygienists)**

A2 - Suspected Human Carcinogen

<b>Reproductive Toxicity</b>	No information available.
<b>STOT - single exposure</b>	No information available.
<b>STOT - repeated exposure</b>	No information available.
<b>Aspiration Hazard</b>	May be harmful if swallowed and enters airways.

**Numerical measures of toxicity - Product**

**Unknown acute toxicity** 7% of the mixture consists of ingredient(s) of unknown toxicity.  
*The following values are calculated based on chapter 3.1 of the GHS document:* Not classified

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity**

The environmental impact of this product has not been fully investigated. May cause long lasting harmful effects to aquatic life.

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
White mineral oil		LC50 96 h: > 10000 mg/L		

8042-47-5		(Lepomis macrochirus)	
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**Persistence and Degradability** No information available.

**Bioaccumulation** Bioaccumulative potential.

Chemical Name	Log Pow
White mineral oil	>6

**Other Adverse Effects**  
No information available.

### 13. DISPOSAL CONSIDERATIONS

**Waste Disposal Methods** This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local regulations for additional requirements.

**Contaminated Packaging** Do not re-use empty containers.

### 14. TRANSPORT INFORMATION

**DOT** Not regulated

### 15. REGULATORY INFORMATION

**International Inventories**

**TSCA** Complies  
**DSL** All components are listed either on the DSL or NDSL.

**Legend**

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory  
**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

**U.S. Federal Regulations**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

**SARA 311/312 Hazard Categories**

<b>Acute Health Hazard</b>	No
<b>Chronic Health Hazard</b>	No
<b>Fire Hazard</b>	No
<b>Sudden Release of Pressure Hazard</b>	No
<b>Reactive Hazard</b>	No

**Clean Water Act**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

**CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and

Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

### U.S. State Regulations

#### California Proposition 65

This product does not contain any Proposition 65 chemicals.

### U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania	Illinois	Rhode Island
White mineral oil	X	X	X		X

### U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. OTHER INFORMATION				
<u>NFPA</u>	Health Hazard 0	Flammability 1	Instability 0	Physical and Chemical Hazards -
<u>HMIS</u>	Health Hazard 0	Flammability 1	Physical Hazard 0	Personal Protection X

Issuing Date 21-Feb-2014  
 Revision Date 13-Mar-2017  
 Revision Note Not applicable.

#### General Disclaimer

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

**End of Safety Data Sheet**

# SAFETY DATA SHEET

## BG In-Force (Aerosol)



### 1. Product and company identification

**Manufacturer** : BG Products Inc.  
701 S. Wichita Street  
Wichita, KS, 67213, USA  
www.bgprod.com

#### Relevant identified uses of the substance or mixture and uses advised against

##### Identified uses

Lubricants and additives

**MSDS #** : 438  
**Validation date** : 2/7/2013.  
**Responsible name** : Kolin Anglin, Environmental Coordinator  
316-265-2686  
msds@bgprod.com  
**In case of emergency** : (800) 424-9300 (CHEMTREC)

### 2. Hazards identification

**OSHA/HCS status** : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

**Classification of the substance or mixture** : FLAMMABLE AEROSOLS - Category 2

Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 30%

#### GHS label elements

##### Hazard pictograms



**Signal word** : Warning  
**Hazard statements** : Flammable aerosol.

#### Precautionary statements

**Prevention** : Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Do not spray on an open flame or other ignition source. Do not pierce or burn, even after use.  
**Response** : Not applicable.  
**Storage** : Protect from sunlight and do not expose to temperatures exceeding 50 °C/122 °F.  
**Disposal** : Not applicable.

**Hazards not otherwise classified** : None known.

### 3. Composition/information on ingredients

**Substance/mixture** : Mixture  
**Other means of identification** : Not available.

#### CAS number/other identifiers

**CAS number** : Not applicable.  
**Product code** : 438



### 3. Composition/information on ingredients

Ingredient name	%	CAS number
Kerosine (petroleum)	15 - 40	8008-20-6
ethyl acetate	1 - 5	141-78-6
Distillates (petroleum), hydrotreated heavy naphthenic	1 - 5	64742-52-5

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

**There are no ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.**

Occupational exposure limits, if available, are listed in Section 8.

### 4. First aid measures

#### Description of necessary first aid measures

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention if irritation occurs.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

#### Most important symptoms/effects, acute and delayed

##### Potential acute health effects

- Eye contact** : No known significant effects or critical hazards.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : No known significant effects or critical hazards.
- Ingestion** : No known significant effects or critical hazards.

##### Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:  
irritation  
redness
- Inhalation** : Adverse symptoms may include the following:  
respiratory tract irritation  
coughing
- Skin contact** : No specific data.
- Ingestion** : No specific data.

#### Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

## 4. First aid measures

- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

## 5. Fire-fighting measures

### Extinguishing media

- Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.
- Unsuitable extinguishing media** : None known.
- Specific hazards arising from the chemical** : Flammable aerosol. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Gas may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back, causing fire or explosion. Bursting aerosol containers may be propelled from a fire at high speed. Runoff to sewer may create fire or explosion hazard.
- Hazardous thermal decomposition products** : Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide
- Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. In the case of aerosols being ruptured, care should be taken due to the rapid escape of the pressurized contents and propellant. If a large number of containers are ruptured, treat as a bulk material spillage according to the instructions in the clean-up section. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

### Methods and materials for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

## 6. Accidental release measures

- Large spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

## 7. Handling and storage

### Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use. Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing gas. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Empty containers retain product residue and can be hazardous.

- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

- Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations. Store away from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Eliminate all ignition sources. Use appropriate containment to avoid environmental contamination.

## 8. Exposure controls/personal protection

### Control parameters

#### Occupational exposure limits

Ingredient name	Exposure limits
Kerosine (petroleum)	<b>NIOSH REL (United States, 6/2009).</b> TWA: 100 mg/m <sup>3</sup> 10 hours.
Ethyl acetate	<b>ACGIH TLV (United States, 3/2012).</b> <b>Absorbed through skin.</b> TWA: 200 mg/m <sup>3</sup> , (as total hydrocarbon vapor) 8 hours. <b>ACGIH TLV (United States, 3/2012).</b> TWA: 400 ppm 8 hours. TWA: 1440 mg/m <sup>3</sup> 8 hours. <b>OSHA PEL 1989 (United States, 3/1989).</b> TWA: 400 ppm 8 hours. TWA: 1400 mg/m <sup>3</sup> 8 hours. <b>NIOSH REL (United States, 6/2009).</b> TWA: 400 ppm 10 hours. TWA: 1400 mg/m <sup>3</sup> 10 hours. <b>OSHA PEL (United States, 6/2010).</b> TWA: 400 ppm 8 hours. TWA: 1400 mg/m <sup>3</sup> 8 hours.
Distillates (petroleum), hydrotreated heavy naphthenic	<b>ACGIH TLV (United States, 3/2012).</b> TWA: 5 mg/m <sup>3</sup> 8 hours. Form: Inhalable fraction

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## 8. Exposure controls/personal protection

**NIOSH REL (United States, 6/2009).**  
 TWA: 5 mg/m<sup>3</sup> 10 hours. Form: Mist  
 STEL: 10 mg/m<sup>3</sup> 15 minutes. Form: Mist  
**OSHA PEL (United States, 6/2010).**  
 TWA: 5 mg/m<sup>3</sup> 8 hours.

- Appropriate engineering controls** : Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
- Individual protection measures**
- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
- Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.
- Skin protection**
- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

## 9. Physical and chemical properties

- Physical state** : Liquid. [Aerosol.]
- Flash point** : Not available.
- Auto-ignition temperature** : Not available.
- Flammable limits** : Not available.
- Color** : Green.

## 9. Physical and chemical properties

<b>Odor</b>	: Solvents
<b>pH</b>	: Not available.
<b>Boiling/condensation point</b>	: Not available.
<b>Melting/freezing point</b>	: Not available.
<b>Specific gravity</b>	: 0.8807
<b>Vapor pressure</b>	: Not available.
<b>Vapor density</b>	: Not available.
<b>Odor threshold</b>	: Not available.
<b>Evaporation rate</b>	: Not available.
<b>Solubility</b>	: Very slightly soluble in the following materials: cold water and hot water.
<b>Density</b>	: 7.345 (lbs/gal)
<b>Aerosol product</b>	
<b>Type of aerosol</b>	: Spray
<b>Heat of combustion</b>	: >30 kJ/g
<b>Ignition distance</b>	: 15 cm

## 10. Stability and reactivity

<b>Reactivity</b>	: No specific test data related to reactivity available for this product or its ingredients.
<b>Chemical stability</b>	: The product is stable.
<b>Possibility of hazardous reactions</b>	: Under normal conditions of storage and use, hazardous reactions will not occur.
<b>Conditions to avoid</b>	: Avoid all possible sources of ignition (spark or flame).
<b>Incompatible materials</b>	: No specific data.
<b>Hazardous decomposition products</b>	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## Section 11. Toxicological information

### Information on toxicological effects

#### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Kerosine (petroleum)	LD50 Oral	Rat	15 g/kg	-
Ethyl acetate	LD50 Oral	Rat	5620 mg/kg	-
Distillates (petroleum), hydrotreated heavy naphthenic	LD50 Oral	Rat	>5000 mg/kg	-

#### Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Kerosine (petroleum)	Skin - Moderate irritant	Rabbit	-	0.5 Milliliters	-
	Skin - Moderate irritant	Rabbit	-	24 hours 100 Percent	-
	Skin - Severe irritant	Rabbit	-	500 milligrams	-
Distillates (petroleum), hydrotreated heavy naphthenic	Skin - Severe irritant	Rabbit	-	500 milligrams	-

#### Sensitization

Not available.

## Section 11. Toxicological information

### Mutagenicity

Not available.

### Carcinogenicity

Not available.

### Reproductive toxicity

Not available.

### Teratogenicity

Not available.

### Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
Ethyl acetate	Category 3	Not applicable.	Narcotic effects

### Specific target organ toxicity (repeated exposure)

Not available.

### Aspiration hazard

Not available.

**Information on the likely routes of exposure** : Not available.

### Potential acute health effects

- Eye contact** : No known significant effects or critical hazards.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : No known significant effects or critical hazards.
- Ingestion** : No known significant effects or critical hazards.

### Symptoms related to the physical, chemical and toxicological characteristics

- Eye contact** : Adverse symptoms may include the following:  
irritation  
redness
- Inhalation** : Adverse symptoms may include the following:  
respiratory tract irritation  
coughing
- Skin contact** : No specific data.
- Ingestion** : No specific data.

### Delayed and immediate effects and also chronic effects from short and long term exposure

#### Short term exposure

- Potential immediate effects** : Not available.
- Potential delayed effects** : Not available.

#### Long term exposure

- Potential immediate effects** : Not available.
- Potential delayed effects** : Not available.

### Potential chronic health effects

Not available.

- General** : No known significant effects or critical hazards.

## Section 11. Toxicological information

- Carcinogenicity** : No known significant effects or critical hazards.  
**Mutagenicity** : No known significant effects or critical hazards.  
**Teratogenicity** : No known significant effects or critical hazards.  
**Developmental effects** : No known significant effects or critical hazards.  
**Fertility effects** : No known significant effects or critical hazards.

### Numerical measures of toxicity

#### Acute toxicity estimates

Not available.

## 12. Ecological information

### Toxicity

Product/ingredient name	Result	Species	Exposure
Ethyl acetate	Acute EC50 2500000 µg/l Fresh water	Algae - Selenastrum sp.	96 hours
	Acute LC50 750000 µg/l Fresh water	Crustaceans - Gammarus pulex	48 hours
	Acute LC50 154000 µg/l Fresh water	Daphnia - Daphnia cucullata	48 hours
	Acute LC50 212500 µg/l Fresh water	Fish - Heteropneustes fossilis	96 hours
	Chronic NOEC 2400 µg/l Fresh water	Daphnia - Daphnia magna	21 days
	Chronic NOEC 75.6 mg/l Fresh water	Fish - Pimephales promelas - Embryo	32 days

### Persistence and degradability

Not available.

### Bioaccumulative potential

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
Ethyl acetate	0.73	-	low

### Mobility in soil

**Soil/water partition coefficient (K<sub>oc</sub>)** : Not available.

**Other adverse effects** : No known significant effects or critical hazards.




## 13. Disposal considerations

**Disposal methods** : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Do not puncture or incinerate container.

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

## 14. Transport information

	DOT Classification	IMDG	IATA
UN number	UN1950	UN1950	UN1950
UN proper shipping name	AEROSOLS, flammable	AEROSOLS, flammable	AEROSOLS, flammable
Transport hazard class(es)	2.1 	2.1 	2.1 
Packing group	-	-	-
Environmental hazards	No.	No.	No.
Additional information	<u>Limited quantity</u> Yes.	<u>Emergency schedules (EmS)</u> F-D, S-U  <u>Remarks</u> Limited quantity	<u>Passenger and Cargo Aircraft</u> Quantity limitation: 75 kg <u>Cargo Aircraft Only</u> Quantity limitation: 150 kg <u>Limited Quantities - Passenger Aircraft</u> Quantity limitation: 30 kg

**Special precautions for user** : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** : Not available.

## 15. Regulatory information

**U.S. Federal regulations** : **TSCA 8(a) CDR Exempt/Partial exemption:** Not determined  
**United States inventory (TSCA 8b):** Not determined.

### SARA 302/304

#### Composition/information on ingredients

No products were found.

**SARA 304 RQ** : Not applicable.

### SARA 311/312

**Classification** : Immediate (acute) health hazard  
Delayed (chronic) health hazard

#### Composition/information on ingredients

Name	Fire hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard



## 15. Regulatory information

Kerosine (petroleum)	Yes.	No.	No.	Yes.	Yes.
ethyl acetate	Yes.	No.	No.	No.	Yes.
Distillates (petroleum), solvent-dewaxed heavy paraffinic	No.	No.	No.	No.	Yes.
Distillates (petroleum), hydrotreated heavy naphthenic	No.	No.	No.	Yes.	Yes.

### State regulations

- Massachusetts** : The following components are listed: KEROSINE; ETHYL ACETATE
- New York** : The following components are listed: Ethyl acetate
- New Jersey** : The following components are listed: KEROSINE; FUEL OIL #1; ETHYL ACETATE; ACETIC ACID, ETHYL ESTER; MINERAL OIL (UNTREATED and MILDLY TREATED); MINERAL OIL (UNTREATED and MILDLY TREATED)
- Pennsylvania** : The following components are listed: KEROSINE (PETROLEUM); ACETIC ACID ETHYL ESTER
- United States inventory (TSCA 8b)** : Not determined.

### Canada

- WHMIS (Canada)** : Class B-5: Flammable aerosol.  
Class D-2B: Material causing other toxic effects (Toxic).

### Canadian lists

- Canadian NPRI** : The following components are listed: Ethyl acetate
- CEPA Toxic substances** : None of the components are listed.
- Canada inventory** : Not determined.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

### International regulations

- International lists** :
- Australia inventory (AICS)**: Not determined.
  - China inventory (IECSC)**: Not determined.
  - Japan inventory**: Not determined.
  - Korea inventory**: Not determined.
  - Malaysia Inventory (EHS Register)**: Not determined.
  - New Zealand Inventory of Chemicals (NZIoC)**: Not determined.
  - Philippines inventory (PICCS)**: Not determined.
  - Taiwan inventory (CSNN)**: Not determined.

## 16. Other information

### Hazardous Material Information System (U.S.A.)

Health	2
Flammability	4
Physical hazards	2

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on MSDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

### National Fire Protection Association (U.S.A.)

## 16. Other information



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Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

### History

<b>Date of printing</b>	: 2/7/2013.
<b>Date of issue/Date of revision</b>	: 2/7/2013.
<b>Date of previous issue</b>	: 3/15/2010.
<b>Version</b>	: 2
<b>Key to abbreviations</b>	: ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = Intermediate Bulk Container IMDG = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) UN = United Nations

**References** : Not available.

☑ Indicates information that has changed from previously issued version.

### Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

# SAFETY DATA SHEET



## BG In-Force (Aerosol)

### 1. Product and company identification

**Manufacturer** : BG Products Inc.  
701 S. Wichita Street  
Wichita, KS, 67213, USA  
www.bgprod.com

#### Relevant identified uses of the substance or mixture and uses advised against

##### Identified uses

Lubricants and additives

**MSDS #** : 438  
**Validation date** : 3/30/2016  
**Responsible name** : Kolin Anglin, Environmental Coordinator  
316-265-2686  
msds@bgprod.com  
**In case of emergency** : (800) 424-9300 (CHEMTREC)

### 2. Hazards identification

**OSHA/HCS status** : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

**Classification of the substance or mixture** : FLAMMABLE AEROSOLS - Category 1  
GASES UNDER PRESSURE - Compressed gas  
ASPIRATION HAZARD - Category 1  
Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 40%

#### GHS label elements

##### Hazard pictograms



**Signal word** : Danger

**Hazard statements** : Extremely flammable aerosol.  
Contains gas under pressure; may explode if heated.  
May be fatal if swallowed and enters airways.

#### Precautionary statements

**Prevention** : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use.

**Response** : IF SWALLOWED: Immediately call a POISON CENTER or physician. Do NOT induce vomiting.

**Storage** : Store locked up. Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F. Store in a well-ventilated place.

**Disposal** : Dispose of contents and container in accordance with all local, regional, national and international regulations.

**Hazards not otherwise classified** : None known.

### 3. Composition/information on ingredients

**Substance/mixture** : Mixture  
**Other means of identification** : Not available.

**CAS number/other identifiers**

**CAS number** : Not applicable.  
**Product code** : 438

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

### 4. First aid measures

**Description of necessary first aid measures**

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention if irritation occurs.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Aspiration hazard if swallowed. Can enter lungs and cause damage. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

**Most important symptoms/effects, acute and delayed**

**Potential acute health effects**

- Eye contact** : No known significant effects or critical hazards.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : No known significant effects or critical hazards.
- Ingestion** : May be fatal if swallowed and enters airways.

**Over-exposure signs/symptoms**

- Eye contact** : Adverse symptoms may include the following:  
irritation  
redness
- Inhalation** : Adverse symptoms may include the following:  
respiratory tract irritation  
coughing
- Skin contact** : No specific data.
- Ingestion** : Adverse symptoms may include the following:  
nausea or vomiting

## 4. First aid measures

### Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

## 5. Fire-fighting measures

### Extinguishing media

- Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.
- Unsuitable extinguishing media** : None known.
- Specific hazards arising from the chemical** : Extremely flammable aerosol. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Gas may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back, causing fire or explosion. Bursting aerosol containers may be propelled from a fire at high speed. Runoff to sewer may create fire or explosion hazard.
- Hazardous thermal decomposition products** : Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide
- Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. In the case of aerosols being ruptured, care should be taken due to the rapid escape of the pressurized contents and propellant. If a large number of containers are ruptured, treat as a bulk material spillage according to the instructions in the clean-up section. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

### Methods and materials for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

## 6. Accidental release measures

- Large spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

## 7. Handling and storage

### Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use. Do not swallow. Avoid contact with eyes, skin and clothing. Avoid breathing gas. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Empty containers retain product residue and can be hazardous.

- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

- Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations. Store away from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Protect from sunlight. Store locked up. Eliminate all ignition sources. Use appropriate containment to avoid environmental contamination.

## 8. Exposure controls/personal protection

### Control parameters

#### Occupational exposure limits

Ingredient name	Exposure limits
None.	

- Appropriate engineering controls** : Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

### Individual protection measures

- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

## 8. Exposure controls/personal protection

- Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields. Recommended: safety glasses with side-shields. (EN 166)
- Skin protection**
- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated. > 8 hours (breakthrough time): Solvent. Chemical-resistant gloves. (EN 374) thickness (minimum) (0.4 mm)
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves. Recommended: Wear work clothing with long sleeves.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Recommended: Wear protective shoes. (EN ISO 20345)
- Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use. Recommended: If operating conditions cause high gas concentrations to be produced or any recommended or statutory exposure limit is exceeded, use an air-fed respirator or self-contained breathing apparatus.

## 9. Physical and chemical properties

- Physical state** : Liquid. [Aerosol.]
- Flash point** : Not available.
- Auto-ignition temperature** : Not available.
- Flammable limits** : Not available.
- Color** : Green. [Dark]
- Odor** : Solvents
- pH** : Not available.
- Boiling/condensation point** : Not available.
- Melting/freezing point** : Not available.
- Specific gravity** : 0.881
- Vapor pressure** : Not available.
- Vapor density** : Not available.
- Odor threshold** : Not available.
- Evaporation rate** : Not available.
- Solubility** : Very slightly soluble in the following materials: cold water and hot water.
- VOC content** : <25 % (w/w)
- Aerosol product**
- Type of aerosol** : Spray
- Heat of combustion** : 33 kJ/g

## 9. Physical and chemical properties

**Ignition distance** : 15 cm

## 10. Stability and reactivity

- Reactivity** : No specific test data related to reactivity available for this product or its ingredients.
- Chemical stability** : The product is stable.
- Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.
- Conditions to avoid** : Avoid all possible sources of ignition (spark or flame).
- Incompatible materials** : No specific data.
- Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## Section 11. Toxicological information

### Information on toxicological effects

**Acute toxicity**

Not available.

**Irritation/Corrosion**

Not available.

**Sensitization**

Not available.

**Mutagenicity**

Not available.

**Carcinogenicity**

Not available.

**Reproductive toxicity**

Not available.

**Teratogenicity**

Not available.

**Specific target organ toxicity (single exposure)**

Not available.

**Specific target organ toxicity (repeated exposure)**

Not available.

**Aspiration hazard**

Name	Result
Extremely flammable aerosol.	ASPIRATION HAZARD - Category 1

**Information on the likely routes of exposure** : Not available.

**Potential acute health effects**

- Eye contact** : No known significant effects or critical hazards.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : No known significant effects or critical hazards.
- Ingestion** : May be fatal if swallowed and enters airways.

**Symptoms related to the physical, chemical and toxicological characteristics**



## Section 11. Toxicological information

- Eye contact** : Adverse symptoms may include the following:  
irritation  
redness
- Inhalation** : Adverse symptoms may include the following:  
respiratory tract irritation  
coughing
- Skin contact** : No specific data.
- Ingestion** : Adverse symptoms may include the following:  
nausea or vomiting

### Delayed and immediate effects and also chronic effects from short and long term exposure

#### Short term exposure

- Potential immediate effects** : Not available.
- Potential delayed effects** : Not available.

#### Long term exposure

- Potential immediate effects** : Not available.
- Potential delayed effects** : Not available.

#### Potential chronic health effects

Not available.

- General** : No known significant effects or critical hazards.
- Carcinogenicity** : No known significant effects or critical hazards.
- Mutagenicity** : No known significant effects or critical hazards.
- Teratogenicity** : No known significant effects or critical hazards.
- Developmental effects** : No known significant effects or critical hazards.
- Fertility effects** : No known significant effects or critical hazards.

### Numerical measures of toxicity

#### Acute toxicity estimates

Not available.

## 12. Ecological information

### Toxicity

Not available.

### Persistence and degradability

Not available.

### Bioaccumulative potential

Not available.

### Mobility in soil

- Soil/water partition coefficient (K<sub>oc</sub>)** : Not available.
- Other adverse effects** : No known significant effects or critical hazards.




## 13. Disposal considerations

**Disposal methods** : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Do not puncture or incinerate container.

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

## 14. Transport information

	DOT Classification	IMDG	IATA
UN number	UN1950	UN1950	UN1950
UN proper shipping name	AEROSOLS, flammable	AEROSOLS, flammable	AEROSOLS, flammable
Transport hazard class(es)	2.1 	2.1 	2.1 
Packing group	-	-	-
Environmental hazards	No.	No.	No.
Additional information	<b>Limited quantity</b> Yes.	<b>Emergency schedules (EmS)</b> F-D, S-U  <b>Remarks</b> Limited quantity	<b>Passenger and Cargo Aircraft</b> Quantity limitation: 75 kg <b>Cargo Aircraft Only</b> Quantity limitation: 150 kg <b>Limited Quantities - Passenger Aircraft</b> Quantity limitation: 30 kg

**Special precautions for user** : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

**Transport in bulk according to Annex II of MARPOL and the IBC Code** : Not available.

## 15. Regulatory information

**U.S. Federal regulations** : **TSCA 8(a) CDR Exempt/Partial exemption:** Not determined  
**United States inventory (TSCA 8b):** All components are listed or exempted.

### SARA 302/304

#### Composition/information on ingredients

No products were found.

## 15. Regulatory information

**SARA 304 RQ** : Not applicable.

**SARA 311/312**

**Classification** : Immediate (acute) health hazard  
 Delayed (chronic) health hazard

**Composition/information on ingredients**

Name	Fire hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard
Distillates (petroleum), hydrotreated heavy naphthenic	No.	No.	No.	Yes.	Yes.
Distillates (petroleum), hydrotreated light ethyl acetate	Yes. Yes.	No. No.	No. No.	No. No.	Yes. Yes.

**State regulations**

- Massachusetts** : The following components are listed: ETHYL ACETATE
- New York** : The following components are listed: Ethyl acetate
- New Jersey** : The following components are listed: MINERAL OIL (UNTREATED and MILDLY TREATED); ETHYL ACETATE; ACETIC ACID, ETHYL ESTER
- Pennsylvania** : The following components are listed: ACETIC ACID ETHYL ESTER
- United States inventory (TSCA 8b)** : All components are listed or exempted.

**Canada**

- WHMIS (Canada)** : Class B-5: Flammable aerosol.
- Canadian lists**
- Canadian NPRI** : The following components are listed: Hydrotreated light distillate; Ethyl acetate
- CEPA Toxic substances** : None of the components are listed.
- Canada inventory** : All components are listed or exempted.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

**International regulations**

**Chemical Weapon Convention List Schedules I, II & III Chemicals**

Not listed.

**Montreal Protocol (Annexes A, B, C, E)**

Not listed.

**Stockholm Convention on Persistent Organic Pollutants**

Not listed.

**Rotterdam Convention on Prior Inform Consent (PIC)**

Not listed.

**UNECE Aarhus Protocol on POPs and Heavy Metals**

Not listed.

**International lists**

**National inventory**

- Australia** : All components are listed or exempted.
- Canada** : All components are listed or exempted.
- China** : All components are listed or exempted.

## 15. Regulatory information

<b>Europe</b>	: All components are listed or exempted.
<b>Japan</b>	: <b>Japan inventory (ENCS):</b> Not determined. <b>Japan inventory (ISHL):</b> Not determined.
<b>Malaysia</b>	: Not determined.
<b>New Zealand</b>	: All components are listed or exempted.
<b>Philippines</b>	: All components are listed or exempted.
<b>Republic of Korea</b>	: All components are listed or exempted.
<b>Taiwan</b>	: All components are listed or exempted.

## 16. Other information

### Hazardous Material Information System (U.S.A.)

Health	2
Flammability	4
Physical hazards	1

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on MSDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

### National Fire Protection Association (U.S.A.)



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Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

### History

<b>Date of printing</b>	: 3/30/2016
<b>Date of issue/Date of revision</b>	: 3/30/2016
<b>Date of previous issue</b>	: No previous validation
<b>Version</b>	: 1
<b>Key to abbreviations</b>	: ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = Intermediate Bulk Container IMDG = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient

## 16. Other information

MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)  
UN = United Nations

**References** : Not available.

✔ Indicates information that has changed from previously issued version.

### Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.



# Safety Data Sheet

Issue Date 12-Aug-2013

Revision Date: 01-Oct-2017

Version 1

## 1. IDENTIFICATION

**Product Identifier**

**Product Name**

Industrial Grade Silicone – Acetoxy Cure – Clear, White & Colors

**Other means of identification**

**SDS #**

RD-0080A

**Product Code**

08160I, 08260I Series

**Recommended use of the chemical and restrictions on use**

**Recommended Use**

Silicone Sealant.

**Details of the supplier of the safety data sheet**

**Supplier Address**

Red Devil, Inc.  
4175 Webb Street  
Pryor, Oklahoma 74361  
www.reddevil.com

**Emergency Telephone Number**

**Company Phone Number**

918-825-5744

Fax: 918-825-5761

**Emergency Telephone (24 hr)**

INFOTRAC 1-352-323-3500 (International)  
1-800-535-5053 (North America)

## 2. HAZARDS IDENTIFICATION

**Classification**

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2

**Signal Word**

**Warning**

**Hazard Statements**

Causes skin irritation

Causes serious eye irritation



**Appearance** Clear/opaque or colored paste

**Physical State** Paste

**Odor** Acetic Acid Odor (Vinegar odor)

**Precautionary Statements - Prevention**

Wash face, hands and any exposed skin thoroughly after handling  
Wear protective gloves/protective clothing/eye protection/face protection

**Precautionary Statements - Response**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
Get medical attention  
IF ON SKIN: Wash with plenty of soap and water  
If skin irritation occurs: Get medical advice/attention  
Take off contaminated clothing and wash it before reuse

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
Hydroxy-terminated Dimethyl siloxane	70131-67-8	>50
Non-hazardous ingredients *	Proprietary	>10
Amorphous silica (glass)	7631-86-9	<13
Polydimethylsiloxane	63148-62-9	<10
Methyltriacetoxysilane	4253-34-3	<6
Titanium Dioxide	13463-67-7	<5
Ethyltriacetoxysilane	17689-77-9	<6

\* Unlisted ingredients are not considered hazardous under the OSHA GHS Hazard Communication Standard (29 CFR 1910.1200). (Methyltriacetoxysilane) Observe limits for acetic acid formed during curing on exposure to water or humid air. (Silica, amorphous; Titanium Dioxide) Inhalation of particulates unlikely due to product's physical state.

### 4. FIRST-AID MEASURES

**First Aid Measures**

<b>General Advice</b>	Provide this SDS to medical personnel for treatment.
<b>Eye Contact</b>	Immediately flush the contaminated eye(s) with lukewarm, gently flowing water for 5 minutes while holding the eyelid(s) open. Obtain medical attention.
<b>Skin Contact</b>	No health effects expected. If irritation does occur, flush with lukewarm, gently flowing water for 5 minutes. If irritation persists, obtain medical advice.
<b>Inhalation</b>	If symptoms are experienced remove source of contamination or move victim to fresh air. If irritation persists, obtain medical advice.
<b>Ingestion</b>	Rinse mouth thoroughly with water. If irritation or discomfort occurs, obtain medical advice.

**Most important symptoms and effects**

<b>Symptoms</b>	Causes skin irritation. May cause nose, throat & respiratory tract irritation. Direct contact with eyes may cause temporary irritation.
-----------------	---

**Indication of any immediate medical attention and special treatment needed**

**Notes to Physician** Treat according to person's condition & specifics of exposure.

**5. FIRE-FIGHTING MEASURES**

**Suitable Extinguishing Media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Small Fire** Use carbon dioxide (CO2), dry chemical or water spray.

**Large Fire** Use dry chemical, foam or water spray.

**Unsuitable Extinguishing Media** Not determined.

**Specific Hazards Arising from the Chemical**

Not determined.

**Hazardous Combustion Products** Carbon oxides & traces of incompletely burned carbon compounds. Silicon dioxide. Formaldehyde.

**Protective equipment and precautions for firefighters**

Self-contained breathing apparatus & protective clothing should be worn in fighting large fires involving chemicals. Determine the need to evacuate or isolate the area according to your local emergency plan. Use water spray to keep fire exposed containers cool.

**6. ACCIDENTAL RELEASE MEASURES**

**Personal precautions, protective equipment and emergency procedures**

**Personal Precautions** Observe all personal protection equipment recommendations described in Sections 5 & 8.

**Environmental Precautions** See Section 12 for additional Ecological Information.

**Methods and material for containment and cleaning up**

**Methods for Containment** Prevent further leakage or spillage if safe to do so. Use absorbent material to contain spill.

**Methods for Clean-Up** Wipe up or scrape up & contain for salvage or disposal. Clean area as appropriate since spilled materials, even in small quantities, may present a slip hazard. Final cleaning may require use of steam, solvents or detergents. Dispose of saturated absorbent or cleaning materials appropriately, since spontaneous heating may occur. Local, state & federal laws & regulations may apply to releases & disposal of this material as well as those materials & items employed in the cleanup of releases. You will need to determine which federal, state & local laws & regulations are applicable. Sections 13 & 15 of this SDS provide information regarding certain federal & state requirements.

**7. HANDLING AND STORAGE**

**Precautions for safe handling**

**Advice on Safe Handling** Handle in accordance with good industrial hygiene and safety practice. Wash face, hands, and any exposed skin thoroughly after handling. Use personal protection recommended in Section 8. Use only in well-ventilated areas. Avoid contact with skin and eyes. Product evolves acetic acid (HOAc) when exposed to water or humid air.



**Conditions for safe storage, including any incompatibilities**

- Storage Conditions** Keep container closed & store away from water or moisture.
- Incompatible Materials** Oxidizing material can cause a reaction. Water, moisture or humid air can cause hazardous vapors to form as described in Section 8.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Exposure Guidelines** Exposure guidelines / protective equipment are for routine handling and accidental spills

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Amorphous silica (glass) 7631-86-9	-	(vacated) TWA: 6 mg/m <sup>3</sup> <1% Crystalline silica TWA: 20 mppcf : (80)/(% SiO <sub>2</sub> ) mg/m <sup>3</sup> TWA	IDLH: 3000 mg/m <sup>3</sup> TWA: 6 mg/m <sup>3</sup>
Titanium Dioxide 13463-67-7	TWA: 10 mg/m <sup>3</sup>	TWA: 15 mg/m <sup>3</sup> total dust (vacated) TWA: 10 mg/m <sup>3</sup> total dust	IDLH: 5000 mg/m <sup>3</sup>

**Other Information** Acetic acid is formed upon contact w/ water or humid air. Provide adequate ventilation to control exposures within guidelines of OSHA PEL: TWA 10 ppm & ACGIH TLV: TWA 10 ppm, STEL 15 ppm.

**Appropriate engineering controls**

**Engineering Controls** Ventilation must be adequate to maintain the ambient workplace atmosphere below the exposure limit(s) outlined in the SDS. Good general ventilation should be sufficient.

**Individual protection measures, such as personal protective equipment**

- Eye/Face Protection** Safety glasses as a minimum for protection.
- Skin and Body Protection** Wear suitable protective clothing.
- Respiratory Protection** No special equipment needed.

**General Hygiene Considerations** Note: These precautions are for room temperature handling. Use at elevated temperature or aerosol/spray applications may require added precautions. Handle in accordance with good industrial hygiene and safety practice. Wash @ mealtime & end of shift. Contaminated clothing & shoes should be removed as soon as practical & thoroughly cleaned before reuse.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

**Information on basic physical and chemical properties**

<b>Physical State</b>	Paste	<b>Odor</b>	Acetic Acid Odor (Vinegar odor)
<b>Appearance</b>	Clear/opaque or colored paste	<b>Odor Threshold</b>	Not determined
<b>Color</b>	Various	<b>Remarks • Method</b>	
<b>Property</b>	<b>Values</b>		
pH	Not determined		
Melting Point/Freezing Point	Not determined		
Boiling Point/Boiling Range	Not determined		
Flash Point	Not applicable		
Evaporation Rate	Not determined		

<b>Flammability (Solid, Gas)</b>	Not determined	
<b>Upper Flammability Limits</b>	Not determined	
<b>Lower Flammability Limit</b>	Not determined	
<b>Vapor Pressure</b>	Not determined	
<b>Vapor Density</b>	Not determined	
<b>Specific Gravity</b>	~1.04	@ 25 °C (77 °F)
<b>Water Solubility</b>	Not determined	
<b>Solubility in other solvents</b>	Not determined	
<b>Partition Coefficient</b>	Not determined	
<b>Autoignition Temperature</b>	Not determined	
<b>Decomposition Temperature</b>	Not determined	
<b>Kinematic Viscosity</b>	Not determined	
<b>Dynamic Viscosity</b>	Not determined	
<b>Explosive Properties</b>	Not determined	
<b>Oxidizing Properties</b>	Not determined	
<b>Additional Information</b>	Note: The above information is not intended for use in preparing product specifications	
<b>VOC Content (%)</b>	< 3%/wt (< 40 g/L)	

## 10. STABILITY AND REACTIVITY

**Reactivity**

Not reactive under normal conditions.

**Chemical Stability**

Stable under recommended storage conditions.

**Possibility of Hazardous Reactions**

None under normal processing.

**Hazardous Polymerization**      Hazardous polymerization does not occur.

**Conditions to Avoid**

Incompatible Materials.

**Incompatible Materials**

Oxidizing material can cause a reaction. Water, moisture or humid air can cause hazardous vapors to form as described in Section 8.

**Hazardous Decomposition Products**

Thermal breakdown of this product during fire or very high heat conditions may evolve the following decomposition products: Carbon oxides & traces of incompletely burned carbon compounds. Silicon dioxide. Formaldehyde, Nitrogen oxides & metal oxides.

## 11. TOXICOLOGICAL INFORMATION

**Information on likely routes of exposure**

**Product Information**

- Eye Contact**                                      Causes serious eye irritation.
- Skin Contact**                                      Causes skin irritation. Can be absorbed through the skin.
- Inhalation**    May cause irritation of respiratory tract.
- Ingestion**    Can be harmful if swallowed.

**Component Information**

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Amorphous silica (glass) 7631-86-9	> 5000 mg/kg ( Rat )	> 2000 mg/kg ( Rabbit )	> 2.2 mg/L ( Rat ) 1 h
Polydimethylsiloxane 63148-62-9	> 17 g/kg ( Rat )	> 2 g/kg ( Rabbit )	-
Methyltriacetoxysilane 4253-34-3	= 2060 mg/kg ( Rat )	-	-
Titanium Dioxide 13463-67-7	> 10000 mg/kg ( Rat )	-	-

**Information on physical, chemical and toxicological effects****Symptoms**

Please see section 4 of this SDS for symptoms.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure****Carcinogenicity**

The table below indicates whether each agency has listed any ingredient as a carcinogen. Titanium dioxide is a possible carcinogen when it appears as a respirable dust.

Chemical Name	ACGIH	IARC	NTP	OSHA
Amorphous silica (glass) 7631-86-9		Group 3		
Titanium Dioxide 13463-67-7		Group 2B		X

*IARC (International Agency for Research on Cancer)**Group 2B - Possibly Carcinogenic to Humans**Group 3 IARC components are "not classifiable as human carcinogens"**OSHA (Occupational Safety and Health Administration of the US Department of Labor)**X - Present***Numerical measures of toxicity**

Not determined

**12. ECOLOGICAL INFORMATION****Ecotoxicity**

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

**Component Information**

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Amorphous silica (glass) 7631-86-9	440: 72 h Pseudokirchneriella subcapitata mg/L EC50	5000: 96 h Brachydanio rerio mg/L LC50 static		7600: 48 h Ceriodaphnia dubia mg/L EC50

**Persistence/Degradability**

Complete information is not yet available

**Bioaccumulation**

Complete information is not yet available

**Mobility**

Complete information is not yet available

**Other Adverse Effects**

Not determined

**13. DISPOSAL CONSIDERATIONS**

**Waste Treatment Methods**

<b>Disposal of Wastes</b>	Disposal should be in accordance with applicable regional, national and local laws and regulations.
<b>Contaminated Packaging</b>	Disposal should be in accordance with applicable regional, national and local laws and regulations.

**14. TRANSPORT INFORMATION**

<b>Note</b>	Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.
<b>DOT</b>	Not regulated
<b>IATA</b>	Not regulated
<b>IMDG</b>	Not regulated

**15. REGULATORY INFORMATION**

**International Inventories**

Not determined

**Legend:**

- TSCA - United States Toxic Substances Control Act Section 8(b) Inventory*
- DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List*
- EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances*
- ENCS - Japan Existing and New Chemical Substances*
- IECSC - China Inventory of Existing Chemical Substances*
- KECL - Korean Existing and Evaluated Chemical Substances*
- PICCS - Philippines Inventory of Chemicals and Chemical Substances*

**US Federal Regulations**

**SARA 311/312 Hazard Categories**

<b>Acute Health Hazard</b>	No
<b>Chronic Health Hazard</b>	No
<b>Fire Hazard</b>	No
<b>Sudden Release of Pressure Hazard</b>	No
<b>Reactive Hazard</b>	No

**SARA 313**

Not determined

**US State Regulations**

**California Proposition 65**

This product contains the following Proposition 65 chemicals.

Chemical Name	California Proposition 65
Titanium Dioxide - 13463-67-7	Carcinogen

**U.S. State Right-to-Know Regulations**

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Amorphous silica (glass) 7631-86-9	X	X	X
Titanium Dioxide 13463-67-7	X	X	X

**16. OTHER INFORMATION**

<b>NFPA</b>	<b>Health Hazards</b>	<b>Flammability</b>	<b>Instability</b>	<b>Special Hazards</b>
	1	1	0	Not determined
<b>HMIS</b>	<b>Health Hazards</b>	<b>Flammability</b>	<b>Physical Hazards</b>	<b>Personal Protection</b>
	1	0	0	B- Safety Glasses, Gloves

Issue Date: 12-Aug-2013  
 Revision Date: 01-Oct-2017  
 Revision Note: New format

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet**

# Key-Tite

## Safety Data Sheet

### 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

#### Identification of the substance or mixture

**Product Name:** Key-Tite  
**Product Use:** Thread sealant  
**Manufacturer:** South Coast Products  
20 Southbelt Industrial Dr  
Houston, TX 77047 USA  
+1 713 225 0048  
**Emergency telephone number:** +1 813 248 0585, 24 hours  
Refer to K159199

**E-mail address for questions regarding this SDS:** [sharons@socousa.com](mailto:sharons@socousa.com)

### 2. HAZARDS IDENTIFICATION

#### GHS Classification

Not classified according to GHS.

#### GHS Label Elements

**Symbol(s)** None

**Signal Word** None

**Hazard Statements** None

#### Other hazards which do not result in classification

High pressure injection under skin is a medical emergency.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Nonhazardous paste containing highly refined mineral oil, vegetable oils, resins and mineral fillers.

### 4. FIRST AID MEASURES

**Inhalation:** Move exposed person to fresh air. Get medical attention if symptoms occur. No symptoms expected.

**Ingestion:** Wash out mouth with water. Do not induce vomiting. Get medical attention if nausea or stomach pains occur.

**Skin contact:** Remove contaminated clothing and shoes. Wash skin with soap and water. Get medical attention if irritation symptoms occur. High pressure injection under skin requires immediate medical attention.

**Eye contact:** Check for and remove any contact lenses. Immediately flush eyes with running water for at least 5 minutes, keeping eyelids open. Get medical attention if redness or irritation persists.

### 5. FIRE-FIGHTING MEASURES

**Suitable media:** Use dry chemical, CO<sub>2</sub>, water spray (fog) or foam.

# Key-Tite

## Safety Data Sheet

<b>Not suitable:</b>	Do not use water jet.
<b>Hazardous combustion products:</b>	Carbon monoxide, carbon dioxide, products of incomplete hydrocarbon combustion.
<b>Special protective equipment for fire-fighters:</b>	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus with a full face-piece operated in positive pressure mode.

### 6. ACCIDENTAL RELEASE MEASURES

<b>Personal precautions:</b>	Wear appropriate personal protection equipment (see section 8).
<b>Environmental precautions:</b>	Recover free product. If small amount, clean residue with soap and water. Otherwise use suitable oil adsorbent. Dispose of material in accordance with all regulations. Keep product out of sewers and watercourses. Advise authorities if large amounts of product enters waterways or extensive land areas.

### 7. HANDLING AND STORAGE

<b>Handling:</b>	Wear appropriate personal protection equipment (see section 8). Do not eat, drink or smoke when using. Wash thoroughly after handling. Follow good hygiene and housekeeping practices.
<b>Storage:</b>	Store in cool dry area in original or equivalent container in accordance with all regulations. Do not expose to extreme heat or flame. Store below 65°C (150°F), away from strong oxidizers and acids.

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

<b>Engineering controls:</b>	Use with adequate ventilation.
<b>Eye/face protection:</b>	Safety glasses. Ensure eye bath is to hand.
<b>Hand protection:</b>	Protective gloves if prolonged or repeated contact is unavoidable.
<b>Skin protection:</b>	No additional protection required beyond normal industrial attire is required.
<b>Respiratory protection:</b>	No special measures required.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance and odor:</b>	Dark green semi-solid, mild odor
<b>pH:</b>	Not applicable
<b>Flash point:</b>	121°C (250°F) (Cleveland open cup)
<b>Evaporation rate:</b>	No data
<b>Upper flammability limit:</b>	No data
<b>Lower flammability limit:</b>	No data
<b>Vapor pressure:</b>	No data
<b>Vapor density:</b>	No data
<b>Relative density:</b>	1.4
<b>Solubility:</b>	Insoluble in water, soluble in alcohols and petroleum distillates

# Key-Tite

## Safety Data Sheet

**Viscosity:** Cone penetration (ASTM D217) 395-405  
**Volatile organic content:** 88 g/L (4% by weight)

### 10. STABILITY AND REACTIVITY

**Chemical stability:** Stable  
**Conditions to avoid:** Extreme heat  
**Incompatible materials:** Strong oxidizers  
**Hazardous decomposition products:** Carbon monoxide, carbon dioxide

### 11. TOXICOLOGICAL INFORMATION

**Acute toxicity:** Tests on similar materials indicate low acute toxicity.  
**Skin corrosion/irritation:** No ingredients reported to be irritating or corrosive to skin.  
**Serious eye damage/irritation:** May cause mild redness and discomfort on contact with eyes.  
**Sensitization:** No ingredients reported to be respiratory or skin sensitizers.  
**Germ cell mutagenicity:** No ingredients reported to have mutagenic effects.  
**Carcinogenicity:** No ingredients reported to have carcinogenic effects. No ingredients listed as carcinogenic by ACGIH, OSHA, IARC, or NTP. Highly refined base oil has <3% DMSO extract as measured by IP346.  
**Reproductive toxicity:** No ingredients reported to have reproductive effects.  
**STOT – single exposure:** No ingredients reported to have specific target organ toxicity single exposure effects.  
**STOT – repeated exposure:** Product may remove oils from skin with repeated or prolonged exposure.  
**Aspiration hazard:** No ingredients reported to meet aspiration hazard classification.

### 12. ECOLOGICAL INFORMATION

**Ecotoxicity:** No information available for this product regarding toxicity in the environment.  
**Persistence/degradability:** Not determined for product. Vegetable oil components are readily biodegradable. Mineral oil component is not expected to be readily biodegradable, at <10% in 28 days.  
**Mobility:** Sinks in water. No data available on mobility in soil.

### 13. DISPOSAL CONSIDERATIONS

**Waste disposal:** Generation of waste should be avoided or minimized where possible. Empty containers may contain residue. Dispose of non-recyclable material via licensed waste disposal operator. Follow all applicable regulations.

### 14. TRANSPORT INFORMATION



# Key-Tite

## Safety Data Sheet

**Transport information:** This product is not regulated for transport by USDOT, ADR/RID, IMDG, IATA/ICAO.

### 15. REGULATORY INFORMATION

#### US Regulations

No ingredient in this product is listed under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65) or CERCLA (40 CFR 302.4)

**United States inventory (TSCA):** All ingredients listed or exempt.

#### State Regulations

**California Prop 65:** No ingredient listed.

**Massachusetts Substances:** No ingredient listed.

**New Jersey Hazardous Substances:** No ingredient listed.

**Pennsylvania RTK Hazardous Substances:** No ingredient listed.

#### International regulations

**Canada: WHMIS Classification:** Not controlled. **WHMIS:** This product has been classified according to the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR. **Canada DSL/NDSL:** All ingredients listed or exempt.

**Europe inventory (EINECS):** All ingredients listed or exempt.

**Australia inventory (AICS):** Some ingredients are not listed.

**China inventory (IECSC):** Some ingredients are not listed.

**Japan inventory:** Some ingredients are not listed.

**Korea inventory:** Some ingredients are not listed.

**New Zealand Inventory of Chemicals (NZIoC):** Some ingredients are not listed.

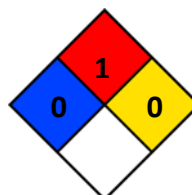
**Philippines inventory (PICCS):** Some ingredients are not listed.

### 16. OTHER INFORMATION

#### Hazardous Material Information System (USA):

HEALTH	0
FIRE	1
REACTIVITY	0
PERSONAL PROTECTION	B

#### National Fire Protection Association (USA):



**Revision information:** Original GHS issue 10 Dec 2014. Rev 1: corrected flash point and VOC level in Section 9. Rev 2: reviewed with no changes.

**END OF SAFETY DATA SHEET**

# SAFETY DATA SHEET

A03408004

## Section 1. Identification

**Product name** : KRYLON® QUIK-MARK™ Water-Based Inverted Marking Paint (Fluorescent)  
Fluorescent Orange

**Product code** : A03408004

**Other means of identification** : Not available.

**Product type** : Aerosol.

### Relevant identified uses of the substance or mixture and uses advised against

Paint or paint related material.

**Manufacturer** : Krylon Products Group  
101 Prospect Avenue NW  
Cleveland, OH 44115

**Emergency telephone number of the company** : US/Canada: (800) 424-9300  
Mexico: CHEMTREC Mexico 01-800-681-9531. Available 24 hours and 365 days per year

**Product Information Telephone Number** : US/Canada: (800) 247-3266  
Mexico: Not Available

**Regulatory Information Telephone Number** : US/Canada: (216) 566-2902  
Mexico: Not Available

**Transportation Emergency Telephone Number** : US/Canada: (800) 424-9300  
Mexico: SETIQ 01-800-00-214-00 / (52) 55-5559-1588 24 hours / 365 days a year

## Section 2. Hazards identification

**OSHA/HCS status** : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

**Classification of the substance or mixture** : FLAMMABLE AEROSOLS - Category 1  
GASES UNDER PRESSURE - Compressed gas  
TOXIC TO REPRODUCTION (Unborn child) - Category 2  
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3  
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3  
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2  
ASPIRATION HAZARD - Category 1  
Percentage of the mixture consisting of ingredient(s) of unknown acute oral toxicity: 18.7%  
Percentage of the mixture consisting of ingredient(s) of unknown acute dermal toxicity: 28.5%  
Percentage of the mixture consisting of ingredient(s) of unknown acute inhalation toxicity: 18.7%

### GHS label elements

**Hazard pictograms** :



**Date of issue/Date of revision** : 11/27/2019 **Date of previous issue** : 11/5/2019

A03408004 KRYLON® QUIK-MARK™ Water-Based Inverted Marking Paint (Fluorescent)  
Fluorescent Orange

**Version** : 13

**SHW-85-NA-GHS-US**

1/16

306

## Section 2. Hazards identification

**Signal word** : Danger

**Hazard statements** : Extremely flammable aerosol.  
 Contains gas under pressure; may explode if heated.  
 Suspected of damaging the unborn child.  
 May be fatal if swallowed and enters airways.  
 May cause respiratory irritation.  
 May cause drowsiness or dizziness.  
 May cause damage to organs through prolonged or repeated exposure.

**Precautionary statements**

**Prevention** : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves. Wear eye or face protection. Wear protective clothing. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not spray on an open flame or other ignition source. Use only outdoors or in a well-ventilated area. Do not breathe dust or mist. Pressurized container: Do not pierce or burn, even after use.

**Response** : Get medical attention if you feel unwell. IF exposed or concerned: Get medical attention. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or physician if you feel unwell. IF SWALLOWED: Immediately call a POISON CENTER or physician. Do NOT induce vomiting.

**Storage** : Store locked up. Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F. Store in a well-ventilated place.

**Disposal** : Dispose of contents and container in accordance with all local, regional, national and international regulations.

**Supplemental label elements** DELAYED EFFECTS FROM LONG TERM OVEREXPOSURE. Contains solvents which can cause permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal. WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. FOR INDUSTRIAL USE ONLY.  
 Please refer to the SDS for additional information. Keep out of reach of children. Keep upright in a cool, dry place. Do not discard empty can in trash compactor.

**Hazards not otherwise classified** : DANGER: Rags, steel wool, other waste soaked with this product, and sanding residue may spontaneously catch fire if improperly discarded. Immediately place rags, steel wool, other waste soaked with this product, and sanding residue in a sealed, water-filled, metal container. Dispose of in accordance with local fire regulations.

## Section 3. Composition/information on ingredients

**Substance/mixture** : Mixture

**Other means of identification** : Not available.

**CAS number/other identifiers**

Ingredient name	% by weight	CAS number
Toluene	<10	108-88-3
Propane	≤10	74-98-6
Light Aliphatic Hydrocarbon	≤10	64742-47-8
Butane	≤5	106-97-8
Lt. Aliphatic Hydrocarbon Solvent	≤3	64742-89-8

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

**There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health and hence require reporting in this section.**

**Occupational exposure limits, if available, are listed in Section 8.**

## Section 4. First aid measures

### Description of necessary first aid measures

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention following exposure or if feeling unwell.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Aspiration hazard if swallowed. Can enter lungs and cause damage. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

### Most important symptoms/effects, acute and delayed

#### Potential acute health effects

- Eye contact** : No known significant effects or critical hazards.
- Inhalation** : Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness. May cause respiratory irritation.
- Skin contact** : No known significant effects or critical hazards.
- Ingestion** : Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways.

#### Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:  
irritation  
redness
- Inhalation** : Adverse symptoms may include the following:  
respiratory tract irritation  
coughing  
nausea or vomiting  
headache  
drowsiness/fatigue  
dizziness/vertigo  
unconsciousness  
reduced fetal weight  
increase in fetal deaths  
skeletal malformations

## Section 4. First aid measures

- Skin contact** : Adverse symptoms may include the following:  
reduced fetal weight  
increase in fetal deaths  
skeletal malformations
- Ingestion** : Adverse symptoms may include the following:  
nausea or vomiting  
reduced fetal weight  
increase in fetal deaths  
skeletal malformations

### Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

## Section 5. Fire-fighting measures

### Extinguishing media

- Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.
- Unsuitable extinguishing media** : None known.

**Specific hazards arising from the chemical** : Extremely flammable aerosol. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Gas may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back, causing fire or explosion. Bursting aerosol containers may be propelled from a fire at high speed.

**Hazardous thermal decomposition products** : Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide  
nitrogen oxides  
sulfur oxides

**Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

**Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. In the case of aerosols being ruptured, care should be taken due to the rapid escape of the pressurized contents and propellant. If a large number of containers are ruptured, treat as a bulk material spillage according to the instructions in the clean-up section. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

### Methods and materials for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

## Section 7. Handling and storage

### Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use. Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not swallow. Avoid breathing gas. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Empty containers retain product residue and can be hazardous.
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

## Section 7. Handling and storage

**Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations. Store away from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Protect from sunlight. Store locked up. Eliminate all ignition sources. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

## Section 8. Exposure controls/personal protection

### Control parameters

#### Occupational exposure limits (OSHA United States)

Ingredient name	CAS #	Exposure limits
Toluene	108-88-3	<b>OSHA PEL Z2 (United States, 2/2013).</b> TWA: 200 ppm 8 hours. CEIL: 300 ppm AMP: 500 ppm 10 minutes. <b>NIOSH REL (United States, 10/2016).</b> TWA: 100 ppm 10 hours. TWA: 375 mg/m <sup>3</sup> 10 hours. STEL: 150 ppm 15 minutes. STEL: 560 mg/m <sup>3</sup> 15 minutes. <b>ACGIH TLV (United States, 3/2019).</b> TWA: 20 ppm 8 hours.
Propane	74-98-6	<b>NIOSH REL (United States, 10/2016).</b> TWA: 1000 ppm 10 hours. TWA: 1800 mg/m <sup>3</sup> 10 hours. <b>OSHA PEL (United States, 5/2018).</b> TWA: 1000 ppm 8 hours. TWA: 1800 mg/m <sup>3</sup> 8 hours. <b>ACGIH TLV (United States, 3/2019). Oxygen Depletion [Asphyxiant]. Explosive potential.</b>
Light Aliphatic Hydrocarbon	64742-47-8	<b>ACGIH TLV (United States, 3/2019).</b> <b>Absorbed through skin.</b> TWA: 200 mg/m <sup>3</sup> , (as total hydrocarbon vapor) 8 hours.
Butane	106-97-8	<b>NIOSH REL (United States, 10/2016).</b> TWA: 800 ppm 10 hours. TWA: 1900 mg/m <sup>3</sup> 10 hours. <b>ACGIH TLV (United States, 3/2019).</b> <b>Explosive potential.</b> STEL: 1000 ppm 15 minutes.
Lt. Aliphatic Hydrocarbon Solvent	64742-89-8	None.

#### Occupational exposure limits (Canada)

Ingredient name	CAS #	Exposure limits
Toluene	108-88-3	<b>CA Alberta Provincial (Canada, 6/2018).</b> <b>Absorbed through skin.</b> 8 hrs OEL: 50 ppm 8 hours. 8 hrs OEL: 188 mg/m <sup>3</sup> 8 hours. <b>CA British Columbia Provincial (Canada, 5/2019).</b> TWA: 20 ppm 8 hours. <b>CA Ontario Provincial (Canada, 1/2018).</b> TWA: 20 ppm 8 hours. <b>CA Quebec Provincial (Canada, 1/2014).</b> <b>Absorbed through skin.</b>

## Section 8. Exposure controls/personal protection

Normal propane	74-98-6	<p>TWAEV: 50 ppm 8 hours.          TWAEV: 188 mg/m<sup>3</sup> 8 hours.  <b>CA Saskatchewan Provincial (Canada, 7/2013). Absorbed through skin.</b>          STEL: 60 ppm 15 minutes.          TWA: 50 ppm 8 hours.</p> <p><b>CA Alberta Provincial (Canada, 6/2018).</b>          8 hrs OEL: 1000 ppm 8 hours.  <b>CA Quebec Provincial (Canada, 1/2014).</b>          TWAEV: 1000 ppm 8 hours.          TWAEV: 1800 mg/m<sup>3</sup> 8 hours.  <b>CA Ontario Provincial (Canada, 1/2018).</b>          TWA: 1000 ppm 8 hours.  <b>CA Saskatchewan Provincial (Canada, 7/2013).</b>          STEL: 1250 ppm 15 minutes.          TWA: 1000 ppm 8 hours.</p> <p><b>CA British Columbia Provincial (Canada, 5/2019). Oxygen Depletion [Asphyxiant]. Explosive potential.</b></p>
Petroleum refining, hydrotreated light distillate	64742-47-8	<p><b>CA British Columbia Provincial (Canada, 5/2019). Absorbed through skin.</b>          TWA: 200 mg/m<sup>3</sup>, (as total hydrocarbon vapour) 8 hours.  <b>CA Alberta Provincial (Canada, 6/2018). Absorbed through skin.</b>          8 hrs OEL: 200 mg/m<sup>3</sup>, (as total hydrocarbon vapour) 8 hours.  <b>CA Ontario Provincial (Canada, 1/2018). Absorbed through skin.</b>          TWA: 200 mg/m<sup>3</sup>, (as total hydrocarbon vapour) 8 hours.</p>
Butane	106-97-8	<p><b>CA Alberta Provincial (Canada, 6/2018).</b>          8 hrs OEL: 1000 ppm 8 hours.  <b>CA Quebec Provincial (Canada, 1/2014).</b>          TWAEV: 800 ppm 8 hours.          TWAEV: 1900 mg/m<sup>3</sup> 8 hours.  <b>CA Ontario Provincial (Canada, 1/2018).</b>          TWA: 800 ppm 8 hours.  <b>CA Saskatchewan Provincial (Canada, 7/2013).</b>          STEL: 1250 ppm 15 minutes.          TWA: 1000 ppm 8 hours.  <b>CA British Columbia Provincial (Canada, 5/2019). Explosive potential.</b>          STEL: 1000 ppm 15 minutes.</p>

**Occupational exposure limits (Mexico)**

	CAS #	Exposure limits
Toluene	108-88-3	<b>NOM-010-STPS-2014 (Mexico, 4/2016).</b> <span style="float: right; color: blue;">▶</span> TWA: 20 ppm 8 hours.
Propane	74-98-6	<b>NOM-010-STPS-2014 (Mexico, 4/2016).</b> TWA: 1000 ppm 8 hours.
Light Aliphatic Hydrocarbon	64742-47-8	<b>ACGIH TLV (United States, 3/2019). Absorbed through skin.</b> TWA: 200 mg/m <sup>3</sup> , (as total hydrocarbon



## Section 8. Exposure controls/personal protection

Butane	106-97-8	vapor) 8 hours. <b>NOM-010-STPS-2014 (Mexico, 4/2016).</b> TWA: 1000 ppm 8 hours.
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- Appropriate engineering controls** : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

**Individual protection measures**

- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
- Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.
- Skin protection**
- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

## Section 9. Physical and chemical properties

**Appearance**

- Physical state** : Liquid.
- Color** : Not available.
- Odor** : Not available.
- Odor threshold** : Not available.
- pH** : 7
- Melting point/freezing point** : Not available.

## Section 9. Physical and chemical properties

- Boiling point/boiling range** : Not available.
- Flash point** : Closed cup: -29°C (-20.2°F) [Pensky-Martens Closed Cup]
- Evaporation rate** : 2 (butyl acetate = 1)
- Flammability (solid, gas)** : Not available.
- Lower and upper explosive (flammable) limits** : Lower: 0.9%  
Upper: 9.5%
- Vapor pressure** : 101.3 kPa (760 mm Hg) [at 20°C]
- Vapor density** : 1 [Air = 1]
- Relative density** : 0.86
- Solubility** : Not available.
- Partition coefficient: n-octanol/water** : Not available.
- Auto-ignition temperature** : Not available.
- Decomposition temperature** : Not available.
- Viscosity** : Kinematic (40°C (104°F)): <0.205 cm<sup>2</sup>/s (<20.5 cSt)
- Molecular weight** : Not applicable.
- Aerosol product**
  - Type of aerosol** : Spray
  - Heat of combustion** : 13.191 kJ/g

## Section 10. Stability and reactivity

- Reactivity** : No specific test data related to reactivity available for this product or its ingredients.
- Chemical stability** : The product is stable.
- Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.
- Conditions to avoid** : Avoid all possible sources of ignition (spark or flame).
- Incompatible materials** : No specific data.
- Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## Section 11. Toxicological information

### Information on toxicological effects

#### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Toluene	LC50 Inhalation Vapor	Rat	49 g/m <sup>3</sup>	4 hours
	LD50 Oral	Rat	636 mg/kg	-
Butane	LC50 Inhalation Vapor	Rat	658000 mg/m <sup>3</sup>	4 hours

#### Irritation/Corrosion

## Section 11. Toxicological information

Product/ingredient name	Result	Species	Score	Exposure	Observation
Toluene	Eyes - Mild irritant	Rabbit	-	0.5 minutes 100 mg	-
	Eyes - Mild irritant	Rabbit	-	870 ug	-
	Eyes - Severe irritant	Rabbit	-	24 hours 2 mg	-
	Skin - Mild irritant	Pig	-	24 hours 250 UJ	-
	Skin - Mild irritant	Rabbit	-	435 mg	-
	Skin - Moderate irritant	Rabbit	-	24 hours 20 mg	-
	Skin - Moderate irritant	Rabbit	-	500 mg	-

### Sensitization

Not available.

### Mutagenicity

Not available.

### Carcinogenicity

Not available.

### Classification

Product/ingredient name	OSHA	IARC	NTP
Toluene	-	3	-

### Reproductive toxicity

Not available.

### Teratogenicity

Not available.

### Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
Toluene	Category 3	Not applicable.	Narcotic effects
	Category 3	Not applicable.	Respiratory tract irritation
Propane	Category 3	Not applicable.	Narcotic effects
	Category 3	Not applicable.	Respiratory tract irritation
Light Aliphatic Hydrocarbon	Category 3	Not applicable.	Narcotic effects
	Category 3	Not applicable.	Respiratory tract irritation
Butane	Category 3	Not applicable.	Narcotic effects
	Category 3	Not applicable.	Respiratory tract irritation
Lt. Aliphatic Hydrocarbon Solvent	Category 3	Not applicable.	Narcotic effects
	Category 3	Not applicable.	Respiratory tract irritation

### Specific target organ toxicity (repeated exposure)

# Section 11. Toxicological information

Name	Category	Route of exposure	Target organs
Toluene	Category 2	Not determined	Not determined
Propane	Category 2	Not determined	Not determined
Light Aliphatic Hydrocarbon	Category 2	Not determined	Not determined
Butane	Category 2	Not determined	Not determined
Lt. Aliphatic Hydrocarbon Solvent	Category 2	Not determined	Not determined

**Aspiration hazard**

Name	Result
Toluene	ASPIRATION HAZARD - Category 1
Propane	ASPIRATION HAZARD - Category 1
Light Aliphatic Hydrocarbon	ASPIRATION HAZARD - Category 1
Butane	ASPIRATION HAZARD - Category 1
Lt. Aliphatic Hydrocarbon Solvent	ASPIRATION HAZARD - Category 1

**Information on the likely routes of exposure** : Not available.

**Potential acute health effects**

- Eye contact** : No known significant effects or critical hazards.
- Inhalation** : Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness. May cause respiratory irritation.
- Skin contact** : No known significant effects or critical hazards.
- Ingestion** : Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways.

**Symptoms related to the physical, chemical and toxicological characteristics**

- Eye contact** : Adverse symptoms may include the following:  
irritation  
redness
- Inhalation** : Adverse symptoms may include the following:  
respiratory tract irritation  
coughing  
nausea or vomiting  
headache  
drowsiness/fatigue  
dizziness/vertigo  
unconsciousness  
reduced fetal weight  
increase in fetal deaths  
skeletal malformations
- Skin contact** : Adverse symptoms may include the following:  
reduced fetal weight  
increase in fetal deaths  
skeletal malformations
- Ingestion** : Adverse symptoms may include the following:  
nausea or vomiting  
reduced fetal weight  
increase in fetal deaths  
skeletal malformations

**Delayed and immediate effects and also chronic effects from short and long term exposure**

**Short term exposure**

## Section 11. Toxicological information

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

Long term exposure

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

Potential chronic health effects

Not available.

**General** : May cause damage to organs through prolonged or repeated exposure.

**Carcinogenicity** : No known significant effects or critical hazards.

**Mutagenicity** : No known significant effects or critical hazards.

**Teratogenicity** : Suspected of damaging the unborn child.

**Developmental effects** : No known significant effects or critical hazards.

**Fertility effects** : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Route	ATE value
Oral	5286.78 mg/kg

## Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
Toluene	Acute EC50 12500 µg/l Fresh water	Algae - Pseudokirchneriella subcapitata	72 hours
	Acute EC50 11600 µg/l Fresh water	Crustaceans - Gammarus pseudolimnaeus - Adult	48 hours
	Acute EC50 6000 µg/l Fresh water	Daphnia - Daphnia magna - Juvenile (Fledgling, Hatchling, Weanling)	48 hours
	Acute LC50 5500 µg/l Fresh water	Fish - Oncorhynchus kisutch - Fry	96 hours
	Chronic NOEC 1000 µg/l Fresh water	Daphnia - Daphnia magna	21 days
	Acute LC50 2200 µg/l Fresh water	Fish - Lepomis macrochirus	4 days
Light Aliphatic Hydrocarbon	Acute LC50 >100000 ppm Fresh water	Fish - Oncorhynchus mykiss	96 hours
Lt. Aliphatic Hydrocarbon Solvent			

Persistence and degradability

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Toluene	-	-	Readily

Bioaccumulative potential

## Section 12. Ecological information

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
Toluene Lt. Aliphatic Hydrocarbon Solvent	- -	90 10 to 2500	low high

### Mobility in soil






**Soil/water partition coefficient (K<sub>oc</sub>)** : Not available.

**Other adverse effects** : No known significant effects or critical hazards.

## Section 13. Disposal considerations

**Disposal methods** : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Do not puncture or incinerate container.

## Section 14. Transport information

	DOT Classification	TDG Classification	Mexico Classification	IATA	IMDG
<b>UN number</b>	UN1950	UN1950	UN1950	UN1950	UN1950
<b>UN proper shipping name</b>	AEROSOLS	AEROSOLS	AEROSOLS	AEROSOLS, flammable	AEROSOLS
<b>Transport hazard class(es)</b>	2.1 	2.1 	2.1 	2.1 	2.1 
<b>Packing group</b>	-	-	-	-	-
<b>Environmental hazards</b>	No.	No.	No.	No.	No.
<b>Additional information</b>	-  <b>ERG No.</b> 126	Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.13-2.17 (Class 2).  <b>ERG No.</b> 126	-  <b>ERG No.</b> 126	-	<b>Emergency schedules</b> F-D, S-U

## Section 14. Transport information

**Special precautions for user** : Multi-modal shipping descriptions are provided for informational purposes and do not consider container sizes. The presence of a shipping description for a particular mode of transport (sea, air, etc.), does not indicate that the product is packaged suitably for that mode of transport. All packaging must be reviewed for suitability prior to shipment, and compliance with the applicable regulations is the sole responsibility of the person offering the product for transport. People loading and unloading dangerous goods must be trained on all of the risks deriving from the substances and on all actions in case of emergency situations.

**Transport in bulk according to Annex II of MARPOL and the IBC Code** : Not available.

**Proper shipping name** : Not available.

**Ship type** : Not available.

**Pollution category** : Not available.

## Section 15. Regulatory information

### SARA 313

SARA 313 (40 CFR 372.45) supplier notification can be found on the Environmental Data Sheet.

### California Prop. 65

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

### International regulations

#### **International lists**

**Australia inventory (AICS)**: Not determined.

**China inventory (IECSC)**: Not determined.

**Japan inventory (ENCS)**: Not determined.

**Japan inventory (ISHL)**: Not determined.

**Korea inventory (KECI)**: Not determined.

**New Zealand Inventory of Chemicals (NZIoC)**: Not determined.

**Philippines inventory (PICCS)**: Not determined.

**Taiwan Chemical Substances Inventory (TCSI)**: Not determined.

**Thailand inventory**: Not determined.

**Turkey inventory**: Not determined.

**Vietnam inventory**: Not determined.

## Section 16. Other information

### Hazardous Material Information System (U.S.A.)

Health	*	3
Flammability		2
Physical hazards		3

The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings and the associated label are not required on SDSs or products leaving a facility under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc.

### Procedure used to derive the classification

**Date of issue/Date of revision**

: 11/27/2019

**Date of previous issue**

: 11/5/2019

**Version** : 13

14/16

A03408004

KRYLON® QUIK-MARK™ Water-Based Inverted Marking Paint (Fluorescent)  
Fluorescent Orange

SHW-85-NA-GHS-US

# Section 16. Other information

Classification	Justification
FLAMMABLE AEROSOLS - Category 1	On basis of test data
GASES UNDER PRESSURE - Compressed gas	Calculation method
TOXIC TO REPRODUCTION (Unborn child) - Category 2	Calculation method
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3	Calculation method
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3	Calculation method
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2	Calculation method
ASPIRATION HAZARD - Category 1	Calculation method

**History**

- Date of printing** : 11/27/2019
- Date of issue/Date of revision** : 11/27/2019
- Date of previous issue** : 11/5/2019
- Version** : 13
- Key to abbreviations** :
  - ATE = Acute Toxicity Estimate
  - BCF = Bioconcentration Factor
  - GHS = Globally Harmonized System of Classification and Labelling of Chemicals
  - IATA = International Air Transport Association
  - IBC = Intermediate Bulk Container
  - IMDG = International Maritime Dangerous Goods
  - LogPow = logarithm of the octanol/water partition coefficient
  - MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
  - N/A = Not available
  - SGG = Segregation Group
  - UN = United Nations

▀ Indicates information that has changed from previously issued version.

**Notice to reader**

It is recommended that each customer or recipient of this Safety Data Sheet (SDS) study it carefully and consult resources, as necessary or appropriate, to become aware of and understand the data contained in this SDS and any hazards associated with the product. This information is provided in good faith and believed to be accurate as of the effective date herein. However, no warranty, express or implied, is given. The information presented here applies only to the product as shipped. The addition of any material can change the composition, hazards and risks of the product. Products shall not be repackaged, modified, or tinted except as specifically instructed by the manufacturer, including but not limited to the incorporation of products not specified by the manufacturer, or the use or addition of products in proportions not specified by the manufacturer. Regulatory requirements are subject to change and may differ between various locations and jurisdictions. The customer/buyer/user is responsible to ensure that his activities comply with all country, federal, state, provincial or local laws. The conditions for use of the product are not under the control of the manufacturer; the customer/buyer/user is responsible to determine the conditions necessary for the safe use of this product. The customer/buyer/user should not use the product for any purpose other than the purpose shown in the applicable section of this SDS without first referring to the supplier and obtaining written handling instructions. Due to the proliferation of sources for information such as manufacturer-specific SDS, the manufacturer cannot be responsible for SDSs obtained from any other source.







# SAFETY DATA SHEET

## 1. IDENTIFICATION

Product name: LA'S TOTALLY AWESOME OXYGEN ORANGE ALL PURPOSE DEGREASER AND SPOT REMOVER

### Additional identification

Chemical name: Water based Mixture  
Product is designed, packaged and labeled for consumer use per USCPSC guidelines.  
Consumer container size: 32 Fl Oz

### Recommended use and restriction on use

Recommended use: All Purpose stain remover  
Restrictions on use: Follow Label Directions.

### Responsible Party

Company Name: AWESOME PRODUCTS, INC.  
Address: 6370 Altura Blvd  
Buena Park, CA 90620 USA  
Telephone: 1-800-482-2875

Emergency telephone number: 1-714-562-8873

## 2. HAZARD(S) IDENTIFICATION

### Hazard Classification

#### Health Hazards

Skin Corrosion/Irritation Category 1B  
Serious Eye Damage/Eye Irritation Category 1  
May be harmful if inhaled (aspirated) Category 3 (Respiratory System)

#### Toxicity

Acute toxicity values for, oral dermal or inhalation are not known however this product is thought to be relatively non-toxic when used in accordance with label instructions. It does not contain any chemicals subject to the reporting requirements of SARA Section 313 (40 CFR 372).

### Label Elements

#### Hazard Symbols



#### Signal Word

**Danger**

#### Hazard Statements:

Causes serious eye damage  
Harmful if swallowed  
Causes skin irritation

# SAFETY DATA SHEET

LA'S TOTALLY AWESOME LAUNDRY PRE-WASH

## Precautionary Statement:

- Prevention:** Wash thoroughly after handling. Wear protective eyewear Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use additional personal protective equipment as required.
- Response:** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. IF ON SKIN: Wash with plenty of water. IF SKIN IRRITATION OCCURS: Get medical advice/attention immediately. IF INGESTED OR ASPIRATED: call a POISON CENTER (1-800-222-1222) or consult a doctor. See product label for specific treatment. Remove contaminated clothing and launder before reuse.
- Storage:** Store in closed containers in restricted location..
- Disposal:** Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws, regulations, and product characteristics at time of disposal.

Other hazards not resulting in GHS classification: None identified.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS number	Percent by Weight
Water	7732-18-5	93.28%
Diethylene Glycol Monoethyl Ether	7884-38-2	1.71%
2-Ethyl hexanol EO-PO nonionic surfactant	111-90-0	1.71%
Trisodium Phosphate	7601-54-9	1.19%
Sodium Metasilicate	10213-79-3	1.19%
Sodium Hydroxide	1310-73-2	0.60%
Tetrasodium EDTA	64-02-8	0.22%
Fragrance	Mixture	0.10%

Trade secret information: We reserve the right to withhold specific chemical identities and/or percentages of composition as trade secrets.

## 4. FIRST-AID MEASURES

- General information:** If exposed or concerned get medical advice/attention.
- Ingestion:** Rinse mouth. Get medical attention if symptoms occur.
- Inhalation:** Remove exposed person to fresh air if adverse effects are observed.
- Skin Contact:** Take off contaminated clothing and launder before re-use. Wash skin thoroughly with soap and water. If skin irritation occurs, get medical attention.
- Eye contact:** Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. Immediately call a POISON CENTER (1-800-222-1222 in USA) or doctor/physician.

# SAFETY DATA SHEET

LA'S TOTALLY AWESOME LAUNDRY PRE-WASH

Most important symptoms/effects, acute and delayed:

Symptoms: Symptoms may be delayed.

Immediate Medical Attention and Special Treatment Requirements:

Treatment: Treat symptomatically.

## 5. FIRE-FIGHTING MEASURES

General Fire Hazards: Product is water based, No unusual fire or explosion hazards noted.

Extinguishing Media:

Suitable: Appropriate to primary fire source. Product will tolerate CO<sub>2</sub>, dry chemical, foam, water spray, water fog.

Unsuitable: Avoid water reactive media.

Specific hazards: Material will not burn until water has boiled off or evaporated. When heated hazardous gases may be released including carbon monoxide. Closed containers may rupture on heating.

Special Protective Equipment and Precautions for Firefighters

Special procedures: Dike runoff areas to avoid release to storm sewers or navigable waterways.

Special protective equipment: Wear full protective fire gear including self-containing breathing apparatus operated in the positive pressure mode with full face piece, coat, pants, gloves and boots for all fires involving chemicals.

## 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures: Do not handle damaged containers or spilled material unless wearing appropriate protective clothing. Keep unauthorized personnel away. Ventilate area if spilled in confined space or other poorly ventilated areas. Personal Protective Equipment must be worn,

Methods and material for containment and cleaning up: Dike spillage area for later recovery and disposal. Pick up free liquid for recycle and/or disposal. Residual liquid can be absorbed on inert material. Wash area with soap and water. Spilled liquid and dried film are slippery. Use care to avoid falls. Stop the flow of material, if this is without risk. Prevent entry into waterways, sewer, basements or confined areas.

Environmental Precautions: Avoid release to the environment. Do not contaminate water sources or allow to enter storm sewer. Safely prevent further spillage.

# SAFETY DATA SHEET

LA'S TOTALLY AWESOME LAUNDRY PRE-WASH

## 7. HANDLING AND STORAGE

**Precautions for safe handling:** Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. Do not get in eyes. Avoid contact with skin. Observe good industrial hygiene practices. Provide adequate ventilation. Use personal protective equipment as required. Wash hands thoroughly after handling. Launder contaminated clothing before reuse. Avoid environmental contamination. Avoid breathing mists or vapors. When using do not eat, drink or smoke. Keep containers closed when not in use.

**Handling Temperature:** Ambient indoor storage. Do not allow to freeze.

**Conditions for safe storage, including any incompatibilities:** Store away from water reactive, acidic and other incompatible materials. Do not store in open, unlabeled or mislabeled containers. Keep away from children.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Control Parameters:**

**Occupational Exposure Limits**

Chemical name	Type	Exposure Limits	Source of Information
Contains no substances with occupational exposure values			NIOSH

**Engineering Controls:** Use material in well ventilated area only. Adequate ventilation should be provided so that exposure limits are not exceeded. Mechanical ventilation or local exhaust ventilation may be required.

**Individual Protection Measures:**

**General information:** Provide easy access to water supply and eye wash facilities. Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels to an acceptable level.

**Eye/face protection:** Wear tight-fitting goggles or face shield.

**Skin Protection:**

**Hand Protection:** Use good industrial hygiene practices to limit or avoid skin contact. If contact may occur wear chemically protective gloves

**Other skin protection:** Wear apron or protective clothing in case of contact. Do not wear rings, watches or similar apparel that could entrap the material.

# SAFETY DATA SHEET

LA'S TOTALLY AWESOME LAUNDRY PRE-WASH

**Respiratory Protection:** Under normal use conditions, respirator is not usually required. Use appropriate respiratory protection if exposure to mist or vapors is likely. Use self-contained breathing apparatus for entry into confined space, for other poorly ventilated areas and for large spill clean-up sites.

**Hygiene measures:** Observe good industrial hygiene practices. Do not get in eyes. Avoid contact with skin. Wash contaminated clothing before reuse. Wash hands before breaks and immediately after handling the product.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Appearance

**Physical state:** Transparent Liquid  
**Color:** Colorless  
**Odor:** Determined by added fragrance  
**Odor threshold:** No data available.

### Chemical Properties

**pH Range:** 11-12.5  
**Freezing point:** Approximately that of water  
**Boiling Point:** Approximately that of water  
**Flash Point:** Boils without Flashing  
**Evaporation rate:** Approximately that of water  
**Flammability (solid, gas):** .  
**Upper limit - upper (%):** Not Flammable.  
**Lower limit - lower (%):** Not Flammable.  
**Explosive limit - upper (%):** Not Explosive  
**Explosive limit - lower (%):** Not Explosive.  
**Vapor pressure:** Approximately that of water  
**Vapor density:** Approximately that of water vapor  
**Relative density:**  
**Solubility**  
**In water:** Miscible  
**Other:** Not determined  
**Auto-ignition temperature:** Not Flammable  
**Decomposition temperature:** Boils without decomposing.  
**Viscosity:** Similar to that of water.  
**Other information**  
**Bulk density:** Approximately 8.4 lb/gal  
**Percent Non-Volatile Solids:** Approximately 5 %  
**Volatile Organic Compounds (VOC):** Less than 2%

# SAFETY DATA SHEET

LA'S TOTALLY AWESOME LAUNDRY PRE-WASH

## 10. STABILITY AND REACTIVITY

Reactivity:	Stable under ambient conditions
Chemical Reactivity:	Performance deteriorates in the presence of acidic material..
Hazardous Polymerization or Other Reactions:	Not expected to occur.
Conditions to Avoid:	Do not freeze or blend with acids.
Incompatible Materials:	Strong acids and water reactive chemicals or metals.
Hazardous Decomposition Products:	Thermal decomposition or combustion following loss of water content may liberate carbon oxides and other toxic gases or vapors.

## 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

Inhalation:	Avoid inhaling mist.
Ingestion:	Do not swallow.
Skin Contact:	Causes skin irritation. Wash off with water if exposed.
Eye contact:	Causes serious eye damage.

### Information on toxicological effects

#### Acute Toxicity

Oral:	Swallowing material may cause irritation of the gastrointestinal lining, nausea, vomiting, diarrhea, and abdominal pain. Swallowing this material causes irritation of mouth, esophagus and stomach, with nausea, vomiting, diarrhea and abdominal pain. Seek immediate medical attention.
Dermal:	Not classified for acute toxicity based on available data.
Inhalation:	Avoid inhalation of mists or vapors. Not classified for acute toxicity based on available data.
Skin Corrosion/Irritation:	Prolonged or repeated skin contact as from clothing wet with material may cause dermatitis. Symptoms may include redness, edema, drying, and cracking of the skin.
Serious Eye Damage/Eye Irritation:	Mist may cause irritation. Causes serious eye damage.
Respiratory sensitization:	No data available
Skin sensitization:	Not a skin sensitizer.

# SAFETY DATA SHEET

LA'S TOTALLY AWESOME LAUNDRY PRE-WASH

**Specific Target Organ Toxicity - Single Exposure:**

Mist or vapors from heating may cause irritation of upper respiratory tract.

**Aspiration Hazard:**

No data available but expected to be harmful.

**Chronic Effects**

**Carcinogenicity:**

It is not anticipated that the hazard of carcinogenicity will result from workplace exposure to this product or it's solutions.

**IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:**

Components not classifiable as to carcinogenicity to humans.

**U.S. National Toxicology Program (NTP) Report on Carcinogens:**

See section 8 of this SDS

**U.S. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):**

See section 8 of this SDS

**Germ Cell Mutagenicity:**

There is limited evidence that this material may damage the developing fetus.

**Reproductive Toxicity:**

There is limited evidence that the components of this material may affect the reproductive system in humans or in animals.

**.Specific Target Organ Toxicity - Repeated Exposure:**

Prolonged or repeated skin contact product mixture may cause dermatitis with redness, edema, drying, and cracking of the skin.

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity**

Product considered toxic to aquatic life. Waste from normal product use may be disposed of in an EPA Permitted Publicly Owned Treatment Works (POTW) in compliance with applicable Federal / Provincial / State / Local / Municipal pretreatment requirements or a qualified Septic system.

## 13. DISPOSAL CONSIDERATIONS

**Disposal instructions:**

Treatment, storage, transportation, and disposal must be in accordance with applicable Federal, State/Provincial, and Local regulations. Dispose of packaging or containers in accordance with local, regional, national and international regulations. Empty container contains product residue which may exhibit hazards of product.

**Used Packaging:**

Container packaging may exhibit residual hazards.

**California Waste Code:**

561 (Detergent and Soap)



# SAFETY DATA SHEET

LA'S TOTALLY AWESOME LAUNDRY PRE-WASH

## 14. TRANSPORT INFORMATION

### DOT

Not regulated (pH Not More Than (NMT) 12.5  
Consumer Commodity UN8000 ERG171

### IMDG

Not regulated.

### IATA

Not regulated.

Shipping descriptions may vary based on mode of transport, quantities, temperature of the material, package size, and/or origin and destination. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material. Review classification requirements before shipping materials at elevated temperatures.

## 15. REGULATORY INFORMATION

### U.S. Federal Regulations

#### Toxic Substances Control Act (TSCA)

The ingredients in this product are listed or are exempt from listing on the U.S. Toxic Substances Control Act (TSCA) Chemical Substance Inventory

#### Superfund Amendments and Reauthorization Act of 1986 (SARA)

This product does not contain any SARA 302 Extremely Hazardous Substances in regulated quantities.

### US State Regulations

#### California Proposition 65

This product does not contain chemical(s) known to the state of California to cause cancer, reproductive harm or birth defects.

#### New Jersey and Pennsylvania Right to Know

One or more components are listed on the Pennsylvania and New Jersey Hazardous Substance and Special Health Hazard Substance lists.

### Canadian Regulations

The components of this material do not appear on Canada's CEPA Environmental Toxic Substances List

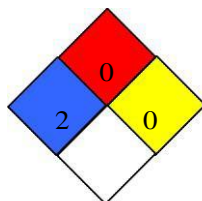
# SAFETY DATA SHEET

LA'S TOTALLY AWESOME LAUNDRY PRE-WASH

## 16. OTHER INFORMATION

HMIS Hazard ID

Hazard rating scale: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe; \*Chronic health effect"



Flammability: 0 - Minimal  
Health: 2 - Moderate  
Physical Hazards: 0 - Minimal

This document has been prepared using data from sources considered technically reliable. It does not constitute a warranty, express or implied, as to the accuracy of the information contained herein. Actual conditions of use and handling are beyond seller's control. User is responsible to evaluate all available information when using product for any particular use and to comply with all Federal, State, Provincial and Local laws and regulations.



# SAFETY DATA SHEET

## 1. IDENTIFICATION

Product name: LA'S TOTALLY AWESOME OXYGEN ORANGE ALL PURPOSE DEGREASER AND SPOT REMOVER

### Additional identification

Chemical name: Water based Mixture  
Product is designed, packaged and labeled for consumer use per USCPSC guidelines.  
Consumer container size: 32 Fl Oz

### Recommended use and restriction on use

Recommended use: All Purpose stain remover  
Restrictions on use: Follow Label Directions.

### Responsible Party

Company Name: AWESOME PRODUCTS, INC.  
Address: 6370 Altura Blvd  
Buena Park, CA 90620 USA  
Telephone: 1-800-482-2875

Emergency telephone number: 1-714-562-8873

## 2. HAZARD(S) IDENTIFICATION

### Hazard Classification

#### Health Hazards

Skin Corrosion/Irritation Category 1B  
Serious Eye Damage/Eye Irritation Category 1  
May be harmful if inhaled (aspirated) Category 3 (Respiratory System)

#### Toxicity

Acute toxicity values for, oral dermal or inhalation are not known however this product is thought to be relatively non-toxic when used in accordance with label instructions. It does not contain any chemicals subject to the reporting requirements of SARA Section 313 (40 CFR 372).

### Label Elements

#### Hazard Symbols



#### Signal Word

**Danger**

#### Hazard Statements:

Causes serious eye damage  
Harmful if swallowed  
Causes skin irritation

# SAFETY DATA SHEET

LA'S TOTALLY AWESOME LAUNDRY PRE-WASH

## Precautionary Statement:

- Prevention:** Wash thoroughly after handling. Wear protective eyewear Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use additional personal protective equipment as required.
- Response:** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. IF ON SKIN: Wash with plenty of water. IF SKIN IRRITATION OCCURS: Get medical advice/attention immediately. IF INGESTED OR ASPIRATED: call a POISON CENTER (1-800-222-1222) or consult a doctor. See product label for specific treatment. Remove contaminated clothing and launder before reuse.
- Storage:** Store in closed containers in restricted location..
- Disposal:** Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws, regulations, and product characteristics at time of disposal.

Other hazards not resulting in GHS classification: None identified.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS number	Percent by Weight
Water	7732-18-5	93.28%
Diethylene Glycol Monoethyl Ether	7884-38-2	1.71%
2-Ethyl hexanol EO-PO nonionic surfactant	111-90-0	1.71%
Trisodium Phosphate	7601-54-9	1.19%
Sodium Metasilicate	10213-79-3	1.19%
Sodium Hydroxide	1310-73-2	0.60%
Tetrasodium EDTA	64-02-8	0.22%
Fragrance	Mixture	0.10%

Trade secret information: We reserve the right to withhold specific chemical identities and/or percentages of composition as trade secrets.

## 4. FIRST-AID MEASURES

- General information:** If exposed or concerned get medical advice/attention.
- Ingestion:** Rinse mouth. Get medical attention if symptoms occur.
- Inhalation:** Remove exposed person to fresh air if adverse effects are observed.
- Skin Contact:** Take off contaminated clothing and launder before re-use. Wash skin thoroughly with soap and water. If skin irritation occurs, get medical attention.
- Eye contact:** Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. Immediately call a POISON CENTER (1-800-222-1222 in USA) or doctor/physician.

# SAFETY DATA SHEET

LA'S TOTALLY AWESOME LAUNDRY PRE-WASH

Most important symptoms/effects, acute and delayed:

Symptoms: Symptoms may be delayed.

Immediate Medical Attention and Special Treatment Requirements:

Treatment: Treat symptomatically.

## 5. FIRE-FIGHTING MEASURES

General Fire Hazards: Product is water based, No unusual fire or explosion hazards noted.

Extinguishing Media:

Suitable: Appropriate to primary fire source. Product will tolerate CO<sub>2</sub>, dry chemical, foam, water spray, water fog.

Unsuitable: Avoid water reactive media.

Specific hazards: Material will not burn until water has boiled off or evaporated. When heated hazardous gases may be released including carbon monoxide. Closed containers may rupture on heating.

Special Protective Equipment and Precautions for Firefighters

Special procedures: Dike runoff areas to avoid release to storm sewers or navigable waterways.

Special protective equipment: Wear full protective fire gear including self-containing breathing apparatus operated in the positive pressure mode with full face piece, coat, pants, gloves and boots for all fires involving chemicals.

## 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures: Do not handle damaged containers or spilled material unless wearing appropriate protective clothing. Keep unauthorized personnel away. Ventilate area if spilled in confined space or other poorly ventilated areas. Personal Protective Equipment must be worn,

Methods and material for containment and cleaning up: Dike spillage area for later recovery and disposal. Pick up free liquid for recycle and/or disposal. Residual liquid can be absorbed on inert material. Wash area with soap and water. Spilled liquid and dried film are slippery. Use care to avoid falls. Stop the flow of material, if this is without risk. Prevent entry into waterways, sewer, basements or confined areas.

Environmental Precautions: Avoid release to the environment. Do not contaminate water sources or allow to enter storm sewer. Safely prevent further spillage.

# SAFETY DATA SHEET

LA'S TOTALLY AWESOME LAUNDRY PRE-WASH

## 7. HANDLING AND STORAGE

**Precautions for safe handling:** Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. Do not get in eyes. Avoid contact with skin. Observe good industrial hygiene practices. Provide adequate ventilation. Use personal protective equipment as required. Wash hands thoroughly after handling. Launder contaminated clothing before reuse. Avoid environmental contamination. Avoid breathing mists or vapors. When using do not eat, drink or smoke. Keep containers closed when not in use.

**Handling Temperature:** Ambient indoor storage. Do not allow to freeze.

**Conditions for safe storage, including any incompatibilities:** Store away from water reactive, acidic and other incompatible materials. Do not store in open, unlabeled or mislabeled containers. Keep away from children.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Control Parameters:**

**Occupational Exposure Limits**

Chemical name	Type	Exposure Limits	Source of Information
Contains no substances with occupational exposure values			NIOSH

**Engineering Controls:** Use material in well ventilated area only. Adequate ventilation should be provided so that exposure limits are not exceeded. Mechanical ventilation or local exhaust ventilation may be required.

**Individual Protection Measures:**

**General information:** Provide easy access to water supply and eye wash facilities. Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels to an acceptable level.

**Eye/face protection:** Wear tight-fitting goggles or face shield.

**Skin Protection:**

**Hand Protection:** Use good industrial hygiene practices to limit or avoid skin contact. If contact may occur wear chemically protective gloves

**Other skin protection:** Wear apron or protective clothing in case of contact. Do not wear rings, watches or similar apparel that could entrap the material.

# SAFETY DATA SHEET

LA'S TOTALLY AWESOME LAUNDRY PRE-WASH

**Respiratory Protection:** Under normal use conditions, respirator is not usually required. Use appropriate respiratory protection if exposure to mist or vapors is likely. Use self-contained breathing apparatus for entry into confined space, for other poorly ventilated areas and for large spill clean-up sites.

**Hygiene measures:** Observe good industrial hygiene practices. Do not get in eyes. Avoid contact with skin. Wash contaminated clothing before reuse. Wash hands before breaks and immediately after handling the product.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Appearance

**Physical state:** Transparent Liquid  
**Color:** Colorless  
**Odor:** Determined by added fragrance  
**Odor threshold:** No data available.

### Chemical Properties

**pH Range:** 11-12.5  
**Freezing point:** Approximately that of water  
**Boiling Point:** Approximately that of water  
**Flash Point:** Boils without Flashing  
**Evaporation rate:** Approximately that of water  
**Flammability (solid, gas):** .  
**Upper limit - upper (%):** Not Flammable.  
**Lower limit - lower (%):** Not Flammable.  
**Explosive limit - upper (%):** Not Explosive  
**Explosive limit - lower (%):** Not Explosive.  
**Vapor pressure:** Approximately that of water  
**Vapor density:** Approximately that of water vapor  
**Relative density:**  
**Solubility**  
**In water:** Miscible  
**Other:** Not determined  
**Auto-ignition temperature:** Not Flammable  
**Decomposition temperature:** Boils without decomposing.  
**Viscosity:** Similar to that of water.  
**Other information**  
**Bulk density:** Approximately 8.4 lb/gal  
**Percent Non-Volatile Solids:** Approximately 5 %  
**Volatile Organic Compounds (VOC):** Less than 2%

# SAFETY DATA SHEET

LA'S TOTALLY AWESOME LAUNDRY PRE-WASH

## 10. STABILITY AND REACTIVITY

Reactivity:	Stable under ambient conditions
Chemical Reactivity:	Performance deteriorates in the presence of acidic material..
Hazardous Polymerization or Other Reactions:	Not expected to occur.
Conditions to Avoid:	Do not freeze or blend with acids.
Incompatible Materials:	Strong acids and water reactive chemicals or metals.
Hazardous Decomposition Products:	Thermal decomposition or combustion following loss of water content may liberate carbon oxides and other toxic gases or vapors.

## 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

Inhalation:	Avoid inhaling mist.
Ingestion:	Do not swallow.
Skin Contact:	Causes skin irritation. Wash off with water if exposed.
Eye contact:	Causes serious eye damage.

### Information on toxicological effects

#### Acute Toxicity

Oral:	Swallowing material may cause irritation of the gastrointestinal lining, nausea, vomiting, diarrhea, and abdominal pain. Swallowing this material causes irritation of mouth, esophagus and stomach, with nausea, vomiting, diarrhea and abdominal pain. Seek immediate medical attention.
Dermal:	Not classified for acute toxicity based on available data.
Inhalation:	Avoid inhalation of mists or vapors. Not classified for acute toxicity based on available data.
Skin Corrosion/Irritation:	Prolonged or repeated skin contact as from clothing wet with material may cause dermatitis. Symptoms may include redness, edema, drying, and cracking of the skin.
Serious Eye Damage/Eye Irritation:	Mist may cause irritation. Causes serious eye damage.
Respiratory sensitization:	No data available
Skin sensitization:	Not a skin sensitizer.



# SAFETY DATA SHEET

LA'S TOTALLY AWESOME LAUNDRY PRE-WASH

**Specific Target Organ Toxicity - Single Exposure:**

Mist or vapors from heating may cause irritation of upper respiratory tract.

**Aspiration Hazard:**

No data available but expected to be harmful.

**Chronic Effects**

**Carcinogenicity:**

It is not anticipated that the hazard of carcinogenicity will result from workplace exposure to this product or it's solutions.

**IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:**

Components not classifiable as to carcinogenicity to humans.

**U.S. National Toxicology Program (NTP) Report on Carcinogens:**

See section 8 of this SDS

**U.S. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):**

See section 8 of this SDS

**Germ Cell Mutagenicity:**

There is limited evidence that this material may damage the developing fetus.

**Reproductive Toxicity:**

There is limited evidence that the components of this material may affect the reproductive system in humans or in animals.

**.Specific Target Organ Toxicity - Repeated Exposure:**

Prolonged or repeated skin contact product mixture may cause dermatitis with redness, edema, drying, and cracking of the skin.

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity**

Product considered toxic to aquatic life. Waste from normal product use may be disposed of in an EPA Permitted Publicly Owned Treatment Works (POTW) in compliance with applicable Federal / Provincial / State / Local / Municipal pretreatment requirements or a qualified Septic system.

## 13. DISPOSAL CONSIDERATIONS

**Disposal instructions:**

Treatment, storage, transportation, and disposal must be in accordance with applicable Federal, State/Provincial, and Local regulations. Dispose of packaging or containers in accordance with local, regional, national and international regulations. Empty container contains product residue which may exhibit hazards of product.

**Used Packaging:**

Container packaging may exhibit residual hazards.

**California Waste Code:**

561 (Detergent and Soap)

# SAFETY DATA SHEET

LA'S TOTALLY AWESOME LAUNDRY PRE-WASH

## 14. TRANSPORT INFORMATION

### DOT

Not regulated (pH Not More Than (NMT) 12.5  
Consumer Commodity UN8000 ERG171

### IMDG

Not regulated.

### IATA

Not regulated.

Shipping descriptions may vary based on mode of transport, quantities, temperature of the material, package size, and/or origin and destination. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material. Review classification requirements before shipping materials at elevated temperatures.

## 15. REGULATORY INFORMATION

### U.S. Federal Regulations

#### Toxic Substances Control Act (TSCA)

The ingredients in this product are listed or are exempt from listing on the U.S. Toxic Substances Control Act (TSCA) Chemical Substance Inventory

#### Superfund Amendments and Reauthorization Act of 1986 (SARA)

This product does not contain any SARA 302 Extremely Hazardous Substances in regulated quantities.

### US State Regulations

#### California Proposition 65

This product does not contain chemical(s) known to the state of California to cause cancer, reproductive harm or birth defects.

#### New Jersey and Pennsylvania Right to Know

One or more components are listed on the Pennsylvania and New Jersey Hazardous Substance and Special Health Hazard Substance lists.

### Canadian Regulations

The components of this material do not appear on Canada's CEPA Environmental Toxic Substances List

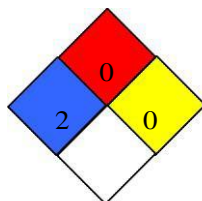
# SAFETY DATA SHEET

LA'S TOTALLY AWESOME LAUNDRY PRE-WASH

## 16. OTHER INFORMATION

HMIS Hazard ID

Hazard rating scale: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe; \*Chronic health effect"



Flammability: 0 - Minimal  
Health: 2 - Moderate  
Physical Hazards: 0 - Minimal

This document has been prepared using data from sources considered technically reliable. It does not constitute a warranty, express or implied, as to the accuracy of the information contained herein. Actual conditions of use and handling are beyond seller's control. User is responsible to evaluate all available information when using product for any particular use and to comply with all Federal, State, Provincial and Local laws and regulations.



# Safety Data Sheet

## 1. IDENTIFICATION

### Product Identifier

**Product Name** Lens Cleaning Liquid

### Other means of identification

**SDS #** PYR-005

**Product Numbers** GALSOL, LCB16, LCS10, LCS20, CRA001

### Recommended use of the chemical and restrictions on use

**Recommended Use** Eyeglass lens cleaner.

### Details of the supplier of the safety data sheet

#### **Supplier Address**

Pyramex Safety Products LLC  
281A Moore Lane  
Collierville, TN 38017

### Emergency Telephone Number

**Company Phone Number** 1-901-861-6100  
**Emergency Telephone (24 hr)** INFOTRAC 1-352-323-3500 (International)  
1-800-535-5053 (North America)

## 2. HAZARDS IDENTIFICATION

**Appearance** Clear or pale pink liquid

**Physical State** Liquid

**Odor** Mild citrus

### Classification

The information below is for the liquid in industrial quantities when used in an industrial setting. The solution as packed in a consumer quantity is considered a consumer good and when used as intended is unlikely to present a hazard

### Hazards Not Otherwise Classified (HNOC)

Causes mild skin irritation

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
Ethylene Glycol Monobutyl Ether	111-76-2	5-15

\*\*If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.\*\*

## 4. FIRST-AID MEASURES

### First Aid Measures

**Eye Contact** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

**Skin Contact** Wash with soap and water.

<b>Inhalation</b>	Remove to fresh air.
<b>Ingestion</b>	Clean mouth with water and drink afterwards plenty of water.

**Most important symptoms and effects**

<b>Symptoms</b>	Causes mild skin irritation.
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**Indication of any immediate medical attention and special treatment needed**

<b>Notes to Physician</b>	Treat symptomatically.
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**5. FIRE-FIGHTING MEASURES**

**Suitable Extinguishing Media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable Extinguishing Media** Not determined.

**Specific Hazards Arising from the Chemical**

Not determined.

**Protective equipment and precautions for firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

**6. ACCIDENTAL RELEASE MEASURES**

**Personal precautions, protective equipment and emergency procedures**

<b>Personal Precautions</b>	Avoid contact with skin, eyes or clothing.
<b>Environmental Precautions</b>	See Section 12 for additional Ecological Information.

**Methods and material for containment and cleaning up**

<b>Methods for Containment</b>	Prevent further leakage or spillage if safe to do so.
<b>Methods for Clean-Up</b>	Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Pick up and transfer to properly labeled containers.

**7. HANDLING AND STORAGE**

**Precautions for safe handling**

<b>Advice on Safe Handling</b>	Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin and eyes. Keep out of the reach of children.
--------------------------------	---

**Conditions for safe storage, including any incompatibilities**

<b>Storage Conditions</b>	Keep containers tightly closed in a dry, cool and well-ventilated place.
<b>Incompatible Materials</b>	None known based on information supplied.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Exposure Guidelines**

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Ethylene Glycol Monobutyl Ether 111-76-2	TWA: 20 ppm	TWA: 50 ppm TWA: 240 mg/m <sup>3</sup> (vacated) TWA: 25 ppm (vacated) TWA: 120 mg/m <sup>3</sup> (vacated) S* S*	IDLH: 700 ppm TWA: 5 ppm TWA: 24 mg/m <sup>3</sup>

**Appropriate engineering controls**

**Engineering Controls** Apply technical measures to comply with the occupational exposure limits.

**Individual protection measures, such as personal protective equipment**

**Eye/Face Protection** Avoid contact with eyes.

**Skin and Body Protection** Wear suitable protective clothing.

**Respiratory Protection** Ensure adequate ventilation, especially in confined areas.

**General Hygiene Considerations** Handle in accordance with good industrial hygiene and safety practice.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

**Information on basic physical and chemical properties**

<b>Physical State</b>	Liquid	<b>Odor</b>	Mild citrus
<b>Appearance</b>	Clear or pale pink liquid	<b>Odor Threshold</b>	Not determined
<b>Color</b>	Clear or pale pink		

<b>Property</b>	<b>Values</b>	<b>Remarks • Method</b>
pH	7	
Melting Point/Freezing Point	Not determined	
Boiling Point/Boiling Range	100 °C / 210 °F	
Flash Point	Not determined	
Evaporation Rate	Not determined	
Flammability (Solid, Gas)	Not determined	
Upper Flammability Limits	Not determined	
Lower Flammability Limit	Not determined	
Vapor Pressure	Not determined	
Vapor Density	1.3	
Specific Gravity	1.010	
Water Solubility	Soluble in water	
Solubility in other solvents	Not determined	
Partition Coefficient	Not determined	
Auto-ignition Temperature	Not determined	

<b>Decomposition Temperature</b>	Not determined
<b>Kinematic Viscosity</b>	Not determined
<b>Dynamic Viscosity</b>	Not determined
<b>Explosive Properties</b>	Not determined
<b>Oxidizing Properties</b>	Not determined
<b>VOC Content</b>	5.09

**10. STABILITY AND REACTIVITY**

**Reactivity**

Not reactive under normal conditions.

**Chemical Stability**

Stable under recommended storage conditions.

**Possibility of Hazardous Reactions**

None under normal processing.

**Hazardous Polymerization**      Hazardous polymerization does not occur.

**Conditions to Avoid**

Keep out of reach of children.

**Incompatible Materials**

None known based on information supplied.

**Hazardous Decomposition Products**

None known based on information supplied.

**11. TOXICOLOGICAL INFORMATION**

**Information on likely routes of exposure**

**Product Information**

- Eye Contact**                                      Avoid contact with eyes.
- Skin Contact**                                    Causes mild skin irritation.
- Inhalation**                                        Do not inhale.
- Ingestion**                                        Do not ingest.

**Component Information**

<b>Chemical Name</b>	<b>Oral LD50</b>	<b>Dermal LD50</b>	<b>Inhalation LC50</b>
Ethylene Glycol Monobutyl Ether 111-76-2	= 470 mg/kg ( Rat )	= 2270 mg/kg ( Rat ) = 220 mg/kg ( Rabbit )	= 2.21 mg/L ( Rat ) 4 h = 450 ppm ( Rat ) 4 h
Sodium Bicarbonate 144-55-8	= 4220 mg/kg ( Rat )	-	-

**Information on physical, chemical and toxicological effects**

**Symptoms**    Please see section 4 of this SDS for symptoms.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Carcinogenicity**

Group 3 IARC components are "not classifiable as human carcinogens".

Chemical Name	ACGIH	IARC	NTP	OSHA
Ethylene Glycol Monobutyl Ether 111-76-2	A3	Group 3		

**Legend**

ACGIH (American Conference of Governmental Industrial Hygienists)

A3 - Animal Carcinogen

IARC (International Agency for Research on Cancer)

Group 3 IARC components are "not classifiable as human carcinogens"

**Numerical measures of toxicity**

Not determined

**12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

**Component Information**

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Ethylene Glycol Monobutyl Ether 111-76-2		1490: 96 h Lepomis macrochirus mg/L LC50 static 2950: 96 h Lepomis macrochirus mg/L LC50		1698 - 1940: 24 h Daphnia magna mg/L EC50 1000: 48 h Daphnia magna mg/L EC50
Sodium Bicarbonate 144-55-8	650: 120 h Nitzschia linearis mg/L EC50	8250 - 9000: 96 h Lepomis macrochirus mg/L LC50 static		2350: 48 h Daphnia magna mg/L EC50

**Persistence/Degradability**

Not determined.

**Bioaccumulation**

Not determined.

**Mobility**

Chemical Name	Partition Coefficient
Ethylene Glycol Monobutyl Ether 111-76-2	0.81

**Other Adverse Effects**

Not determined

**13. DISPOSAL CONSIDERATIONS**

**Waste Treatment Methods**

**Disposal of Wastes**

Disposal should be in accordance with applicable regional, national and local laws and regulations.

**Contaminated Packaging**

Disposal should be in accordance with applicable regional, national and local laws and regulations.

**14. TRANSPORT INFORMATION**

**Note**

Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.



**DOT** Not regulated  
**IATA** Not regulated  
**IMDG** Not regulated

**15. REGULATORY INFORMATION**

**International Inventories**

**TSCA** Complies  
**DSL** Does not comply  
**NDSL** Does not comply  
**EINECS** Does not comply  
**ELINCS** Does not comply  
**ENCS** Does not comply  
**IECSC** Does not comply  
**KECL** Does not comply  
**PICCS** Does not comply  
**AICS** Does not comply

**Legend:**

*TSCA - United States Toxic Substances Control Act Section 8(b) Inventory*  
*DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List*  
*EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances*  
*ENCS - Japan Existing and New Chemical Substances*  
*IECSC - China Inventory of Existing Chemical Substances*  
*KECL - Korean Existing and Evaluated Chemical Substances*  
*PICCS - Philippines Inventory of Chemicals and Chemical Substances*  
*AICS - Australian Inventory of Chemical Substances*

**US Federal Regulations**

**SARA 313**

Chemical Name	CAS No	Weight-%	SARA 313 - Threshold Values %
Ethylene Glycol Monobutyl Ether - 111-76-2	111-76-2	5-15	1.0

**US State Regulations**

**U.S. State Right-to-Know Regulations**

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Ethylene Glycol Monobutyl Ether 111-76-2	X	X	X

**16. OTHER INFORMATION**

<b>NEPA</b>	<b>Health Hazards</b>	<b>Flammability</b>	<b>Instability</b>	<b>Special Hazards</b>
	1	0	0	Not determined
<b>HMIS</b>	<b>Health Hazards</b>	<b>Flammability</b>	<b>Physical Hazards</b>	<b>Personal Protection</b>
	1	0	0	Not determined

Issue Date: 12/6/2007  
 Revision Date: 02/20/2015  
 Revision Note: New format

**Disclaimer**

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**End of Safety Data Sheet**



Revision Number: 006.0

Issue date: 03/30/2020

**1. PRODUCT AND COMPANY IDENTIFICATION**

<b>Product name:</b>	<b>LOCTITE LB 771 NICKEL GRADE ANTI-SEIZE known as Nickel Grade Anti-Seize</b>	<b>IDH number:</b>	235028
<b>Product type:</b>	Lubricant	<b>Item number:</b>	77124
<b>Restriction of Use:</b>	None identified	<b>Region:</b>	United States
<b>Company address:</b>	<b>Contact information:</b>		
Henkel Corporation	Telephone: +1 (860) 571-5100		
One Henkel Way	MEDICAL EMERGENCY Phone: Poison Control Center		
Rocky Hill, Connecticut 06067	1-877-671-4608 (toll free) or 1-303-592-1711		
	TRANSPORT EMERGENCY Phone: CHEMTREC		
	1-800-424-9300 (toll free) or 1-703-527-3887		
	Internet: www.henkelna.com		

**2. HAZARDS IDENTIFICATION**

**EMERGENCY OVERVIEW**

**DANGER:** MAY CAUSE AN ALLERGIC SKIN REACTION. SUSPECTED OF CAUSING CANCER. CAUSES DAMAGE TO ORGANS THROUGH PROLONGED OR REPEATED EXPOSURE.

HAZARD CLASS	HAZARD CATEGORY
SKIN SENSITIZATION	1
CARCINOGENICITY	2
SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE	1

**PICTOGRAM(S)**



**Precautionary Statements**

**Prevention:** Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust or fumes. Wash affected area thoroughly after handling. Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves, clothing, eye and face protection.

**Response:** IF ON SKIN: Wash with plenty of water. IF exposed or concerned: Get medical attention. If skin irritation or rash occurs: Get medical attention. Wash contaminated clothing before reuse.

**Storage:** Store locked up.

**Disposal:** Dispose of contents and/or container according to Federal, State/Provincial and local governmental regulations.

Classification complies with OSHA Hazard Communication Standard (29 CFR 1910.1200) and is consistent with the provisions of the United Nations Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

**See Section 11 for additional toxicological information.**

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous Component(s)	CAS Number	Percentage*
Distillates (petroleum), hydrotreated heavy naphthenic	64742-52-5	50 - 60
Nickel	7440-02-0	10 - 20
Graphite	7782-42-5	5 - 10
Distillates (petroleum), hydrotreated heavy paraffinic	64742-54-7	1 - 5
Aluminum not powder, dust or fume	7429-90-5	1 - 5

\* Exact percentages may vary or are trade secret. Concentration range is provided to assist users in providing appropriate protections.

### 4. FIRST AID MEASURES

<b>Inhalation:</b>	Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention.
<b>Skin contact:</b>	Remove contaminated clothing and footwear. Immediately flush skin with plenty of water (using soap, if available). If symptoms develop and persist, get medical attention. Wash clothing before reuse.
<b>Eye contact:</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms develop and persist, get medical attention.
<b>Ingestion:</b>	Do not induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention.
<b>Symptoms:</b>	See Section 11.

### 5. FIRE FIGHTING MEASURES

<b>Extinguishing media:</b>	Foam, dry chemical or carbon dioxide.
<b>Special firefighting procedures:</b>	Wear self-contained breathing apparatus and full protective clothing, such as turn-out gear. In case of fire, keep containers cool with water spray.
<b>Unusual fire or explosion hazards:</b>	None
<b>Hazardous combustion products:</b>	Oxides of carbon. Oxides of Metals in Section 3. Toxic and irritating vapors.

### 6. ACCIDENTAL RELEASE MEASURES

Use personal protection recommended in Section 8, isolate the hazard area and deny entry to unnecessary and unprotected personnel.

<b>Environmental precautions:</b>	Do not allow product to enter sewer or waterways.
<b>Clean-up methods:</b>	Refer to Section 8 "Exposure Controls / Personal Protection" prior to clean up. Scrape up as much material as possible. Store in a partly filled, closed container until disposal.

### 7. HANDLING AND STORAGE

<b>Handling:</b>	Use only with adequate ventilation. Prevent contact with eyes, skin and clothing. Do not breathe vapor and mist. Wash thoroughly after handling. Keep container closed.
<b>Storage:</b>	Keep in a cool, well ventilated area away from heat, sparks and open flame. Keep container tightly closed until ready for use.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Employers should complete an assessment of all workplaces to determine the need for, and selection of, proper exposure controls and protective equipment for each task performed.

Hazardous Component(s)	ACGIH TLV	OSHA PEL	AIHA WEEL	OTHER
Distillates (petroleum), hydrotreated heavy naphthenic	5 mg/m3 TWA Inhalable fraction.	500 ppm (2,000 mg/m3) PEL 5 mg/m3 PEL Mist.	None	None
Nickel	1.5 mg/m3 TWA Inhalable fraction.	1 mg/m3 PEL (as Ni)	None	None
Graphite	2 mg/m3 TWA Respirable fraction.	5 mg/m3 PEL Respirable fraction. 15 mg/m3 PEL Total dust. 15 MPPCF TWA	None	None
Distillates (petroleum), hydrotreated heavy paraffinic	5 mg/m3 TWA mist 10 mg/m3 STEL mist	5 mg/m3 TWA mist 5 mg/m3 PEL Mist.	None	None
Aluminum not powder, dust or fume	1 mg/m3 TWA Respirable fraction.	5 mg/m3 PEL (as Al) Respirable fraction. 15 MPPCF TWA Respirable fraction. 5 mg/m3 TWA Respirable fraction.	None	None

**Engineering controls:**

Provide adequate local exhaust ventilation to maintain worker exposure below exposure limits.

**Respiratory protection:**

Use NIOSH approved respirator if there is potential to exceed exposure limit(s).

**Eye/face protection:**

Safety goggles or safety glasses with side shields. Safety showers and eye wash stations should be available.

**Skin protection:**

Chemical resistant, impermeable gloves.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical state:</b>	Paste
<b>Color:</b>	Gray
<b>Odor:</b>	Petroleum
<b>Odor threshold:</b>	Not available.
<b>pH:</b>	Not available.
<b>Vapor pressure:</b>	< 5 mm hg (80 °F (26.7 °C))
<b>Boiling point/range:</b>	Not available.
<b>Melting point/ range:</b>	Not available.
<b>Specific gravity:</b>	1.1
<b>Vapor density:</b>	Not available.
<b>Flash point:</b>	> 93 °C (> 199.4 °F)
<b>Flammable/Explosive limits - lower:</b>	Not available.
<b>Flammable/Explosive limits - upper:</b>	Not available.
<b>Autoignition temperature:</b>	Not available.
<b>Flammability:</b>	Not applicable
<b>Evaporation rate:</b>	Not available.
<b>Solubility in water:</b>	Negligible
<b>Partition coefficient (n-octanol/water):</b>	Not available.
<b>VOC content:</b>	2.47 %; 27 g/l
<b>Viscosity:</b>	Not available.
<b>Decomposition temperature:</b>	Not available.

## 10. STABILITY AND REACTIVITY

<b>Stability:</b>	Stable under normal conditions of storage and use.
<b>Hazardous reactions:</b>	None under normal processing.
<b>Hazardous decomposition products:</b>	Oxides of carbon. Oxides of Metals in Section 3. Irritating organic vapours.
<b>Incompatible materials:</b>	Strong oxidizing agents.
<b>Reactivity:</b>	Not available.
<b>Conditions to avoid:</b>	Keep away from heat, spark and flame. Store away from incompatible materials.

## 11. TOXICOLOGICAL INFORMATION

**Relevant routes of exposure:** Skin, Inhalation, Eyes, Ingestion

**Potential Health Effects/Symptoms**

<b>Inhalation:</b>	May cause respiratory tract irritation.
<b>Skin contact:</b>	May cause skin irritation. May cause allergic skin reaction.
<b>Eye contact:</b>	May cause eye irritation.
<b>Ingestion:</b>	Not expected under normal conditions of use. May cause gastrointestinal tract irritation if swallowed.

Hazardous Component(s)	LD50s and LC50s	Immediate and Delayed Health Effects
Distillates (petroleum), hydrotreated heavy naphthenic	None	Irritant
Nickel	None	No Data
Graphite	None	Lung
Distillates (petroleum), hydrotreated heavy paraffinic	None	Irritant
Aluminum not powder, dust or fume	None	Central nervous system, Irritant, Lung

Hazardous Component(s)	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
Distillates (petroleum), hydrotreated heavy naphthenic	No	No	No
Nickel	Reasonably Anticipated to be a Human Carcinogen.	Group 2B	No
Graphite	No	No	No
Distillates (petroleum), hydrotreated heavy paraffinic	No	No	No
Aluminum not powder, dust or fume	No	No	No

## 12. ECOLOGICAL INFORMATION

**Ecological information:** Not available.

### 13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

**Recommended method of disposal:** Follow all local, state, federal and provincial regulations for disposal.  
**Hazardous waste number:** Not a RCRA hazardous waste.

### 14. TRANSPORT INFORMATION

The transport information provided in this section only applies to the material/formulation itself, and is not specific to any package/configuration.

#### U.S. Department of Transportation Ground (49 CFR)

**Proper shipping name:** Not regulated  
**Hazard class or division:** None  
**Identification number:** None  
**Packing group:** None

#### International Air Transportation (ICAO/IATA)

**Proper shipping name:** Not regulated  
**Hazard class or division:** None  
**Identification number:** None  
**Packing group:** None

#### Water Transportation (IMO/IMDG)

**Proper shipping name:** Not regulated  
**Hazard class or division:** None  
**Identification number:** None  
**Packing group:** None

### 15. REGULATORY INFORMATION

#### United States Regulatory Information

**TSCA 8 (b) Inventory Status:** One or more components of this product are not listed on the U.S. Toxic Substances Control Act (TSCA) inventory. As such, this product may only be used for research and development purposes as described in 40 CFR 720.36. All other components of this product are listed or are exempt from listing.

**TSCA 12 (b) Export Notification:** None above reporting de minimis

**CERCLA/SARA Section 302 EHS:** None above reporting de minimis.  
**CERCLA/SARA Section 311/312:** Delayed Health, Immediate Health  
**CERCLA/SARA Section 313:** This product contains the following toxic chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 (40 CFR 372). Nickel (CAS# 7440-02-0).

**CERCLA Reportable quantity:** Nickel (CAS# 7440-02-0) 100 lbs. (45.4 kg)

**California Proposition 65:** This product contains a chemical known in the State of California to cause cancer.

#### Canada Regulatory Information

**CEPA DSL/NDSL Status:** One or more components are not listed on, and are not exempt from listing on either the Domestic Substances List or the Non-Domestic Substances List.

## 16. OTHER INFORMATION

This safety data sheet contains changes from the previous version in sections: 8

**Prepared by:** Product Safety and Regulatory Affairs

**Issue date:** 03/30/2020

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# SAFETY DATA SHEET

S00701000

## Section 1. Identification

**Product name** : LU™701 Food Grade Machinery Oil Aerosol  
**Product code** : S00701000  
**Other means of identification** : Not available.  
**Product type** : Aerosol.  
**Relevant identified uses of the substance or mixture and uses advised against**

Paint or paint related material.

**Manufacturer** : Sprayon Products Group  
101 W. Prospect Avenue,  
Cleveland, Ohio 44115

**Emergency telephone number of the company** : US / Canada: (800) 424-9300  
Mexico: SETIQ 01-800-00-214-00 / (52) 55-5559-1588 24 hours / 365 days a year

**Product Information Telephone Number** : US / Canada: (800) 247-3266  
Mexico: Not Available

**Regulatory Information Telephone Number** : US / Canada: (216) 566-2902  
Mexico: Not Available

**Transportation Emergency Telephone Number** : US / Canada: (800) 424-9300  
Mexico: SETIQ 01-800-00-214-00 / (52) 55-5559-1588 24 hours / 365 days a year

## Section 2. Hazards identification

**OSHA/HCS status** : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

**Classification of the substance or mixture** : FLAMMABLE AEROSOLS - Category 1  
GASES UNDER PRESSURE - Compressed gas  
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3  
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3  
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2  
ASPIRATION HAZARD - Category 1  
Percentage of the mixture consisting of ingredient(s) of unknown acute oral toxicity: 70%  
Percentage of the mixture consisting of ingredient(s) of unknown acute dermal toxicity: 100%  
Percentage of the mixture consisting of ingredient(s) of unknown acute inhalation toxicity: 100%

### GHS label elements

**Hazard pictograms** :



**Date of issue/Date of revision** : 11/29/2019 **Date of previous issue** : 4/16/2018

**Version** : 7

1/13

S00701000 LU™701 Food Grade Machinery Oil Aerosol

SHW-85-NA-GHS-US

## Section 2. Hazards identification

- Signal word** : Danger
- Hazard statements** : Extremely flammable aerosol.  
 Contains gas under pressure; may explode if heated.  
 May be fatal if swallowed and enters airways.  
 May cause respiratory irritation.  
 May cause drowsiness or dizziness.  
 May cause damage to organs through prolonged or repeated exposure.
- Precautionary statements**
- Prevention** : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not spray on an open flame or other ignition source. Use only outdoors or in a well-ventilated area. Do not breathe dust or mist. Pressurized container: Do not pierce or burn, even after use.
- Response** : Get medical attention if you feel unwell. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or physician if you feel unwell. IF SWALLOWED: Immediately call a POISON CENTER or physician. Do NOT induce vomiting.
- Storage** : Store locked up. Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F. Store in a well-ventilated place.
- Disposal** : Dispose of contents and container in accordance with all local, regional, national and international regulations.
- Supplemental label elements** DELAYED EFFECTS FROM LONG TERM OVEREXPOSURE. Contains solvents which can cause permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal. FOR INDUSTRIAL USE ONLY.  
  
 Please refer to the SDS for additional information. Keep out of reach of children. Keep upright in a cool, dry place. Do not discard empty can in trash compactor.
- Hazards not otherwise classified** : None known.

## Section 3. Composition/information on ingredients

- Substance/mixture** : Mixture
- Other means of identification** : Not available.
- CAS number/other identifiers**

Ingredient name	% by weight	CAS number
Aliphatic Solvent	≥50 - ≤75	64742-47-8
Paraffinic Mineral Oil	≥25 - ≤50	8042-47-5
Carbon Dioxide	≤3	124-38-9

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

**There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health and hence require reporting in this section.**

Occupational exposure limits, if available, are listed in Section 8.

## Section 4. First aid measures

- Description of necessary first aid measures**
- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention following exposure or if feeling unwell.

## Section 4. First aid measures

- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention following exposure or if feeling unwell. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Aspiration hazard if swallowed. Can enter lungs and cause damage. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

### Most important symptoms/effects, acute and delayed

#### Potential acute health effects

- Eye contact** : No known significant effects or critical hazards.
- Inhalation** : Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness. May cause respiratory irritation.
- Skin contact** : No known significant effects or critical hazards.
- Ingestion** : Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways.

#### Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:
  - irritation
  - redness
- Inhalation** : Adverse symptoms may include the following:
  - respiratory tract irritation
  - coughing
  - nausea or vomiting
  - headache
  - drowsiness/fatigue
  - dizziness/vertigo
  - unconsciousness
- Skin contact** : No specific data.
- Ingestion** : Adverse symptoms may include the following:
  - nausea or vomiting

### Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.

## Section 4. First aid measures

**Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

## Section 5. Fire-fighting measures

### Extinguishing media

**Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.

**Unsuitable extinguishing media** : None known.

**Specific hazards arising from the chemical** : Extremely flammable aerosol. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Gas may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back, causing fire or explosion. Bursting aerosol containers may be propelled from a fire at high speed.

**Hazardous thermal decomposition products** : Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide

**Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

**Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

**For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. In the case of aerosols being ruptured, care should be taken due to the rapid escape of the pressurized contents and propellant. If a large number of containers are ruptured, treat as a bulk material spillage according to the instructions in the clean-up section. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

**For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

**Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

### Methods and materials for containment and cleaning up

## Section 6. Accidental release measures

- Small spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

## Section 7. Handling and storage

### Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use. Do not breathe vapor or mist. Do not swallow. Avoid contact with eyes, skin and clothing. Avoid breathing gas. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Empty containers retain product residue and can be hazardous.

- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

- Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations. Store away from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Protect from sunlight. Store locked up. Eliminate all ignition sources. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

## Section 8. Exposure controls/personal protection

### Control parameters

#### Occupational exposure limits (OSHA United States)

Ingredient name	CAS #	Exposure limits
Aliphatic Solvent	64742-47-8	<b>ACGIH TLV (United States, 3/2019). Absorbed through skin.</b> TWA: 200 mg/m <sup>3</sup> , (as total hydrocarbon vapor) 8 hours.
Paraffinic Mineral Oil	8042-47-5	<b>OSHA PEL (United States, 5/2018).</b> TWA: 5 mg/m <sup>3</sup> 8 hours. <b>ACGIH TLV (United States, 3/2019).</b> TWA: 5 mg/m <sup>3</sup> 8 hours. Form: Inhalable fraction <b>NIOSH REL (United States, 10/2016).</b> TWA: 5 mg/m <sup>3</sup> 10 hours. Form: Mist STEL: 10 mg/m <sup>3</sup> 15 minutes. Form: Mist
Carbon Dioxide	124-38-9	<b>ACGIH TLV (United States, 3/2019). Oxygen Depletion [Asphyxiant].</b>

## Section 8. Exposure controls/personal protection

		<p>TWA: 5000 ppm 8 hours.  TWA: 9000 mg/m<sup>3</sup> 8 hours.  STEL: 30000 ppm 15 minutes.  STEL: 54000 mg/m<sup>3</sup> 15 minutes.  <b>NIOSH REL (United States, 10/2016).</b>  TWA: 5000 ppm 10 hours.  TWA: 9000 mg/m<sup>3</sup> 10 hours.  STEL: 30000 ppm 15 minutes.  STEL: 54000 mg/m<sup>3</sup> 15 minutes.  <b>OSHA PEL (United States, 5/2018).</b>  TWA: 5000 ppm 8 hours.  TWA: 9000 mg/m<sup>3</sup> 8 hours.</p>
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### Occupational exposure limits (Canada)

Ingredient name	CAS #	Exposure limits
Petroleum refining, hydrotreated light distillate	64742-47-8	<b>CA British Columbia Provincial (Canada, 5/2019). Absorbed through skin.</b> TWA: 200 mg/m <sup>3</sup> , (as total hydrocarbon vapour) 8 hours. <b>CA Alberta Provincial (Canada, 6/2018). Absorbed through skin.</b> 8 hrs OEL: 200 mg/m <sup>3</sup> , (as total hydrocarbon vapour) 8 hours. <b>CA Ontario Provincial (Canada, 1/2018). Absorbed through skin.</b> TWA: 200 mg/m <sup>3</sup> , (as total hydrocarbon vapour) 8 hours.
Paraffinic Mineral Oil	8042-47-5	<b>CA Alberta Provincial (Canada, 6/2018).</b> 8 hrs OEL: 5 mg/m <sup>3</sup> 8 hours. Form: Mist 15 min OEL: 10 mg/m <sup>3</sup> 15 minutes. Form: Mist <b>CA British Columbia Provincial (Canada, 5/2019).</b> TWA: 1 mg/m <sup>3</sup> 8 hours. <b>CA Quebec Provincial (Canada, 1/2014).</b> TWAEV: 5 mg/m <sup>3</sup> 8 hours. Form: mist STEV: 10 mg/m <sup>3</sup> 15 minutes. Form: mist

### Occupational exposure limits (Mexico)

Ingredient name	CAS #	Exposure limits
Aliphatic Solvent	64742-47-8	<b>ACGIH TLV (United States, 3/2019). Absorbed through skin.</b> TWA: 200 mg/m <sup>3</sup> , (as total hydrocarbon vapor) 8 hours.
Paraffinic Mineral Oil	8042-47-5	<b>NOM-010-STPS-2014 (Mexico, 4/2016).</b> TWA: 5 mg/m <sup>3</sup> 8 hours. Form: mist

**Appropriate engineering controls** : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

**Environmental exposure controls** :

## Section 8. Exposure controls/personal protection

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

### Individual protection measures

- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
- Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.
- Skin protection**
- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

## Section 9. Physical and chemical properties

### Appearance

- Physical state** : Liquid.
- Color** : Not available.
- Odor** : Not available.
- Odor threshold** : Not available.
- pH** : Not available.
- Melting point/freezing point** : Not available.
- Boiling point/boiling range** : Not available.
- Flash point** : Closed cup: 104°C (219.2°F) [Pensky-Martens Closed Cup]
- Evaporation rate** : 0.192 (butyl acetate = 1)
- Flammability (solid, gas)** : Not available.
- Lower and upper explosive (flammable) limits** : Lower: 0.7%  
Upper: 6%
- Vapor pressure** : 101.3 kPa (760 mm Hg) [at 20°C]
- Vapor density** : Not available.

## Section 9. Physical and chemical properties

**Relative density** : 0.8  
**Solubility** : Not available.  
**Partition coefficient: n-octanol/water** : Not available.  
**Auto-ignition temperature** : Not available.  
**Decomposition temperature** : Not available.  
**Viscosity** : Kinematic (40°C (104°F)): <0.205 cm<sup>2</sup>/s (<20.5 cSt)  
**Molecular weight** : Not applicable.  
**Aerosol product**  
**Type of aerosol** : Spray  
**Heat of combustion** : 27.81 kJ/g

## Section 10. Stability and reactivity

**Reactivity** : No specific test data related to reactivity available for this product or its ingredients.  
**Chemical stability** : The product is stable.  
**Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.  
**Conditions to avoid** : Avoid all possible sources of ignition (spark or flame).  
**Incompatible materials** : No specific data.  
**Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## Section 11. Toxicological information

### Information on toxicological effects

#### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Paraffinic Mineral Oil	LD50 Oral	Rat	>5000 mg/kg	-

#### Irritation/Corrosion

Not available.

#### Sensitization

Not available.

#### Mutagenicity

Not available.

#### Carcinogenicity

Not available.

#### Reproductive toxicity

Not available.

#### Teratogenicity

Not available.



# Section 11. Toxicological information

## Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
Aliphatic Solvent	Category 3 Category 3	Not applicable. Not applicable.	Narcotic effects Respiratory tract irritation

## Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
Aliphatic Solvent	Category 2	Not determined	Not determined

## Aspiration hazard

Name	Result
Aliphatic Solvent Paraffinic Mineral Oil	ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1

**Information on the likely routes of exposure** : Not available.

## Potential acute health effects

- Eye contact** : No known significant effects or critical hazards.
- Inhalation** : Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness. May cause respiratory irritation.
- Skin contact** : No known significant effects or critical hazards.
- Ingestion** : Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways.

## Symptoms related to the physical, chemical and toxicological characteristics

- Eye contact** : Adverse symptoms may include the following:  
irritation  
redness
- Inhalation** : Adverse symptoms may include the following:  
respiratory tract irritation  
coughing  
nausea or vomiting  
headache  
drowsiness/fatigue  
dizziness/vertigo  
unconsciousness
- Skin contact** : No specific data.
- Ingestion** : Adverse symptoms may include the following:  
nausea or vomiting

## Delayed and immediate effects and also chronic effects from short and long term exposure

### Short term exposure

- Potential immediate effects** : Not available.
- Potential delayed effects** : Not available.

### Long term exposure

- Potential immediate effects** : Not available.

## Section 11. Toxicological information

**Potential delayed effects** : Not available.

### Potential chronic health effects

Not available.

**General** : May cause damage to organs through prolonged or repeated exposure.

**Carcinogenicity** : No known significant effects or critical hazards.

**Mutagenicity** : No known significant effects or critical hazards.

**Teratogenicity** : No known significant effects or critical hazards.

**Developmental effects** : No known significant effects or critical hazards.

**Fertility effects** : No known significant effects or critical hazards.

### Numerical measures of toxicity

#### Acute toxicity estimates

Not available.

## Section 12. Ecological information

### Toxicity

Product/ingredient name	Result	Species	Exposure
Aliphatic Solvent	Acute LC50 2200 µg/l Fresh water	Fish - Lepomis macrochirus	4 days

### Persistence and degradability

Not available.

### Bioaccumulative potential

Not available.

### Mobility in soil






**Soil/water partition coefficient (K<sub>oc</sub>)** : Not available.

**Other adverse effects** : No known significant effects or critical hazards.

## Section 13. Disposal considerations

**Disposal methods** : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Do not puncture or incinerate container.

## Section 14. Transport information

	DOT Classification	TDG Classification	Mexico Classification	IATA	IMDG
<b>UN number</b>	UN1950	UN1950	UN1950	UN1950	UN1950
<b>UN proper shipping name</b>	AEROSOLS	AEROSOLS	AEROSOLS	Aerosols, non-flammable	AEROSOLS
<b>Transport hazard class(es)</b>	2.2 	2.2 	2.2 	2.2 	2.2 
<b>Packing group</b>	-	-	-	-	-
<b>Environmental hazards</b>	No.	No.	No.	No.	No.
<b>Additional information</b>	-  <b>ERG No.</b> 126	Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.13-2.17 (Class 2). <b>ERG No.</b> 126	-  <b>ERG No.</b> 126	-	<b>Emergency schedules</b> F-D, S-U

**Special precautions for user :** Multi-modal shipping descriptions are provided for informational purposes and do not consider container sizes. The presence of a shipping description for a particular mode of transport (sea, air, etc.), does not indicate that the product is packaged suitably for that mode of transport. All packaging must be reviewed for suitability prior to shipment, and compliance with the applicable regulations is the sole responsibility of the person offering the product for transport. People loading and unloading dangerous goods must be trained on all of the risks deriving from the substances and on all actions in case of emergency situations.

**Transport in bulk according to Annex II of MARPOL and the IBC Code :** Not available.

**Proper shipping name :** Not available.  
**Ship type :** Not available.  
**Pollution category :** Not available.

## Section 15. Regulatory information

**SARA 313**

SARA 313 (40 CFR 372.45) supplier notification can be found on the Environmental Data Sheet.

**California Prop. 65**

Not applicable.

**International regulations**

## Section 15. Regulatory information

**International lists** :

- Australia inventory (AICS):** Not determined.
- China inventory (IECSC):** Not determined.
- Japan inventory (ENCS):** Not determined.
- Japan inventory (ISHL):** Not determined.
- Korea inventory (KECI):** Not determined.
- New Zealand Inventory of Chemicals (NZIoC):** Not determined.
- Philippines inventory (PICCS):** Not determined.
- Taiwan Chemical Substances Inventory (TCSI):** Not determined.
- Thailand inventory:** Not determined.
- Turkey inventory:** Not determined.
- Vietnam inventory:** Not determined.

## Section 16. Other information

### Hazardous Material Information System (U.S.A.)

Health	*	3
Flammability		0
Physical hazards		3

The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.

**Caution:** HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings and the associated label are not required on SDSs or products leaving a facility under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc.

### Procedure used to derive the classification

Classification	Justification
FLAMMABLE AEROSOLS - Category 1	On basis of test data
GASES UNDER PRESSURE - Compressed gas	Calculation method
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3	Calculation method
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3	Calculation method
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2	Calculation method
ASPIRATION HAZARD - Category 1	Calculation method

### History

**Date of printing** : 11/29/2019

**Date of issue/Date of revision** : 11/29/2019

**Date of previous issue** : 4/16/2018

**Version** : 7

**Key to abbreviations** :

- ATE = Acute Toxicity Estimate
- BCF = Bioconcentration Factor
- GHS = Globally Harmonized System of Classification and Labelling of Chemicals
- IATA = International Air Transport Association
- IBC = Intermediate Bulk Container
- IMDG = International Maritime Dangerous Goods
- LogPow = logarithm of the octanol/water partition coefficient
- MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
- N/A = Not available

# Section 16. Other information

SGG = Segregation Group  
UN = United Nations

✔ Indicates information that has changed from previously issued version.

## Notice to reader

It is recommended that each customer or recipient of this Safety Data Sheet (SDS) study it carefully and consult resources, as necessary or appropriate, to become aware of and understand the data contained in this SDS and any hazards associated with the product. This information is provided in good faith and believed to be accurate as of the effective date herein. However, no warranty, express or implied, is given. The information presented here applies only to the product as shipped. The addition of any material can change the composition, hazards and risks of the product. Products shall not be repackaged, modified, or tinted except as specifically instructed by the manufacturer, including but not limited to the incorporation of products not specified by the manufacturer, or the use or addition of products in proportions not specified by the manufacturer. Regulatory requirements are subject to change and may differ between various locations and jurisdictions. The customer/buyer/user is responsible to ensure that his activities comply with all country, federal, state, provincial or local laws. The conditions for use of the product are not under the control of the manufacturer; the customer/buyer/user is responsible to determine the conditions necessary for the safe use of this product. The customer/buyer/user should not use the product for any purpose other than the purpose shown in the applicable section of this SDS without first referring to the supplier and obtaining written handling instructions. Due to the proliferation of sources for information such as manufacturer-specific SDS, the manufacturer cannot be responsible for SDSs obtained from any other source.

# SAFETY DATA SHEET

S00701000

## Section 1. Identification

**Product name** : LU™701 Food Grade Machinery Oil Aerosol  
**Product code** : S00701000  
**Other means of identification** : Not available.  
**Product type** : Aerosol.  
**Relevant identified uses of the substance or mixture and uses advised against**

Paint or paint related material.

**Manufacturer** : Sprayon Products Group  
101 W. Prospect Avenue,  
Cleveland, Ohio 44115

**Emergency telephone number of the company** : US / Canada: (800) 424-9300  
Mexico: SETIQ 01-800-00-214-00 / (52) 55-5559-1588 24 hours / 365 days a year

**Product Information Telephone Number** : US / Canada: (800) 247-3266  
Mexico: Not Available

**Regulatory Information Telephone Number** : US / Canada: (216) 566-2902  
Mexico: Not Available

**Transportation Emergency Telephone Number** : US / Canada: (800) 424-9300  
Mexico: SETIQ 01-800-00-214-00 / (52) 55-5559-1588 24 hours / 365 days a year

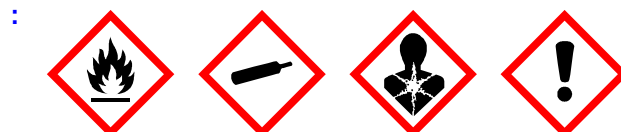
## Section 2. Hazards identification

**OSHA/HCS status** : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

**Classification of the substance or mixture** : FLAMMABLE AEROSOLS - Category 1  
GASES UNDER PRESSURE - Compressed gas  
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3  
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3  
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2  
ASPIRATION HAZARD - Category 1  
Percentage of the mixture consisting of ingredient(s) of unknown acute toxicity: 70% (oral), 100% (dermal), 100% (inhalation) ▶

### GHS label elements

#### Hazard pictograms



**Signal word** : Danger

**Date of issue/Date of revision** : 10/15/2020 **Date of previous issue** : 11/29/2019

S00701000 LU™701 Food Grade Machinery Oil Aerosol

**Version** : 8

SHW-85-NA-GHS-US

1/13

## Section 2. Hazards identification

- Hazard statements** : Extremely flammable aerosol.  
Contains gas under pressure; may explode if heated.  
May be fatal if swallowed and enters airways.  
May cause respiratory irritation.  
May cause drowsiness or dizziness.  
May cause damage to organs through prolonged or repeated exposure.
- Precautionary statements**
- Prevention** : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not spray on an open flame or other ignition source. Use only outdoors or in a well-ventilated area. Do not breathe dust or mist. Pressurized container: Do not pierce or burn, even after use.
- Response** : IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor if you feel unwell. IF SWALLOWED: Immediately call a POISON CENTER or doctor. Do NOT induce vomiting.
- Storage** : Store locked up. Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F. Store in a well-ventilated place. Keep container tightly closed.
- Disposal** : Dispose of contents and container in accordance with all local, regional, national and international regulations.
- Supplemental label elements** DELAYED EFFECTS FROM LONG TERM OVEREXPOSURE. Contains solvents which can cause permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal. FOR INDUSTRIAL USE ONLY.  
Please refer to the SDS for additional information. Keep out of reach of children. Keep upright in a cool, dry place. Do not discard empty can in trash compactor.
- Hazards not otherwise classified** : None known.

## Section 3. Composition/information on ingredients

- Substance/mixture** : Mixture
- Other means of identification** : Not available.

### CAS number/other identifiers

Ingredient name	% by weight	CAS number
Aliphatic Solvent	≥50 - ≤75	64742-47-8
Paraffinic Mineral Oil	≥25 - ≤50	8042-47-5
Carbon Dioxide	≤3	124-38-9

Any concentration shown as a range is to protect confidentiality or is due to batch variation.  
**There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health and hence require reporting in this section.**

Occupational exposure limits, if available, are listed in Section 8.

## Section 4. First aid measures

### Description of necessary first aid measures

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention following exposure or if feeling unwell.

## Section 4. First aid measures

- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention following exposure or if feeling unwell. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Aspiration hazard if swallowed. Can enter lungs and cause damage. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

### Most important symptoms/effects, acute and delayed

#### Potential acute health effects

- Eye contact** : No known significant effects or critical hazards.
- Inhalation** : Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness. May cause respiratory irritation.
- Skin contact** : No known significant effects or critical hazards.
- Ingestion** : Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways.

#### Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:
  - irritation
  - redness
- Inhalation** : Adverse symptoms may include the following:
  - respiratory tract irritation
  - coughing
  - nausea or vomiting
  - headache
  - drowsiness/fatigue
  - dizziness/vertigo
  - unconsciousness
- Skin contact** : No specific data.
- Ingestion** : Adverse symptoms may include the following:
  - nausea or vomiting

### Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.



## Section 4. First aid measures

**Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

## Section 5. Fire-fighting measures

### Extinguishing media

**Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.

**Unsuitable extinguishing media** : None known.

**Specific hazards arising from the chemical** : Extremely flammable aerosol. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Gas may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back, causing fire or explosion. Bursting aerosol containers may be propelled from a fire at high speed.

**Hazardous thermal decomposition products** : Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide

**Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

**Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

**For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. In the case of aerosols being ruptured, care should be taken due to the rapid escape of the pressurized contents and propellant. If a large number of containers are ruptured, treat as a bulk material spillage according to the instructions in the clean-up section. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

**For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

**Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

### Methods and materials for containment and cleaning up

## Section 6. Accidental release measures

- Small spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

## Section 7. Handling and storage

### Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use. Do not breathe vapor or mist. Do not swallow. Avoid contact with eyes, skin and clothing. Avoid breathing gas. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Empty containers retain product residue and can be hazardous.

- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

- Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations. Store away from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Protect from sunlight. Store locked up. Eliminate all ignition sources. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

## Section 8. Exposure controls/personal protection

### Control parameters

#### Occupational exposure limits (OSHA United States)

Ingredient name	CAS #	Exposure limits
Aliphatic Solvent	64742-47-8	<b>ACGIH TLV (United States, 3/2020). Absorbed through skin.</b> TWA: 200 mg/m <sup>3</sup> , (as total hydrocarbon vapor) 8 hours.
Paraffinic Mineral Oil	8042-47-5	<b>OSHA PEL (United States, 5/2018).</b> TWA: 5 mg/m <sup>3</sup> 8 hours. <b>ACGIH TLV (United States, 3/2020).</b> TWA: 5 mg/m <sup>3</sup> 8 hours. Form: Inhalable fraction <b>NIOSH REL (United States, 10/2016).</b> TWA: 5 mg/m <sup>3</sup> 10 hours. Form: Mist STEL: 10 mg/m <sup>3</sup> 15 minutes. Form: Mist
Carbon Dioxide	124-38-9	<b>ACGIH TLV (United States, 3/2020). Oxygen Depletion [Asphyxiant].</b>

## Section 8. Exposure controls/personal protection

		<p>TWA: 5000 ppm 8 hours.                      TWA: 9000 mg/m<sup>3</sup> 8 hours.                      STEL: 30000 ppm 15 minutes.                      STEL: 54000 mg/m<sup>3</sup> 15 minutes.  <b>NIOSH REL (United States, 10/2016).</b>                      TWA: 5000 ppm 10 hours.                      TWA: 9000 mg/m<sup>3</sup> 10 hours.                      STEL: 30000 ppm 15 minutes.                      STEL: 54000 mg/m<sup>3</sup> 15 minutes.  <b>OSHA PEL (United States, 5/2018).</b>                      TWA: 5000 ppm 8 hours.                      TWA: 9000 mg/m<sup>3</sup> 8 hours.</p>
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**Occupational exposure limits (Canada)**

Ingredient name	CAS #	Exposure limits
Petroleum refining, hydrotreated light distillate	64742-47-8	<p><b>CA British Columbia Provincial (Canada, 1/2020). Absorbed through skin.</b>                      TWA: 200 mg/m<sup>3</sup>, (as total hydrocarbon vapour) 8 hours.  <b>CA Alberta Provincial (Canada, 6/2018). Absorbed through skin.</b>                      8 hrs OEL: 200 mg/m<sup>3</sup>, (as total hydrocarbon vapour) 8 hours.  <b>CA Ontario Provincial (Canada, 6/2019). Absorbed through skin.</b>                      TWA: 200 mg/m<sup>3</sup>, (as total hydrocarbon vapour) 8 hours.</p>
Paraffinic Mineral Oil	8042-47-5	<p><b>CA Alberta Provincial (Canada, 6/2018).</b>                      8 hrs OEL: 5 mg/m<sup>3</sup> 8 hours. Form: Mist                      15 min OEL: 10 mg/m<sup>3</sup> 15 minutes. Form: Mist  <b>CA British Columbia Provincial (Canada, 1/2020).</b>                      TWA: 1 mg/m<sup>3</sup> 8 hours.  <b>CA Quebec Provincial (Canada, 7/2019).</b>                      TWAEV: 5 mg/m<sup>3</sup> 8 hours. Form: mist                      STEV: 10 mg/m<sup>3</sup> 15 minutes. Form: mist</p>

**Occupational exposure limits (Mexico)**

	CAS #	Exposure limits
Aliphatic Solvent	64742-47-8	<p><b>ACGIH TLV (United States, 3/2020). Absorbed through skin.</b>                      TWA: 200 mg/m<sup>3</sup>, (as total hydrocarbon vapor) 8 hours.</p>
Paraffinic Mineral Oil	8042-47-5	<p><b>NOM-010-STPS-2014 (Mexico, 4/2016).</b>                      TWA: 5 mg/m<sup>3</sup> 8 hours. Form: mist</p>

**Appropriate engineering controls** : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

**Environmental exposure controls** :

## Section 8. Exposure controls/personal protection

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

### Individual protection measures

- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
- Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.
- Skin protection**
- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

## Section 9. Physical and chemical properties

### Appearance

- Physical state** : Liquid.
- Color** : Not available.
- Odor** : Not available.
- Odor threshold** : Not available.
- pH** : Not available.
- Melting point/freezing point** : Not available.
- Boiling point/boiling range** : Not available.
- Flash point** : Closed cup: 104°C (219.2°F) [Pensky-Martens Closed Cup]
- Evaporation rate** : 0.192 (butyl acetate = 1)
- Flammability (solid, gas)** : Not available.
- Lower and upper explosive (flammable) limits** : Lower: 0.7%  
Upper: 6%
- Vapor pressure** : 101.3 kPa (760 mm Hg) [at 20°C]
- Vapor density** : Not available.

## Section 9. Physical and chemical properties

**Relative density** : 0.8  
**Solubility** : Not available.  
**Partition coefficient: n-octanol/water** : Not available.  
**Auto-ignition temperature** : Not available.  
**Decomposition temperature** : Not available.  
**Viscosity** : Kinematic (40°C (104°F)): <0.205 cm<sup>2</sup>/s (<20.5 cSt)  
**Molecular weight** : Not applicable.  
**Aerosol product**  
**Type of aerosol** : Spray  
**Heat of combustion** : 27.81 kJ/g

## Section 10. Stability and reactivity

**Reactivity** : No specific test data related to reactivity available for this product or its ingredients.  
**Chemical stability** : The product is stable.  
**Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.  
**Conditions to avoid** : Avoid all possible sources of ignition (spark or flame).  
**Incompatible materials** : No specific data.  
**Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## Section 11. Toxicological information

### Information on toxicological effects

#### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Paraffinic Mineral Oil	LD50 Oral	Rat	>5000 mg/kg	-

#### Irritation/Corrosion

Not available.

#### Sensitization

Not available.

#### Mutagenicity

Not available.

#### Carcinogenicity

Not available.

#### Reproductive toxicity

Not available.

#### Teratogenicity

Not available.

# Section 11. Toxicological information

## Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
Aliphatic Solvent	Category 3 Category 3	-	Respiratory tract irritation Narcotic effects

## Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
Aliphatic Solvent	Category 2	-	-

## Aspiration hazard

Name	Result
Aliphatic Solvent Paraffinic Mineral Oil	ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1

**Information on the likely routes of exposure** : Not available.

### Potential acute health effects

- Eye contact** : No known significant effects or critical hazards.
- Inhalation** : Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness. May cause respiratory irritation.
- Skin contact** : No known significant effects or critical hazards.
- Ingestion** : Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways.

### Symptoms related to the physical, chemical and toxicological characteristics

- Eye contact** : Adverse symptoms may include the following:  
irritation  
redness
- Inhalation** : Adverse symptoms may include the following:  
respiratory tract irritation  
coughing  
nausea or vomiting  
headache  
drowsiness/fatigue  
dizziness/vertigo  
unconsciousness
- Skin contact** : No specific data.
- Ingestion** : Adverse symptoms may include the following:  
nausea or vomiting

### Delayed and immediate effects and also chronic effects from short and long term exposure

#### Short term exposure

- Potential immediate effects** : Not available.
- Potential delayed effects** : Not available.

#### Long term exposure

- Potential immediate effects** : Not available.

## Section 11. Toxicological information

**Potential delayed effects** : Not available.

### Potential chronic health effects

Not available.

**General** : May cause damage to organs through prolonged or repeated exposure.

**Carcinogenicity** : No known significant effects or critical hazards.

**Mutagenicity** : No known significant effects or critical hazards.

**Teratogenicity** : No known significant effects or critical hazards.

**Developmental effects** : No known significant effects or critical hazards.

**Fertility effects** : No known significant effects or critical hazards.

### Numerical measures of toxicity

#### Acute toxicity estimates

Not available.

## Section 12. Ecological information

### Toxicity

Product/ingredient name	Result	Species	Exposure
Aliphatic Solvent	Acute LC50 2200 µg/l Fresh water	Fish - Lepomis macrochirus	4 days

### Persistence and degradability

Not available.

### Bioaccumulative potential

Not available.

### Mobility in soil






**Soil/water partition coefficient (K<sub>oc</sub>)** : Not available.

**Other adverse effects** : No known significant effects or critical hazards.

## Section 13. Disposal considerations

**Disposal methods** : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Do not puncture or incinerate container.

## Section 14. Transport information

	DOT Classification	TDG Classification	Mexico Classification	IATA	IMDG
<b>UN number</b>	UN1950	UN1950	UN1950	UN1950	UN1950
<b>UN proper shipping name</b>	AEROSOLS	AEROSOLS	AEROSOLS	Aerosols, non-flammable	AEROSOLS
<b>Transport hazard class(es)</b>	2.2 	2.2 	2.2 	2.2 	2.2 
<b>Packing group</b>	-	-	-	-	-
<b>Environmental hazards</b>	No.	No.	No.	No.	No.
<b>Additional information</b>	-  <b>ERG No.</b> 126 Dependent upon container size, this product may ship under the Limited Quantity shipping exception.	Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.13-2.17 (Class 2).  <b>ERG No.</b> 126 Dependent upon container size, this product may ship under the Limited Quantity shipping exception.	-  <b>ERG No.</b> 126 Dependent upon container size, this product may ship under the Limited Quantity shipping exception.	-  Dependent upon container size, this product may ship under the Limited Quantity shipping exception.	<b>Emergency schedules</b> F-D, S-U  Dependent upon container size, this product may ship under the Limited Quantity shipping exception.

**Special precautions for user :** Multi-modal shipping descriptions are provided for informational purposes and do not consider container sizes. The presence of a shipping description for a particular mode of transport (sea, air, etc.), does not indicate that the product is packaged suitably for that mode of transport. All packaging must be reviewed for suitability prior to shipment, and compliance with the applicable regulations is the sole responsibility of the person offering the product for transport. People loading and unloading dangerous goods must be trained on all of the risks deriving from the substances and on all actions in case of emergency situations.

**Transport in bulk according to IMO instruments :** Not available.

**Proper shipping name :** Not available.

## Section 15. Regulatory information

- SARA 313**  
SARA 313 (40 CFR 372.45) supplier notification can be found on the Environmental Data Sheet.
- California Prop. 65**  
Not applicable.
- International regulations**



## Section 15. Regulatory information

**International lists** :

- Australia inventory (AICS):** Not determined.
- China inventory (IECSC):** Not determined.
- Japan inventory (ENCS):** Not determined.
- Japan inventory (ISHL):** Not determined.
- Korea inventory (KECI):** Not determined.
- New Zealand Inventory of Chemicals (NZIoC):** Not determined.
- Philippines inventory (PICCS):** Not determined.
- Taiwan Chemical Substances Inventory (TCSI):** Not determined.
- Thailand inventory:** Not determined.
- Turkey inventory:** Not determined.
- Vietnam inventory:** Not determined.

## Section 16. Other information

### Hazardous Material Information System (U.S.A.)

Health	*	3
Flammability		0
Physical hazards		3

The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.

**Caution:** HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings and the associated label are not required on SDSs or products leaving a facility under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc.

### Procedure used to derive the classification

Classification	Justification
FLAMMABLE AEROSOLS - Category 1	On basis of test data
GASES UNDER PRESSURE - Compressed gas	Calculation method
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3	Calculation method
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3	Calculation method
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2	Calculation method
ASPIRATION HAZARD - Category 1	Calculation method

### History

**Date of printing** : 10/15/2020

**Date of issue/Date of revision** : 10/15/2020

**Date of previous issue** : 11/29/2019

**Version** : 8

**Key to abbreviations** :

- ATE = Acute Toxicity Estimate
- BCF = Bioconcentration Factor
- GHS = Globally Harmonized System of Classification and Labelling of Chemicals
- IATA = International Air Transport Association
- IBC = Intermediate Bulk Container
- IMDG = International Maritime Dangerous Goods
- LogPow = logarithm of the octanol/water partition coefficient
- MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
- N/A = Not available

# Section 16. Other information

SGG = Segregation Group  
UN = United Nations

✔ Indicates information that has changed from previously issued version.

## Notice to reader


It is recommended that each customer or recipient of this Safety Data Sheet (SDS) study it carefully and consult resources, as necessary or appropriate, to become aware of and understand the data contained in this SDS and any hazards associated with the product. This information is provided in good faith and believed to be accurate as of the effective date herein. However, no warranty, express or implied, is given. The information presented here applies only to the product as shipped. The addition of any material can change the composition, hazards and risks of the product. Products shall not be repackaged, modified, or tinted except as specifically instructed by the manufacturer, including but not limited to the incorporation of products not specified by the manufacturer, or the use or addition of products in proportions not specified by the manufacturer. Regulatory requirements are subject to change and may differ between various locations and jurisdictions. The customer/buyer/user is responsible to ensure that his activities comply with all country, federal, state, provincial or local laws. The conditions for use of the product are not under the control of the manufacturer; the customer/buyer/user is responsible to determine the conditions necessary for the safe use of this product. The customer/buyer/user should not use the product for any purpose other than the purpose shown in the applicable section of this SDS without first referring to the supplier and obtaining written handling instructions. Due to the proliferation of sources for information such as manufacturer-specific SDS, the manufacturer cannot be responsible for SDSs obtained from any other source.

## SAFETY DATA SHEET

### Section 1: Product and Company Identification

**Product Name:** LUBRI-JOINT® Water Dispersible Gasket Lubricant  
**Product Code:** 78713  
**Product Use:** Lubricant for rubber gaskets. Suitable for all types of pipelines, including PVC and soil pipe.  
**Supplier:** LA-CO Industries, Inc.  
 1201 Pratt Boulevard  
 Elk Grove Village, IL.  
 60007-5746  
 E-mail Contact: customer\_service@laco.com  
**Phone:** (847) 956-7600  
**Fax:** (847) 956-9885  
**24-hour Emergency:** CHEMTREC: (800) 424-9300

### Section 2: Hazards Identification

Protective Clothing	GHS Classification	WHMIS (Canada)	Transport
Not Required for Normal Use	Not classified as a hazardous chemical	 Not controlled	Not Regulated

**Emergency Overview:** Non-hazardous. Used in potable water supply systems, certified to NSF/ANSI Standard 61-G.  
**Appearance, Color and Odor:** off-white paste, bland odor.  
 USA: This product is not a hazardous material as defined by 29 CFR1910.1200, OSHA Hazard Communication Standard.  
 Canada: This is not a controlled product under WHMIS.  
 European Union (EU): This product is not classified as hazardous according to Regulation (EC) No 1272/2008.

**Potential Health Effects**

**ACUTE (short term):**

**Relevant Route(s) of Exposure:** Skin contact.

**Inhalation:** Exposure to hazardous substances by inhalation is not expected with normal use.

**Ingestion:** Not an expected route of occupational exposure. Acute oral toxicity of the component substances is low. Swallowing large amounts of the product may cause nausea and diarrhea.

**Skin:** Prolonged skin contact may cause mild skin irritation.

**Eye:** Not an expected route of occupational exposure. Paste may cause mild irritation with direct eye contact.

**CHRONIC (long term): see Section 11 for additional toxicological data**  
 Long-term health effects are not expected with normal use.  
 Prolonged or repeated skin contact may cause mild skin irritation.

**Medical Conditions Aggravated by Exposure:** Not available  
**Interactions With Other Chemicals:** Not available

**Potential Environmental Effects:** Not available

## SAFETY DATA SHEET

### Section 3: Composition / Information on Ingredients

<u>Chemical Name</u>	<u>CAS No.</u>	<u>Wt. %</u>	<u>EINECS / ELINCS</u>	<u>Symbol</u>	<u>Risk Phrases</u>
No hazardous/dangerous ingredients by OSHA, WHMIS and EU criteria					

### Section 4: First Aid Measures

<b>Inhalation:</b>	If symptoms are experienced remove source of contamination or move victim to fresh air and obtain medical advice.
<b>Eye Contact:</b>	No effects expected. If irritation occurs, flush contaminated eye(s) with lukewarm, gently flowing water for 5 minutes. If irritation persists, obtain medical advice.
<b>Skin Contact:</b>	No health effects expected. If irritation does occur, flush with lukewarm, gently flowing water for 5 minutes. If irritation persists, obtain medical advice.
<b>Ingestion:</b>	If irritation or discomfort occurs, obtain medical advice immediately.

### Section 5: Fire Fighting Measures

<b>Flammable Properties:</b>	Product will burn if involved in a fire. Flashpoint: >104°C (>220°F)
<b>Suitable extinguishing Media:</b>	For small fires, use water spray, dry chemical, carbon dioxide, or alcohol-resistant foam. For large fires, use carbon dioxide, dry chemical powder, alcohol-resistant foam or polymer foam. Use water spray to cool fire-exposed containers.
<b>Unsuitable extinguishing Media:</b>	Do not use water jet on hot, molten product.
<b>Explosion Data:</b>	
<b>Sensitivity to Mechanical Impact:</b>	Not applicable
<b>Sensitivity to Static Discharge:</b>	Not applicable
<b>Specific Hazards arising from the Chemical:</b>	If involved in a fire, combustion may produce toxic and irritating fumes and gases.
<b>Protective Equipment and precautions for firefighters:</b>	Self-contained breathing apparatus and protective clothing should be worn. Remove all unprotected personnel.

### Section 6: Accidental Release Measures

<b>Personal Precautions:</b>	Wear protective gloves to prevent skin contact. Contaminated gloves and clothing should be washed before re-use.
<b>Environmental Precautions:</b>	Prevent the product from entering sewers or waterways.
<b>Methods for Containment:</b>	Not applicable
<b>Methods for Clean-up:</b>	Pick up spilled product and collect for re-use or proper disposal. Dispose of any contaminated, unusable product as described in Section 13 of this SDS.

### Section 7: Handling and Storage

<b>Handling:</b>	Keep out of reach of children. Avoid breathing any fumes from thermal decomposition. Do not ingest.
<b>Storage:</b>	Store out of direct sunlight and away from heat, flames and ignition sources. Keep container closed when not in use.

## SAFETY DATA SHEET

### Section 8: Exposure Controls/Personal Protection

**Exposure Guidelines**

Measurable airborne concentrations of the component substances are not expected when the product is used for its intended purpose.

**Exposure Controls**

**Engineering Controls:** Not required for normal use.

**Personal Protection:** Wear protective equipment appropriate for the workplace conditions where this product is used.

**Eye/Face Protection:** Not required for normal use. Wear safety glasses or goggles when needed to prevent eye contact.

**Skin Protection:** Not required for normal use. Wear gloves when needed to prevent repeated or prolonged contact.

**Respiratory Protection:** Not required for normal use

**General Hygiene Measures:** Avoid contact with the skin. Keep out of reach of children. Wash hands at the end of every work shift and before eating, drinking, smoking or using the toilet.

### Section 9: Physical and Chemical Properties

<b>Physical State:</b>	Semi-solid	<b>Flash Point &amp; method:</b>	>104°C (>220°F)
<b>Appearance, Color and Odor:</b>	Off-white paste, bland odor	<b>Autoignition Temperature:</b>	Not available
<b>Odor Threshold:</b>	Not available	<b>Flammability Limits in Air:</b>	Not available
<b>pH:</b>	8.95 – 9.5	<b>Vapor Pressure:</b>	Not applicable
<b>Relative density (water = 1):</b>	1.26 Bulk density: 10.5 lbs/gal.	<b>Vapor Density (Air = 1):</b>	Not applicable
<b>Partition coefficient:</b>	Not available	<b>Evaporation Rate:</b>	Not applicable
<b>Solubility:</b>	Completely dispersible in water.	<b>Boiling Point/Range:</b>	>104°C (220°F)
<b>Viscosity:</b>	Viscous paste	<b>Freezing Point:</b>	<0°C (32°F)
<b>Decomposition Temperature:</b>	Not available	<b>VOC Content:</b>	33%

### Section 10: Stability and Reactivity

**Chemical Stability:** Stable at normal room temperature.

**Conditions to Avoid:** Avoid contact with strong oxidizing agents.

**Incompatible Materials:** Not available

**Hazardous Decomposition Products:** Combustion or heating to decomposition may release irritating and toxic fumes.

**Possibility of Hazardous Reactions:** Not applicable

## SAFETY DATA SHEET

### Section 11: Toxicological Information

<b><u>Acute Toxicity Data</u></b>	Acute toxicity data are not available for the product. Acute toxicity of the component substances is low.
<b><u>Other Toxicity Data</u></b>	
<b>Carcinogenicity:</b>	Normal use of this product will not result in exposure to any component that is considered a human carcinogen by IARC (International Agency for Research on Cancer), ACGIH (American Conference of Governmental Industrial Hygienists, OSHA or NTP (National Toxicology Program).
<b>Irritation:</b>	No data available. Contains a biodegradable soap component. Soaps can cause mild, reversible irritation to eyes and skin.
<b>Corrosivity:</b>	Not applicable
<b>Sensitization:</b>	Not applicable
<b>Neurological Effects:</b>	Not applicable
<b>Genetic Effects:</b>	Not applicable
<b>Reproductive Effects:</b>	Not applicable
<b>Developmental Effects:</b>	Not applicable
<b>Target Organ Effects:</b>	Not applicable

### Section 12: Ecological Information

<b>Ecotoxicity:</b>	Not available
<b>Persistence/Degradability:</b>	Biodegradable soap product.
<b>Bioaccumulation/Accumulation:</b>	Not available
<b>Mobility:</b>	Completely dispersible in water.

### Section 13: Disposal Considerations

<b>Waste Disposal Method:</b>	Do NOT dump into any sewers, on the ground or into any body of water. Store material for disposal as indicated in Section 7 Handling and Storage. The conditions of use, storage and disposal of this product are beyond our control and may be beyond our knowledge. For this and other reasons, LA-CO Industries, Inc. does not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of this product.  Waste must be disposed of in accordance with relevant EU Directives and national, regional and local environmental control regulations.
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### Section 14: Transport Information:

<b>U.S. Hazardous Materials Regulation (DOT 49CFR):</b>	Not regulated
<b>Canadian Transportation of Dangerous Goods (TDG):</b>	Not regulated
<b>IMDG:</b>	Not regulated
<b>ICAO/IATA:</b>	Not regulated

## SAFETY DATA SHEET

### Section 15: Regulatory Information

- USA**
- TSCA Status:** All component substances are listed on the TSCA inventory.
- SARA Title III**
- Sec. 302/304: None
- Sec. 311/312: Not applicable
- Sec. 313: Not applicable
- CERCLA RQ: Not applicable
- California Prop 65:** This product does not contain chemicals known to the State of California to cause cancer or reproductive toxicity.
- Canada**
- This product has been classified in accordance with the hazard criteria of the *Controlled Products Regulations* and the MSDS contains all the information required by the *Controlled Products Regulations*.
- WHMIS Classification:** Not controlled.
- NSNR:** All component substances are listed on Canada's Domestic Substances List (DSL).
- NPRI Substances:** Not applicable
- EU Classification**
- European Inventories:** All component substances are listed in EINECS.
- Symbol:** This article is not classified as dangerous according to Directive 1999/45/EC and its amendments.

### Section 16: Other Information

**Preparation Information:**

- Revision Date:** September 27, 2012
- Revision Summary:** Section 9: Revised physical and chemical properties information.
- Supplier Note:** The information contained herein is based on data available to us and is accurate and reliable to the best of our knowledge and belief. However, LA-CO Industries, Inc. makes no representations as to its completeness or accuracy. Information is supplied on condition that persons receiving such information will make their own determination as to its suitability for their purposes prior to use. In no event will LA-CO Industries, Inc. be responsible for damages of any nature whatsoever resulting from the use of or reliance upon the information contained herein.
- Prepared by:** LEHDER Environmental Services Limited (519) 336-4101  
 www.lehder.com
- While LEHDER Environmental Services Limited believes that the data set forth herein is accurate, as of the date hereof, LEHDER makes no warranty with respect thereto and expressly disclaims all liability for reliance thereon. Such data is offered solely for your consideration, investigation and verification.

# SAFETY DATA SHEET

82012

## Section 1. Identification

**Product name** : Marking Paint  
Fluorescent Orange

**Product code** : 82012

**Other means of identification** : Not available.

**Product type** : Aerosol.

**Relevant identified uses of the substance or mixture and uses advised against**

Paint or paint related material.

**Manufacturer** : Valspar  
101 W. Prospect Avenue  
Cleveland, OH 44115

**Emergency telephone number of the company** : (800) 424-9300

**Product Information Telephone Number** : 1-877-825-7727

**Regulatory Information Telephone Number** : (216) 566-2902

**Transportation Emergency Telephone Number** : (800) 424-9300

## Section 2. Hazards identification

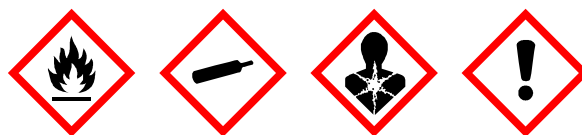
**OSHA/HCS status** : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

**Classification of the substance or mixture** : FLAMMABLE AEROSOLS - Category 1  
GASES UNDER PRESSURE - Compressed gas  
SKIN CORROSION/IRRITATION - Category 2  
TOXIC TO REPRODUCTION - Category 2  
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3  
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3  
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2  
ASPIRATION HAZARD - Category 1

Percentage of the mixture consisting of ingredient(s) of unknown acute toxicity: 38.5% (oral), 38.5% (dermal), 41.8% (inhalation)

### GHS label elements

**Hazard pictograms**



**Signal word** : Danger

**Date of issue/Date of revision** : 10/9/2020

**Date of previous issue** : 5/14/2020

**Version** : 7

1/16

82012 Marking Paint  
Fluorescent Orange

SHW-85-NA-GHS-US



## Section 2. Hazards identification

- Hazard statements** : Extremely flammable aerosol.  
Contains gas under pressure; may explode if heated.  
May be fatal if swallowed and enters airways.  
Causes skin irritation.  
May cause respiratory irritation.  
May cause drowsiness or dizziness.  
Suspected of damaging fertility or the unborn child.  
May cause damage to organs through prolonged or repeated exposure.
- Precautionary statements**
- General** : Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand.
- Prevention** : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves, protective clothing and eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not spray on an open flame or other ignition source. Use only outdoors or in a well-ventilated area. Do not breathe dust or mist. Wash thoroughly after handling. Pressurized container: Do not pierce or burn, even after use.
- Response** : IF exposed or concerned: Get medical advice or attention. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor if you feel unwell. IF SWALLOWED: Immediately call a POISON CENTER or doctor. Do NOT induce vomiting. Take off contaminated clothing and wash it before reuse. IF ON SKIN: Wash with plenty of water. If skin irritation occurs: Get medical advice or attention.
- Storage** : Store locked up. Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F. Store in a well-ventilated place. Keep container tightly closed.
- Disposal** : Dispose of contents and container in accordance with all local, regional, national and international regulations.
- Supplemental label elements** DELAYED EFFECTS FROM LONG TERM OVEREXPOSURE. Contains solvents which can cause permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal. WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. Adequate ventilation required when sanding or abrading the dried film. If Adequate ventilation cannot be provided wear an approved particulate respirator (NIOSH approved). Follow respirator manufacturer's directions for respirator use. DELAYED EFFECTS FROM LONG TERM OVEREXPOSURE. Abrading or sanding of the dry film may release Crystalline Silica which has been shown to cause lung damage and cancer under long term exposure.  
Please refer to the SDS for additional information. Keep out of reach of children. Keep upright in a cool, dry place. Do not discard empty can in trash compactor.
- Hazards not otherwise classified** : DANGER: Rags, steel wool, other waste soaked with this product, and sanding residue may spontaneously catch fire if improperly discarded. Immediately place rags, steel wool, other waste soaked with this product, and sanding residue in a sealed, water-filled, metal container. Dispose of in accordance with local fire regulations.

## Section 3. Composition/information on ingredients

- Substance/mixture** : Mixture
- Other means of identification** : Not available.
- CAS number/other identifiers**

## Section 3. Composition/information on ingredients

Ingredient name	% by weight	CAS number
Lt Aliphatic Hydrocarbon Solvent	≥10 - ≤25	64742-89-8
Propane	≥10 - ≤25	74-98-6
Calcium Carbonate	≥10 - ≤25	1317-65-3
Butane	≤10	106-97-8
Heavy Aliphatic Solvent	≤5	64742-47-8
Isobutyl Acetate	≤5	110-19-0
Light Aliphatic Hydrocarbon Solvent	<1	68410-97-9
Xylene, mixed isomers	≤0.3	1330-20-7

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

**There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health and hence require reporting in this section.**

Occupational exposure limits, if available, are listed in Section 8.

## Section 4. First aid measures

### Description of necessary first aid measures

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Aspiration hazard if swallowed. Can enter lungs and cause damage. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

### Most important symptoms/effects, acute and delayed

#### Potential acute health effects

- Eye contact** : No known significant effects or critical hazards.
- Inhalation** : Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness. May cause respiratory irritation.
- Skin contact** : Causes skin irritation.
- Ingestion** : Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways.

#### Over-exposure signs/symptoms

## Section 4. First aid measures

- Eye contact** : Adverse symptoms may include the following:  
pain or irritation  
watering  
redness
- Inhalation** : Adverse symptoms may include the following:  
respiratory tract irritation  
coughing  
nausea or vomiting  
headache  
drowsiness/fatigue  
dizziness/vertigo  
unconsciousness  
reduced fetal weight  
increase in fetal deaths  
skeletal malformations
- Skin contact** : Adverse symptoms may include the following:  
irritation  
redness  
reduced fetal weight  
increase in fetal deaths  
skeletal malformations
- Ingestion** : Adverse symptoms may include the following:  
nausea or vomiting  
reduced fetal weight  
increase in fetal deaths  
skeletal malformations

### Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

## Section 5. Fire-fighting measures

### Extinguishing media

- Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.
- Unsuitable extinguishing media** : None known.

**Specific hazards arising from the chemical** : Extremely flammable aerosol. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Gas may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back, causing fire or explosion. Bursting aerosol containers may be propelled from a fire at high speed.

- Hazardous thermal decomposition products** : Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide  
metal oxide/oxides

## Section 5. Fire-fighting measures

- Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. In the case of aerosols being ruptured, care should be taken due to the rapid escape of the pressurized contents and propellant. If a large number of containers are ruptured, treat as a bulk material spillage according to the instructions in the clean-up section. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

### Methods and materials for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

## Section 7. Handling and storage

### Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use. Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not swallow. Avoid breathing gas. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Empty containers retain product residue and can be hazardous.

## Section 7. Handling and storage

**Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

**Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations. Store away from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Protect from sunlight. Store locked up. Eliminate all ignition sources. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

## Section 8. Exposure controls/personal protection

### Control parameters

#### Occupational exposure limits (OSHA United States)

Ingredient name	CAS #	Exposure limits
Lt Aliphatic Hydrocarbon Solvent Propane	64742-89-8 74-98-6	None. <b>NIOSH REL (United States, 10/2016).</b> TWA: 1000 ppm 10 hours. TWA: 1800 mg/m <sup>3</sup> 10 hours. <b>OSHA PEL (United States, 5/2018).</b> TWA: 1000 ppm 8 hours. TWA: 1800 mg/m <sup>3</sup> 8 hours. <b>ACGIH TLV (United States, 3/2020). Oxygen Depletion [Asphyxiant]. Explosive potential.</b>
Calcium Carbonate	1317-65-3	<b>OSHA PEL (United States, 5/2018).</b> TWA: 5 mg/m <sup>3</sup> 8 hours. Form: Respirable fraction TWA: 15 mg/m <sup>3</sup> 8 hours. Form: Total dust <b>NIOSH REL (United States, 10/2016).</b> TWA: 5 mg/m <sup>3</sup> 10 hours. Form: Respirable fraction TWA: 10 mg/m <sup>3</sup> 10 hours. Form: Total
Butane	106-97-8	<b>NIOSH REL (United States, 10/2016).</b> TWA: 800 ppm 10 hours. TWA: 1900 mg/m <sup>3</sup> 10 hours. <b>ACGIH TLV (United States, 3/2020).</b> <b>Explosive potential.</b> STEL: 1000 ppm 15 minutes.
Heavy Aliphatic Solvent	64742-47-8	<b>ACGIH TLV (United States, 3/2020).</b> <b>Absorbed through skin.</b> TWA: 200 mg/m <sup>3</sup> , (as total hydrocarbon vapor) 8 hours.
Isobutyl Acetate	110-19-0	<b>NIOSH REL (United States, 10/2016).</b> TWA: 150 ppm 10 hours. TWA: 700 mg/m <sup>3</sup> 10 hours. <b>OSHA PEL (United States, 5/2018).</b> TWA: 150 ppm 8 hours. TWA: 700 mg/m <sup>3</sup> 8 hours. <b>ACGIH TLV (United States, 3/2020).</b> STEL: 150 ppm 15 minutes. TWA: 50 ppm 8 hours.
Light Aliphatic Hydrocarbon Solvent Xylene, mixed isomers	68410-97-9 1330-20-7	None. <b>ACGIH TLV (United States, 3/2020).</b> TWA: 100 ppm 8 hours.

## Section 8. Exposure controls/personal protection

		<p>TWA: 434 mg/m<sup>3</sup> 8 hours.          STEL: 150 ppm 15 minutes.          STEL: 651 mg/m<sup>3</sup> 15 minutes.  <b>OSHA PEL (United States, 5/2018).</b>          TWA: 100 ppm 8 hours.          TWA: 435 mg/m<sup>3</sup> 8 hours.</p>
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**Occupational exposure limits (Canada)**

Ingredient name	CAS #	Exposure limits
Normal propane	74-98-6	<p><b>CA Alberta Provincial (Canada, 6/2018).</b>            8 hrs OEL: 1000 ppm 8 hours.</p> <p><b>CA Quebec Provincial (Canada, 7/2019).</b>            TWAEV: 1000 ppm 8 hours.            TWAEV: 1800 mg/m<sup>3</sup> 8 hours.</p> <p><b>CA Ontario Provincial (Canada, 6/2019).</b>            TWA: 1000 ppm 8 hours.</p> <p><b>CA Saskatchewan Provincial (Canada, 7/2013).</b>            STEL: 1250 ppm 15 minutes.            TWA: 1000 ppm 8 hours.</p> <p><b>CA British Columbia Provincial (Canada, 1/2020). Oxygen Depletion [Asphyxiant]. Explosive potential.</b></p>
Butane	106-97-8	<p><b>CA Alberta Provincial (Canada, 6/2018).</b>            8 hrs OEL: 1000 ppm 8 hours.</p> <p><b>CA Quebec Provincial (Canada, 7/2019).</b>            TWAEV: 800 ppm 8 hours.            TWAEV: 1900 mg/m<sup>3</sup> 8 hours.</p> <p><b>CA Ontario Provincial (Canada, 6/2019).</b>            TWA: 800 ppm 8 hours.</p> <p><b>CA Saskatchewan Provincial (Canada, 7/2013).</b>            STEL: 1250 ppm 15 minutes.            TWA: 1000 ppm 8 hours.</p> <p><b>CA British Columbia Provincial (Canada, 1/2020). Explosive potential.</b>            STEL: 1000 ppm 15 minutes.</p>
Petroleum refining, hydrotreated light distillate	64742-47-8	<p><b>CA British Columbia Provincial (Canada, 1/2020). Absorbed through skin.</b>            TWA: 200 mg/m<sup>3</sup>, (as total hydrocarbon vapour) 8 hours.</p> <p><b>CA Alberta Provincial (Canada, 6/2018). Absorbed through skin.</b>            8 hrs OEL: 200 mg/m<sup>3</sup>, (as total hydrocarbon vapour) 8 hours.</p> <p><b>CA Ontario Provincial (Canada, 6/2019). Absorbed through skin.</b>            TWA: 200 mg/m<sup>3</sup>, (as total hydrocarbon vapour) 8 hours.</p>
Isobutyl acetate	110-19-0	<p><b>CA Alberta Provincial (Canada, 6/2018).</b>            8 hrs OEL: 150 ppm 8 hours.            8 hrs OEL: 713 mg/m<sup>3</sup> 8 hours.</p> <p><b>CA British Columbia Provincial (Canada, 1/2020).</b>            TWA: 150 ppm 8 hours.</p> <p><b>CA Ontario Provincial (Canada, 6/2019).</b></p>

## Section 8. Exposure controls/personal protection

Xylene	1330-20-7	<p>TWA: 150 ppm 8 hours.  <b>CA Quebec Provincial (Canada, 7/2019).</b>          TWAEV: 150 ppm 8 hours.          TWAEV: 713 mg/m<sup>3</sup> 8 hours.  <b>CA Saskatchewan Provincial (Canada, 7/2013).</b>          STEL: 188 ppm 15 minutes.          TWA: 150 ppm 8 hours.  <b>CA Alberta Provincial (Canada, 6/2018).</b>          8 hrs OEL: 100 ppm 8 hours.          15 min OEL: 651 mg/m<sup>3</sup> 15 minutes.          15 min OEL: 150 ppm 15 minutes.          8 hrs OEL: 434 mg/m<sup>3</sup> 8 hours.  <b>CA British Columbia Provincial (Canada, 1/2020).</b>          TWA: 100 ppm 8 hours.          STEL: 150 ppm 15 minutes.  <b>CA Quebec Provincial (Canada, 7/2019).</b>          TWAEV: 100 ppm 8 hours.          TWAEV: 434 mg/m<sup>3</sup> 8 hours.          STEV: 150 ppm 15 minutes.          STEV: 651 mg/m<sup>3</sup> 15 minutes.  <b>CA Ontario Provincial (Canada, 6/2019).</b>          STEL: 150 ppm 15 minutes.          TWA: 100 ppm 8 hours.  <b>CA Saskatchewan Provincial (Canada, 7/2013).</b>          STEL: 150 ppm 15 minutes.          TWA: 100 ppm 8 hours.</p>
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**Occupational exposure limits (Mexico)**

	<b>CAS #</b>	<b>Exposure limits</b>
Propane	74-98-6	<b>NOM-010-STPS-2014 (Mexico, 4/2016).</b> TWA: 1000 ppm 8 hours.
Butane	106-97-8	<b>NOM-010-STPS-2014 (Mexico, 4/2016).</b> TWA: 1000 ppm 8 hours.
Heavy Aliphatic Solvent	64742-47-8	<b>ACGIH TLV (United States, 3/2020).</b> <b>Absorbed through skin.</b> TWA: 200 mg/m <sup>3</sup> , (as total hydrocarbon vapor) 8 hours.
Isobutyl Acetate	110-19-0	<b>NOM-010-STPS-2014 (Mexico, 4/2016).</b> TWA: 150 ppm 8 hours.

**Appropriate engineering controls** : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

**Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

**Individual protection measures**

## Section 8. Exposure controls/personal protection

- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
- Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.
- Skin protection**
- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

## Section 9. Physical and chemical properties

- Appearance**
- Physical state** : Liquid.
- Color** : Not available.
- Odor** : Not available.
- Odor threshold** : Not available.
- pH** : 8
- Melting point/freezing point** : Not available.
- Boiling point/boiling range** : Not available.
- Flash point** : Closed cup: -19°C (-2.2°F) [Tagliabue Closed Cup]
- Evaporation rate** : 4.2 (butyl acetate = 1)
- Flammability (solid, gas)** : Not available.
- Lower and upper explosive (flammable) limits** : Lower: 1%  
Upper: 9.5%
- Vapor pressure** : 101.3 kPa (760 mm Hg) [at 20°C]
- Vapor density** : 1 [Air = 1]
- Relative density** : 0.82
- Solubility** : Not available.
- Partition coefficient: n-octanol/water** : Not available.
- Auto-ignition temperature** : Not available.



## Section 9. Physical and chemical properties

- Decomposition temperature** : Not available.
- Viscosity** : Kinematic (40°C (104°F)): <0.205 cm<sup>2</sup>/s (<20.5 cSt)
- Molecular weight** : Not applicable.
- Aerosol product**
  - Type of aerosol** : Spray
  - Heat of combustion** : 21.972 kJ/g

## Section 10. Stability and reactivity

- Reactivity** : No specific test data related to reactivity available for this product or its ingredients.
- Chemical stability** : The product is stable.
- Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.
- Conditions to avoid** : Avoid all possible sources of ignition (spark or flame).
- Incompatible materials** : No specific data.
- Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## Section 11. Toxicological information

### Information on toxicological effects

#### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Butane Isobutyl Acetate	LC50 Inhalation Vapor	Rat	658000 mg/m <sup>3</sup>	4 hours
	LD50 Dermal	Rabbit	>17400 mg/kg	-
	LD50 Oral	Rat	13400 mg/kg	-
Light Aliphatic Hydrocarbon Solvent	LD50 Oral	Rat	5.17 g/kg	-
	Xylene, mixed isomers	LC50 Inhalation Gas.	Rat	6700 ppm
LD50 Oral		Rat	4300 mg/kg	-

#### Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Isobutyl Acetate	Eyes - Moderate irritant	Rabbit	-	24 hours 500 mg	-
	Skin - Mild irritant	Rabbit	-	500 mg	-
	Skin - Moderate irritant	Rabbit	-	24 hours 500 mg	-
Xylene, mixed isomers	Eyes - Mild irritant	Rabbit	-	87 mg	-
	Eyes - Severe irritant	Rabbit	-	24 hours 5 mg	-
	Skin - Mild irritant	Rat	-	8 hours 60 UI	-
	Skin - Moderate irritant	Rabbit	-	24 hours 500 mg	-
	Skin - Moderate irritant	Rabbit	-	100 %	-
	Skin - Moderate irritant	Rabbit	-	100 %	-

#### Sensitization

Not available.

# Section 11. Toxicological information

**Mutagenicity**

Not available.

**Carcinogenicity**

Not available.

**Classification**

Product/ingredient name	OSHA	IARC	NTP
Xylene, mixed isomers	-	3	-

**Reproductive toxicity**

Not available.

**Teratogenicity**

Not available.

**Specific target organ toxicity (single exposure)**

Name	Category	Route of exposure	Target organs
Lt Aliphatic Hydrocarbon Solvent	Category 3	-	Respiratory tract irritation
Propane	Category 3 Category 3	-	Narcotic effects Respiratory tract irritation
Butane	Category 3 Category 3	-	Narcotic effects Respiratory tract irritation
Heavy Aliphatic Solvent	Category 3 Category 3	-	Narcotic effects Respiratory tract irritation
Isobutyl Acetate	Category 3	-	Narcotic effects
Light Aliphatic Hydrocarbon Solvent	Category 3 Category 3	-	Narcotic effects Respiratory tract irritation
Xylene, mixed isomers	Category 3 Category 3	-	Narcotic effects Respiratory tract irritation

**Specific target organ toxicity (repeated exposure)**

Name	Category	Route of exposure	Target organs
Lt Aliphatic Hydrocarbon Solvent	Category 2	-	-
Propane	Category 2	-	-
Butane	Category 2	-	-
Heavy Aliphatic Solvent	Category 2	-	-
Light Aliphatic Hydrocarbon Solvent	Category 2	-	-
Xylene, mixed isomers	Category 2	-	-

**Aspiration hazard**

Name	Result
Lt Aliphatic Hydrocarbon Solvent	ASPIRATION HAZARD - Category 1
Propane	ASPIRATION HAZARD - Category 1
Butane	ASPIRATION HAZARD - Category 1
Heavy Aliphatic Solvent	ASPIRATION HAZARD - Category 1
Light Aliphatic Hydrocarbon Solvent	ASPIRATION HAZARD - Category 1
Xylene, mixed isomers	ASPIRATION HAZARD - Category 1

# Section 11. Toxicological information

**Information on the likely routes of exposure** : Not available.

## Potential acute health effects

- Eye contact** : No known significant effects or critical hazards.
- Inhalation** : Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness. May cause respiratory irritation.
- Skin contact** : Causes skin irritation.
- Ingestion** : Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways.

## Symptoms related to the physical, chemical and toxicological characteristics

- Eye contact** : Adverse symptoms may include the following:
  - pain or irritation
  - watering
  - redness
- Inhalation** : Adverse symptoms may include the following:
  - respiratory tract irritation
  - coughing
  - nausea or vomiting
  - headache
  - drowsiness/fatigue
  - dizziness/vertigo
  - unconsciousness
  - reduced fetal weight
  - increase in fetal deaths
  - skeletal malformations
- Skin contact** : Adverse symptoms may include the following:
  - irritation
  - redness
  - reduced fetal weight
  - increase in fetal deaths
  - skeletal malformations
- Ingestion** : Adverse symptoms may include the following:
  - nausea or vomiting
  - reduced fetal weight
  - increase in fetal deaths
  - skeletal malformations

## Delayed and immediate effects and also chronic effects from short and long term exposure

### Short term exposure

- Potential immediate effects** : Not available.
- Potential delayed effects** : Not available.

### Long term exposure

- Potential immediate effects** : Not available.
- Potential delayed effects** : Not available.

## Potential chronic health effects

Not available.

- General** : May cause damage to organs through prolonged or repeated exposure.
- Carcinogenicity** : No known significant effects or critical hazards.

## Section 11. Toxicological information

- Mutagenicity** : No known significant effects or critical hazards.
- Teratogenicity** : Suspected of damaging the unborn child.
- Developmental effects** : No known significant effects or critical hazards.
- Fertility effects** : Suspected of damaging fertility.

### Numerical measures of toxicity

#### Acute toxicity estimates

Not available.

## Section 12. Ecological information

### Toxicity

Product/ingredient name	Result	Species	Exposure
Lt Aliphatic Hydrocarbon Solvent	Acute LC50 >100000 ppm Fresh water	Fish - Oncorhynchus mykiss	96 hours
Heavy Aliphatic Solvent	Acute LC50 2200 µg/l Fresh water	Fish - Lepomis macrochirus	4 days
Xylene, mixed isomers	Acute LC50 8500 µg/l Marine water	Crustaceans - Palaemonetes pugio	48 hours
	Acute LC50 13400 µg/l Fresh water	Fish - Pimephales promelas	96 hours

### Persistence and degradability

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Xylene, mixed isomers	-	-	Readily

### Bioaccumulative potential

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
Lt Aliphatic Hydrocarbon Solvent	-	10 to 2500	high
Light Aliphatic Hydrocarbon Solvent	-	10 to 2500	high
Xylene, mixed isomers	-	8.1 to 25.9	low

### Mobility in soil

- Soil/water partition coefficient (K<sub>oc</sub>)** : Not available.

- Other adverse effects** : No known significant effects or critical hazards.






## Section 13. Disposal considerations

- Disposal methods** : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a

## Section 13. Disposal considerations

safe way. Empty containers or liners may retain some product residues. Do not puncture or incinerate container.

## Section 14. Transport information

	DOT Classification	TDG Classification	Mexico Classification	IATA	IMDG
<b>UN number</b>	UN1950	UN1950	UN1950	UN1950	UN1950
<b>UN proper shipping name</b>	AEROSOLS	AEROSOLS	AEROSOLS	AEROSOLS, flammable	AEROSOLS
<b>Transport hazard class(es)</b>	2.1 	2.1 	2.1 	2.1 	2.1 
<b>Packing group</b>	-	-	-	-	-
<b>Environmental hazards</b>	No.	No.	No.	No.	No.
<b>Additional information</b>	-  <b>ERG No.</b> 126 Dependent upon container size, this product may ship under the Limited Quantity shipping exception.	Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.13-2.17 (Class 2).  <b>ERG No.</b> 126 Dependent upon container size, this product may ship under the Limited Quantity shipping exception.	-  <b>ERG No.</b> 126 Dependent upon container size, this product may ship under the Limited Quantity shipping exception.	-  Dependent upon container size, this product may ship under the Limited Quantity shipping exception.	<b>Emergency schedules</b> F-D, S-U  Dependent upon container size, this product may ship under the Limited Quantity shipping exception.

**Special precautions for user** : Multi-modal shipping descriptions are provided for informational purposes and do not consider container sizes. The presence of a shipping description for a particular mode of transport (sea, air, etc.), does not indicate that the product is packaged suitably for that mode of transport. All packaging must be reviewed for suitability prior to shipment, and compliance with the applicable regulations is the sole responsibility of the person offering the product for transport. People loading and unloading dangerous goods must be trained on all of the risks deriving from the substances and on all actions in case of emergency situations.

**Transport in bulk according to IMO instruments** : Not available.

**Proper shipping name** : Not available.

## Section 15. Regulatory information

### SARA 313

SARA 313 (40 CFR 372.45) supplier notification can be found on the Environmental Data Sheet.

### California Prop. 65

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

### International regulations

#### International lists

- : **Australia inventory (AICS):** Not determined.
- : **China inventory (IECSC):** Not determined.
- : **Japan inventory (ENCS):** Not determined.
- : **Japan inventory (ISHL):** Not determined.
- : **Korea inventory (KECI):** Not determined.
- : **New Zealand Inventory of Chemicals (NZIoC):** Not determined.
- : **Philippines inventory (PICCS):** Not determined.
- : **Taiwan Chemical Substances Inventory (TCSI):** Not determined.
- : **Thailand inventory:** Not determined.
- : **Turkey inventory:** Not determined.
- : **Vietnam inventory:** Not determined.

## Section 16. Other information

### Hazardous Material Information System (U.S.A.)

Health	*	3
Flammability		4
Physical hazards		3

The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.

**Caution:** HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings and the associated label are not required on SDSs or products leaving a facility under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc.

### Procedure used to derive the classification

Classification	Justification
FLAMMABLE AEROSOLS - Category 1	On basis of test data
GASES UNDER PRESSURE - Compressed gas	Calculation method
SKIN CORROSION/IRRITATION - Category 2	Calculation method
TOXIC TO REPRODUCTION - Category 2	Calculation method
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3	Calculation method
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3	Calculation method
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2	Calculation method
ASPIRATION HAZARD - Category 1	Calculation method

### History

- Date of printing** : 10/9/2020
- Date of issue/Date of revision** : 10/9/2020
- Date of previous issue** : 5/14/2020
- Version** : 7

# Section 16. Other information

**Key to abbreviations** : ATE = Acute Toxicity Estimate  
BCF = Bioconcentration Factor  
GHS = Globally Harmonized System of Classification and Labelling of Chemicals  
IATA = International Air Transport Association  
IBC = Intermediate Bulk Container  
IMDG = International Maritime Dangerous Goods  
LogPow = logarithm of the octanol/water partition coefficient  
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)  
N/A = Not available  
SGG = Segregation Group  
UN = United Nations

✔ Indicates information that has changed from previously issued version.

## Notice to reader

It is recommended that each customer or recipient of this Safety Data Sheet (SDS) study it carefully and consult resources, as necessary or appropriate, to become aware of and understand the data contained in this SDS and any hazards associated with the product. This information is provided in good faith and believed to be accurate as of the effective date herein. However, no warranty, express or implied, is given. The information presented here applies only to the product as shipped. The addition of any material can change the composition, hazards and risks of the product. Products shall not be repackaged, modified, or tinted except as specifically instructed by the manufacturer, including but not limited to the incorporation of products not specified by the manufacturer, or the use or addition of products in proportions not specified by the manufacturer. Regulatory requirements are subject to change and may differ between various locations and jurisdictions. The customer/buyer/user is responsible to ensure that his activities comply with all country, federal, state, provincial or local laws. The conditions for use of the product are not under the control of the manufacturer; the customer/buyer/user is responsible to determine the conditions necessary for the safe use of this product. The customer/buyer/user should not use the product for any purpose other than the purpose shown in the applicable section of this SDS without first referring to the supplier and obtaining written handling instructions. Due to the proliferation of sources for information such as manufacturer-specific SDS, the manufacturer cannot be responsible for SDSs obtained from any other source.

# METHYL ETHYL KETONE (MEK)

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 12/21/2018 Version: 1.0

### SECTION 1: Identification

#### 1.1. Identification

Product form	: Substance
Trade name	: METHYL ETHYL KETONE (MEK)
CAS-No.	: 78-93-3
Product code	: TS109
Formula	: C4H8O
Synonyms	: 2-butanone / 2-oxobutane / 3-butanone / acetone, methyl- / A13-07540 / butan-2-one / butanone / Caswell NO 569 / ethyl methyl ketone / Ethyl methyl ketone (methyl ethyl ketone) / EXXON methylethyl ketone / FEMA N°. 2170 / ketone, ethyl methyl- / meetco / MEK (= methyl ethyl ketone) / methyl 2-propanone / methyl acetone
BIG no	: 10074

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture	: Solvent Chemical raw material
------------------------------	------------------------------------

#### 1.3. Details of the supplier of the safety data sheet

Crown Paint Company  
1801 W. Sheridan  
Oklahoma City, 73106 - United States  
T 1-405-232-8580  
[crownpaint@polyglasscoatings.com](mailto:crownpaint@polyglasscoatings.com) - [www.crownpaintok.com](http://www.crownpaintok.com)

#### 1.4. Emergency telephone number

Emergency number	: In the event of an emergency involving dangerous goods: in Canada call CANUTEC at 613-996-6666 or *666 on a cellular phone. in the US call CHEMTREC at 800-424-9300 (Account Name for US is Polyglass Coatings)
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### SECTION 2: Hazard(s) identification

#### 2.1. Classification of the substance or mixture

##### GHS-US classification

Flam. Liq. 2	H225 - Highly flammable liquid and vapour
Eye Irrit. 2	H319 - Causes serious eye irritation
STOT SE 3	H336 - May cause drowsiness or dizziness

Full text of H statements : see section 16

#### 2.2. Label elements

##### GHS-US labeling

Hazard pictograms (GHS-US)



Signal word (GHS-US)

: Danger

Hazard statements (GHS-US)

: H225 - Highly flammable liquid and vapour  
H319 - Causes serious eye irritation  
H336 - May cause drowsiness or dizziness

Precautionary statements (GHS-US)

: P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking.  
P233 - Keep container tightly closed.  
P240 - Ground/Bond container and receiving equipment  
P241 - Use explosion-proof electrical/ventilating/lighting equipment  
P242 - Use only non-sparking tools.  
P243 - Take precautionary measures against static discharge.  
P261 - Avoid breathing dust/fume/gas/mist/vapors/spray.  
P264 - Wash thoroughly after handling  
P271 - Use only outdoors or in a well-ventilated area.  
P280 - Wear protective gloves/protective clothing/eye protection/face protection.  
P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse



# METHYL ETHYL KETONE (MEK)

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

skin with water/shower  
P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing  
P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
P312 - Call a poison center or a doctor if you feel unwell  
P337+P313 - If eye irritation persists: Get medical advice/attention.  
P370+P378 - In case of fire: Use dry chemical powder, alcohol-resistant foam, carbon dioxide (CO<sub>2</sub>) to extinguish  
P403+P233 - Store in a well-ventilated place. Keep container tightly closed.  
P403+P235 - Store in a well-ventilated place. Keep cool.  
P405 - Store locked up.  
P501 - Dispose of contents/container in accordance with all local, regional, national and international regulations.

### 2.3. Other hazards

No additional information available

### 2.4. Unknown acute toxicity (GHS US)

Not applicable

## SECTION 3: Composition/Information on ingredients

### 3.1. Substances

Name	Product identifier	%	GHS-US classification
methanol (Main constituent)	(CAS-No.) 78-93-3	100	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336

Full text of H-phrases: see section 16

### 3.2. Mixtures

Not applicable

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

First-aid measures general : Check the vital functions. Unconscious: maintain adequate airway and respiration. Respiratory arrest: artificial respiration or oxygen. Cardiac arrest: perform resuscitation. Victim conscious with laboured breathing: half-seated. Victim in shock: on his back with legs slightly raised. Vomiting: prevent asphyxia/aspiration pneumonia. Prevent cooling by covering the victim (no warming up). Keep watching the victim. Give psychological aid. Keep the victim calm, avoid physical strain. Depending on the victim's condition: doctor/hospital.

First-aid measures after inhalation : Remove the victim into fresh air. Respiratory problems: consult a doctor/medical service.

First-aid measures after skin contact : Wash immediately with lots of water. Soap may be used. Do not apply (chemical) neutralizing agents. Take victim to a doctor if irritation persists.

First-aid measures after eye contact : Rinse immediately with plenty of water. Do not apply neutralizing agents. Take victim to an ophthalmologist if irritation persists.

First-aid measures after ingestion : Rinse mouth with water. Immediately after ingestion: give lots of water to drink. Do not induce vomiting. Immediately call a poison center or doctor/physician. Consult a doctor/medical service if you feel unwell. Ingestion of large quantities: immediately to hospital.

### 4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects after inhalation : Irritation of the nasal mucous membranes. Nausea. Headache. EXPOSURE TO HIGH CONCENTRATIONS: Irritation of the respiratory tract. Central nervous system depression. Dizziness. Mental confusion. Narcosis. Disturbances of consciousness.

Symptoms/effects after skin contact : Red skin. ON CONTINUOUS EXPOSURE/CONTACT: Dry skin. Cracking of the skin.

Symptoms/effects after eye contact : Irritation of the eye tissue. Inflammation/damage of the eye tissue.

Symptoms/effects after ingestion : AFTER INGESTION OF HIGH QUANTITIES: Symptoms similar to those listed under inhalation. Risk of aspiration pneumonia.

Chronic symptoms : ON CONTINUOUS/REPEATED EXPOSURE/CONTACT: Dry skin. Itching. Skin rash/inflammation.

### 4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media : Alcohol-resistant foam. Dry chemical powder. Carbon dioxide.

Unsuitable extinguishing media : Do not use a heavy water stream.

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### 5.2. Special hazards arising from the substance or mixture

- Fire hazard : DIRECT FIRE HAZARD: Highly flammable. Gas/vapour flammable with air within explosion limits. INDIRECT FIRE HAZARD: May be ignited by sparks. Gas/vapour spreads at floor level: ignition hazard. Reactions involving a fire hazard: see "Reactivity Hazard".
- Explosion hazard : DIRECT EXPLOSION HAZARD: Gas/vapour explosive with air within explosion limits. INDIRECT EXPLOSION HAZARD: may be ignited by sparks. Reactions with explosion hazards: see "Reactivity Hazard".
- Reactivity : On heating: peroxidation resulting in increased fire or explosion risk. Upon combustion: CO and CO<sub>2</sub> are formed. Reacts violently with (strong) oxidizers: (increased) risk of fire/explosion. Violent to explosive reaction with many compounds e.g.: with (some) halogens compounds, alcohols and with (some) acids/bases. Prolonged storage: peroxidation resulting in increased fire or explosion risk.

### 5.3. Advice for firefighters

- Firefighting instructions : Cool tanks/drums with water spray/remove them into safety. Do not move the load if exposed to heat.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

#### 6.1.1. For non-emergency personnel

- Protective equipment : Gloves. Protective goggles. Protective clothing. See "Material-Handling" to select protective clothing.
- Emergency procedures : Keep upwind. Mark the danger area. Consider evacuation. Seal off low-lying areas. Close doors and windows of adjacent premises. Stop engines and no smoking. No naked flames or sparks. Spark- and explosionproof appliances and lighting equipment. Keep containers closed. Wash contaminated clothes.

#### 6.1.2. For emergency responders

- Protective equipment : Do not attempt to take action without suitable protective equipment.

### 6.2. Environmental precautions

- Prevent spreading in sewers.

### 6.3. Methods and material for containment and cleaning up

- For containment : Contain released product, pump into suitable containers. Consult "Material-handling" to select material of containers. Plug the leak, cut off the supply. Dam up the liquid spill. Try to reduce evaporation. Measure the concentration of the explosive gas-air mixture. Dilute/disperse combustible gas/vapour with water curtain. Provide equipment/receptacles with earthing. Do not use compressed air for pumping over spills.
- Methods for cleaning up : Take up liquid spill into absorbent material, e.g.: sand, earth, vermiculite. Scoop absorbed substance into closing containers. See "Material-handling" for suitable container materials. Carefully collect the spill/leftovers. Damaged/cooled tanks must be emptied. Do not use compressed air for pumping over spills. Clean contaminated surfaces with an excess of water. Take collected spill to manufacturer/competent authority. Wash clothing and equipment after handling.

### 6.4. Reference to other sections

- No additional information available

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

- Precautions for safe handling : Comply with the legal requirements. Remove contaminated clothing immediately. Clean contaminated clothing. Handle uncleaned empty containers as full ones. Thoroughly clean/dry the installation before use. Do not discharge the waste into the drain. Do not use compressed air for pumping over. Use spark-/explosionproof appliances and lighting system. Take precautions against electrostatic charges. Keep away from naked flames/heat. Keep away from ignition sources/sparks. Observe normal hygiene standards. Avoid prolonged and repeated contact with skin. Keep container tightly closed. Before use: check for peroxides and eliminate them. Measure the concentration in the air regularly. Work under local exhaust/ventilation.
- Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product. Remove contaminated clothes. Wash contaminated clothing before reuse.

### 7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container closed when not in use. Keep container tightly closed.
- Heat-ignition : KEEP SUBSTANCE AWAY FROM: heat sources. ignition sources.

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Information on mixed storage	: KEEP SUBSTANCE AWAY FROM: oxidizing agents. (strong) acids. (strong) bases. halogens. alcohols. amines.
Storage area	: Store in a cool area. Keep out of direct sunlight. Store in a dark area. Ventilation at floor level. Fireproof storeroom. Provide for an automatic sprinkler system. Provide for a tub to collect spills. Provide the tank with earthing. May be stored under inert gas. Meet the legal requirements.
Special rules on packaging	: SPECIAL REQUIREMENTS: closing. dry. clean. opaque. correctly labelled. meet the legal requirements. Secure fragile packagings in solid containers.
Packaging materials	: SUITABLE MATERIAL: stainless steel. monel steel. carbon steel. MATERIAL TO AVOID: synthetic material. synthetic material.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

METHYL ETHYL KETONE (MEK) (78-93-3)		
ACGIH	ACGIH TWA (ppm)	200 ppm (Methyl ethyl ketone (MEK); USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value)
ACGIH	ACGIH STEL (ppm)	300 ppm (Methyl ethyl ketone (MEK); USA; Short time value; TLV - Adopted Value)
ACGIH	Remark (ACGIH)	URT irr; CNS & PNS impair
OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	590 mg/m <sup>3</sup>
OSHA	OSHA PEL (TWA) (ppm)	200 ppm

### 8.2. Exposure controls

Appropriate engineering controls	: Ensure good ventilation of the work station.
Materials for protective clothing	: GIVE EXCELLENT RESISTANCE: No data available. GIVE GOOD RESISTANCE: butyl rubber. GIVE LESS RESISTANCE: No data available. GIVE POOR RESISTANCE: natural rubber. neoprene. nitrile rubber. polyethylene. PVC. viton.
Hand protection	: Gloves.
Eye protection	: Safety glasses.
Skin and body protection	: Head/neck protection. Protective clothing.
Respiratory protection	: Insufficient ventilation: wear respiratory protection.
Other information	: Do not eat, drink or smoke when using this product.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Liquid.
Color	: Colourless
Odor	: Sweet odour Acetone odour
Odor threshold	: 2 - 85 ppm 6 - 251 mg/m <sup>3</sup>
pH	: No data available
Melting point	: -86 °C (1013 hPa)
Freezing point	: No data available
Boiling point	: 80 °C (1013 hPa) -176 °F
Critical temperature	: 263 °C
Critical pressure	: 41550 hPa
Flash point	: -9 °C 15.8 °F
Relative evaporation rate (butyl acetate=1)	: 6
Relative evaporation rate (ether=1)	: 2.7
Flammability (solid, gas)	: No data available
Explosion limits	: 1.5 - 12 vol % 45 - 378 g/m <sup>3</sup>

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Explosive properties	: No data available
Oxidizing properties	: No data available
Vapor pressure	: 105 hPa (20 °C)
Vapor pressure at 50 °C	: 370 hPa (50 °C)
Relative density	: 0.81 (20 °C)
Relative vapor density at 20 °C	: 2.4
Relative density of saturated gas/air mixture	: 1.2
Specific gravity / density	: 810 kg/m <sup>3</sup> (20 °C)
Molecular mass	: 72.11 g/mol
Solubility	: Soluble in water. Soluble in ethanol. Soluble in ether. Soluble in acetone. Soluble in oil. Water: 28 g/100ml Ethanol: Complete Ether: Complete Acetone: Complete
Log Pow	: 0.3 (Experimental value; OECD 117: Partition Coefficient (n-octanol/water), HPLC method; 40 °C)
Auto-ignition temperature	: 404 °C 759 °F
Decomposition temperature	: No data available
Viscosity	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: 0.00041 Pa.s (25 °C)

### 9.2. Other information

Minimum ignition energy	: 0.53 mJ
Specific conductivity	: 36000 pS/m
Saturation concentration	: 311 g/m <sup>3</sup>
VOC content (Regulatory - Less water and exempt solvents)	: 100 % :
Other properties	: Gas/vapour heavier than air at 20°C. Clear. Volatile.

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

On heating: peroxidation resulting in increased fire or explosion risk. Upon combustion: CO and CO<sub>2</sub> are formed. Reacts violently with (strong) oxidizers: (increased) risk of fire/explosion. Violent to explosive reaction with many compounds e.g.: with (some) halogens compounds, alcohols and with (some) acids/bases. Prolonged storage: peroxidation resulting in increased fire or explosion risk.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

No additional information available

### 10.4. Conditions to avoid

Heat. No flames, No sparks. Eliminate all sources of ignition.

### 10.5. Incompatible materials

amines. acids. strong acids. Strong bases. Oxidizing agent. Ammonia. copper. Copper alloys. Halogenated compounds. nitric acid. Hydrogen peroxide. Isocyanates. Strong mineral acids.

### 10.6. Hazardous decomposition products

Carbon dioxide. Carbon monoxide.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Likely routes of exposure	: Inhalation; Ingestion; Skin and eyes contact.
Acute toxicity	: Not classified
Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Causes serious eye irritation.

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Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
Specific target organ toxicity – single exposure	: May cause drowsiness or dizziness.
Specific target organ toxicity – repeated exposure	: Not classified
Aspiration hazard	: Not classified
Symptoms/effects after inhalation	: Irritation of the nasal mucous membranes. Nausea. Headache. EXPOSURE TO HIGH CONCENTRATIONS: Irritation of the respiratory tract. Central nervous system depression. Dizziness. Mental confusion. Narcosis. Disturbances of consciousness.
Symptoms/effects after skin contact	: Red skin. ON CONTINUOUS EXPOSURE/CONTACT: Dry skin. Cracking of the skin.
Symptoms/effects after eye contact	: Irritation of the eye tissue. Inflammation/damage of the eye tissue.
Symptoms/effects after ingestion	: AFTER INGESTION OF HIGH QUANTITIES: Symptoms similar to those listed under inhalation. Risk of aspiration pneumonia.
Chronic symptoms	: ON CONTINUOUS/REPEATED EXPOSURE/CONTACT: Dry skin. Itching. Skin rash/inflammation.

### SECTION 12: Ecological information

#### 12.1. Toxicity

Ecology - general	: Not classified as dangerous for the environment according to the criteria of Regulation (EC) No 1272/2008. Not classified as dangerous for the environment according to the criteria of Directive 67/548/EEC.
Ecology - air	: Not classified as dangerous for the ozone layer (Regulation (EC) No 1005/2009). Not included in the list of fluorinated greenhouse gases (Regulation (EC) No 842/2006). TA-Luft Klasse 5.2.5.
Ecology - water	: Groundwater pollutant. Not harmful to fishes (LC50(96h) >1000 mg/l). Slightly harmful to invertebrates (Daphnia) (EC50 (48h): 100 - 1000 mg/l). Not harmful to algae (EC50 (72h) >1000 mg/l). Not harmful to bacteria (EC50 >1000 mg/l). Not harmful to activated sludge.

#### METHYL ETHYL KETONE (MEK) (78-93-3)

EC50 Daphnia 1	308 mg/l (EC50; OECD 202: Daphnia sp. Acute Immobilisation Test; 48 h; Daphnia magna; Static system; Fresh water; Experimental value)
LC50 fish 2	2993 mg/l (LC50; OECD 203: Fish, Acute Toxicity Test; 96 h; Pimephales promelas; Static system; Fresh water; Experimental value)

#### 12.2. Persistence and degradability

##### METHYL ETHYL KETONE (MEK) (78-93-3)

Persistence and degradability	Readily biodegradable in water. Biodegradable in the soil. Biodegradable in the soil under anaerobic conditions.
Biochemical oxygen demand (BOD)	2.03 g O <sub>2</sub> /g substance
Chemical oxygen demand (COD)	2.31 g O <sub>2</sub> /g substance
ThOD	2.44 g O <sub>2</sub> /g substance
BOD (% of ThOD)	> 0.5 (5 days; Literature study)

#### 12.3. Bioaccumulative potential

##### METHYL ETHYL KETONE (MEK) (78-93-3)

Log Pow	0.3 (Experimental value; OECD 117: Partition Coefficient (n-octanol/water), HPLC method; 40 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

#### 12.4. Mobility in soil

##### METHYL ETHYL KETONE (MEK) (78-93-3)

Surface tension	0.024 N/m (20 °C)
Log Koc	Koc,34; Calculated value
Ecology - soil	Slightly harmful to plants.

#### 12.5. Other adverse effects

No additional information available

# METHYL ETHYL KETONE (MEK)

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### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

- Product/Packaging disposal recommendations : Remove waste in accordance with local and/or national regulations. Hazardous waste shall not be mixed together with other waste. Different types of hazardous waste shall not be mixed together if this may entail a risk of pollution or create problems for the further management of the waste. Hazardous waste shall be managed responsibly. All entities that store, transport or handle hazardous waste shall take the necessary measures to prevent risks of pollution or damage to people or animals. Recycle by distillation. Remove to an authorized waste incinerator for solvents with energy recovery. Do not discharge into surface water. May be discharged to wastewater treatment installation.
- Additional information : Do not reuse empty containers.  
. Handle empty containers with care because residual vapors are flammable.

### SECTION 14: Transport information

#### Department of Transportation (DOT)

In accordance with DOT

- Transport document description : UN1193 Methyl ethyl ketone, 3, II
- UN-No.(DOT) : UN1193
- Proper Shipping Name (DOT) : Methyl ethyl ketone
- Class (DOT) : 3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120
- Hazard labels (DOT) : 3 - Flammable liquid



- Packing group (DOT) : II - Medium Danger
- DOT Packaging Non Bulk (49 CFR 173.xxx) : 202
- DOT Packaging Bulk (49 CFR 173.xxx) : 242
- DOT Special Provisions (49 CFR 172.102) : IB2 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized.  
T4 - 2.65 178.274(d)(2) Normal..... 178.275(d)(3)  
TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling =  $97 / 1 + a (tr - tf)$  Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling.
- DOT Packaging Exceptions (49 CFR 173.xxx) : 150
- DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27) : 5 L
- DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75) : 60 L
- DOT Vessel Stowage Location : B - (i) The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel carrying a number of passengers limited to not more than the larger of 25 passengers, or one passenger per each 3 m of overall vessel length; and (ii) "On deck only" on passenger vessels in which the number of passengers specified in paragraph (k)(2)(i) of this section is exceeded.
- Other information : No supplementary information available.

#### Transportation of Dangerous Goods

- Transport document description : UN1193 METHYL ETHYL KETONE (METHYL ETHYL KETONE), 3, II
- UN-No. (TDG) : UN1193
- Proper Shipping Name (Transportation of Dangerous Goods) : METHYL ETHYL KETONE
- TDG Primary Hazard Classes : 3 - Class 3 - Flammable Liquids
- Packing group : II - Medium Danger
- Explosive Limit and Limited Quantity Index : 1
- Passenger Carrying Road Vehicle or Passenger Carrying Railway Vehicle Index : 5

# METHYL ETHYL KETONE (MEK)

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### Transport by sea

UN-No. (IMDG)	: 1193
Proper Shipping Name (IMDG)	: ETHYL METHYL KETONE (METHYL ETHYL KETONE)
Class (IMDG)	: 3 - Flammable liquids
Packing group (IMDG)	: II - substances presenting medium danger
EmS-No. (1)	: F-E
EmS-No. (2)	: S-D

### Air transport

No additional information available

## SECTION 15: Regulatory information

### 15.1. US Federal regulations

#### METHYL ETHYL KETONE (MEK) (78-93-3)

Listed on the United States TSCA (Toxic Substances Control Act) inventory  
Not listed on SARA Section 313 (Specific toxic chemical listings)

CERCLA RQ	5000 lb
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All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

### 15.2. International regulations

#### CANADA

#### METHYL ETHYL KETONE (MEK) (78-93-3)

Listed on the Canadian DSL (Domestic Substances List) inventory.

### EU-Regulations

No additional information available

### National regulations

No additional information available

### 15.3. US State regulations

#### METHYL ETHYL KETONE (MEK) (78-93-3)

State or local regulations	U.S. - Massachusetts - Right To Know List U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) List
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California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer and/or reproductive harm

## SECTION 16: Other information

Full text of H-phrases:

H225	Highly flammable liquid and vapour
H319	Causes serious eye irritation
H336	May cause drowsiness or dizziness

SDS US Endura

*The information contained here has been compiled from sources considered by Endura Manufacturing Co. Ltd to be dependable and is accurate to the best of the Company's knowledge. However, neither Endura Manufacturing Co. Ltd or any of its subsidiaries assume any liability whatsoever for the accuracy or completeness of the information contained herein. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown health hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist.*

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## SAFETY DATA SHEET

### SECTION 1 PRODUCT AND COMPANY IDENTIFICATION

#### PRODUCT

**Product Name:** MOBIL DTE 24  
**Product Description:** Base Oil and Additives  
**Product Code:** 201560102010, 602623-00, 970972  
**Intended Use:** Hydraulic fluid

#### COMPANY IDENTIFICATION

**Supplier:** EXXON MOBIL CORPORATION  
22777 Springwoods Village Parkway  
Spring, TX 77389 USA

**24 Hour Health Emergency** 609-737-4411  
**Transportation Emergency Phone** 800-424-9300 or 703-527-3887 CHEMTREC  
**Product Technical Information** 800-662-4525  
**MSDS Internet Address** [www.exxon.com](http://www.exxon.com), [www.mobil.com](http://www.mobil.com)

### SECTION 2 HAZARDS IDENTIFICATION

This material is not hazardous according to regulatory guidelines (see (M)SDS Section 15).

**Other hazard information:**

**HAZARD NOT OTHERWISE CLASSIFIED (HNOC):** None as defined under 29 CFR 1910.1200.

#### PHYSICAL / CHEMICAL HAZARDS

No significant hazards.

#### HEALTH HAZARDS

High-pressure injection under skin may cause serious damage. Excessive exposure may result in eye, skin, or respiratory irritation.

#### ENVIRONMENTAL HAZARDS

No significant hazards.

<b>NFPA Hazard ID:</b>	Health: 0	Flammability: 1	Reactivity: 0
<b>HMIS Hazard ID:</b>	Health: 0	Flammability: 1	Reactivity: 0



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**NOTE:** This material should not be used for any other purpose than the intended use in Section 1 without expert advice. Health studies have shown that chemical exposure may cause potential human health risks which may vary from person to person.

### SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

This material is defined as a mixture.

#### Hazardous Substance(s) or Complex Substance(s) required for disclosure

Name	CAS#	Concentration*	GHS Hazard Codes
2,6-DI-TERT-BUTYL-P-CRESOL	128-37-0	0.1 - < 1%	H400(M factor 1), H410(M factor 1)
CALCIUM SULFONATE	57855-77-3	0.1 - < 1%	H315, H319(2A), H317
PHOSPHORODITHIOIC ACID, MIXED 0,0-BIS(2-ETHYL HEXYL AND ISO-BU) ESTERS, ZINC SALTS.	68442-22-8	0.1 - < 1%	H303, H315, H318, H401, H411

\* All concentrations are percent by weight unless material is a gas. Gas concentrations are in percent by volume.

As per paragraph (i) of 29 CFR 1910.1200, formulation is considered a trade secret and specific chemical identity and exact percentage (concentration) of composition may have been withheld. Specific chemical identity and exact percentage composition will be provided to health professionals, employees, or designated representatives in accordance with applicable provisions of paragraph (i).

### SECTION 4 FIRST AID MEASURES

#### INHALATION

Remove from further exposure. For those providing assistance, avoid exposure to yourself or others. Use adequate respiratory protection. If respiratory irritation, dizziness, nausea, or unconsciousness occurs, seek immediate medical assistance. If breathing has stopped, assist ventilation with a mechanical device or use mouth-to-mouth resuscitation.

#### SKIN CONTACT

Wash contact areas with soap and water. If product is injected into or under the skin, or into any part of the body, regardless of the appearance of the wound or its size, the individual should be evaluated immediately by a physician as a surgical emergency. Even though initial symptoms from high pressure injection may be minimal or absent, early surgical treatment within the first few hours may significantly reduce the ultimate extent of injury.

#### EYE CONTACT

Flush thoroughly with water. If irritation occurs, get medical assistance.

#### INGESTION

First aid is normally not required. Seek medical attention if discomfort occurs.

### SECTION 5 FIRE FIGHTING MEASURES

#### EXTINGUISHING MEDIA

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**Appropriate Extinguishing Media:** Use water fog, foam, dry chemical or carbon dioxide (CO<sub>2</sub>) to extinguish flames.

**Inappropriate Extinguishing Media:** Straight Streams of Water

## FIRE FIGHTING

**Fire Fighting Instructions:** Evacuate area. Prevent runoff from fire control or dilution from entering streams, sewers, or drinking water supply. Firefighters should use standard protective equipment and in enclosed spaces, self-contained breathing apparatus (SCBA). Use water spray to cool fire exposed surfaces and to protect personnel.

**Unusual Fire Hazards:** Pressurized mists may form a flammable mixture.

**Hazardous Combustion Products:** Aldehydes, Incomplete combustion products, Oxides of carbon, Smoke, Fume, Sulfur oxides

## FLAMMABILITY PROPERTIES

**Flash Point [Method]:** >200°C (392°F) [ASTM D-92]

**Flammable Limits (Approximate volume % in air):** LEL: 0.9 UEL: 7.0

**Autoignition Temperature:** N/D

## SECTION 6

## ACCIDENTAL RELEASE MEASURES

### NOTIFICATION PROCEDURES

In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations. US regulations require reporting releases of this material to the environment which exceed the applicable reportable quantity or oil spills which could reach any waterway including intermittent dry creeks. The National Response Center can be reached at (800)424-8802.

### PROTECTIVE MEASURES

Avoid contact with spilled material. See Section 5 for fire fighting information. See the Hazard Identification Section for Significant Hazards. See Section 4 for First Aid Advice. See Section 8 for advice on the minimum requirements for personal protective equipment. Additional protective measures may be necessary, depending on the specific circumstances and/or the expert judgment of the emergency responders.

For emergency responders: Respiratory protection: respiratory protection will be necessary only in special cases, e.g., formation of mists. Half-face or full-face respirator with filter(s) for dust/organic vapor or Self Contained Breathing Apparatus (SCBA) can be used depending on the size of spill and potential level of exposure. If the exposure cannot be completely characterized or an oxygen deficient atmosphere is possible or anticipated, SCBA is recommended. Work gloves that are resistant to hydrocarbons are recommended. Gloves made of polyvinyl acetate (PVA) are not water-resistant and are not suitable for emergency use. Chemical goggles are recommended if splashes or contact with eyes is possible. Small spills: normal antistatic work clothes are usually adequate. Large spills: full body suit of chemical resistant, antistatic material is recommended.

### SPILL MANAGEMENT

**Land Spill:** Stop leak if you can do it without risk. Recover by pumping or with suitable absorbent.

**Water Spill:** Stop leak if you can do it without risk. Confine the spill immediately with booms. Warn other shipping. Remove from the surface by skimming or with suitable absorbents. Seek the advice of a specialist before using dispersants.

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Water spill and land spill recommendations are based on the most likely spill scenario for this material; however, geographic conditions, wind, temperature, (and in the case of a water spill) wave and current direction and speed may greatly influence the appropriate action to be taken. For this reason, local experts should be consulted. Note: Local regulations may prescribe or limit action to be taken.

**ENVIRONMENTAL PRECAUTIONS**

Large Spills: Dike far ahead of liquid spill for later recovery and disposal. Prevent entry into waterways, sewers, basements or confined areas.

**SECTION 7 HANDLING AND STORAGE**

**HANDLING**

Prevent small spills and leakage to avoid slip hazard. Material can accumulate static charges which may cause an electrical spark (ignition source). When the material is handled in bulk, an electrical spark could ignite any flammable vapors from liquids or residues that may be present (e.g., during switch-loading operations). Use proper bonding and/or ground procedures. However, bonding and grounds may not eliminate the hazard from static accumulation. Consult local applicable standards for guidance. Additional references include American Petroleum Institute 2003 (Protection Against Ignitions Arising out of Static, Lightning and Stray Currents) or National Fire Protection Agency 77 (Recommended Practice on Static Electricity) or CENELEC CLC/TR 50404 (Electrostatics - Code of practice for the avoidance of hazards due to static electricity).

**Static Accumulator:** This material is a static accumulator.

**STORAGE**

The type of container used to store the material may affect static accumulation and dissipation. Do not store in open or unlabelled containers. Keep away from incompatible materials.

**SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION**

**EXPOSURE LIMIT VALUES**

Exposure limits/standards (Note: Exposure limits are not additive)

Substance Name	Form	Limit / Standard		NOTE	Source
2,6-DI-TERT-BUTYL-P-CRESOL	Inhalable fraction and vapor	TWA	2 mg/m <sup>3</sup>	N/A	ACGIH

**Exposure limits/standards for materials that can be formed when handling this product:** When mists/aerosols can occur the following are recommended: 5 mg/m<sup>3</sup> - ACGIH TLV (inhalable fraction), 5 mg/m<sup>3</sup> - OSHA PEL.

NOTE: Limits/standards shown for guidance only. Follow applicable regulations.

No biological limits allocated.

**ENGINEERING CONTROLS**

The level of protection and types of controls necessary will vary depending upon potential exposure conditions.

---

Control measures to consider:

No special requirements under ordinary conditions of use and with adequate ventilation.

## PERSONAL PROTECTION

Personal protective equipment selections vary based on potential exposure conditions such as applications, handling practices, concentration and ventilation. Information on the selection of protective equipment for use with this material, as provided below, is based upon intended, normal usage.

**Respiratory Protection:** If engineering controls do not maintain airborne contaminant concentrations at a level which is adequate to protect worker health, an approved respirator may be appropriate. Respirator selection, use, and maintenance must be in accordance with regulatory requirements, if applicable. Types of respirators to be considered for this material include:

No special requirements under ordinary conditions of use and with adequate ventilation.

For high airborne concentrations, use an approved supplied-air respirator, operated in positive pressure mode. Supplied air respirators with an escape bottle may be appropriate when oxygen levels are inadequate, gas/vapor warning properties are poor, or if air purifying filter capacity/rating may be exceeded.

**Hand Protection:** Any specific glove information provided is based on published literature and glove manufacturer data. Glove suitability and breakthrough time will differ depending on the specific use conditions. Contact the glove manufacturer for specific advice on glove selection and breakthrough times for your use conditions. Inspect and replace worn or damaged gloves. The types of gloves to be considered for this material include:

No protection is ordinarily required under normal conditions of use.

**Eye Protection:** If contact is likely, safety glasses with side shields are recommended.

**Skin and Body Protection:** Any specific clothing information provided is based on published literature or manufacturer data. The types of clothing to be considered for this material include:

No skin protection is ordinarily required under normal conditions of use. In accordance with good industrial hygiene practices, precautions should be taken to avoid skin contact.

**Specific Hygiene Measures:** Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Discard contaminated clothing and footwear that cannot be cleaned. Practice good housekeeping.

## ENVIRONMENTAL CONTROLS

Comply with applicable environmental regulations limiting discharge to air, water and soil. Protect the environment by applying appropriate control measures to prevent or limit emissions.

## SECTION 9

## PHYSICAL AND CHEMICAL PROPERTIES

**Note:** Physical and chemical properties are provided for safety, health and environmental considerations only and may not fully represent product specifications. Contact the Supplier for additional information.

## GENERAL INFORMATION

**Physical State:** Liquid

**Color:** Brown

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**Odor:** Characteristic  
**Odor Threshold:** N/D

**IMPORTANT HEALTH, SAFETY, AND ENVIRONMENTAL INFORMATION**

**Relative Density (at 15.6 °C):** 0.871  
**Flammability (Solid, Gas):** N/A  
**Flash Point [Method]:** >200°C (392°F) [ASTM D-92]  
**Flammable Limits (Approximate volume % in air):** LEL: 0.9 UEL: 7.0  
**Autoignition Temperature:** N/D  
**Boiling Point / Range:** > 316°C (600°F)  
**Decomposition Temperature:** N/D  
**Vapor Density (Air = 1):** > 2 at 101 kPa  
**Vapor Pressure:** < 0.013 kPa (0.1 mm Hg) at 20 °C  
**Evaporation Rate (n-butyl acetate = 1):** N/D  
**pH:** N/A  
**Log Pow (n-Octanol/Water Partition Coefficient):** > 3.5  
**Solubility in Water:** Negligible  
**Viscosity:** 32 cSt (32 mm<sup>2</sup>/sec) at 40 °C | 5.3 cSt (5.3 mm<sup>2</sup>/sec) at 100°C [ASTM D 445]  
**Oxidizing Properties:** See Hazards Identification Section.

**OTHER INFORMATION**

**Freezing Point:** N/D  
**Melting Point:** N/A  
**Pour Point:** -18°C (0°F)  
**DMSO Extract (mineral oil only), IP-346:** < 3 %wt

**SECTION 10 STABILITY AND REACTIVITY**

**REACTIVITY:** See sub-sections below.

**STABILITY:** Material is stable under normal conditions.

**CONDITIONS TO AVOID:** Excessive heat. High energy sources of ignition.

**MATERIALS TO AVOID:** Strong oxidizers

**HAZARDOUS DECOMPOSITION PRODUCTS:** Material does not decompose at ambient temperatures.

**POSSIBILITY OF HAZARDOUS REACTIONS:** Hazardous polymerization will not occur.

**SECTION 11 TOXICOLOGICAL INFORMATION**

**INFORMATION ON TOXICOLOGICAL EFFECTS**

<b>Hazard Class</b>	<b>Conclusion / Remarks</b>
<b>Inhalation</b>	
Acute Toxicity: No end point data for material.	Minimally Toxic. Based on assessment of the components.
Irritation: No end point data for material.	Negligible hazard at ambient/normal handling temperatures.
<b>Ingestion</b>	
Acute Toxicity: No end point data for	Minimally Toxic. Based on assessment of the components.

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material.	
<b>Skin</b>	
Acute Toxicity: No end point data for material.	Minimally Toxic. Based on assessment of the components.
Skin Corrosion/Irritation: No end point data for material.	Negligible irritation to skin at ambient temperatures. Based on assessment of the components.
<b>Eye</b>	
Serious Eye Damage/Irritation: No end point data for material.	May cause mild, short-lasting discomfort to eyes. Based on assessment of the components.
<b>Sensitization</b>	
Respiratory Sensitization: No end point data for material.	Not expected to be a respiratory sensitizer.
Skin Sensitization: No end point data for material.	Not expected to be a skin sensitizer. Based on assessment of the components.
<b>Aspiration:</b> Data available.	Not expected to be an aspiration hazard. Based on physico-chemical properties of the material.
<b>Germ Cell Mutagenicity:</b> No end point data for material.	Not expected to be a germ cell mutagen. Based on assessment of the components.
<b>Carcinogenicity:</b> No end point data for material.	Not expected to cause cancer. Based on assessment of the components.
<b>Reproductive Toxicity:</b> No end point data for material.	Not expected to be a reproductive toxicant. Based on assessment of the components.
<b>Lactation:</b> No end point data for material.	Not expected to cause harm to breast-fed children.
<b>Specific Target Organ Toxicity (STOT)</b>	
Single Exposure: No end point data for material.	Not expected to cause organ damage from a single exposure.
Repeated Exposure: No end point data for material.	Not expected to cause organ damage from prolonged or repeated exposure. Based on assessment of the components.

## OTHER INFORMATION

### For the product itself:

Component concentrations in this formulation would not be expected to cause skin sensitization, based on tests of the components, this formulation, or similar formulations.

### Contains:

Base oil severely refined: Not carcinogenic in animal studies. Representative material passes IP-346, Modified Ames test, and/or other screening tests. Dermal and inhalation studies showed minimal effects; lung non-specific infiltration of immune cells, oil deposition and minimal granuloma formation. Not sensitizing in test animals.

The following ingredients are cited on the lists below: None.

--REGULATORY LISTS SEARCHED--

1 = NTP CARC

3 = IARC 1

5 = IARC 2B

2 = NTP SUS

4 = IARC 2A

6 = OSHA CARC

## SECTION 12

## ECOLOGICAL INFORMATION

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The information given is based on data for the material, components of the material, or for similar materials, through the application of bridging principals.

**ECOTOXICITY**

Material -- Not expected to be harmful to aquatic organisms.

**MOBILITY**

Base oil component -- Low solubility and floats and is expected to migrate from water to the land.  
Expected to partition to sediment and wastewater solids.

**PERSISTENCE AND DEGRADABILITY**

**Biodegradation:**

Base oil component -- Expected to be inherently biodegradable

**BIOACCUMULATION POTENTIAL**

Base oil component -- Has the potential to bioaccumulate, however metabolism or physical properties may reduce the bioconcentration or limit bioavailability.

**OTHER ECOLOGICAL INFORMATION**

**VOC:** 0 G/L [ASTM E1868-10]

<b>SECTION 13</b>	<b>DISPOSAL CONSIDERATIONS</b>
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Disposal recommendations based on material as supplied. Disposal must be in accordance with current applicable laws and regulations, and material characteristics at time of disposal.

**DISPOSAL RECOMMENDATIONS**

Product is suitable for burning in an enclosed controlled burner for fuel value or disposal by supervised incineration at very high temperatures to prevent formation of undesirable combustion products. Protect the environment. Dispose of used oil at designated sites. Minimize skin contact. Do not mix used oils with solvents, brake fluids or coolants.

**REGULATORY DISPOSAL INFORMATION**

RCRA Information: The unused product, in our opinion, is not specifically listed by the EPA as a hazardous waste (40 CFR, Part 261D), nor is it formulated to contain materials which are listed as hazardous wastes. It does not exhibit the hazardous characteristics of ignitability, corrosivity or reactivity and is not formulated with contaminants as determined by the Toxicity Characteristic Leaching Procedure (TCLP). However, used product may be regulated.

**Empty Container Warning** Empty Container Warning (where applicable): Empty containers may contain residue and can be dangerous. Do not attempt to refill or clean containers without proper instructions. Empty drums should be completely drained and safely stored until appropriately reconditioned or disposed. Empty containers should be taken for recycling, recovery, or disposal through suitably qualified or licensed contractor and in accordance with governmental regulations. **DO NOT PRESSURISE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION. THEY MAY EXPLODE AND CAUSE INJURY OR DEATH.**

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<b>SECTION 14</b>	<b>TRANSPORT INFORMATION</b>
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**LAND (DOT):** Not Regulated for Land Transport

**LAND (TDG):** Not Regulated for Land Transport

**SEA (IMDG):** Not Regulated for Sea Transport according to IMDG-Code

**Marine Pollutant:** No

**AIR (IATA):** Not Regulated for Air Transport

<b>SECTION 15</b>	<b>REGULATORY INFORMATION</b>
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**OSHA HAZARD COMMUNICATION STANDARD:** This material is not considered hazardous in accordance with OSHA HazCom 2012, 29 CFR 1910.1200.

**Listed or exempt from listing/notification on the following chemical inventories:** AICS, DSL, ENCS, IECSC, ISHL, KECI, PICCS, TCSI, TSCA

**SARA 302:** No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302

**SARA (311/312) REPORTABLE GHS HAZARD CLASSES:** None.

**SARA (313) TOXIC RELEASE INVENTORY:** This material contains no chemicals subject to the supplier notification requirements of the SARA 313 Toxic Release Program.

The following ingredients are cited on the lists below:

Chemical Name	CAS Number	List Citations
PHOSPHORODITHIOIC ACID, MIXED 0,0-BIS(2-ETHYL HEXYL AND ISO-BU) ESTERS, ZINC SALTS.	68442-22-8	15
SEVERELY HYDROTREATED HEAVY PARAFFINIC DISTILLATE	64742-54-7	19

--REGULATORY LISTS SEARCHED--

1 = ACGIH ALL

6 = TSCA 5a2

11 = CA P65 REPRO

16 = MN RTK



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2 = ACGIH A1	7 = TSCA 5e	12 = CA RTK	17 = NJ RTK
3 = ACGIH A2	8 = TSCA 6	13 = IL RTK	18 = PA RTK
4 = OSHA Z	9 = TSCA 12b	14 = LA RTK	19 = RI RTK
5 = TSCA 4	10 = CA P65 CARC	15 = MI 293	

Code key: CARC=Carcinogen; REPRO=Reproductive

<b>SECTION 16</b>	<b>OTHER INFORMATION</b>
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N/D = Not determined, N/A = Not applicable

**KEY TO THE H-CODES CONTAINED IN SECTION 3 OF THIS DOCUMENT (for information only):**

- H303: May be harmful if swallowed; Acute Tox Oral, Cat 5
- H315: Causes skin irritation; Skin Corr/Irritation, Cat 2
- H317: May cause allergic skin reaction; Skin Sensitization, Cat 1
- H318: Causes serious eye damage; Serious Eye Damage/Irr, Cat 1
- H319(2A): Causes serious eye irritation; Serious Eye Damage/Irr, Cat 2A
- H400: Very toxic to aquatic life; Acute Env Tox, Cat 1
- H401: Toxic to aquatic life; Acute Env Tox, Cat 2
- H410: Very toxic to aquatic life with long lasting effects; Chronic Env Tox, Cat 1
- H411: Toxic to aquatic life with long lasting effects; Chronic Env Tox, Cat 2

**THIS SAFETY DATA SHEET CONTAINS THE FOLLOWING REVISIONS:**

- Composition: Component Table information was modified.
- Section 01: Company Contact Methods information was modified.
- Section 01: Company Mailing Address information was modified.
- Section 07: Handling and Storage - Handling information was modified.
- Section 07: Handling and Storage - Storage Phrases information was modified.
- Section 09: Vapor Pressure information was added.
- Section 11 Acute Toxicity data - Header information was deleted.
- Section 11 Substance Name - Header information was deleted.
- Section 11 Substance Toxicity table - Header information was deleted.
- Section 11 Substance Toxicology table information was deleted.
- Section 11: Other Health Effects information was modified.
- Section 12: information was modified.
- Section 14: Marine Pollutant information was modified.
- Section 15: List Citations Table information was modified.
- Section 15: National Chemical Inventory Listing information was modified.
- Section 15: SARA (311/312) REPORTABLE GHS HAZARD CLASSES information was added.
- Section 15: SARA (311/312) REPORTABLE HAZARD CATEGORIES information was deleted.
- Section 16: HCode Key information was modified.

The information and recommendations contained herein are, to the best of ExxonMobil's knowledge and belief, accurate and reliable as of the date issued. You can contact ExxonMobil to insure that this document is the most current available from ExxonMobil. The information and recommendations are offered for the user's consideration and examination. It is the user's responsibility to satisfy itself that the product is suitable for the intended use. If buyer repackages this product, it is the user's responsibility to insure proper health, safety and other necessary information is included with and/or on the container. Appropriate warnings and safe-handling procedures should be provided to handlers and users. Alteration of this document is strictly prohibited. Except to the extent required by law, re-

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Internal Use Only

MHC: 0B, 0B, 0, 0, 0, 0

PPEC: A

DGN: 2007783XUS (1014069)

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# SAFETY DATA SHEET

<b>SECTION 1</b>	<b>PRODUCT AND COMPANY IDENTIFICATION</b>
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## PRODUCT

**Product Name:** MOBIL DTE 24  
**Product Description:** Base Oil and Additives  
**Product Code:** 201560102010, 602623-00, 970972  
**Intended Use:** Hydraulic fluid

## COMPANY IDENTIFICATION

<b>Supplier:</b>	<b>EXXON MOBIL CORPORATION</b> 22777 Springwoods Village Parkway Spring, TX 77389 USA	
<b>24 Hour Health Emergency</b>		609-737-4411
<b>Transportation Emergency Phone</b>		800-424-9300 or 703-527-3887 CHEMTREC
<b>Product Technical Information</b>		800-662-4525
<b>MSDS Internet Address</b>		www.exxon.com, www.mobil.com

<b>SECTION 2</b>	<b>HAZARDS IDENTIFICATION</b>
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This material is not hazardous according to regulatory guidelines (see (M)SDS Section 15).

**Other hazard information:**

**HAZARD NOT OTHERWISE CLASSIFIED (HNOC):** None as defined under 29 CFR 1910.1200.

## PHYSICAL / CHEMICAL HAZARDS

No significant hazards.

## HEALTH HAZARDS

High-pressure injection under skin may cause serious damage. Excessive exposure may result in eye, skin, or respiratory irritation.

## ENVIRONMENTAL HAZARDS

No significant hazards.

<b>NFPA Hazard ID:</b>	Health: 0	Flammability: 1	Reactivity: 0
<b>HMIS Hazard ID:</b>	Health: 0	Flammability: 1	Reactivity: 0

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**NOTE:** This material should not be used for any other purpose than the intended use in Section 1 without expert advice. Health studies have shown that chemical exposure may cause potential human health risks which may vary from person to person.

<b>SECTION 3</b>	<b>COMPOSITION / INFORMATION ON INGREDIENTS</b>
------------------	---

This material is defined as a mixture.

**Hazardous Substance(s) or Complex Substance(s) required for disclosure**

Name	CAS#	Concentration*	GHS Hazard Codes
2,6-DI-TERT-BUTYL-P-CRESOL	128-37-0	0.1 - < 1%	H400(M factor 1), H410(M factor 1)
CALCIUM SULFONATE	57855-77-3	0.1 - < 1%	H315, H319(2A), H317
PHOSPHORODITHIOIC ACID, MIXED 0,0-BIS(2-ETHYL HEXYL AND ISO-BU) ESTERS, ZINC SALTS.	68442-22-8	0.1 - < 1%	H303, H315, H318, H401, H411

\* All concentrations are percent by weight unless material is a gas. Gas concentrations are in percent by volume.

As per paragraph (i) of 29 CFR 1910.1200, formulation is considered a trade secret and specific chemical identity and exact percentage (concentration) of composition may have been withheld. Specific chemical identity and exact percentage composition will be provided to health professionals, employees, or designated representatives in accordance with applicable provisions of paragraph (i).

<b>SECTION 4</b>	<b>FIRST AID MEASURES</b>
------------------	---------------------------

**INHALATION**

Remove from further exposure. For those providing assistance, avoid exposure to yourself or others. Use adequate respiratory protection. If respiratory irritation, dizziness, nausea, or unconsciousness occurs, seek immediate medical assistance. If breathing has stopped, assist ventilation with a mechanical device or use mouth-to-mouth resuscitation.

**SKIN CONTACT**

Wash contact areas with soap and water. If product is injected into or under the skin, or into any part of the body, regardless of the appearance of the wound or its size, the individual should be evaluated immediately by a physician as a surgical emergency. Even though initial symptoms from high pressure injection may be minimal or absent, early surgical treatment within the first few hours may significantly reduce the ultimate extent of injury.

**EYE CONTACT**

Flush thoroughly with water. If irritation occurs, get medical assistance.

**INGESTION**

First aid is normally not required. Seek medical attention if discomfort occurs.

<b>SECTION 5</b>	<b>FIRE FIGHTING MEASURES</b>
------------------	-------------------------------

**EXTINGUISHING MEDIA**

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**Appropriate Extinguishing Media:** Use water fog, foam, dry chemical or carbon dioxide (CO<sub>2</sub>) to extinguish flames.

**Inappropriate Extinguishing Media:** Straight Streams of Water

## FIRE FIGHTING

**Fire Fighting Instructions:** Evacuate area. Prevent runoff from fire control or dilution from entering streams, sewers, or drinking water supply. Firefighters should use standard protective equipment and in enclosed spaces, self-contained breathing apparatus (SCBA). Use water spray to cool fire exposed surfaces and to protect personnel.

**Unusual Fire Hazards:** Pressurized mists may form a flammable mixture.

**Hazardous Combustion Products:** Aldehydes, Incomplete combustion products, Oxides of carbon, Smoke, Fume, Sulfur oxides

## FLAMMABILITY PROPERTIES

**Flash Point [Method]:** >200°C (392°F) [ASTM D-92]

**Flammable Limits (Approximate volume % in air):** LEL: 0.9 UEL: 7.0

**Autoignition Temperature:** N/D

## SECTION 6

## ACCIDENTAL RELEASE MEASURES

### NOTIFICATION PROCEDURES

In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations. US regulations require reporting releases of this material to the environment which exceed the applicable reportable quantity or oil spills which could reach any waterway including intermittent dry creeks. The National Response Center can be reached at (800)424-8802.

### PROTECTIVE MEASURES

Avoid contact with spilled material. See Section 5 for fire fighting information. See the Hazard Identification Section for Significant Hazards. See Section 4 for First Aid Advice. See Section 8 for advice on the minimum requirements for personal protective equipment. Additional protective measures may be necessary, depending on the specific circumstances and/or the expert judgment of the emergency responders.

For emergency responders: Respiratory protection: respiratory protection will be necessary only in special cases, e.g., formation of mists. Half-face or full-face respirator with filter(s) for dust/organic vapor or Self Contained Breathing Apparatus (SCBA) can be used depending on the size of spill and potential level of exposure. If the exposure cannot be completely characterized or an oxygen deficient atmosphere is possible or anticipated, SCBA is recommended. Work gloves that are resistant to hydrocarbons are recommended. Gloves made of polyvinyl acetate (PVA) are not water-resistant and are not suitable for emergency use. Chemical goggles are recommended if splashes or contact with eyes is possible. Small spills: normal antistatic work clothes are usually adequate. Large spills: full body suit of chemical resistant, antistatic material is recommended.

### SPILL MANAGEMENT

**Land Spill:** Stop leak if you can do it without risk. Recover by pumping or with suitable absorbent.

**Water Spill:** Stop leak if you can do it without risk. Confine the spill immediately with booms. Warn other shipping. Remove from the surface by skimming or with suitable absorbents. Seek the advice of a specialist before using dispersants.

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Water spill and land spill recommendations are based on the most likely spill scenario for this material; however, geographic conditions, wind, temperature, (and in the case of a water spill) wave and current direction and speed may greatly influence the appropriate action to be taken. For this reason, local experts should be consulted. Note: Local regulations may prescribe or limit action to be taken.

**ENVIRONMENTAL PRECAUTIONS**

Large Spills: Dike far ahead of liquid spill for later recovery and disposal. Prevent entry into waterways, sewers, basements or confined areas.

**SECTION 7 HANDLING AND STORAGE**

**HANDLING**

Prevent small spills and leakage to avoid slip hazard. Material can accumulate static charges which may cause an electrical spark (ignition source). When the material is handled in bulk, an electrical spark could ignite any flammable vapors from liquids or residues that may be present (e.g., during switch-loading operations). Use proper bonding and/or ground procedures. However, bonding and grounds may not eliminate the hazard from static accumulation. Consult local applicable standards for guidance. Additional references include American Petroleum Institute 2003 (Protection Against Ignitions Arising out of Static, Lightning and Stray Currents) or National Fire Protection Agency 77 (Recommended Practice on Static Electricity) or CENELEC CLC/TR 50404 (Electrostatics - Code of practice for the avoidance of hazards due to static electricity).

**Static Accumulator:** This material is a static accumulator.

**STORAGE**

The type of container used to store the material may affect static accumulation and dissipation. Do not store in open or unlabelled containers. Keep away from incompatible materials.

**SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION**

**EXPOSURE LIMIT VALUES**

Exposure limits/standards (Note: Exposure limits are not additive)

Substance Name	Form	Limit / Standard		NOTE	Source
2,6-DI-TERT-BUTYL-P-CRESOL	Inhalable fraction and vapor	TWA	2 mg/m <sup>3</sup>	N/A	ACGIH

**Exposure limits/standards for materials that can be formed when handling this product:** When mists/aerosols can occur the following are recommended: 5 mg/m<sup>3</sup> - ACGIH TLV (inhalable fraction), 5 mg/m<sup>3</sup> - OSHA PEL.

NOTE: Limits/standards shown for guidance only. Follow applicable regulations.

No biological limits allocated.

**ENGINEERING CONTROLS**

The level of protection and types of controls necessary will vary depending upon potential exposure conditions.

---

Control measures to consider:

No special requirements under ordinary conditions of use and with adequate ventilation.

## PERSONAL PROTECTION

Personal protective equipment selections vary based on potential exposure conditions such as applications, handling practices, concentration and ventilation. Information on the selection of protective equipment for use with this material, as provided below, is based upon intended, normal usage.

**Respiratory Protection:** If engineering controls do not maintain airborne contaminant concentrations at a level which is adequate to protect worker health, an approved respirator may be appropriate. Respirator selection, use, and maintenance must be in accordance with regulatory requirements, if applicable. Types of respirators to be considered for this material include:

No special requirements under ordinary conditions of use and with adequate ventilation.

For high airborne concentrations, use an approved supplied-air respirator, operated in positive pressure mode. Supplied air respirators with an escape bottle may be appropriate when oxygen levels are inadequate, gas/vapor warning properties are poor, or if air purifying filter capacity/rating may be exceeded.

**Hand Protection:** Any specific glove information provided is based on published literature and glove manufacturer data. Glove suitability and breakthrough time will differ depending on the specific use conditions. Contact the glove manufacturer for specific advice on glove selection and breakthrough times for your use conditions. Inspect and replace worn or damaged gloves. The types of gloves to be considered for this material include:

No protection is ordinarily required under normal conditions of use.

**Eye Protection:** If contact is likely, safety glasses with side shields are recommended.

**Skin and Body Protection:** Any specific clothing information provided is based on published literature or manufacturer data. The types of clothing to be considered for this material include:

No skin protection is ordinarily required under normal conditions of use. In accordance with good industrial hygiene practices, precautions should be taken to avoid skin contact.

**Specific Hygiene Measures:** Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Discard contaminated clothing and footwear that cannot be cleaned. Practice good housekeeping.

## ENVIRONMENTAL CONTROLS

Comply with applicable environmental regulations limiting discharge to air, water and soil. Protect the environment by applying appropriate control measures to prevent or limit emissions.

<b>SECTION 9</b>	<b>PHYSICAL AND CHEMICAL PROPERTIES</b>
------------------	---

**Note:** Physical and chemical properties are provided for safety, health and environmental considerations only and may not fully represent product specifications. Contact the Supplier for additional information.

## GENERAL INFORMATION

**Physical State:** Liquid  
**Color:** Brown

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**Odor:** Characteristic  
**Odor Threshold:** N/D

**IMPORTANT HEALTH, SAFETY, AND ENVIRONMENTAL INFORMATION**

**Relative Density (at 15.6 °C):** 0.871  
**Flammability (Solid, Gas):** N/A  
**Flash Point [Method]:** >200°C (392°F) [ASTM D-92]  
**Flammable Limits (Approximate volume % in air):** LEL: 0.9 UEL: 7.0  
**Autoignition Temperature:** N/D  
**Boiling Point / Range:** > 316°C (600°F)  
**Decomposition Temperature:** N/D  
**Vapor Density (Air = 1):** > 2 at 101 kPa  
**Vapor Pressure:** < 0.013 kPa (0.1 mm Hg) at 20 °C  
**Evaporation Rate (n-butyl acetate = 1):** N/D  
**pH:** N/A  
**Log Pow (n-Octanol/Water Partition Coefficient):** > 3.5  
**Solubility in Water:** Negligible  
**Viscosity:** 32 cSt (32 mm<sup>2</sup>/sec) at 40 °C | 5.3 cSt (5.3 mm<sup>2</sup>/sec) at 100°C [ASTM D 445]  
**Oxidizing Properties:** See Hazards Identification Section.

**OTHER INFORMATION**

**Freezing Point:** N/D  
**Melting Point:** N/A  
**Pour Point:** -18°C (0°F)  
**DMSO Extract (mineral oil only), IP-346:** < 3 %wt

**SECTION 10 STABILITY AND REACTIVITY**

**REACTIVITY:** See sub-sections below.

**STABILITY:** Material is stable under normal conditions.

**CONDITIONS TO AVOID:** Excessive heat. High energy sources of ignition.

**MATERIALS TO AVOID:** Strong oxidizers

**HAZARDOUS DECOMPOSITION PRODUCTS:** Material does not decompose at ambient temperatures.

**POSSIBILITY OF HAZARDOUS REACTIONS:** Hazardous polymerization will not occur.

**SECTION 11 TOXICOLOGICAL INFORMATION**

**INFORMATION ON TOXICOLOGICAL EFFECTS**

<b>Hazard Class</b>	<b>Conclusion / Remarks</b>
<b>Inhalation</b>	
Acute Toxicity: No end point data for material.	Minimally Toxic. Based on assessment of the components.
Irritation: No end point data for material.	Negligible hazard at ambient/normal handling temperatures.
<b>Ingestion</b>	
Acute Toxicity: No end point data for	Minimally Toxic. Based on assessment of the components.



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material.	
<b>Skin</b>	
Acute Toxicity: No end point data for material.	Minimally Toxic. Based on assessment of the components.
Skin Corrosion/Irritation: No end point data for material.	Negligible irritation to skin at ambient temperatures. Based on assessment of the components.
<b>Eye</b>	
Serious Eye Damage/Irritation: No end point data for material.	May cause mild, short-lasting discomfort to eyes. Based on assessment of the components.
<b>Sensitization</b>	
Respiratory Sensitization: No end point data for material.	Not expected to be a respiratory sensitizer.
Skin Sensitization: No end point data for material.	Not expected to be a skin sensitizer. Based on assessment of the components.
<b>Aspiration:</b> Data available.	Not expected to be an aspiration hazard. Based on physico-chemical properties of the material.
<b>Germ Cell Mutagenicity:</b> No end point data for material.	Not expected to be a germ cell mutagen. Based on assessment of the components.
<b>Carcinogenicity:</b> No end point data for material.	Not expected to cause cancer. Based on assessment of the components.
<b>Reproductive Toxicity:</b> No end point data for material.	Not expected to be a reproductive toxicant. Based on assessment of the components.
<b>Lactation:</b> No end point data for material.	Not expected to cause harm to breast-fed children.
<b>Specific Target Organ Toxicity (STOT)</b>	
Single Exposure: No end point data for material.	Not expected to cause organ damage from a single exposure.
Repeated Exposure: No end point data for material.	Not expected to cause organ damage from prolonged or repeated exposure. Based on assessment of the components.

**OTHER INFORMATION**

**For the product itself:**

Component concentrations in this formulation would not be expected to cause skin sensitization, based on tests of the components, this formulation, or similar formulations.

**Contains:**

Base oil severely refined: Not carcinogenic in animal studies. Representative material passes IP-346, Modified Ames test, and/or other screening tests. Dermal and inhalation studies showed minimal effects; lung non-specific infiltration of immune cells, oil deposition and minimal granuloma formation. Not sensitizing in test animals.

The following ingredients are cited on the lists below: None.

--REGULATORY LISTS SEARCHED--

1 = NTP CARC  
 2 = NTP SUS

3 = IARC 1  
 4 = IARC 2A

5 = IARC 2B  
 6 = OSHA CARC

<b>SECTION 12</b>	<b>ECOLOGICAL INFORMATION</b>
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The information given is based on data for the material, components of the material, or for similar materials, through the application of bridging principals.

#### **ECOTOXICITY**

Material -- Not expected to be harmful to aquatic organisms.

#### **MOBILITY**

Base oil component -- Low solubility and floats and is expected to migrate from water to the land.  
Expected to partition to sediment and wastewater solids.

#### **PERSISTENCE AND DEGRADABILITY**

##### **Biodegradation:**

Base oil component -- Expected to be inherently biodegradable

#### **BIOACCUMULATION POTENTIAL**

Base oil component -- Has the potential to bioaccumulate, however metabolism or physical properties may reduce the bioconcentration or limit bioavailability.

#### **OTHER ECOLOGICAL INFORMATION**

**VOC:** 0 G/L [ASTM E1868-10]

### **SECTION 13**

### **DISPOSAL CONSIDERATIONS**

Disposal recommendations based on material as supplied. Disposal must be in accordance with current applicable laws and regulations, and material characteristics at time of disposal.

#### **DISPOSAL RECOMMENDATIONS**

Product is suitable for burning in an enclosed controlled burner for fuel value or disposal by supervised incineration at very high temperatures to prevent formation of undesirable combustion products. Protect the environment. Dispose of used oil at designated sites. Minimize skin contact. Do not mix used oils with solvents, brake fluids or coolants.

#### **REGULATORY DISPOSAL INFORMATION**

RCRA Information: The unused product, in our opinion, is not specifically listed by the EPA as a hazardous waste (40 CFR, Part 261D), nor is it formulated to contain materials which are listed as hazardous wastes. It does not exhibit the hazardous characteristics of ignitability, corrosivity or reactivity and is not formulated with contaminants as determined by the Toxicity Characteristic Leaching Procedure (TCLP). However, used product may be regulated.

**Empty Container Warning** Empty Container Warning (where applicable): Empty containers may contain residue and can be dangerous. Do not attempt to refill or clean containers without proper instructions. Empty drums should be completely drained and safely stored until appropriately reconditioned or disposed. Empty containers should be taken for recycling, recovery, or disposal through suitably qualified or licensed contractor and in accordance with governmental regulations. **DO NOT PRESSURISE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION. THEY MAY EXPLODE AND CAUSE INJURY OR DEATH.**

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<b>SECTION 14</b>	<b>TRANSPORT INFORMATION</b>
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**LAND (DOT):** Not Regulated for Land Transport

**LAND (TDG):** Not Regulated for Land Transport

**SEA (IMDG):** Not Regulated for Sea Transport according to IMDG-Code

**Marine Pollutant:** No

**AIR (IATA):** Not Regulated for Air Transport

<b>SECTION 15</b>	<b>REGULATORY INFORMATION</b>
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**OSHA HAZARD COMMUNICATION STANDARD:** This material is not considered hazardous in accordance with OSHA HazCom 2012, 29 CFR 1910.1200.

**Listed or exempt from listing/notification on the following chemical inventories:** AICS, DSL, ENCS, IECSC, ISHL, KECI, PICCS, TCSI, TSCA

**SARA 302:** No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302

**SARA (311/312) REPORTABLE GHS HAZARD CLASSES:** None.

**SARA (313) TOXIC RELEASE INVENTORY:** This material contains no chemicals subject to the supplier notification requirements of the SARA 313 Toxic Release Program.

The following ingredients are cited on the lists below:

Chemical Name	CAS Number	List Citations
PHOSPHORODITHIOIC ACID, MIXED 0,0-BIS(2-ETHYL HEXYL AND ISO-BU) ESTERS, ZINC SALTS.	68442-22-8	15
SEVERELY HYDROTREATED HEAVY PARAFFINIC DISTILLATE	64742-54-7	19

--REGULATORY LISTS SEARCHED--

1 = ACGIH ALL

6 = TSCA 5a2

11 = CA P65 REPRO

16 = MN RTK

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2 = ACGIH A1	7 = TSCA 5e	12 = CA RTK	17 = NJ RTK
3 = ACGIH A2	8 = TSCA 6	13 = IL RTK	18 = PA RTK
4 = OSHA Z	9 = TSCA 12b	14 = LA RTK	19 = RI RTK
5 = TSCA 4	10 = CA P65 CARC	15 = MI 293	

Code key: CARC=Carcinogen; REPRO=Reproductive

<b>SECTION 16</b>	<b>OTHER INFORMATION</b>
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N/D = Not determined, N/A = Not applicable

**KEY TO THE H-CODES CONTAINED IN SECTION 3 OF THIS DOCUMENT (for information only):**

- H303: May be harmful if swallowed; Acute Tox Oral, Cat 5
- H315: Causes skin irritation; Skin Corr/Irritation, Cat 2
- H317: May cause allergic skin reaction; Skin Sensitization, Cat 1
- H318: Causes serious eye damage; Serious Eye Damage/Irr, Cat 1
- H319(2A): Causes serious eye irritation; Serious Eye Damage/Irr, Cat 2A
- H400: Very toxic to aquatic life; Acute Env Tox, Cat 1
- H401: Toxic to aquatic life; Acute Env Tox, Cat 2
- H410: Very toxic to aquatic life with long lasting effects; Chronic Env Tox, Cat 1
- H411: Toxic to aquatic life with long lasting effects; Chronic Env Tox, Cat 2

**THIS SAFETY DATA SHEET CONTAINS THE FOLLOWING REVISIONS:**

- Composition: Component Table information was modified.
- Section 01: Company Contact Methods information was modified.
- Section 01: Company Mailing Address information was modified.
- Section 07: Handling and Storage - Handling information was modified.
- Section 07: Handling and Storage - Storage Phrases information was modified.
- Section 09: Vapor Pressure information was added.
- Section 11 Acute Toxicity data - Header information was deleted.
- Section 11 Substance Name - Header information was deleted.
- Section 11 Substance Toxicity table - Header information was deleted.
- Section 11 Substance Toxicology table information was deleted.
- Section 11: Other Health Effects information was modified.
- Section 12: information was modified.
- Section 14: Marine Pollutant information was modified.
- Section 15: List Citations Table information was modified.
- Section 15: National Chemical Inventory Listing information was modified.
- Section 15: SARA (311/312) REPORTABLE GHS HAZARD CLASSES information was added.
- Section 15: SARA (311/312) REPORTABLE HAZARD CATEGORIES information was deleted.
- Section 16: HCode Key information was modified.

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PPEC: A

DGN: 2007783XUS (1014069)

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**MOLYKOTE(R) G-0050 FM WHITE EP  
BEARING GREASE**

Version 2.4      Revision Date: 04.01.2016      SDS Number: 889189-00007      Date of last issue: 14.10.2015  
Date of first issue: 03.12.2014

**SECTION 1: Identification of the substance/mixture and of the company/undertaking**

**1.1 Product identifier**

Trade name : MOLYKOTE(R) G-0050 FM WHITE EP BEARING GREASE  
Product code : 000000000004051671, 000000000004051671

**1.2 Relevant identified uses of the substance or mixture and uses advised against**

Use of the Sub-stance/Mixture : Lubricants and lubricant additives

**1.3 Details of the supplier of the safety data sheet**

Company : Dow Corning Europe S.A.  
rue Jules Bordet - Parc Industriel - Zone C  
B-7180 Seneffe  
Telephone : English Tel: +49 611237507  
Deutsch Tel: +49 611237500  
Français Tel: +32 64511149  
Italiano Tel: +32 64511170  
Español Tel: +32 64511163  
E-mail address of person responsible for the SDS : sdseu@dowcorning.com

**1.4 Emergency telephone number**

Dow Corning (Barry U.K. 24h) Tél: +44 1446732350  
Dow Corning (Wiesbaden 24h) Tél: +49 61122158  
Dow Corning (Seneffe 24h) Tel: +32 64 888240

**SECTION 2: Hazards identification**

**2.1 Classification of the substance or mixture**

**Classification (REGULATION (EC) No 1272/2008)**

Chronic aquatic toxicity, Category 2      H411: Toxic to aquatic life with long lasting effects.

**2.2 Label elements**

**Labelling (REGULATION (EC) No 1272/2008)**

Hazard pictograms :



Hazard statements : H411      Toxic to aquatic life with long lasting effects.

Precautionary statements : **Prevention:**  
P273      Avoid release to the environment.

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**Response:**  
P391      Collect spillage.

**2.3 Other hazards**  
None known.

**SECTION 3: Composition/information on ingredients**

**3.2 Mixtures**

Chemical nature      :    Organic grease

**Hazardous components**

Chemical name	CAS-No. EC-No. Registration number	Classification	Concentration (% w/w)
White mineral oil (petroleum)	8042-47-5 232-455-8 01-2119487078-27	Asp. Tox. 1; H304	>= 70 - < 90
Zinc oxide	1314-13-2 215-222-5 01-2119463881-32	Aquatic Acute 1; H400 Aquatic Chronic 1; H410	>= 2.5 - < 10

**SECTION 4: First aid measures**

**4.1 Description of first aid measures**

Protection of first-aiders      :    No special precautions are necessary for first aid responders.

If inhaled      :    If inhaled, remove to fresh air.  
Get medical attention if symptoms occur.

In case of skin contact      :    Wash with water and soap as a precaution.  
Get medical attention if symptoms occur.

In case of eye contact      :    Flush eyes with water as a precaution.  
Get medical attention if irritation develops and persists.

If swallowed      :    If swallowed, DO NOT induce vomiting.  
Get medical attention if symptoms occur.  
Rinse mouth thoroughly with water.

**4.2 Most important symptoms and effects, both acute and delayed**

None known.

**4.3 Indication of any immediate medical attention and special treatment needed**

Treatment      :    Treat symptomatically and supportively.

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**SECTION 5: Firefighting measures**

**5.1 Extinguishing media**

Suitable extinguishing media : Water spray  
Alcohol-resistant foam  
Carbon dioxide (CO<sub>2</sub>)  
Dry chemical

Unsuitable extinguishing media : None known.

**5.2 Special hazards arising from the substance or mixture**

Specific hazards during fire-fighting : Exposure to combustion products may be a hazard to health.

Hazardous combustion products : Carbon oxides  
Metal oxides

**5.3 Advice for firefighters**

Special protective equipment for firefighters : Wear self-contained breathing apparatus for firefighting if necessary. Use personal protective equipment.

Specific extinguishing methods : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.  
Use water spray to cool unopened containers.  
Remove undamaged containers from fire area if it is safe to do so.  
Evacuate area.

---

**SECTION 6: Accidental release measures**

**6.1 Personal precautions, protective equipment and emergency procedures**

Personal precautions : Follow safe handling advice and personal protective equipment recommendations.

**6.2 Environmental precautions**

Environmental precautions : Discharge into the environment must be avoided.  
Prevent further leakage or spillage if safe to do so.  
Retain and dispose of contaminated wash water.  
Local authorities should be advised if significant spillages cannot be contained.

**6.3 Methods and material for containment and cleaning up**

Methods for cleaning up : Soak up with inert absorbent material.  
For large spills, provide dyking or other appropriate containment to keep material from spreading. If dyked material can be pumped, store recovered material in appropriate container.  
Clean up remaining materials from spill with suitable absor-





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bent.  
 Local or national regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to determine which regulations are applicable.  
 Sections 13 and 15 of this SDS provide information regarding certain local or national requirements.

**6.4 Reference to other sections**

See sections: 7, 8, 11, 12 and 13.

**SECTION 7: Handling and storage**

**7.1 Precautions for safe handling**

- Technical measures : See Engineering measures under EXPOSURE CONTROLS/PERSONAL PROTECTION section.
- Local/Total ventilation : Use only with adequate ventilation.
- Advice on safe handling : Handle in accordance with good industrial hygiene and safety practice.  
Take care to prevent spills, waste and minimize release to the environment.
- Hygiene measures : Ensure that eye flushing systems and safety showers are located close to the working place. When using do not eat, drink or smoke. Wash contaminated clothing before re-use.

**7.2 Conditions for safe storage, including any incompatibilities**

- Requirements for storage areas and containers : Keep in properly labelled containers. Store in accordance with the particular national regulations.
- Advice on common storage : Do not store with the following product types:  
Strong oxidizing agents

**7.3 Specific end use(s)**

- Specific use(s) : These precautions are for room temperature handling. Use at elevated temperature or aerosol/spray applications may require added precautions.

**SECTION 8: Exposure controls/personal protection**

**8.1 Control parameters**

**Occupational Exposure Limits**

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
Calcium carbonate	471-34-1	TWA (inhalable dust)	10 mg/m3	GB EH40
Further information	For the purposes of these limits, respirable dust and inhalable dust are those			



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	<p>fractions of airborne dust which will be collected when sampling is undertaken in accordance with the methods described in MDHS14/3 General methods for sampling and gravimetric analysis of respirable and inhalable dust, The COSHH definition of a substance hazardous to health includes dust of any kind when present at a concentration in air equal to or greater than 10 mg.m-3 8-hour TWA of inhalable dust or 4 mg.m-3 8-hour TWA of respirable dust. This means that any dust will be subject to COSHH if people are exposed above these levels. Some dusts have been assigned specific WELs and exposure to these must comply with the appropriate limit., Most industrial dusts contain particles of a wide range of sizes. The behaviour, deposition and fate of any particular particle after entry into the human respiratory system and the body response that it elicits, depend on the nature and size of the particle. HSE distinguishes two size fractions for limit-setting purposes termed 'inhalable' and 'respirable'. Inhalable dust approximates to the fraction of airborne material that enters the nose and mouth during breathing and is therefore available for deposition in the respiratory tract. Respirable dust approximates to the fraction that penetrates to the gas exchange region of the lung. Fuller definitions and explanatory material are given in MDHS14/3., Where dusts contain components that have their own assigned WEL, all the relevant limits should be complied with., Where no specific short-term exposure limit is listed, a figure three times the long-term exposure should be used</p>			
	<table border="1"> <tr> <td>TWA (Respirable dust)</td> <td>4 mg/m3</td> <td>GB EH40</td> </tr> </table>	TWA (Respirable dust)	4 mg/m3	GB EH40
TWA (Respirable dust)	4 mg/m3	GB EH40		
Further information	<p>For the purposes of these limits, respirable dust and inhalable dust are those fractions of airborne dust which will be collected when sampling is undertaken in accordance with the methods described in MDHS14/3 General methods for sampling and gravimetric analysis of respirable and inhalable dust, The COSHH definition of a substance hazardous to health includes dust of any kind when present at a concentration in air equal to or greater than 10 mg.m-3 8-hour TWA of inhalable dust or 4 mg.m-3 8-hour TWA of respirable dust. This means that any dust will be subject to COSHH if people are exposed above these levels. Some dusts have been assigned specific WELs and exposure to these must comply with the appropriate limit., Most industrial dusts contain particles of a wide range of sizes. The behaviour, deposition and fate of any particular particle after entry into the human respiratory system and the body response that it elicits, depend on the nature and size of the particle. HSE distinguishes two size fractions for limit-setting purposes termed 'inhalable' and 'respirable'. Inhalable dust approximates to the fraction of airborne material that enters the nose and mouth during breathing and is therefore available for deposition in the respiratory tract. Respirable dust approximates to the fraction that penetrates to the gas exchange region of the lung. Fuller definitions and explanatory material are given in MDHS14/3., Where dusts contain components that have their own assigned WEL, all the relevant limits should be complied with., Where no specific short-term exposure limit is listed, a figure three times the long-term exposure should be used</p>			

**Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:**

Substance name	End Use	Exposure routes	Potential health effects	Value
Calcium carbonate	Workers	Inhalation	Long-term systemic effects	10 mg/m3

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	Consumers	Inhalation	Long-term systemic effects	10 mg/m <sup>3</sup>
	Consumers	Ingestion	Long-term systemic effects	6.1 mg/kg bw/day
	Consumers	Ingestion	Acute systemic effects	6.1 mg/kg bw/day
Zinc oxide	Workers	Skin contact	Long-term systemic effects	83 mg/kg bw/day
	Workers	Inhalation	Long-term systemic effects	5 mg/m <sup>3</sup>
	Consumers	Skin contact	Long-term systemic effects	83 mg/kg bw/day
	Consumers	Inhalation	Long-term systemic effects	2.5 mg/m <sup>3</sup>
	Consumers	Ingestion	Long-term systemic effects	0.83 mg/kg bw/day

**Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:**

Substance name	Environmental Compartment	Value
Calcium carbonate	Sewage treatment plant	100 mg/l
Zinc oxide	Fresh water	20.6 µg/l
	Marine water	6.1 µg/l
	Sewage treatment plant	52 µg/l
	Fresh water sediment	117.8 mg/kg
	Marine sediment	56.5 mg/kg
	Soil	35.6 mg/kg
Aluminum hydroxide benzoate stearate	Fresh water	0.1 mg/l
	Marine water	0.01 mg/l
	Intermittent use/release	1 mg/l

**8.2 Exposure controls**

**Engineering measures**

Ensure adequate ventilation, especially in confined areas.  
Minimize workplace exposure concentrations.

**Personal protective equipment**

Eye protection : Wear the following personal protective equipment:  
Safety glasses

Hand protection : Wash hands before breaks and at the end of workday.  
Remarks

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Skin and body protection	: Skin should be washed after contact.
Respiratory protection	: Use respiratory protection unless adequate local exhaust ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines.
Filter type	: Combined particulates and organic vapour type (A-P)

---

**SECTION 9: Physical and chemical properties**

**9.1 Information on basic physical and chemical properties**

Appearance	: Grease
Colour	: white
Odour	: slight
Odour Threshold	: No data available
pH	: Not applicable
Melting point/freezing point	: No data available
Initial boiling point and boiling range	: Not applicable
Flash point	: 215 °C Method: closed cup
Evaporation rate	: Not applicable
Flammability (solid, gas)	: Not classified as a flammability hazard
Upper explosion limit	: No data available
Lower explosion limit	: No data available
Vapour pressure	: Not applicable
Relative vapour density	: No data available
Relative density	: 0.89
Solubility(ies)	
Water solubility	: No data available
Partition coefficient: n-octanol/water	: No data available
Auto-ignition temperature	: No data available

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Decomposition temperature : No data available

Viscosity  
Viscosity, dynamic : Not applicable

Explosive properties : Not explosive

Oxidizing properties : The substance or mixture is not classified as oxidizing.

**9.2 Other information**

Molecular weight : No data available

---

**SECTION 10: Stability and reactivity**

**10.1 Reactivity**

Not classified as a reactivity hazard.

**10.2 Chemical stability**

Stable under normal conditions.

**10.3 Possibility of hazardous reactions**

Hazardous reactions : Can react with strong oxidizing agents.

**10.4 Conditions to avoid**

Conditions to avoid : None known.

**10.5 Incompatible materials**

Materials to avoid : Oxidizing agents

**10.6 Hazardous decomposition products**

No hazardous decomposition products are known.

---

**SECTION 11: Toxicological information**

**11.1 Information on toxicological effects**

Information on likely routes of exposure : Skin contact  
Ingestion  
Eye contact

**Acute toxicity**

Not classified based on available information.

**Components:**

**White mineral oil (petroleum):**

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg

Acute inhalation toxicity : LC50 (Rat): > 5 mg/l  
Exposure time: 4 h



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Test atmosphere: dust/mist  
Assessment: The substance or mixture has no acute inhalation toxicity

Acute dermal toxicity : LD50 (Rabbit): > 2,000 mg/kg  
Assessment: The substance or mixture has no acute dermal toxicity

**Zinc oxide:**  
Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg  
Method: OECD Test Guideline 401

Acute inhalation toxicity : LC50 (Rat): > 5.7 mg/l  
Exposure time: 4 h  
Test atmosphere: dust/mist  
Method: OECD Test Guideline 403  
Assessment: The substance or mixture has no acute inhalation toxicity

**Skin corrosion/irritation**  
Not classified based on available information.

**Components:**  
**White mineral oil (petroleum):**  
Species: Rabbit  
Result: No skin irritation

**Zinc oxide:**  
Species: Rabbit  
Method: OECD Test Guideline 404  
Result: No skin irritation

**Serious eye damage/eye irritation**  
Not classified based on available information.

**Components:**  
**White mineral oil (petroleum):**  
Species: Rabbit  
Result: No eye irritation

**Zinc oxide:**  
Species: Rabbit  
Method: OECD Test Guideline 405  
Result: No eye irritation

**Respiratory or skin sensitisation**  
Skin sensitisation: Not classified based on available information.  
Respiratory sensitisation: Not classified based on available information.

**Components:**  
**White mineral oil (petroleum):**

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Test Type: Buehler Test  
Exposure routes: Skin contact  
Species: Guinea pig  
Result: negative

**Zinc oxide:**

Test Type: Maximisation Test  
Exposure routes: Skin contact  
Species: Guinea pig  
Method: OECD Test Guideline 406  
Result: negative

**Germ cell mutagenicity**

Not classified based on available information.

**Components:**

**White mineral oil (petroleum):**

Genotoxicity in vitro : Test Type: In vitro mammalian cell gene mutation test  
Result: negative

Genotoxicity in vivo : Test Type: Mammalian erythrocyte micronucleus test (in vivo  
cytogenetic assay)  
Species: Mouse  
Application Route: Intraperitoneal injection  
Method: OECD Test Guideline 474  
Result: negative  
Remarks: Based on data from similar materials

**Zinc oxide:**

Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)  
Method: OECD Test Guideline 471  
Result: negative

Genotoxicity in vivo : Test Type: Mammalian erythrocyte micronucleus test (in vivo  
cytogenetic assay)  
Species: Rat  
Application Route: Inhalation  
Method: OECD Test Guideline 474  
Result: negative

**Carcinogenicity**

Not classified based on available information.

**Components:**

**White mineral oil (petroleum):**

Species: Rat  
Application Route: Ingestion  
Exposure time: 24 Months  
Result: negative



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**Reproductive toxicity**

Not classified based on available information.

**Components:**

**White mineral oil (petroleum):**

Effects on fertility : Test Type: One-generation reproduction toxicity study  
Species: Rat  
Application Route: Skin contact  
Result: negative

Effects on foetal development : Test Type: Embryo-foetal development  
Species: Rat  
Application Route: Ingestion  
Result: negative

**Zinc oxide:**

Effects on fertility : Test Type: Two-generation reproduction toxicity study  
Species: Rat  
Application Route: Ingestion  
Method: OECD Test Guideline 416  
Result: negative

Effects on foetal development : Test Type: Embryo-foetal development  
Species: Hamster  
Application Route: Ingestion  
Result: negative  
Remarks: Based on data from similar materials

**STOT - single exposure**

Not classified based on available information.

**STOT - repeated exposure**

Not classified based on available information.

**Components:**

**Zinc oxide:**

Exposure routes: inhalation (dust/mist/fume)  
Assessment: No significant health effects observed in animals at concentrations of 0.2 mg/l/6h/d or less.

**Repeated dose toxicity**

**Components:**

**White mineral oil (petroleum):**

Species: Rat  
LOAEL: > 160 mg/kg  
Application Route: Ingestion  
Exposure time: 90 Days

Species: Rat  
LOAEL: >= 1 mg/l  
Application Route: inhalation (dust/mist/fume)



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Exposure time: 4 Weeks  
Method: OECD Test Guideline 412

**Zinc oxide:**  
Species: Rat  
NOAEL: 1.5 mg/m<sup>3</sup>  
Application Route: inhalation (dust/mist/fume)  
Exposure time: 3 Months  
Method: OECD Test Guideline 413

**Aspiration toxicity**  
Not classified based on available information.

**Components:**  
**White mineral oil (petroleum):**  
The substance or mixture is known to cause human aspiration toxicity hazards or has to be regarded as if it causes a human aspiration toxicity hazard.

**SECTION 12: Ecological information**

**12.1 Toxicity**

**Components:**  
**White mineral oil (petroleum):**

Toxicity to fish	: LC50 (Oncorhynchus mykiss (rainbow trout)): > 100 mg/l Exposure time: 96 h Method: OECD Test Guideline 203
Toxicity to daphnia and other aquatic invertebrates	: EC50 (Daphnia magna (Water flea)): > 100 mg/l Exposure time: 48 h Method: OECD Test Guideline 202
Toxicity to algae	: NOEC (Pseudokirchneriella subcapitata (green algae)): 100 mg/l Exposure time: 72 h Method: OECD Test Guideline 201
Toxicity to fish (Chronic toxicity)	: NOEC: 1,000 mg/l Exposure time: 28 d Species: Oncorhynchus mykiss (rainbow trout)
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	: NOEC: 1,000 mg/l Exposure time: 21 d Species: Daphnia magna (Water flea)

**Zinc oxide:**

Toxicity to fish	: LC50 (Oncorhynchus mykiss (rainbow trout)): 330 - 780 µg/l Exposure time: 96 h Remarks: Based on data from similar materials
Toxicity to daphnia and other	: EC50 (Daphnia magna (Water flea)): 6.9 - 16.2 mg/l



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- aquatic invertebrates : Exposure time: 48 h  
Method: OECD Test Guideline 202
- Toxicity to algae : EC50 (Selenastrum capricornutum (green algae)): 136 µg/l  
Exposure time: 72 h  
Method: OECD Test Guideline 201  
  
NOEC (Selenastrum capricornutum (green algae)): 24 µg/l  
Exposure time: 72 h  
Method: OECD Test Guideline 201
- M-Factor (Acute aquatic toxicity) : 1
- Toxicity to bacteria : EC50 : 5.2 mg/l  
Exposure time: 3 h  
Method: OECD Test Guideline 209  
Remarks: Based on data from similar materials
- Toxicity to fish (Chronic toxicity) : NOEC: 199 µg/l  
Exposure time: 30 d  
Species: Oncorhynchus mykiss (rainbow trout)  
Remarks: Based on data from similar materials
- Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC: 37 µg/l  
Exposure time: 21 d  
Species: Daphnia magna (Water flea)  
Remarks: Based on data from similar materials
- M-Factor (Chronic aquatic toxicity) : 1

**12.2 Persistence and degradability**

**Components:**

**White mineral oil (petroleum):**

- Biodegradability : Result: Not readily biodegradable.  
Biodegradation: 31 %  
Exposure time: 28 d

**12.3 Bioaccumulative potential**

**Components:**

**Zinc oxide:**

- Bioaccumulation : Species: Fish  
Bioconcentration factor (BCF): 177

**12.4 Mobility in soil**

No data available



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**12.5 Results of PBT and vPvB assessment**

Not relevant

**12.6 Other adverse effects**

No data available

**SECTION 13: Disposal considerations**

**13.1 Waste treatment methods**

- Product : Dispose of in accordance with local regulations.  
According to the European Waste Catalogue, Waste Codes are not product specific, but application specific.  
Waste codes should be assigned by the user, preferably in discussion with the waste disposal authorities.
  
- Contaminated packaging : Empty containers should be taken to an approved waste handling site for recycling or disposal.  
If not otherwise specified: Dispose of as unused product.

**SECTION 14: Transport information**

**14.1 UN number**

- ADN : UN 3077
- ADR : UN 3077
- RID : UN 3077
- IMDG : UN 3077
- IATA : UN 3077

**14.2 UN proper shipping name**

- ADN : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.  
(Zinc oxide)
- ADR : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.  
(Zinc oxide)
- RID : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.  
(Zinc oxide)
- IMDG : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.  
(Zinc oxide)
- IATA : Environmentally hazardous substance, solid, n.o.s.  
(Zinc oxide)

**14.3 Transport hazard class(es)**

- ADN : 9
- ADR : 9



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**RID** : 9  
**IMDG** : 9  
**IATA** : 9

**14.4 Packing group**

**ADN**  
Packing group : III  
Classification Code : M7  
Hazard Identification Number : 90  
Labels : 9

**ADR**  
Packing group : III  
Classification Code : M7  
Hazard Identification Number : 90  
Labels : 9  
Tunnel restriction code : (E)

**RID**  
Packing group : III  
Classification Code : M7  
Hazard Identification Number : 90  
Labels : 9

**IMDG**  
Packing group : III  
Labels : 9  
EmS Code : F-A, S-F

**IATA (Cargo)**  
Packing instruction (cargo aircraft) : 956  
Packing instruction (LQ) : Y956  
Packing group : III  
Labels : Miscellaneous

**IATA (Passenger)**  
Packing instruction (passenger aircraft) : 956  
Packing instruction (LQ) : Y956  
Packing group : III  
Labels : Miscellaneous

**14.5 Environmental hazards**

**ADN**  
Environmentally hazardous : yes

**ADR**  
Environmentally hazardous : yes

**RID**  
Environmentally hazardous : yes



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**IMDG**  
Marine pollutant : yes

**14.6 Special precautions for user**  
Not applicable

**14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**  
Remarks : Not applicable for product as supplied.

**SECTION 15: Regulatory information**

**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

Regulation (EC) No 649/2012 of the European Parliament and the Council concerning the export and import of dangerous chemicals : Not applicable

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59). : Not applicable

Regulation (EC) No 1005/2009 on substances that deplete the ozone layer : Not applicable

Regulation (EC) No 850/2004 on persistent organic pollutants : Not applicable

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

		Quantity 1	Quantity 2
E2	ENVIRONMENTAL HAZARDS	200 t	500 t
34	Petroleum products: (a) gasolines and naphthas, (b) kerosenes (including jet fuels), (c) gas oils (including diesel fuels, home heating oils and gas oil blending streams), (d) heavy fuel oils (e) alternative fuels serving the same purposes and with similar properties as regards flammability and environmental hazards as the products referred to in points (a) to (d)	2,500 t	25,000 t

**The components of this product are reported in the following inventories:**  
REACH : All ingredients (pre-)registered or exempt.

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TSCA : All chemical substances in this material are included on or exempted from listing on the TSCA Inventory of Chemical Substances.

AICS : All ingredients listed or exempt.

IECSC : All ingredients listed or exempt.

ENCS/ISHL : All components are listed on ENCS/ISHL or exempted from inventory listing.

KECI : One or more ingredients are not listed or exempt.

DSL : All chemical substances in this product comply with the CEPA 1999 and NSNR and are on or exempt from listing on the Canadian Domestic Substances List (DSL).

TCSI : All ingredients listed or exempt.

**15.2 Chemical safety assessment**

A Chemical Safety Assessment has not been carried out.

**SECTION 16: Other information**

**Full text of H-Statements**

H304 : May be fatal if swallowed and enters airways.  
H400 : Very toxic to aquatic life.  
H410 : Very toxic to aquatic life with long lasting effects.

**Full text of other abbreviations**

Aquatic Acute : Acute aquatic toxicity  
Aquatic Chronic : Chronic aquatic toxicity  
Asp. Tox. : Aspiration hazard  
GB EH40 : UK. EH40 WEL - Workplace Exposure Limits  
GB EH40 / TWA : Long-term exposure limit (8-hour TWA reference period)

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road; AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisa-

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tion for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

**Further information**

Sources of key data used to compile the Safety Data Sheet : Internal technical data, data from raw material SDSs, OECD eChem Portal search results and European Chemicals Agency, <http://echa.europa.eu/>

Items where changes have been made to the previous version are highlighted in the body of this document by two vertical lines.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and shall not be considered a warranty or quality specification of any type. The information provided relates only to the specific material identified at the top of this SDS and may not be valid when the SDS material is used in combination with any other materials or in any process, unless specified in the text. Material users should review the information and recommendations in the specific context of their intended manner of handling, use, processing and storage, including an assessment of the appropriateness of the SDS material in the user's end product, if applicable.

GB / EN

# Safety Data Sheet



## SECTION 1 PRODUCT AND COMPANY IDENTIFICATION

### Multifak EP 00

**Product Use:** Grease

**Product Number(s):** 274509

#### Company Identification

Chevron Products Company

a division of Chevron U.S.A. Inc.

6001 Bollinger Canyon Rd.

San Ramon, CA 94583

United States of America

www.chevronlubricants.com

#### Transportation Emergency Response

CHEMTREC: (800) 424-9300 or (703) 527-3887

#### Health Emergency

Chevron Emergency Information Center: Located in the USA. International collect calls accepted. (800) 231-0623 or (510) 231-0623

#### Product Information

email : lubemsds@chevron.com

Product Information: 1 (800) 582-3835, LUBETEK@chevron.com

## SECTION 2 HAZARDS IDENTIFICATION

**CLASSIFICATION:** Not classified as hazardous according to 29 CFR 1910.1200 (2012).

**HAZARDS NOT OTHERWISE CLASSIFIED:** Not Applicable

## SECTION 3 COMPOSITION/ INFORMATION ON INGREDIENTS

COMPONENTS	CAS NUMBER	AMOUNT
Highly refined mineral oil (C15 - C50)	Mixture	60 - 99 %weight



## SECTION 4 FIRST AID MEASURES

### Description of first aid measures

**Eye:** No specific first aid measures are required. As a precaution, remove contact lenses, if worn, and flush eyes with water.

**Skin:** No specific first aid measures are required. As a precaution, remove clothing and shoes if contaminated. To remove the material from skin, use soap and water. Discard contaminated clothing and shoes or thoroughly clean before reuse.

**Ingestion:** No specific first aid measures are required. Do not induce vomiting. As a precaution, get medical advice.

**Inhalation:** No specific first aid measures are required. If exposed to excessive levels of material in the air, move the exposed person to fresh air. Get medical attention if coughing or respiratory discomfort occurs.

### Most important symptoms and effects, both acute and delayed

#### IMMEDIATE HEALTH EFFECTS

**Eye:** Not expected to cause prolonged or significant eye irritation.

**Skin:** High-Pressure Equipment Information: Accidental high-velocity injection under the skin of materials of this type may result in serious injury. Seek medical attention at once should an accident like this occur. The initial wound at the injection site may not appear to be serious at first; but, if left untreated, could result in disfigurement or amputation of the affected part.

Contact with the skin is not expected to cause prolonged or significant irritation. Contact with the skin is not expected to cause an allergic skin response. Not expected to be harmful to internal organs if absorbed through the skin.

**Ingestion:** Not expected to be harmful if swallowed.

**Inhalation:** Not expected to be harmful if inhaled. Contains a petroleum-based mineral oil. May cause respiratory irritation or other pulmonary effects following prolonged or repeated inhalation of oil mist at airborne levels above the recommended mineral oil mist exposure limit. Symptoms of respiratory irritation may include coughing and difficulty breathing.

**DELAYED OR OTHER HEALTH EFFECTS:** Not classified

### Indication of any immediate medical attention and special treatment needed

**Note to Physicians:** In an accident involving high-pressure equipment, this product may be injected under the skin. Such an accident may result in a small, sometimes bloodless, puncture wound. However, because of its driving force, material injected into a fingertip can be deposited into the palm of the hand. Within 24 hours, there is usually a great deal of swelling, discoloration, and intense throbbing pain. Immediate treatment at a surgical emergency center is recommended.

## SECTION 5 FIRE FIGHTING MEASURES

**EXTINGUISHING MEDIA:** Use water fog, foam, dry chemical or carbon dioxide (CO<sub>2</sub>) to extinguish flames.

**Unusual Fire Hazards:** Leaks/ruptures in high pressure system using materials of this type can create a fire hazard when in the vicinity of ignition sources (eg. open flame, pilot lights, sparks, or electric arcs).

### PROTECTION OF FIRE FIGHTERS:

**Fire Fighting Instructions:** This material will burn although it is not easily ignited. See Section 7 for proper handling and storage. For fires involving this material, do not enter any enclosed or confined fire space without proper protective equipment, including self-contained breathing apparatus.

**Combustion Products:** Highly dependent on combustion conditions. A complex mixture of airborne solids, liquids, and gases including carbon monoxide, carbon dioxide, and unidentified organic compounds will be evolved when this material undergoes combustion. Combustion may form oxides of: Phosphorus, Sulfur, Zinc, Lithium.

## SECTION 6 ACCIDENTAL RELEASE MEASURES

**Protective Measures:** Eliminate all sources of ignition in vicinity of spilled material.

**Spill Management:** Clean up spills immediately, observing precautions in Exposure Controls/Personal Protection section. Stop the source of the release if you can do it without risk. Contain release to prevent further contamination of soil, surface water or groundwater. Clean up spill as soon as possible, observing precautions in Exposure Controls/Personal Protection. Use appropriate techniques such as applying non-combustible absorbent materials or pumping. Where feasible and appropriate, remove contaminated soil. Place contaminated materials in disposable containers and dispose of in a manner consistent with applicable regulations.

**Reporting:** Report spills to local authorities and/or the U.S. Coast Guard's National Response Center at (800) 424-8802 as appropriate or required.

## SECTION 7 HANDLING AND STORAGE

**General Handling Information:** Avoid contaminating soil or releasing this material into sewage and drainage systems and bodies of water.

**Precautionary Measures:** DO NOT USE IN HIGH PRESSURE SYSTEMS in the vicinity of flames, sparks and hot surfaces. Use only in well ventilated areas. Keep container closed. Keep out of the reach of children.

**Static Hazard:** Electrostatic charge may accumulate and create a hazardous condition when handling this material. To minimize this hazard, bonding and grounding may be necessary but may not, by themselves, be sufficient. Review all operations which have the potential of generating and accumulating an electrostatic charge and/or a flammable atmosphere (including tank and container filling, splash filling, tank cleaning, sampling, gauging, switch loading, filtering, mixing, agitation, and vacuum truck operations) and use appropriate mitigating procedures.

**Container Warnings:** Container is not designed to contain pressure. Do not use pressure to empty container or it may rupture with explosive force. Empty containers retain product residue (solid, liquid, and/or vapor) and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition. They may explode and cause injury or death. Empty containers should be completely drained, properly closed, and promptly returned to a drum reconditioner or disposed of properly.

## SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

### GENERAL CONSIDERATIONS:

Consider the potential hazards of this material (see Section 2), applicable exposure limits, job activities, and other substances in the work place when designing engineering controls and selecting personal protective equipment. If engineering controls or work practices are not adequate to prevent exposure to harmful levels of this material, the personal protective equipment listed below is recommended. The user should read and understand all instructions and limitations supplied with the equipment since protection is usually provided for a limited time or under certain circumstances.

### ENGINEERING CONTROLS:

Use in a well-ventilated area.

### PERSONAL PROTECTIVE EQUIPMENT

**Eye/Face Protection:** No special eye protection is normally required. Where splashing is possible, wear safety glasses with side shields as a good safety practice.

**Skin Protection:** No special protective clothing is normally required. Where splashing is possible, select protective clothing depending on operations conducted, physical requirements and other substances in the workplace. Suggested materials for protective gloves include: Neoprene, Nitrile Rubber, Silver Shield, Viton.

**Respiratory Protection:** No respiratory protection is normally required.

If user operations generate an oil mist, determine if airborne concentrations are below the occupational exposure limit for mineral oil mist. If not, wear an approved respirator that provides adequate protection from the measured concentrations of this material. For air-purifying respirators use a particulate cartridge.

Use a positive pressure air-supplying respirator in circumstances where air-purifying respirators may not provide adequate protection.

### Occupational Exposure Limits:

Component	Agency	TWA	STEL	Ceiling	Notation
Highly refined mineral oil (C15 - C50)	ACGIH	5 mg/m3	10 mg/m3	--	--
Highly refined mineral oil (C15 - C50)	OSHA Z-1	5 mg/m3	--	--	--

Consult local authorities for appropriate values.

## SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

**Attention:** the data below are typical values and do not constitute a specification.

**Color:** Light to Brown

**Physical State:** Semi-solid

**Odor:** Petroleum odor

**Odor Threshold:** No data available

**pH:** Not Applicable

**Vapor Pressure:** <0.01 mmHg (Estimated) @ 37.8 °C (100 °F)

**Vapor Density (Air = 1):** >1 (Estimated)

**Initial Boiling Point:** 260°C (500°F)

**Solubility:** Soluble in hydrocarbons; insoluble in water

**Freezing Point:** No data available

**Melting Point:** 155°C (311°F) (Min)

**Specific Gravity:** 0.90 (Typical)

**Density:** No data available

**Viscosity:** 112 mm<sup>2</sup>/s @ 40°C (104°F) (Typical)

**Evaporation Rate:** Not Applicable

**Decomposition temperature:** No data available

**Octanol/Water Partition Coefficient:** No data available

### FLAMMABLE PROPERTIES:

**Flammability (solid, gas):** No Data Available

**Flashpoint:** 150 °C (302 °F) (Typical)

**Autoignition:** No data available

**Flammability (Explosive) Limits (% by volume in air):** Lower: Not Applicable Upper: Not Applicable

## SECTION 10 STABILITY AND REACTIVITY

**Reactivity:** May react with strong acids or strong oxidizing agents, such as chlorates, nitrates, peroxides, etc.

**Chemical Stability:** This material is considered stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

**Incompatibility With Other Materials:** Not applicable

**Hazardous Decomposition Products:** Hydrogen Sulfide (Elevated temperatures), Alkyl Mercaptans (Elevated temperatures)

**Hazardous Polymerization:** Hazardous polymerization will not occur.

## SECTION 11 TOXICOLOGICAL INFORMATION

### Information on toxicological effects

**Serious Eye Damage/Irritation:** The eye irritation hazard is based on evaluation of data for similar materials.

**Skin Corrosion/Irritation:** The skin irritation hazard is based on evaluation of data for similar materials.

**Skin Sensitization:** The skin sensitization hazard is based on evaluation of data for similar materials.

**Acute Dermal Toxicity:** The acute dermal toxicity hazard is based on evaluation of data for similar materials.

**Acute Oral Toxicity:** The acute oral toxicity hazard is based on evaluation of data for similar materials.

**Acute Inhalation Toxicity:** The acute inhalation toxicity hazard is based on evaluation of data for product components.

**Acute Toxicity Estimate:** Not Determined

**Germ Cell Mutagenicity:** The hazard evaluation is based on data for components or a similar material.

**Carcinogenicity:** The hazard evaluation is based on data for components or a similar material.

**Reproductive Toxicity:** The hazard evaluation is based on data for components or a similar material.

**Specific Target Organ Toxicity - Single Exposure:** The hazard evaluation is based on data for components or a similar material.

**Specific Target Organ Toxicity - Repeated Exposure:** The hazard evaluation is based on data for components or a similar material.

**ADDITIONAL TOXICOLOGY INFORMATION:**

This product contains petroleum base oils which may be refined by various processes including severe solvent extraction, severe hydrocracking, or severe hydrotreating. None of the oils requires a cancer warning under the OSHA Hazard Communication Standard (29 CFR 1910.1200). These oils have not been listed in the National Toxicology Program (NTP) Annual Report nor have they been classified by the International Agency for Research on Cancer (IARC) as; carcinogenic to humans (Group 1), probably carcinogenic to humans (Group 2A), or possibly carcinogenic to humans (Group 2B).

These oils have not been classified by the American Conference of Governmental Industrial Hygienists (ACGIH) as: confirmed human carcinogen (A1), suspected human carcinogen (A2), or confirmed animal carcinogen with unknown relevance to humans (A3).

**SECTION 12 ECOLOGICAL INFORMATION**

**ECOTOXICITY**

This material is not expected to be harmful to aquatic organisms.

The product has not been tested. The statement has been derived from the properties of the individual components.

**MOBILITY**

No data available.

**PERSISTENCE AND DEGRADABILITY**

This material is not expected to be readily biodegradable. The biodegradability of this material is based on an evaluation of data for the components or a similar material.

The product has not been tested. The statement has been derived from the properties of the individual components.

**POTENTIAL TO BIOACCUMULATE**

Bioconcentration Factor: No data available.

Octanol/Water Partition Coefficient: No data available

**SECTION 13 DISPOSAL CONSIDERATIONS**

Use material for its intended purpose or recycle if possible. Oil collection services are available for used oil recycling or disposal. Place contaminated materials in containers and dispose of in a manner consistent with

applicable regulations. Contact your sales representative or local environmental or health authorities for approved disposal or recycling methods.

#### SECTION 14 TRANSPORT INFORMATION

The description shown may not apply to all shipping situations. Consult 49CFR, or appropriate Dangerous Goods Regulations, for additional description requirements (e.g., technical name) and mode-specific or quantity-specific shipping requirements.

**DOT Shipping Description:** NOT REGULATED AS HAZARDOUS MATERIAL UNDER 49 CFR

**IMO/IMDG Shipping Description:** NOT REGULATED AS DANGEROUS GOODS FOR TRANSPORT UNDER THE IMDG CODE

**ICAO/IATA Shipping Description:** NOT REGULATED AS DANGEROUS GOODS FOR TRANSPORT UNDER ICAO

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code:**  
Not applicable

#### SECTION 15 REGULATORY INFORMATION

**EPCRA 311/312 CATEGORIES:** Not applicable

**REGULATORY LISTS SEARCHED:**

01-1=IARC Group 1	03=EPCRA 313
01-2A=IARC Group 2A	04=CA Proposition 65
01-2B=IARC Group 2B	05=MA RTK
02=NTP Carcinogen	06=NJ RTK
	07=PA RTK

No components of this material were found on the regulatory lists above.

**CHEMICAL INVENTORIES:**

All components comply with the following chemical inventory requirements: AICS (Australia), DSL (Canada), IECSC (China), KECI (Korea), TSCA (United States).

One or more components is listed on ELINCS (European Union). All other components are listed or exempted from listing on EINECS.

One or more components does not comply with the following chemical inventory requirements: ENCS (Japan), PICCS (Philippines).

**NEW JERSEY RTK CLASSIFICATION:**

Under the New Jersey Right-to-Know Act L. 1983 Chapter 315 N.J.S.A. 34:5A-1 et. seq., the product is to be identified as follows: PETROLEUM OIL (Grease)

#### SECTION 16 OTHER INFORMATION

**NFPA RATINGS:** Health: 2 Flammability: 1 Reactivity: 0

**HMIS RATINGS:** Health: 0 Flammability: 1 Reactivity: 0  
 (0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme, PPE:- Personal Protection Equipment Index recommendation, \*-Chronic Effect Indicator). These values are obtained using the guidelines or published evaluations prepared by the National Fire Protection Association (NFPA) or the National Paint and Coating Association (for HMIS ratings).

**REVISION STATEMENT:** SECTION 09 - Physical/Chemical Properties information was modified.  
 SECTION 15 - SARA 311 EPCRA Score information was added.  
 SECTION 15 - SARA 311 Score information was deleted.

**Revision Date:** February 06, 2019

**ABBREVIATIONS THAT MAY HAVE BEEN USED IN THIS DOCUMENT:**

TLV - Threshold Limit Value	TWA - Time Weighted Average
STEL - Short-term Exposure Limit	PEL - Permissible Exposure Limit
GHS - Globally Harmonized System	CAS - Chemical Abstract Service Number
ACGIH - American Conference of Governmental Industrial Hygienists	IMO/IMDG - International Maritime Dangerous Goods Code
API - American Petroleum Institute	SDS - Safety Data Sheet
HMIS - Hazardous Materials Information System	NFPA - National Fire Protection Association (USA)
DOT - Department of Transportation (USA)	NTP - National Toxicology Program (USA)
IARC - International Agency for Research on Cancer	OSHA - Occupational Safety and Health Administration
NCEL - New Chemical Exposure Limit	EPA - Environmental Protection Agency
SCBA - Self-Contained Breathing Apparatus	

Prepared according to the 29 CFR 1910.1200 (2012) by Chevron Energy Technology Company, 6001 Bollinger Canyon Road, San Ramon, CA 94583.

**The above information is based on the data of which we are aware and is believed to be correct as of the date hereof. Since this information may be applied under conditions beyond our control and with which we may be unfamiliar and since data made available subsequent to the date hereof may suggest modifications of the information, we do not assume any responsibility for the results of its use. This information is furnished upon condition that the person receiving it shall make his own determination of the suitability of the material for his particular purpose.**



# Penta International Corporation

50 Okner Parkway Livingston, NJ 07039-1604 | Tel: (973)740-2300 | Fax: (973)740-1839  
www.pentamfg.com | E-mail: sales@pentamfg.com

## SAFETY DATA SHEET

Revision Date: 11/01/2020

Print Date: 8/27/2021

### 1. PRODUCT AND COMPANY IDENTIFICATION

Product Name	ORANGE TERPENES
Product Number	15-67000
Brand	Penta
Identified Uses	Manufacture of substances
Company	Penta International Corporation 50 Okner Parkway Livingston NJ 07039-1604 U.S.A.
Telephone	(973)740-2300
Fax	(973)740-1839
Emergency Phone	(800)424-9300 24-Hrs

### 2. HAZARD(S) IDENTIFICATION

#### Emergency Overview

#### GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Flammable liquids (Category 3)

Skin irritation (Category 2)

Skin sensitisation (Category 1)

Aspiration hazard (Category 1)

Acute aquatic toxicity (Category 2)

Chronic aquatic toxicity (Category 2)

#### GHS Label elements, including precautionary statements



Pictogram:

Signal word

Danger

Hazard statement(s)

H226

Flammable liquid and vapour.

H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H411	Toxic to aquatic life with long lasting effects.
Precautionary statement(s)	
P210	Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P233	Keep container tightly closed.
P240	Ground/bond container and receiving equipment.
P241	Use explosion-proof electrical/ ventilating/ lighting/ equipment.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
P261	Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
P264	Wash skin thoroughly after handling.
P272	Contaminated work clothing should not be allowed out of the workplace.
P273	Avoid release to the environment.
P280	Wear protective gloves/ eye protection/ face protection.
P301 P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician.
P303 P361 P353	IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.
P331	Do NOT induce vomiting.
P333 P313	If skin irritation or rash occurs: Get medical advice/ attention.
P362	Take off contaminated clothing and wash before reuse.
P370 P378	In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.
P391	Collect spillage.
P403 P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.
P501	Dispose of contents/ container to an approved waste disposal plant.

#### HMIS Classification

<b>Health hazard</b>	0
<b>Flammability</b>	0
<b>Physical hazards</b>	0

#### NFPA Rating

<b>Health hazard</b>	0
<b>Fire</b>	0
<b>Reactivity Hazard</b>	0

#### Potential Health Effects

<b>Inhalation</b>	May be harmful if inhaled. May cause respiratory tract irritation.
<b>Skin</b>	May be harmful if absorbed through skin. May cause skin irritation
<b>Eyes</b>	May cause eye irritation.
<b>Ingestion</b>	May be harmful if swallowed



### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### SYNONYM

Formula		C H O		
Molecular Weight		g/mol		
CAS-No	EC-No	Index-No.		Concentration
8028-48-6	232-433-8			

### 4. FIRST-AID MEASURES

#### Description of first aid measures

##### General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

##### If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

##### In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

##### In case of eye contact

Flush eyes with water as a precaution.

##### If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

##### Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

##### Indication of any immediate medical attention and special treatment needed

No data available

### 5. FIRE-FIGHTING MEASURES

#### Extinguishing media

##### Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

##### Special hazards arising from the substance or mixture

Nature of decomposition products not known.

##### Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

##### Further information

Use water spray to cool unopened containers.

### 6. ACCIDENTAL RELEASE MEASURES

### **Personal precautions, protective equipment and emergency procedures**

Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

For personal protection see section 8.

### **Environmental precautions**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

### **Methods and materials for containment and cleaning up**

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).

### **Reference to other sections**

For disposal see section 13.

## **7. HANDLING AND STORAGE**

### **Precautions for safe handling**

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.

Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge.

For precautions see section 2.2.

### **Conditions for safe storage, including any incompatibilities**

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully

resealed and kept upright to prevent leakage.

Storage class (TRGS 510): Flammable liquids

### **Specific end use(s)**

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## **8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

### **Control parameters**

#### **Components with workplace control parameters**

Contains no substances with occupational exposure limit values.

### **Exposure controls**

#### **Appropriate engineering controls**

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

### **Personal protective equipment**

#### **Eye/face protection**

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

#### **Skin protection**

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

#### **Body Protection**

Complete suit protecting against chemicals, Flame retardant antistatic protective clothing., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

#### **Respiratory protection**

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multipurpose

combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls.

If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

#### **Control of environmental exposure**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

## **9. PHYSICAL AND CHEMICAL PROPERTIES**

### **Appearance**

Form	LIQUID
Colour	COLORLESS TO PALE YELLOW

### **Safety data**

pH	no data available
Melting point (°C)	no data available
Boiling point (°C)	176
Flash point (°F) Closed cup	112
Ignition temperature	no data available
Autoignition temperature	no data available
Lower explosion limit	no data available
Upper explosion limit	no data available
Vapour pressure (mm Hg @20 °C)	no data available
Density @25 °C	0.838
Water solubility	no data available
Partition coefficient: n-octanol/water	no data available
Relative vapour density	no data available
Odor	REMENISCENT OF ORANGE OIL
Odour Threshold	no data available
Evaporation rate	no data available

## **10. STABILITY AND REACTIVITY**

### **Reactivity**

No data available

**Chemical stability**

Stable under recommended storage conditions.

**Possibility of hazardous reactions**

No data available

**Conditions to avoid**

Heat, flames and sparks.

**Incompatible materials**

Strong oxidizing agents

**Hazardous decomposition products**

Other decomposition products - No data available

In the event of fire: see section 5

## 11. TOXICOLOGICAL INFORMATION

**Information on toxicological effects**

**Acute toxicity**

LD50 Oral - Rat - male - > 5,000 mg/kg

Inhalation: No data available

LD50 Dermal - Rabbit - female - > 5,000 mg/kg

No data available

**Skin corrosion/irritation**

Skin - Rabbit

Result: Irritating to skin.

(OECD Test Guideline 404)

**Serious eye damage/eye irritation**

Eyes - Rabbit

Result: No eye irritation

(OECD Test Guideline 405)

**Respiratory or skin sensitisation**

No data available

**Germ cell mutagenicity**

Mouse

mouse lymphoma cells

Result: negative

**Carcinogenicity**

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**Reproductive toxicity**

no data available

**Teratogenicity**

no data available

**Specific target organ toxicity - single exposure (Globally Harmonized System)**

no data available

**Specific target organ toxicity - repeated exposure (Globally Harmonized System)**

no data available

**Aspiration hazard**

no data available

**Potential health effects**

Inhalation

May be harmful if inhaled. May cause respiratory tract irritation.

Ingestion

May be harmful if swallowed.

Skin

May be harmful if absorbed through skin. May cause skin irritation.

Eyes

May cause eye irritation.

**Additional Information**

RTECS: RI8600000

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

## 12. ECOLOGICAL INFORMATION

**Toxicity**

No data available

**Persistence and degradability**

No data available

**Bioaccumulative potential**

No data available

**Mobility in soil**

No data available

**Results of PBT and vPvB assessment**

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

**Other adverse effects**

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Toxic to aquatic life with long lasting effects.

## 13. DISPOSAL CONSIDERATIONS

**Waste treatment methods****Product**

Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a

licensed professional waste disposal service to dispose of this material.

**Contaminated packaging**

Dispose of as unused product.

**14. TRANSPORT INFORMATION**

**DOT (US)**

UN number: 2319 Class: 3 Packing group: III

Proper shipping name: Terpene hydrocarbons, n.o.s.

Reportable Quantity (RQ):

Marine pollutant: No

Poison Inhalation Hazard: No

**IMDG**

UN number: 2319 Class: 3 Packing group: III EMS-No: F-E, S-D

Proper shipping name: TERPENE HYDROCARBONS, N.O.S.

Marine pollutant: No

**IATA**

UN number: 2319 Class: 3 Packing group: III

Proper shipping name: Terpene hydrocarbons, n.o.s.

**15. REGULATORY INFORMATION**

SARA 302 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De

Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards

Fire Hazard, Acute Health Hazard

Massachusetts Right To Know Components

No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know Components

Orange terpenes

CAS-No.

8028-48-6

Revision Date

New Jersey Right To Know Components

Orange terpenes

CAS-No.

8028-48-6

Revision Date

California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

**16. OTHER CATEGORIES**

**Safety Data Sheet prepared by: Penta**

**The information in this SDS was obtained from current and reliable sources. However, the data is provided without any warranty, expressed or implied, regarding its correctness or accuracy. Since the conditions for use, handling, storage and disposal of this product are beyond Penta's control, it is the responsibility of the user both to determine safe conditions for use of this product and to assume liability for loss, damage, or expense arising out of the products improper use. No warranty expressed or implied regarding the product described herein will be created by or inferred from any statement or omission in the SDS. Various federal, state, or provincial agencies may have specific regulations concerning the transportation, handling, storage, use, or disposal of this product which may not be reflected in the SDS. The user should review these regulations to ensure full compliance.**

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Revision Date: 11/01/2020

Print Date: 8/27/2021

# SAFETY DATA SHEET

K05874

## Section 1. Identification

**Product name** : KRYLON® PRO PROFESSIONAL Red Oxide Primer

**Product code** : K05874

**Other means of identification** : Not available.

**Product type** : Aerosol.

**Relevant identified uses of the substance or mixture and uses advised against**

Paint or paint related material.

**Manufacturer** : Krylon Products Group  
101 W. Prospect Avenue  
Cleveland, OH 44115

**Emergency telephone number of the company** : US / Canada: (216) 566-2917  
Mexico: SETIQ 800-00-214-00 / 55-5559-1588 Available 24 hours and 365 days a year

**Product Information Telephone Number** : US / Canada: (800) 457-9566  
Mexico: Not Available

**Regulatory Information Telephone Number** : US / Canada: (216) 566-2902  
Mexico: Not Available

**Transportation Emergency Telephone Number** : US / Canada: (216) 566-2917  
Mexico: SETIQ 800-00-214-00 / 55-5559-1588 Available 24 hours and 365 days a year

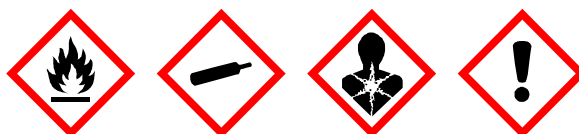
## Section 2. Hazards identification

**OSHA/HCS status** : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

**Classification of the substance or mixture** : FLAMMABLE AEROSOLS - Category 1  
GASES UNDER PRESSURE - Compressed gas  
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A  
CARCINOGENICITY - Category 2  
TOXIC TO REPRODUCTION - Category 2  
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3  
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3  
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1  
ASPIRATION HAZARD - Category 1  
Percentage of the mixture consisting of ingredient(s) of unknown acute toxicity: 16.1% (oral), 17.2% (dermal), 26.9% (inhalation)

**GHS label elements**

**Hazard pictograms** :



**Signal word** : Danger



## Section 2. Hazards identification

- Hazard statements** : Extremely flammable aerosol.  
Contains gas under pressure; may explode if heated.  
May be fatal if swallowed and enters airways.  
Causes serious eye irritation.  
May cause respiratory irritation.  
May cause drowsiness or dizziness.  
Suspected of causing cancer.  
Suspected of damaging fertility or the unborn child.  
Causes damage to organs through prolonged or repeated exposure. (lungs)
- Precautionary statements**
- General** : Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand.
- Prevention** : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves, protective clothing and eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not spray on an open flame or other ignition source. Use only outdoors or in a well-ventilated area. Do not breathe dust or mist. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Pressurized container: Do not pierce or burn, even after use.
- Response** : IF exposed or concerned: Get medical advice or attention. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor if you feel unwell. IF SWALLOWED: Immediately call a POISON CENTER or doctor. Do NOT induce vomiting. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice or attention.
- Storage** : Store locked up. Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F. Store in a well-ventilated place. Keep container tightly closed.
- Disposal** : Dispose of contents and container in accordance with all local, regional, national and international regulations.
- Supplemental label elements** DELAYED EFFECTS FROM LONG TERM OVEREXPOSURE. Contains solvents which can cause permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal. WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.  
Please refer to the SDS for additional information. Keep out of reach of children. Keep upright in a cool, dry place. Do not discard empty can in trash compactor.
- Hazards not otherwise classified** : DANGER: Rags, steel wool, other waste soaked with this product, and sanding residue may spontaneously catch fire if improperly discarded. Immediately place rags, steel wool, other waste soaked with this product, and sanding residue in a sealed, water-filled, metal container. Dispose of in accordance with local fire regulations.

## Section 3. Composition/information on ingredients

- Substance/mixture** : Mixture
- Other means of identification** : Not available.
- CAS number/other identifiers**

## Section 3. Composition/information on ingredients

Ingredient name	% by weight	CAS number
Acetone	≥25 - ≤50	67-64-1
Propane	≥10 - ≤25	74-98-6
Ethylbenzene	≤10	100-41-4
Dimethyl Carbonate	≤10	616-38-6
Butane	≤10	106-97-8
Talc	≤10	14807-96-6
Iron Oxide	≤3	1309-37-1
2-Methyl-1-propanol	<3	78-83-1
Lt. Aliphatic Hydrocarbon Solvent	≤3	64742-89-8
Light Aliphatic Hydrocarbon Solvent	≤3	64742-49-0
Light Aliphatic Hydrocarbon Solvent	≤2.8	68410-97-9
Xylene, mixed isomers	<1	1330-20-7
Octane	≤0.3	111-65-9
Heptane	≤0.3	142-82-5

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

**There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified and hence require reporting in this section.**

Occupational exposure limits, if available, are listed in Section 8.

## Section 4. First aid measures

### Description of necessary first aid measures

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Aspiration hazard if swallowed. Can enter lungs and cause damage. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

### Most important symptoms/effects, acute and delayed

#### Potential acute health effects

- Eye contact** : Causes serious eye irritation.
- Inhalation** : Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness. May cause respiratory irritation.
- Skin contact** : No known significant effects or critical hazards.

## Section 4. First aid measures

**Ingestion** : Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways.

### Over-exposure signs/symptoms

**Eye contact** : Adverse symptoms may include the following:  
pain or irritation  
watering  
redness

**Inhalation** : Adverse symptoms may include the following:  
respiratory tract irritation  
coughing  
nausea or vomiting  
headache  
drowsiness/fatigue  
dizziness/vertigo  
unconsciousness  
reduced fetal weight  
increase in fetal deaths  
skeletal malformations

**Skin contact** : Adverse symptoms may include the following:  
reduced fetal weight  
increase in fetal deaths  
skeletal malformations

**Ingestion** : Adverse symptoms may include the following:  
nausea or vomiting  
reduced fetal weight  
increase in fetal deaths  
skeletal malformations

### Indication of immediate medical attention and special treatment needed, if necessary

**Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

**Specific treatments** : No specific treatment.

**Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

## Section 5. Fire-fighting measures

### Extinguishing media

**Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.

**Unsuitable extinguishing media** : None known.

**Specific hazards arising from the chemical** : Extremely flammable aerosol. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Gas may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back, causing fire or explosion. Bursting aerosol containers may be propelled from a fire at high speed.

## Section 5. Fire-fighting measures

- Hazardous thermal decomposition products** : Decomposition products may include the following materials:
  - carbon dioxide
  - carbon monoxide
  - phosphorus oxides
  - metal oxide/oxides
- Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. In the case of aerosols being ruptured, care should be taken due to the rapid escape of the pressurized contents and propellant. If a large number of containers are ruptured, treat as a bulk material spillage according to the instructions in the clean-up section. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

### Methods and materials for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

## Section 7. Handling and storage

### Precautions for safe handling

**Protective measures** : Put on appropriate personal protective equipment (see Section 8). Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use. Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not swallow. Avoid breathing gas. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Empty containers retain product residue and can be hazardous.

**Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

**Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations. Store away from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Protect from sunlight. Store locked up. Eliminate all ignition sources. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

## Section 8. Exposure controls/personal protection

### Control parameters

#### Occupational exposure limits (OSHA United States)

Ingredient name	CAS #	Exposure limits
Acetone	67-64-1	<b>ACGIH TLV (United States, 1/2021).</b> TWA: 250 ppm 8 hours. STEL: 500 ppm 15 minutes. <b>NIOSH REL (United States, 10/2020).</b> TWA: 250 ppm 10 hours. TWA: 590 mg/m <sup>3</sup> 10 hours. <b>OSHA PEL (United States, 5/2018).</b> TWA: 1000 ppm 8 hours. TWA: 2400 mg/m <sup>3</sup> 8 hours.
Propane	74-98-6	<b>NIOSH REL (United States, 10/2020).</b> TWA: 1000 ppm 10 hours. TWA: 1800 mg/m <sup>3</sup> 10 hours. <b>OSHA PEL (United States, 5/2018).</b> TWA: 1000 ppm 8 hours. TWA: 1800 mg/m <sup>3</sup> 8 hours. <b>ACGIH TLV (United States, 1/2021). Oxygen Depletion [Asphyxiant]. Explosive potential.</b>
Ethylbenzene	100-41-4	<b>ACGIH TLV (United States, 1/2021).</b> TWA: 20 ppm 8 hours. <b>NIOSH REL (United States, 10/2020).</b> TWA: 100 ppm 10 hours. TWA: 435 mg/m <sup>3</sup> 10 hours. STEL: 125 ppm 15 minutes. STEL: 545 mg/m <sup>3</sup> 15 minutes. <b>OSHA PEL (United States, 5/2018).</b> TWA: 100 ppm 8 hours. TWA: 435 mg/m <sup>3</sup> 8 hours.

## Section 8. Exposure controls/personal protection

<p>Dimethyl Carbonate Butane</p>	<p>616-38-6 106-97-8</p>	<p>None. <b>NIOSH REL (United States, 10/2020).</b> TWA: 800 ppm 10 hours. TWA: 1900 mg/m<sup>3</sup> 10 hours. <b>ACGIH TLV (United States, 1/2021).</b> <b>Explosive potential.</b> STEL: 1000 ppm 15 minutes.</p>
<p>Talc</p>	<p>14807-96-6</p>	<p><b>NIOSH REL (United States, 10/2020).</b> TWA: 2 mg/m<sup>3</sup> 10 hours. Form: Respirable fraction <b>ACGIH TLV (United States, 1/2021).</b> TWA: 2 mg/m<sup>3</sup> 8 hours. Form: Respirable fraction</p>
<p>Iron Oxide</p>	<p>1309-37-1</p>	<p><b>NIOSH REL (United States, 10/2020).</b> TWA: 5 mg/m<sup>3</sup>, (as Fe) 10 hours. Form: Dust and fumes <b>OSHA PEL (United States, 5/2018).</b> TWA: 10 mg/m<sup>3</sup> 8 hours. Form: Fume TWA: 5 mg/m<sup>3</sup> 8 hours. Form: Respirable fraction TWA: 15 mg/m<sup>3</sup> 8 hours. Form: Total dust <b>ACGIH TLV (United States, 1/2021).</b> TWA: 5 mg/m<sup>3</sup> 8 hours. Form: Respirable fraction</p>
<p>2-Methyl-1-propanol</p>	<p>78-83-1</p>	<p><b>ACGIH TLV (United States, 1/2021).</b> TWA: 50 ppm 8 hours. TWA: 152 mg/m<sup>3</sup> 8 hours. <b>NIOSH REL (United States, 10/2020).</b> TWA: 50 ppm 10 hours. TWA: 150 mg/m<sup>3</sup> 10 hours. <b>OSHA PEL (United States, 5/2018).</b> TWA: 100 ppm 8 hours. TWA: 300 mg/m<sup>3</sup> 8 hours.</p>
<p>Lt. Aliphatic Hydrocarbon Solvent Light Aliphatic Hydrocarbon Solvent Light Aliphatic Hydrocarbon Solvent Xylene, mixed isomers</p>	<p>64742-89-8 64742-49-0 68410-97-9 1330-20-7</p>	<p>None. None. None. <b>ACGIH TLV (United States, 1/2021).</b> TWA: 100 ppm 8 hours. TWA: 434 mg/m<sup>3</sup> 8 hours. STEL: 150 ppm 15 minutes. STEL: 651 mg/m<sup>3</sup> 15 minutes. <b>OSHA PEL (United States, 5/2018).</b> TWA: 100 ppm 8 hours. TWA: 435 mg/m<sup>3</sup> 8 hours.</p>
<p>Octane</p>	<p>111-65-9</p>	<p><b>NIOSH REL (United States, 10/2020).</b> TWA: 75 ppm 10 hours. TWA: 350 mg/m<sup>3</sup> 10 hours. CEIL: 385 ppm 15 minutes. CEIL: 1800 mg/m<sup>3</sup> 15 minutes. <b>ACGIH TLV (United States, 1/2021).</b> TWA: 300 ppm 8 hours. <b>OSHA PEL (United States, 5/2018).</b> TWA: 500 ppm 8 hours. TWA: 2350 mg/m<sup>3</sup> 8 hours.</p>
<p>Heptane</p>	<p>142-82-5</p>	<p><b>ACGIH TLV (United States, 1/2021).</b> TWA: 400 ppm 8 hours. TWA: 1640 mg/m<sup>3</sup> 8 hours.</p>

## Section 8. Exposure controls/personal protection

STEL: 500 ppm 15 minutes.  
 STEL: 2050 mg/m<sup>3</sup> 15 minutes.  
**NIOSH REL (United States, 10/2020).**  
 TWA: 85 ppm 10 hours.  
 TWA: 350 mg/m<sup>3</sup> 10 hours.  
 CEIL: 440 ppm 15 minutes.  
 CEIL: 1800 mg/m<sup>3</sup> 15 minutes.  
**OSHA PEL (United States, 5/2018).**  
 TWA: 500 ppm 8 hours.  
 TWA: 2000 mg/m<sup>3</sup> 8 hours.

### Occupational exposure limits (Canada)

Ingredient name	CAS #	Exposure limits
acetone	67-64-1	<p><b>CA Alberta Provincial (Canada, 6/2018).</b>            8 hrs OEL: 1200 mg/m<sup>3</sup> 8 hours.            15 min OEL: 1800 mg/m<sup>3</sup> 15 minutes.            8 hrs OEL: 500 ppm 8 hours.            15 min OEL: 750 ppm 15 minutes.</p> <p><b>CA British Columbia Provincial (Canada, 1/2021).</b>            TWA: 250 ppm 8 hours.            STEL: 500 ppm 15 minutes.</p> <p><b>CA Ontario Provincial (Canada, 6/2019).</b>            TWA: 250 ppm 8 hours.            STEL: 500 ppm 15 minutes.</p> <p><b>CA Quebec Provincial (Canada, 7/2019).</b>            TWAEV: 500 ppm 8 hours.            TWAEV: 1190 mg/m<sup>3</sup> 8 hours.            STEV: 1000 ppm 15 minutes.            STEV: 2380 mg/m<sup>3</sup> 15 minutes.</p> <p><b>CA Saskatchewan Provincial (Canada, 7/2013).</b>            STEL: 750 ppm 15 minutes.            TWA: 500 ppm 8 hours.</p>
Normal propane	74-98-6	<p><b>CA Alberta Provincial (Canada, 6/2018).</b>            8 hrs OEL: 1000 ppm 8 hours.</p> <p><b>CA Quebec Provincial (Canada, 7/2019).</b>            TWAEV: 1000 ppm 8 hours.            TWAEV: 1800 mg/m<sup>3</sup> 8 hours.</p> <p><b>CA Saskatchewan Provincial (Canada, 7/2013).</b>            STEL: 1250 ppm 15 minutes.            TWA: 1000 ppm 8 hours.</p> <p><b>CA British Columbia Provincial (Canada, 1/2021). Oxygen Depletion [Asphyxiant]. Explosive potential.</b></p> <p><b>CA Ontario Provincial (Canada, 6/2019). Oxygen Depletion [Asphyxiant]. Explosive potential.</b></p>
Ethylbenzene	100-41-4	<p><b>CA Alberta Provincial (Canada, 6/2018).</b>            8 hrs OEL: 100 ppm 8 hours.            8 hrs OEL: 434 mg/m<sup>3</sup> 8 hours.            15 min OEL: 543 mg/m<sup>3</sup> 15 minutes.            15 min OEL: 125 ppm 15 minutes.</p> <p><b>CA British Columbia Provincial (Canada,</b></p>

## Section 8. Exposure controls/personal protection

Butane	106-97-8	<p>1/2021). TWA: 20 ppm 8 hours. <b>CA Ontario Provincial (Canada, 6/2019).</b> TWA: 20 ppm 8 hours. <b>CA Quebec Provincial (Canada, 7/2019).</b> TWAEV: 100 ppm 8 hours. TWAEV: 434 mg/m<sup>3</sup> 8 hours. STEV: 125 ppm 15 minutes. STEV: 543 mg/m<sup>3</sup> 15 minutes. <b>CA Saskatchewan Provincial (Canada, 7/2013).</b> STEL: 125 ppm 15 minutes. TWA: 100 ppm 8 hours. <b>CA Alberta Provincial (Canada, 6/2018).</b> 8 hrs OEL: 1000 ppm 8 hours. <b>CA Quebec Provincial (Canada, 7/2019).</b> TWAEV: 800 ppm 8 hours. TWAEV: 1900 mg/m<sup>3</sup> 8 hours. <b>CA Saskatchewan Provincial (Canada, 7/2013).</b> STEL: 1250 ppm 15 minutes. TWA: 1000 ppm 8 hours. <b>CA British Columbia Provincial (Canada, 1/2021). Explosive potential.</b> STEL: 1000 ppm 15 minutes. <b>CA Ontario Provincial (Canada, 6/2019). Explosive potential.</b> STEL: 1000 ppm 15 minutes.</p>
talc (none asbestiform)	14807-96-6	<p><b>CA British Columbia Provincial (Canada, 1/2021).</b> TWA: 2 mg/m<sup>3</sup> 8 hours. Form: Respirable <b>CA Quebec Provincial (Canada, 7/2019).</b> TWAEV: 3 mg/m<sup>3</sup> 8 hours. Form: Respirable dust. <b>CA Alberta Provincial (Canada, 6/2018).</b> 8 hrs OEL: 2 mg/m<sup>3</sup> 8 hours. Form: Respirable particulate <b>CA Ontario Provincial (Canada, 6/2019).</b> TWA: 2 mg/m<sup>3</sup> 8 hours. Form: Respirable particulate matter. TWA: 2 f/cc 8 hours. <b>CA Saskatchewan Provincial (Canada, 7/2013).</b> TWA: 2 mg/m<sup>3</sup> 8 hours. Form: respirable fraction</p>
Isobutyl alcohol	78-83-1	<p><b>CA Alberta Provincial (Canada, 6/2018).</b> 8 hrs OEL: 50 ppm 8 hours. 8 hrs OEL: 152 mg/m<sup>3</sup> 8 hours. <b>CA British Columbia Provincial (Canada, 1/2021).</b> TWA: 50 ppm 8 hours. <b>CA Ontario Provincial (Canada, 6/2019).</b> TWA: 50 ppm 8 hours. <b>CA Quebec Provincial (Canada, 7/2019).</b> TWAEV: 50 ppm 8 hours. TWAEV: 152 mg/m<sup>3</sup> 8 hours. <b>CA Saskatchewan Provincial (Canada,</b></p>



## Section 8. Exposure controls/personal protection

Xylene	1330-20-7	<p><b>7/2013).</b>          STEL: 60 ppm 15 minutes.          TWA: 50 ppm 8 hours.</p> <p><b>CA Alberta Provincial (Canada, 6/2018).</b>          8 hrs OEL: 100 ppm 8 hours.          15 min OEL: 651 mg/m<sup>3</sup> 15 minutes.          15 min OEL: 150 ppm 15 minutes.          8 hrs OEL: 434 mg/m<sup>3</sup> 8 hours.</p> <p><b>CA British Columbia Provincial (Canada, 1/2021).</b>          TWA: 100 ppm 8 hours.          STEL: 150 ppm 15 minutes.</p> <p><b>CA Quebec Provincial (Canada, 7/2019).</b>          TWAEV: 100 ppm 8 hours.          TWAEV: 434 mg/m<sup>3</sup> 8 hours.          STEV: 150 ppm 15 minutes.          STEV: 651 mg/m<sup>3</sup> 15 minutes.</p> <p><b>CA Ontario Provincial (Canada, 6/2019).</b>          STEL: 150 ppm 15 minutes.          TWA: 100 ppm 8 hours.</p> <p><b>CA Saskatchewan Provincial (Canada, 7/2013).</b>          STEL: 150 ppm 15 minutes.          TWA: 100 ppm 8 hours.</p>
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**Occupational exposure limits (Mexico)**

	<b>CAS #</b>	<b>Exposure limits</b>
Acetone	67-64-1	<b>NOM-010-STPS-2014 (Mexico, 4/2016).</b> TWA: 500 ppm 8 hours. STEL: 750 ppm 15 minutes.
Propane	74-98-6	<b>NOM-010-STPS-2014 (Mexico, 4/2016).</b> TWA: 1000 ppm 8 hours.
Ethylbenzene	100-41-4	<b>NOM-010-STPS-2014 (Mexico, 4/2016).</b> TWA: 20 ppm 8 hours.
Butane	106-97-8	<b>NOM-010-STPS-2014 (Mexico, 4/2016).</b> TWA: 1000 ppm 8 hours.
2-methylpropan-1-ol	78-83-1	<b>NOM-010-STPS-2014 (Mexico, 4/2016).</b> TWA: 50 ppm 8 hours.

**Appropriate engineering controls**

: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

**Environmental exposure controls**

: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

**Individual protection measures**

**Hygiene measures**

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

## Section 8. Exposure controls/personal protection

- Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.
- Skin protection**
- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

## Section 9. Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

### Appearance

- Physical state** : Liquid.
- Color** : Not available.
- Odor** : Not available.
- Odor threshold** : Not available.
- pH** : 7
- Melting point/freezing point** : Not available.
- Boiling point, initial boiling point, and boiling range** : Not available.
- Flash point** : Closed cup: -29°C (-20.2°F) [Pensky-Martens Closed Cup]
- Evaporation rate** : 5.6 (butyl acetate = 1)
- Flammability** : Not available.
- Lower and upper explosion limit/flammability limit** : Lower: 0.9%  
Upper: 12.8%
- Vapor pressure** : 101.3 kPa (760 mm Hg)
- Relative vapor density** : 1.55 [Air = 1]
- Relative density** : 0.82
- Solubility** : Not available.
- Partition coefficient: n-octanol/water** : Not applicable.
- Auto-ignition temperature** : Not available.
- Decomposition temperature** : Not available.
- Viscosity** : Kinematic (40°C (104°F)): <20.5 mm<sup>2</sup>/s (<20.5 cSt)

## Section 9. Physical and chemical properties

**Molecular weight** : Not applicable.  
**Aerosol product**  
**Type of aerosol** : Spray  
**Heat of combustion** : 27.94 kJ/g

## Section 10. Stability and reactivity

**Reactivity** : No specific test data related to reactivity available for this product or its ingredients.

**Chemical stability** : The product is stable.

**Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.

**Conditions to avoid** : Avoid all possible sources of ignition (spark or flame).

**Incompatible materials** : No specific data.

**Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## Section 11. Toxicological information

### Information on toxicological effects

#### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Acetone	LD50 Oral	Rat	5800 mg/kg	-
Ethylbenzene	LD50 Dermal	Rabbit	>5000 mg/kg	-
Dimethyl Carbonate	LD50 Oral	Rat	3500 mg/kg	-
	LD50 Dermal	Rabbit	>5 g/kg	-
Butane	LD50 Oral	Rat	13 g/kg	-
	LC50 Inhalation Vapor	Rat	658000 mg/m <sup>3</sup>	4 hours
2-Methyl-1-propanol	LC50 Inhalation Vapor	Rat	19200 mg/m <sup>3</sup>	4 hours
	LD50 Dermal	Rabbit	3400 mg/kg	-
	LD50 Oral	Rat	2460 mg/kg	-
Light Aliphatic Hydrocarbon Solvent	LD50 Oral	Rat	5.17 g/kg	-
	LC50 Inhalation Gas.	Rat	6700 ppm	4 hours
Xylene, mixed isomers	LD50 Oral	Rat	4300 mg/kg	-
	LC50 Inhalation Gas.	Rat	25260 ppm	4 hours
Octane	LC50 Inhalation Vapor	Rat	118 g/m <sup>3</sup>	4 hours
	LC50 Inhalation Gas.	Rat	48000 ppm	4 hours
Heptane	LC50 Inhalation Vapor	Rat	103 g/m <sup>3</sup>	4 hours

#### Irritation/Corrosion

# Section 11. Toxicological information

Product/ingredient name	Result	Species	Score	Exposure	Observation
Acetone	Eyes - Mild irritant	Human	-	186300 ppm	-
	Eyes - Mild irritant	Rabbit	-	10 uL	-
	Eyes - Moderate irritant	Rabbit	-	24 hours 20 mg	-
	Eyes - Severe irritant	Rabbit	-	20 mg	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 mg	-
	Skin - Mild irritant	Rabbit	-	395 mg	-
Ethylbenzene	Eyes - Severe irritant	Rabbit	-	500 mg	-
	Skin - Mild irritant	Rabbit	-	24 hours 15 mg	-
	Skin - Mild irritant	Human	-	72 hours 300 ug l	-
Talc	Skin - Mild irritant	Human	-	72 hours 300 ug l	-
Xylene, mixed isomers	Eyes - Mild irritant	Rabbit	-	87 mg	-
	Eyes - Severe irritant	Rabbit	-	24 hours 5 mg	-
	Skin - Mild irritant	Rat	-	8 hours 60 uL	-
	Skin - Moderate irritant	Rabbit	-	24 hours 500 mg	-
	Skin - Moderate irritant	Rabbit	-	100 %	-

**Sensitization**

Not available.

**Mutagenicity**

Not available.

**Carcinogenicity**

Not available.

**Classification**

Product/ingredient name	OSHA	IARC	NTP
Ethylbenzene	-	2B	-
Talc	-	3	-
Iron Oxide	-	3	-
Xylene, mixed isomers	-	3	-

**Reproductive toxicity**

Not available.

**Teratogenicity**

Not available.

**Specific target organ toxicity (single exposure)**

Name	Category	Route of exposure	Target organs
Acetone	Category 3	-	Respiratory tract irritation
Propane	Category 3	-	Narcotic effects
	Category 3		Respiratory tract irritation
Ethylbenzene	Category 3	-	Narcotic effects
	Category 3		Respiratory tract irritation
Butane	Category 3	-	Narcotic effects
	Category 3		Respiratory tract

## Section 11. Toxicological information

2-Methyl-1-propanol	Category 3 Category 3	-	irritation Narcotic effects Respiratory tract irritation
Lt. Aliphatic Hydrocarbon Solvent	Category 3 Category 3	-	Narcotic effects Respiratory tract irritation
Light Aliphatic Hydrocarbon Solvent	Category 3 Category 3	-	Narcotic effects Respiratory tract irritation
Light Aliphatic Hydrocarbon Solvent	Category 3 Category 3	-	Narcotic effects Respiratory tract irritation
Xylene, mixed isomers	Category 3 Category 3	-	Narcotic effects Respiratory tract irritation
Octane	Category 3	-	Respiratory tract irritation
Heptane	Category 3 Category 3	-	Narcotic effects Respiratory tract irritation
	Category 3		Narcotic effects

### Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
Acetone	Category 2	-	-
Propane	Category 2	-	-
Ethylbenzene	Category 2	-	-
Butane	Category 2	-	-
Talc	Category 1	inhalation	lungs
2-Methyl-1-propanol	Category 2	-	-
Lt. Aliphatic Hydrocarbon Solvent	Category 2	-	-
Light Aliphatic Hydrocarbon Solvent	Category 2	-	-
Light Aliphatic Hydrocarbon Solvent	Category 2	-	-
Xylene, mixed isomers	Category 2	-	-
Octane	Category 2	-	-
Heptane	Category 2	-	-

### Aspiration hazard

Name	Result
Propane	ASPIRATION HAZARD - Category 1
Ethylbenzene	ASPIRATION HAZARD - Category 1
Butane	ASPIRATION HAZARD - Category 1
Lt. Aliphatic Hydrocarbon Solvent	ASPIRATION HAZARD - Category 1
Light Aliphatic Hydrocarbon Solvent	ASPIRATION HAZARD - Category 1
Light Aliphatic Hydrocarbon Solvent	ASPIRATION HAZARD - Category 1
Xylene, mixed isomers	ASPIRATION HAZARD - Category 1
Octane	ASPIRATION HAZARD - Category 1
Heptane	ASPIRATION HAZARD - Category 1

**Information on the likely routes of exposure** : Not available.

### Potential acute health effects

**Eye contact** : Causes serious eye irritation.

**Inhalation** : Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness. May cause respiratory irritation.

# Section 11. Toxicological information

- Skin contact** : No known significant effects or critical hazards.
- Ingestion** : Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways.

## Symptoms related to the physical, chemical and toxicological characteristics

- Eye contact** : Adverse symptoms may include the following:
  - pain or irritation
  - watering
  - redness

- Inhalation** : Adverse symptoms may include the following:
  - respiratory tract irritation
  - coughing
  - nausea or vomiting
  - headache
  - drowsiness/fatigue
  - dizziness/vertigo
  - unconsciousness
  - reduced fetal weight
  - increase in fetal deaths
  - skeletal malformations

- Skin contact** : Adverse symptoms may include the following:
  - reduced fetal weight
  - increase in fetal deaths
  - skeletal malformations

- Ingestion** : Adverse symptoms may include the following:
  - nausea or vomiting
  - reduced fetal weight
  - increase in fetal deaths
  - skeletal malformations

## Delayed and immediate effects and also chronic effects from short and long term exposure

### Short term exposure

- Potential immediate effects** : Not available.
- Potential delayed effects** : Not available.

### Long term exposure

- Potential immediate effects** : Not available.
- Potential delayed effects** : Not available.

### Potential chronic health effects

Not available.

- General** : Causes damage to organs through prolonged or repeated exposure.
- Carcinogenicity** : Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.
- Mutagenicity** : No known significant effects or critical hazards.
- Teratogenicity** : Suspected of damaging the unborn child.
- Developmental effects** : No known significant effects or critical hazards.
- Fertility effects** : Suspected of damaging fertility.

## Numerical measures of toxicity

### Acute toxicity estimates

## Section 11. Toxicological information

Route	ATE value
Oral	26649.21 mg/kg
Dermal	186654.89 mg/kg
Inhalation (vapors)	82.57 mg/l

## Section 12. Ecological information

### Toxicity

Product/ingredient name	Result	Species	Exposure
Acetone	Acute EC50 7200000 µg/l Fresh water	Algae - Selenastrum sp.	96 hours
	Acute LC50 4.42589 ml/L Marine water	Crustaceans - Acartia tonsa - Copepodid	48 hours
	Acute LC50 7460000 µg/l Fresh water	Daphnia - Daphnia cucullata	48 hours
	Acute LC50 5600 ppm Fresh water	Fish - Poecilia reticulata	96 hours
	Chronic NOEC 4.95 mg/l Marine water	Algae - Ulva pertusa	96 hours
	Chronic NOEC 0.016 ml/L Fresh water	Crustaceans - Daphniidae	21 days
	Chronic NOEC 0.1 ml/L Fresh water	Daphnia - Daphnia magna - Neonate	21 days
Ethylbenzene	Chronic NOEC 5 µg/l Marine water	Fish - Gasterosteus aculeatus - Larvae	42 days
	Acute EC50 4900 µg/l Marine water	Algae - Skeletonema costatum	72 hours
	Acute EC50 7700 µg/l Marine water	Algae - Skeletonema costatum	96 hours
	Acute EC50 6.53 mg/l Marine water	Crustaceans - Artemia sp. - Nauplii	48 hours
2-Methyl-1-propanol	Acute EC50 2.93 mg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute LC50 4200 µg/l Fresh water	Fish - Oncorhynchus mykiss	96 hours
	Acute LC50 600 mg/l Marine water	Crustaceans - Artemia salina	48 hours
Lt. Aliphatic Hydrocarbon Solvent	Acute LC50 1030000 µg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute LC50 1330000 µg/l Fresh water	Fish - Oncorhynchus mykiss	96 hours
	Chronic NOEC 4000 µg/l Fresh water	Daphnia - Daphnia magna	21 days
Xylene, mixed isomers	Acute LC50 >100000 ppm Fresh water	Fish - Oncorhynchus mykiss	96 hours
	Acute LC50 8500 µg/l Marine water	Crustaceans - Palaemonetes pugio	48 hours
Heptane	Acute LC50 13400 µg/l Fresh water	Fish - Pimephales promelas	96 hours
	Acute LC50 375000 µg/l Fresh water	Fish - Oreochromis mossambicus	96 hours

### Persistence and degradability

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Acetone	-	-	Readily
Ethylbenzene	-	-	Readily
2-Methyl-1-propanol	-	-	Readily
Xylene, mixed isomers	-	-	Readily

### Bioaccumulative potential

## Section 12. Ecological information

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
Lt. Aliphatic Hydrocarbon Solvent	-	10 to 2500	high
Light Aliphatic Hydrocarbon Solvent	-	10 to 2500	high
Light Aliphatic Hydrocarbon Solvent	-	10 to 2500	high
Xylene, mixed isomers	-	8.1 to 25.9	low
Octane	-	198.7	low
Heptane	-	552	high

**Mobility in soil**






**Soil/water partition coefficient (K<sub>oc</sub>)** : Not available.

**Other adverse effects** : No known significant effects or critical hazards.

## Section 13. Disposal considerations

**Disposal methods** : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Do not puncture or incinerate container.

## Section 14. Transport information

	DOT Classification	TDG Classification	Mexico Classification	IATA	IMDG
<b>UN number</b>	UN1950	UN1950	UN1950	UN1950	UN1950
<b>UN proper shipping name</b>	AEROSOLS	AEROSOLS	AEROSOLS	AEROSOLS, flammable	AEROSOLS
<b>Transport hazard class(es)</b>	2.1 	2.1 	2.1 	2.1 	2.1 
<b>Packing group</b>	-	-	-	-	-
<b>Environmental hazards</b>	No.	No.	No.	No.	No.



## Section 14. Transport information

<b>Additional information</b>	-	Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.13-2.17 (Class 2).	-	-	<b>Emergency schedules</b> F-D, S-U
	<b>ERG No.</b> 126 Dependent upon container size, this product may ship under the Limited Quantity shipping exception.	<b>ERG No.</b> 126 Dependent upon container size, this product may ship under the Limited Quantity shipping exception.	<b>ERG No.</b> 126 Dependent upon container size, this product may ship under the Limited Quantity shipping exception.	<b>ERG No.</b> 126 Dependent upon container size, this product may ship under the Limited Quantity shipping exception.	<b>ERG No.</b> 126 Dependent upon container size, this product may ship under the Limited Quantity shipping exception.

**Special precautions for user** : Multi-modal shipping descriptions are provided for informational purposes and do not consider container sizes. The presence of a shipping description for a particular mode of transport (sea, air, etc.), does not indicate that the product is packaged suitably for that mode of transport. All packaging must be reviewed for suitability prior to shipment, and compliance with the applicable regulations is the sole responsibility of the person offering the product for transport. People loading and unloading dangerous goods must be trained on all of the risks deriving from the substances and on all actions in case of emergency situations.

**Transport in bulk according to IMO instruments** : Not available.

**Proper shipping name** : Not available.

## Section 15. Regulatory information

**SARA 313**

SARA 313 (40 CFR 372.45) supplier notification can be found on the Environmental Data Sheet.

**California Prop. 65**

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

**International regulations**

**International lists**

- Australia inventory (AIIIC):** Not determined.
- China inventory (IECSC):** Not determined.
- Japan inventory (CSCL):** Not determined.
- Japan inventory (ISHL):** Not determined.
- Korea inventory (KECI):** Not determined.
- New Zealand Inventory of Chemicals (NZIoC):** Not determined.
- Philippines inventory (PICCS):** Not determined.
- Taiwan Chemical Substances Inventory (TCSI):** Not determined.
- Thailand inventory:** Not determined.
- Turkey inventory:** Not determined.
- Vietnam inventory:** Not determined.

# Section 16. Other information

## Hazardous Material Information System (U.S.A.)

Health	*	3
Flammability		4
Physical hazards		3

The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings and the associated label are not required on SDSs or products leaving a facility under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc.

### Procedure used to derive the classification

Classification	Justification
FLAMMABLE AEROSOLS - Category 1	On basis of test data
GASES UNDER PRESSURE - Compressed gas	Calculation method
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A	Calculation method
CARCINOGENICITY - Category 2	Calculation method
TOXIC TO REPRODUCTION - Category 2	Calculation method
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3	Calculation method
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3	Calculation method
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1	Calculation method
ASPIRATION HAZARD - Category 1	Calculation method

### History

**Date of printing** : 9/18/2021

**Date of issue/Date of revision** : 9/18/2021

**Date of previous issue** : 4/13/2021

**Version** : 16

**Key to abbreviations** : ATE = Acute Toxicity Estimate  
 BCF = Bioconcentration Factor  
 GHS = Globally Harmonized System of Classification and Labelling of Chemicals  
 IATA = International Air Transport Association  
 IBC = Intermediate Bulk Container  
 IMDG = International Maritime Dangerous Goods  
 LogPow = logarithm of the octanol/water partition coefficient  
 MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)  
 N/A = Not available  
 SGG = Segregation Group  
 UN = United Nations

Indicates information that has changed from previously issued version.

### Notice to reader

## Section 16. Other information

It is recommended that each customer or recipient of this Safety Data Sheet (SDS) study it carefully and consult resources, as necessary or appropriate, to become aware of and understand the data contained in this SDS and any hazards associated with the product. This information is provided in good faith and believed to be accurate as of the effective date herein. However, no warranty, express or implied, is given. The information presented here applies only to the product as shipped. The addition of any material can change the composition, hazards and risks of the product. Products shall not be repackaged, modified, or tinted except as specifically instructed by the manufacturer, including but not limited to the incorporation of products not specified by the manufacturer, or the use or addition of products in proportions not specified by the manufacturer. Regulatory requirements are subject to change and may differ between various locations and jurisdictions. The customer/buyer/user is responsible to ensure that his activities comply with all country, federal, state, provincial or local laws. The conditions for use of the product are not under the control of the manufacturer; the customer/buyer/user is responsible to determine the conditions necessary for the safe use of this product. The customer/buyer/user should not use the product for any purpose other than the purpose shown in the applicable section of this SDS without first referring to the supplier and obtaining written handling instructions. Due to the proliferation of sources for information such as manufacturer-specific SDS, the manufacturer cannot be responsible for SDSs obtained from any other source.



# PB Penetrating Catalyst

## Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom2012

Date of issue: 9/24/2019

Revision date: 9/24/2019

Version: 1.0

### SECTION 1: Identification

#### 1.1. Identification

Product name : PB Penetrating Catalyst  
Product code : 16-PB, 8-PB, 8-PBS, PB-TS, 20-PB, 26-PB, 16-PB-DS

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Penetrant

#### 1.3. Details of the supplier of the safety datasheet

##### Manufacturer

The Blaster Corporation  
8500 Sweet Valley Drive  
Valley View, Ohio 44125 - USA  
T (216) 901-5800 - F (216) 901-5801  
[www.blastercorp.com](http://www.blastercorp.com)

#### 1.4. Emergency telephone number

Emergency number : ChemTel 800-255-3924

### SECTION 2: Hazard(s) identification

#### 2.1. Classification of the substance or mixture

##### GHS-US classification

Flam. Aerosol 2  
Gases under Pressure (Dissolved gas)  
Asp. Tox. 1

#### 2.2. Label elements

##### GHS-US labelling

Hazard pictograms (GHS-US) :



Signal word (GHS-US) : Danger  
Hazard statements (GHS-US) : Flammable aerosol. Contains gas under pressure; may explode if heated. May be fatal if swallowed and enters airways.  
Precautionary statements (GHS-US) : Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use. If swallowed: Immediately call a poison center/doctor. Do NOT induce vomiting. Store locked up. Store in a well-ventilated place. Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F. Dispose of contents/container in accordance with local, regional, national and/or international regulation.

#### 2.3. Other hazards

No additional information available

#### 2.4. Unknown acute toxicity (GHS US)

Not applicable

### SECTION 3: Composition/information on ingredients

#### 3.1. Substances

Not applicable

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### 3.2. Mixtures

Name	Product identifier	%
Petroleum distillates, hydrotreated light	(CAS No) 64742-47-8	50 - 60
Solvent naphtha, petroleum, heavy aromatic	(CAS No) 64742-94-5	20 - 30
Distillates, petroleum, hydrotreated heavy naphthenic	(CAS No) 64742-52-5	20 - 30
Carbon dioxide	(CAS No) 124-38-9	1 - 4

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

First-aid measures after inhalation	: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.
First-aid measures after skin contact	: If irritation occurs, flush skin with plenty of water. Get medical attention if irritation persists. Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.
First-aid measures after eye contact	: Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persists. Direct contact with the eyes is likely to be irritating.
First-aid measures after ingestion	: IF SWALLOWED: immediately call a POISON CENTER or doctor/physician. Do NOT induce vomiting.

### 4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries after inhalation	: May cause respiratory tract irritation.
Symptoms/injuries after skin contact	: May cause skin irritation. Symptoms may include redness, drying, defatting and cracking of the skin.
Symptoms/injuries after eye contact	: May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling.
Symptoms/injuries after ingestion	: May be fatal if swallowed and enters airways. This product may be aspirated into the lungs and cause chemical pneumonitis. May cause stomach distress, nausea or vomiting.

### 4.3. Indication of any immediate medical attention and special treatment needed

Symptoms may not appear immediately. In case of accident or if you feel unwell, seek medical advice immediately (show the label or SDS where possible).

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media	: Carbon dioxide, dry chemical, halons or foam.
Unsuitable extinguishing media	: Do not use a heavy water stream.

### 5.2. Special hazards arising from the substance or mixture

Fire hazard	: Flammable aerosol. Products of combustion may include, and are not limited to: oxides of carbon and oxides of nitrogen.
Explosion hazard	: Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries.
Reactivity	: No dangerous reaction known under conditions of normal use.

### 5.3. Advice for firefighters

Firefighting instructions	: DO NOT fight fire when fire reaches explosives. Evacuate area. Exercise caution when fighting any chemical fire.
Protection during firefighting	: Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA). Vapors may be heavier than air and may travel along the ground to a distant ignition source and flash back. Use water spray to keep fire-exposed containers cool.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

General measures	: Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Isolate from fire, if possible, without unnecessary risk. Remove ignition sources. Use special care to avoid static electric charges.
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#### 6.1.1. For non-emergency personnel

Emergency procedures	: Evacuate unnecessary personnel.
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#### 6.1.2. For emergency responders

Protective equipment	: Equip cleanup crew with proper protection.
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# PB Penetrating Catalyst

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according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012

Emergency procedures : Ventilate area.

### 6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

### 6.3. Methods and material for containment and cleaning up

For containment : Eliminate sources of ignition. Contain and/or absorb spill with inert material (e.g. sand, vermiculite), then place in a suitable container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).

Methods for cleaning up : Scoop up material and place in a disposal container. Provide ventilation.

### 6.4. Reference to other sections

See section 8 for further information on protective clothing and equipment and section 13 for advice on waste disposal.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Precautions for safe handling : Do not spray on an open flame or other ignition source. Keep away from sources of ignition - No smoking. Use non-sparking tools. Use explosion-proof equipment. Take precautionary measures against static discharge. Avoid contact with skin and eyes. Do not swallow. Do not breathe gas, fumes, vapour or spray. When using do not eat, drink or smoke. Use only outdoors or in a well-ventilated area. Do not pierce or burn, even after use.

Hygiene measures : Launder contaminated clothing before reuse. Wash hands before eating, drinking, or smoking.

### 7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Proper grounding procedures to avoid static electricity should be followed.

Storage conditions : Keep locked up and out of reach of children. Do not expose to temperatures exceeding 50 °C/ 122 °F. Store away from direct sunlight or other heat sources. Keep in fireproof place.

Storage area : Store in a well-ventilated place.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

Petroleum distillates, hydrotreated light (64742-47-8)		
Not applicable		
Solvent naphtha, petroleum, heavy aromatic (64742-94-5)		
Not applicable		
Distillates, petroleum, hydrotreated heavy naphthenic (64742-52-5)		
Not applicable		
Carbon dioxide (124-38-9)		
ACGIH	ACGIH TWA (ppm)	5000 ppm
ACGIH	ACGIH STEL (ppm)	30000 ppm
OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	9000 mg/m <sup>3</sup>
OSHA	OSHA PEL (TWA) (ppm)	5000 ppm

### 8.2. Exposure controls

Appropriate engineering controls : Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, etc.) below recommended exposure limits.

Hand protection : Wear chemically resistant protective gloves.

Eye protection : Safety glasses or goggles are recommended when using product.

Skin and body protection : Wear suitable protective clothing.

Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Environmental exposure controls : Maintain levels below Community environmental protection thresholds.

Other information : Do not eat, smoke or drink where material is handled, processed or stored. Wash hands carefully before eating or smoking. Handle according to established industrial hygiene and safety practices.

# PB Penetrating Catalyst

## Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012

### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Clear. Aerosol.
Colour	: Orange
Odour	: Characteristic
Odour threshold	: No data available
pH	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: 356 °F (180 °C)
Flash point	: > 141 °F (> 61 °C)
Relative evaporation rate (butylacetate=1)	: No data available
Flammability (solid, gas)	: Flammable aerosol.
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: 0.9
Solubility	: No data available
Partition coefficient n-octanol/water	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive limits	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available

#### 9.2. Other information

Heat of Combustion	: 45.8 kJ/g
Flame Projection	: 0 inches
Flashback	: None

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

No dangerous reaction known under conditions of normal use.

#### 10.2. Chemical stability

Stable under normal storage conditions. Flammable aerosol. Contents under pressure. Container may explode if heated. Do not puncture. Do not burn. Extreme risk of explosion by shock, friction, fire or other sources of ignition.

#### 10.3. Possibility of hazardous reactions

No dangerous reaction known under conditions of normal use.

#### 10.4. Conditions to avoid

Sources of ignition. Heat. Incompatible materials.

#### 10.5. Incompatible materials

Strong oxidizing agents.

#### 10.6. Hazardous decomposition products

May include, and are not limited to: oxides of carbon and oxides of nitrogen.

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

Acute toxicity : Not classified.

# PB Penetrating Catalyst

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<b>PB Penetrating Catalyst</b>	
LD50 oral rat	> 2000 mg/kg (Calculated Acute Toxicity Estimate)
LD50 dermal rabbit	> 2000 mg/kg (Calculated Acute Toxicity Estimate)
LC50 inhalation rat	> 5 mg/l/4h (Calculated Acute Toxicity Estimate)
<b>Petroleum distillates, hydrotreated light (64742-47-8)</b>	
LD50 oral rat	> 5000 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
LC50 inhalation rat	> 5.2 mg/l/4h
<b>Solvent naphtha, petroleum, heavy aromatic (64742-94-5)</b>	
LD50 oral rat	> 5000 mg/kg
LD50 dermal rabbit	> 2 ml/kg
LC50 inhalation rat	> 590 mg/m <sup>3</sup> (Exposure time: 4 h)

Skin corrosion/irritation	: Notclassified.
Serious eye damage/irritation	: Notclassified.
Respiratory or skin sensitisation	: Notclassified.
Germ cell mutagenicity	: Notclassified.
Carcinogenicity	: Notclassified.
Reproductive toxicity	: Not classified.
Specific target organ toxicity (single exposure)	: Notclassified.
Specific target organ toxicity (repeated exposure)	: Not classified.
Aspiration hazard	: May be fatal if swallowed and enters airways.
Symptoms/injuries after inhalation	: May cause respiratory tract irritation.
Symptoms/injuries after skin contact	: May cause skin irritation. Symptoms may include redness, drying, defatting and cracking of the skin.
Symptoms/injuries after eye contact	: May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling.
Symptoms/injuries after ingestion	: May be fatal if swallowed and enters airways. This product may be aspirated into the lungs and cause chemical pneumonitis. May cause stomach distress, nausea or vomiting.
Other information	: Likely routes of exposure: ingestion, inhalation, skin and eye.

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general : May cause long-term adverse effects in the aquatic environment.

<b>Petroleum distillates, hydrotreated light (64742-47-8)</b>	
LC50 fish 1	45 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
LC50 fish 2	2.2 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])
<b>Solvent naphtha, petroleum, heavy aromatic (64742-94-5)</b>	
LC50 fish 1	19 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])
EC50 Daphnia 1	0.95 mg/l (Exposure time: 48 h - Species: Daphnia magna)
LC50 fish 2	2.34 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss)
<b>Distillates, petroleum, hydrotreated heavy naphthenic (64742-52-5)</b>	
LC50 fish 1	> 5000 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss)
EC50 Daphnia 1	> 1000 mg/l (Exposure time: 48 h - Species: Daphnia magna)

### 12.2. Persistence and degradability

<b>PB Penetrating Catalyst</b>	
Persistence and degradability	Not established.



# PB Penetrating Catalyst

## Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012

### 12.3. Bioaccumulative potential

PB Penetrating Catalyst	
Bioaccumulative potential	Not established.
Petroleum distillates, hydrotreated light (64742-47-8)	
BCF fish 1	61 - 159
Solvent naphtha, petroleum, heavy aromatic (64742-94-5)	
BCF fish 1	61 - 159
Partition coefficient n-octanol/water	2.9 - 6.1
Carbon dioxide (124-38-9)	
BCF fish 1	(no bioaccumulation)

### 12.4. Mobility in soil

No additional information available

### 12.5. Other adverse effects

Effect on the global warming : No known effects from this product.

Other information : Avoid release to the environment.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Waste disposal recommendations : This material must be disposed of in accordance with all local, state, provincial, and federal regulations. The generation of waste should be avoided or minimized wherever possible.

Additional information : Flammable vapours may accumulate in the container.

## SECTION 14: Transport information

### DOT, IATA & IMO

UN-No. : UN1950  
Proper Shipping Name : AEROSOLS, flammable, limited quantities

Class : 2.1

Hazard labels :



Other information : No supplementary information available.

Special transport precautions : Do not handle until all safety precautions have been read and understood.

## SECTION 15: Regulatory information

### 15.1. US Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory.

### 15.2. International regulations

No additional information available

### US State regulations

California Proposition 65 - This product contains, or may contain, trace quantities of a substance(s) known to the state of

15.3. California to cause cancer, developmental and/or reproductive harm

# PB Penetrating Catalyst

## Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012

Naphthalene (91-20-3)				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	Non-significant risk level (NSRL)
Yes	No	No	No	5.8 µg/day

Carbon dioxide (124-38-9)
U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) List

### SECTION 16: Other information

Date of issue : 9/24/2019  
 Revision date : 9/24/2019  
 Other information : None.

*Disclaimer: We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind. The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. It is the user's responsibility to satisfy oneself as to the suitability and completeness of this information for the user's own particular use.*



# SAFETY DATA SHEET

## Section 1: IDENTIFICATION

### 1.1 PRODUCT IDENTIFIER

**Product Name:** PB Penetrating Catalyst (Aerosol)  
**Product Code:** 16-PB, 8-PB, 8-PBS, PBTS, 20-PB, 16-PB-IND

### 1.2 RECOMMENDED USE OF CHEMICAL AND RESTRICTIONS ON USE

**Use:** Lubricant/Penetrant

### 1.3 DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET

**Name/Address:** The Blaster Corporation  
8500 Sweet Valley Drive  
Valley View, Ohio 44125 – USA  
**Telephone Number:** T (216) 901-5800  
F (216) 901-5801

### 1.4 EMERGENCY TELEPHONE NUMBER

**Emergency Telephone Number:** CHEMTREC: (800) 424-9300  
**Date of Preparation:** Feb. 3, 2016 **Version #:** 1.0

## Section 2: HAZARD(S) IDENTIFICATION

### 2.1 CLASSIFICATION OF THE CHEMICAL ACCORDING TO OSHA HAZCOM 2012

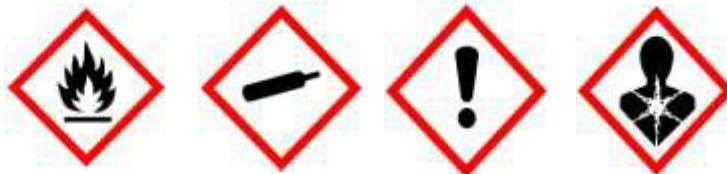
**Hazard class**

Flammable Aerosol 2  
Gases Under Pressure (Dissolved Gas)  
Serious Eye Irritation 2A  
Carcinogenicity 2  
Aspiration Hazard 1

### 2.2 LABEL ELEMENTS ACCORDING TO OSHA HAZCOM 2012

This product is a consumer product and is labeled in accordance with the US Consumer Product Safety Commission regulations which take precedence over OSHA Hazard Communication labeling. The actual container label will not include the label elements below. The labeling below applies to industrial/professional products.

**Hazard Pictogram:**



**Signal Word:** Danger  
**Hazard Statement:** Flammable aerosol. Contains gas under pressure; may explode if heated. Causes serious eye irritation. Suspected of causing cancer. May be fatal if swallowed and enters airways.  
**Prevention:** Keep away from heat/sparks/open flames/hot surfaces. -No smoking. Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use. Wash hands thoroughly after handling. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves/protective clothing/eye protection/face protection.





## SAFETY DATA SHEET

**Response:** If exposed or concerned: Get medical advice/attention. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. If swallowed: Immediately call a poison center or doctor. Do NOT induce vomiting.

**Storage:** Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F. Store in a well-ventilated place. Store locked up.

**Disposal:** Dispose of contents and container in accordance with all local, regional, national and international regulations.

### 2.3 ADDITIONAL INFORMATION

**Hazards not otherwise classified:** Not applicable.

8 % of the mixture consists of ingredient(s) of unknown acute toxicity.

This product is a hazardous chemical as defined by NOM-018-STPS-2000.

**Mexico Classification:**



**Blue = Health   Red = Flammability   Yellow = Reactivity   White = Special**

**Hazard Rating:** 0 = minimal, 1 = slight, 2 = moderate, 3 = severe, 4 = extreme

### Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.1 MIXTURES

Ingredient	UN #	H / F / R / *	CAS No	Wt. %
Distillates (petroleum), hydrotreated light	Not available	Not available	64742-47-8	50 - 60
Solvent naphtha (petroleum), heavy aromatic	UN1270	Not available	64742-94-5	20 - 30
Distillates (petroleum), hydrotreated heavy naphthenic	Not available	Not available	64742-52-5	20 - 30
Carbon dioxide	UN1013	1/0/0	124-38-9	1 - 5
Naphthalene	UN1334/ UN2304	2/2/0	91-20-3	2 - 3
Dinonylphenol, ethoxylated, phosphated	Not available	Not available	39464-64-7	0.5 - 1.5

The exact percentage (concentration) of composition has been withheld as a trade secret in accordance with paragraph (i) of §1910.1200.

\* Per NOM-018-STPS-2000



## SAFETY DATA SHEET

### Section 4: FIRST- AID MEASURES

#### 4.1 DESCRIPTION OF THE FIRST AID MEASURE

- Eye:** In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. If easy to do, remove contact lenses, if worn. If irritation persists, get medical attention.
- Skin:** In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Call a physician if irritation develops and persists.
- Inhalation:** If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.
- Ingestion:** If swallowed, do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get immediate medical advice/attention.

#### 4.2 MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED

- Eye:** Causes serious eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva.
- Skin:** May cause skin irritation. Symptoms may include redness, drying, defatting and cracking of the skin.
- Inhalation:** May be fatal if swallowed and enters airways. This product may be aspirated into the lungs and cause chemical pneumonitis. May cause stomach distress, nausea or vomiting.
- Ingestion:** May cause respiratory tract irritation.

#### 4.3 INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENTS NEEDED

- Note to Physicians:** Symptoms may not appear immediately.
- Specific Treatments:** In case of accident or if you feel unwell, seek medical advice immediately (show the label or SDS where possible).

### Section 5: FIRE-FIGHTING MEASURES

#### 5.1 EXTINGUISHING MEDIA

- Suitable Extinguishing Media:** Dry chemical, carbon dioxide or foam.
- Unsuitable Extinguishing Media:** Water may be ineffective for extinguishing fire.

#### 5.2 SPECIAL HAZARDS ARISING FROM THE CHEMICAL

- Products of Combustion:** May include, and are not limited to: oxides of carbon, hydrocarbons.

#### 5.3 SPECIAL PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIRE FIGHTERS

Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA). Cool closed containers exposed to fire with water. Do not use a solid water stream as it may scatter and spread fire. Containers may explode when heated.



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### Section 6: ACCIDENTAL RELEASE MEASURES

#### 6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Eliminate sources of ignition.

#### 6.2 METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING - UP

**Methods for Containment:** Contain and/or absorb spill with inert material (e.g. sand, vermiculite), then place in a suitable container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).

**Methods for Cleaning-Up:** Scoop up material and place in a disposal container. Vapors may be heavier than air and may travel along the ground to a distant ignition source and flash back. Provide ventilation.

### Section 7: HANDLING AND STORAGE

#### 7.1 PRECAUTIONS FOR SAFE HANDLING

**Handling:** Keep away from sources of ignition. - No smoking. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapours/spray. Do not swallow. When using do not eat, drink or smoke. Do not spray on an open flame or other ignition source. Use only outdoors or in a well-ventilated area. Pressurized container: Do not pierce or burn, even after use. (See section 8)

**General Hygiene Advice:** Launder contaminated clothing before reuse. Wash hands before eating, drinking, or smoking.

#### 7.2 CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES

**Storage:** Keep locked up and out of reach of children. Do not expose to temperatures exceeding 50 °C/ 122 °F. Store in dry, cool, well-ventilated area. (See section 10)

### Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

#### 8.1 CONTROL PARAMETERS

##### Exposure Guidelines

Ingredient	Occupational Exposure Limits	
	OSHA-PEL	ACGIH-TLV
Distillates (petroleum), hydrotreated light	100 ppm	200 mg/m <sup>3</sup>
Solvent naphtha (petroleum), heavy aromatic	Not available.	Not available.
Distillates (petroleum), hydrotreated heavy naphthenic	5 mg/m <sup>3</sup> (mist)	5 mg/m <sup>3</sup> (mist)
Carbon dioxide	5000 ppm; 9000 mg/m <sup>3</sup>	5000 ppm
Naphthalene	10 ppm; 50 mg/m <sup>3</sup>	10 ppm
Dinonylphenol, ethoxylated, phosphated	Not available.	Not available.



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### 8.2 EXPOSURE CONTROLS

**Engineering Controls:** Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, etc.) below recommended exposure limits.

### 8.3 INDIVIDUAL PROTECTIVE MEASURES

**Personal Protective Equipment:**

**Eye/Face Protection:** Safety glasses with side-shields.

**Skin Protection:**

**Hand Protection:** Wear chemically resistant protective gloves.

**Body Protection:** Wear suitable protective clothing.

**Respiratory Protection:** A NIOSH approved respirator is recommended in poorly ventilated areas or when permissible exposure limits may be exceeded. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

**General Health and Safety Measures:** Do not eat, smoke or drink where material is handled, processed or stored. Wash hands carefully before eating or smoking. Handle according to established industrial hygiene and safety practices. Ensure that eyewash stations and safety showers are close to the workstation location.

## Section 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance:</b>	Viscous / Oily.
<b>Color:</b>	Orange.
<b>Odor:</b>	Heavy aromatic.
<b>Odor Threshold:</b>	Not available.
<b>Physical State:</b>	Gas/pressurized liquid.
<b>pH:</b>	Not available.
<b>Melting Point/Freezing Point:</b>	Not available.
<b>Initial Boiling Point and Boiling Range:</b>	177.8 °C (352 °F)
<b>Flash Point:</b>	65.6 °C (150 °F)
<b>Evaporation Rate:</b>	<1 (n-butyl acetate = 1)
<b>Flammability:</b>	Flammable.
<b>Lower Flammability/Explosive Limit:</b>	Not available.
<b>Upper Flammability/Explosive Limit:</b>	Not available.
<b>Vapor Pressure:</b>	Not available.
<b>Vapor Density:</b>	>1 (Air = 1)
<b>Relative Density/Specific Gravity:</b>	0.91 (Water = 1)
<b>Solubility:</b>	Negligible.



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<b>Partition coefficient: n-octanol/water:</b>	Not available.
<b>Auto-ignition Temperature:</b>	Not available.
<b>Decomposition Temperature:</b>	Not available.
<b>Viscosity:</b>	Not available.
<b>Oxidizing Properties:</b>	Not available.
<b>Explosive Properties:</b>	Not available.
<b>VOC Content:</b>	< 25%
<b>Flame Projection:</b>	0 cm
<b>Heat of Combustion:</b>	45.8 kJ/g

### Section 10: STABILITY AND REACTIVITY

#### 10.1 REACTIVITY

No dangerous reaction known under conditions of normal use.

#### 10.2 CHEMICAL STABILITY

Stable under normal storage conditions. Flammable aerosol. Contents under pressure. Container may explode if heated. Do not puncture. Do not burn.

#### 10.3 POSSIBILITY OF HAZARDOUS REACTIONS

No dangerous reaction known under conditions of normal use.

#### 10.4 CONDITIONS TO AVOID

Heat. Incompatible materials. Sources of ignition. Excessive water.

#### 10.5 INCOMPATIBLE MATERIALS

Strong oxidizing agents. Strong reducing agents. Moisture.

#### 10.6 HAZARDOUS DECOMPOSITION PRODUCTS

May include, and are not limited to: oxides of carbon, hydrocarbons.

### Section 11: TOXICOLOGICAL INFORMATION

#### 11.1 INFORMATION ON TOXICOLOGICAL EFFECTS

**Likely Routes of Exposure:** Skin contact, eye contact, inhalation, and ingestion.

**Symptoms related to physical/chemical/toxicological characteristics:**

**Eye:** Causes serious eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva.

**Skin:** May cause skin irritation. Symptoms may include redness, drying, defatting and cracking of the skin.

**Ingestion:** May be fatal if swallowed and enters airways. This product may be aspirated into the lungs and cause chemical pneumonitis. May cause stomach distress, nausea or vomiting.

**Inhalation:** May cause respiratory tract irritation.





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**Acute Toxicity:**

Ingredient	IDLH	LC50	LD50
Distillates (petroleum), hydrotreated light	Not available.	Inhalation >5.2 mg/L 4h rat	Oral >5000 mg/kg, rat; Dermal >2000 mg/kg, rabbit
Solvent naphtha (petroleum), heavy aromatic	Not available.	Inhalation >5.28 mg/L 4h, rat	Oral >5000 mg/kg, rat; Dermal >2000 mg/kg, rabbit
Distillates (petroleum), hydrotreated heavy naphthenic	Not available.	Inhalation >5.0 mg/L 4h, rat	Oral >5000 mg/kg, rat; Dermal >5000 mg/kg, rabbit
Carbon dioxide	40000 ppm	Not available.	Not available.
Naphthalene	250 ppm	Not available.	Oral 490 mg/kg, rat; Dermal >2500 mg/kg, rat; Dermal >20 g/kg, rabbit
Dinonylphenol, ethoxylated, phosphated	Not available.	Not available.	Not available.

Calculated overall Chemical Acute Toxicity Values		
LC50 (inhalation)	LD50 (oral)	LD50 (dermal)
> 5 mg/L 4h, rat	> 2000 mg/kg, rat	> 2000 mg/kg, rabbit

Ingredient	Chemical Listed as Carcinogen or Potential Carcinogen (NTP, IARC, OSHA, ACGIH, CP65)*
Distillates (petroleum), hydrotreated light	Not listed.
Solvent naphtha (petroleum), heavy aromatic	Not listed.
Distillates (petroleum), hydrotreated heavy naphthenic	Not listed.
Carbon dioxide	Not listed.
Naphthalene	G-A4, I-2B, N-2, CP65
Dinonylphenol, ethoxylated, phosphated	Not listed.

\* See Section 15 for more information.

### 11.2 DELAYED, IMMEDIATE, AND CHRONIC EFFECTS OF SHORT- AND LONG-TERM EXPOSURE

**Skin Corrosion/Irritation:** Based on available data, the classification criteria are not met.

**Serious Eye Damage/Irritation:** Causes serious eye irritation.

**Respiratory Sensitization:** Based on available data, the classification criteria are not met.

**Skin Sensitization:** Based on available data, the classification criteria are not met.

**STOT-Single Exposure:** Based on available data, the classification criteria are not met.

**Chronic Health Effects:**

**Carcinogenicity:** Possible carcinogen.

**Germ Cell Mutagenicity:** Based on available data, the classification criteria are not met.

**Reproductive Toxicity:**

**Developmental:** Based on available data, the classification criteria are not met.

**Fertility:** Based on available data, the classification criteria are not met.

**STOT-Repeated Exposure:** Based on available data, the classification criteria are not met.

**Aspiration Hazard:** May be fatal if swallowed and enters airways.





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Other Information: Not available.

## Section 12: ECOLOGICAL INFORMATION

### 12.1 ECOTOXICITY

**Acute/Chronic Toxicity:** May cause long-term adverse effects in the aquatic environment.

### 12.2 PERSISTENCE AND DEGRADABILITY

Not available.

### 12.3 BIOACCUMULATIVE POTENTIAL

**Bioaccumulation:** Not available.

### 12.4 MOBILITY IN SOIL

Not available.

### 12.5 OTHER ADVERSE EFFECTS

Not available.

## Section 13: DISPOSAL CONSIDERATIONS

### 13.1 WASTE TREATMENT METHODS

**Disposal Method:** This material must be disposed of in accordance with all local, state, provincial, and federal regulations. The generation of waste should be avoided or minimized wherever possible.

**Other disposal recommendations:** Flammable vapours may accumulate in the container. Do not incinerate empty containers.

## Section 14: TRANSPORT INFORMATION

### 14.1 UN NUMBER

<b>DOT</b>	<b>NOM-004-SCT2-1994</b>
UN1950	UN1950

### 14.2 UN PROPER SHIPPING NAME

<b>DOT</b>	<b>NOM-004-SCT2-1994</b>
AEROSOLS, flammable, limited quantities	AEROSOLS, flammable, limited quantities

### 14.3 TRANSPORT HAZARD CLASS (ES)

<b>DOT</b>	<b>NOM-004-SCT2-1994</b>
2.1	2.1

### 14.4 PACKING GROUP

<b>DOT</b>	<b>NOM-004-SCT2-1994</b>
Not applicable.	Not applicable.





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### 14.5 ENVIRONMENTAL HAZARDS

Not available.

### 14.6 TRANSPORT IN BULK ACCORDING TO ANNEX II OF MARPOL 73/78 AND THE IBC CODE

Not available.

### 14.7 SPECIAL PRECAUTIONS FOR USER

Do not handle until all safety precautions have been read and understood. The Blaster Corporation does not recommend shipping their aerosol products by air.

## Section 15: REGULATORY INFORMATION

### 15.1 SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS/ LEGISLATIONS SPECIFIC FOR THE CHEMICAL

**US:** SDS prepared pursuant to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012

**Mexico:** SDS prepared pursuant to NOM-018-STPS-2000.

SARA Title III				
Ingredient	Section 302 (EHS) TPQ (lbs.)	Section 304 EHS RQ (lbs.)	CERCLA RQ (lbs.)	Section 313
Distillates (petroleum), hydrotreated light	Not listed.	Not listed.	Not listed.	Not listed.
Solvent naphtha (petroleum), heavy aromatic	Not listed.	Not listed.	Not listed.	Not listed.
Distillates (petroleum), hydrotreated heavy naphthenic	Not listed.	Not listed.	Not listed.	Not listed.
Carbon dioxide	Not listed.	Not listed.	Not listed.	Not listed.
Naphthalene	Not listed.	Not listed.	100	313
Dinonylphenol, ethoxylated, phosphated	Not listed.	Not listed.	Not listed.	Not listed.

#### State Regulations

**California Proposition 65:**

This product contains a chemical known to the State of California to cause cancer.

**Global Inventories:**

Ingredient	USA TSCA
Distillates (petroleum), hydrotreated light	Yes.
Solvent naphtha (petroleum), heavy aromatic	Yes.
Distillates (petroleum), hydrotreated heavy naphthenic	Yes.
Carbon dioxide	Yes.
Naphthalene	Yes.
Dinonylphenol, ethoxylated, phosphated	Yes.





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NFPA-National Fire Protection Association:	
Health:	2
Fire:	4
Reactivity:	0
HMIS-Hazardous Materials Identification System:	
Health:	2*
Fire:	4
Physical Hazard:	0

**Hazard Rating:** 0 = minimal, 1 = slight, 2 = moderate, 3 = severe, 4 = extreme

### SOURCE AGENCY CARCINOGEN CLASSIFICATIONS:

- CP65 California Proposition 65**
- OSHA (O) Occupational Safety and Health Administration.**
- ACGIH (G) American Conference of Governmental Industrial Hygienists.**  
A1 - Confirmed human carcinogen.  
A2 - Suspected human carcinogen.  
A3 - Animal carcinogen.  
A4 - Not classifiable as a human carcinogen.  
A5 - Not suspected as a human carcinogen.
- IARC (I) International Agency for Research on Cancer.**  
1 - The agent (mixture) is carcinogenic to humans.  
2A - The agent (mixture) is probably carcinogenic to humans; there is limited evidence of carcinogenicity in humans and sufficient evidence of carcinogenicity in experimental animals.  
2B - The agent (mixture) is possibly carcinogenic to humans; there is limited evidence of carcinogenicity in humans in the absence of sufficient evidence of carcinogenicity in experimental animals.  
3 - The agent (mixture, exposure circumstance) is not classifiable as to its carcinogenicity to humans.  
4 - The agent (mixture, exposure circumstance) is probably not carcinogenic to humans.
- NTP (N) National Toxicology Program.**  
1 - Known to be carcinogens.  
2 - Reasonably anticipated to be carcinogens.

### Section 16: OTHER INFORMATION

**Date of Preparation:** Feb. 3, 2016  
**Version:** 1.0  
**Revision Date:** Feb. 3, 2016

**Disclaimer:** We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind. The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. It is the user's responsibility to satisfy oneself as to the suitability and completeness of this information for the user's own particular use.

## End of Safety Data Sheet





# PENRAY STARTING FLUID

## Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

Date of issue: 05/28/2014

Revision date: 05/28/2014

Version: 1.0

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

Product name : PENRAY STARTING FLUID  
Product code : 5301

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Starting Fluid.

#### 1.3. Details of the supplier of the safety data sheet

The Penray Companies, Inc.  
440 Denniston Ct.  
Wheeling, IL 60090  
T (800) 373-6729  
[rotto@penray.com](mailto:rotto@penray.com)

#### 1.4. Emergency telephone number

Emergency number : (800) 373-6729  
CHEMTREC (800) 424-9300  
CHEMTREC International +1 (703) 527-3887 24 hr

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### GHS-US classification

Flammable Aerosol 1  
Gases Under Pressure - Compressed Gas  
Skin irritation 2  
Carcinogenicity 2  
Specific target organ toxicity - Single exposure 3  
Aspiration hazard 1

#### 2.2. Label elements

##### GHS-US labelling

Hazard pictograms (GHS-US) :



Signal word (GHS-US) : Danger

Hazard statements (GHS-US) : Extremely flammable aerosol. Contains gas under pressure; may explode if heated. Causes skin irritation. May cause drowsiness or dizziness. May be fatal if swallowed and enters airways.

Precautionary statements (GHS-US) : Keep away from heat/sparks/open flames/hot surfaces. -No smoking. Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use. Wash hands thoroughly after handling. Wear protective gloves. Avoid breathing gas/mist/vapors/spray. Use only outdoors or in a well-ventilated area. If on skin: Wash with plenty of water. Take off contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical advice/attention. If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor if you feel unwell. If swallowed: Immediately call a poison center/doctor. Do NOT induce vomiting. Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F. Store in a well-ventilated place. Store locked up. Dispose of contents and container in accordance with all local, regional, national and international regulations.

#### 2.3. Other hazards

No additional information available

#### 2.4. Unknown acute toxicity (GHS-US)

77 % of the mixture consists of ingredient(s) of unknown acute toxicity.

### SECTION 3: Composition/information on ingredients

#### 3.1. Substance

Not applicable

#### 3.2. Mixture

Name	Product identifier	%	GHS-US classification
Heptane, branched, cyclic and linear	(CAS No) 426260-76-6	60 - 100	Flam. Liq. 2 Skin Irrit. 2 STOT SE 3 Asp. Tox. 1

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Name	Product identifier	%	GHS-US classification
Ethyl ether	(CAS No) 60-29-7	10 - 30	Flam. Liq. 1 Acute Tox. 4 (Oral) STOT SE 3
Carbon dioxide	(CAS No) 124-38-9	3 - 7	Compressed gas
n-Heptane	(CAS No) 142-82-5	1 - 5	Flam. Liq. 2 Skin Irrit. 2 STOT SE 3
Ethyl alcohol	(CAS No) 64-17-5	0.5 - 1.5	Flam. Liq. 2 Eye Irrit. 2A
Ethyl chloride	(CAS No) 75-00-3	0.1 - 1	Flam. Gas 1 Liquefied gas Carc. 2
Toluene	(CAS No) 108-88-3	< 0.1	Flam. Liq. 2 Acute Tox. 4 (Oral) Skin Irrit. 2 Repr. 2 STOT SE 3 STOT RE 2 Asp. Tox. 1

The exact percentage (concentration) of composition has been withheld as a trade secret in accordance with paragraph (i) of §1910.1200.

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

- First-aid measures after inhalation : If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical advice/attention if you feel unwell.
- First-aid measures after skin contact : In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Call a physician if irritation develops and persists.
- First-aid measures after eye contact : In case of contact, immediately flush eyes with plenty of water. Remove contact lenses, if worn. If irritation persists, get medical attention.
- First-aid measures after ingestion : If swallowed, do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get immediate medical advice/attention.

#### 4.2. Most important symptoms and effects, both acute and delayed

- Symptoms/injuries after inhalation : May cause drowsiness, dizziness and central nervous system depression. May cause respiratory tract irritation.
- Symptoms/injuries after skin contact : Causes skin irritation. Symptoms may include redness, edema, drying, defatting and cracking of the skin.
- Symptoms/injuries after eye contact : May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling.
- Symptoms/injuries after ingestion : May be fatal if swallowed and enters airways. This product may be aspirated into the lungs and cause chemical pneumonitis. May cause stomach distress, nausea or vomiting.

#### 4.3. Indication of any immediate medical attention and special treatment needed

Symptoms may not appear immediately. In case of accident or if you feel unwell, seek medical advice immediately (show the label or SDS where possible).

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

- Suitable extinguishing media : Powder, water spray, foam, carbon dioxide.
- Unsuitable extinguishing media : Do not use a heavy water stream.

#### 5.2. Special hazards arising from the substance or mixture

- Fire hazard : Extremely flammable aerosol. Products of combustion may include, and are not limited to: oxides of carbon.
- Explosion hazard : Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries.

#### 5.3. Advice for firefighters

- Protection during firefighting : Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA). Vapors may be heavier than air and may travel along the ground to a distant ignition source and flash back. Use water spray to keep fire-exposed containers cool.

### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Eliminate sources of ignition.

#### 6.2. Methods and material for containment and cleaning up

- For containment : Contain and/or absorb spill with inert material (e.g. sand, vermiculite), then place in a suitable container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).

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according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

Methods for cleaning up : Scoop up material and place in a disposal container. Provide ventilation.

### 6.3. Reference to other sections

See section 8 for further information on protective clothing and equipment and section 13 for advice on waste disposal.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Precautions for safe handling : Keep away from sources of ignition. - No smoking. Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use. Avoid contact with skin and eyes. Do not swallow. Avoid breathing gas/mist/vapors/spray. When using do not eat, drink or smoke. Use only outdoors or in a well-ventilated area.

Hygiene measures : Launder contaminated clothing before reuse. Wash hands before eating, drinking, or smoking.

### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep locked up and out of reach of children. Do not expose to temperatures exceeding 50°C/ 122°F. Store away from direct sunlight or other heat sources. Store in a well-ventilated place.

### 7.3. Specific end use(s)

Not available.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

Heptane, branched, cyclic and linear (426260-76-6)		
USA ACGIH	ACGIH TWA	Not applicable.
USA OSHA	OSHA PEL (TWA)	Not applicable.

Ethyl ether (60-29-7)		
USA ACGIH	ACGIH TWA (ppm)	400 ppm
USA ACGIH	ACGIH STEL (ppm)	500 ppm
USA OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	1200 mg/m <sup>3</sup>
USA OSHA	OSHA PEL (TWA) (ppm)	400 ppm

Carbon dioxide (124-38-9)		
USA ACGIH	ACGIH TWA (ppm)	5000 ppm
USA ACGIH	ACGIH STEL (ppm)	30000 ppm
USA OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	9000 mg/m <sup>3</sup>
USA OSHA	OSHA PEL (TWA) (ppm)	5000 ppm

n-Heptane (142-82-5)		
USA ACGIH	ACGIH TWA (ppm)	400 ppm
USA ACGIH	ACGIH STEL (ppm)	500 ppm
USA OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	2000 mg/m <sup>3</sup>
USA OSHA	OSHA PEL (TWA) (ppm)	500 ppm

Ethyl alcohol (64-17-5)		
USA ACGIH	ACGIH STEL (ppm)	1000 ppm
USA OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	1900 mg/m <sup>3</sup>
USA OSHA	OSHA PEL (TWA) (ppm)	1000 ppm

Ethyl chloride (75-00-3)		
USA ACGIH	ACGIH TWA (ppm)	100 ppm
USA OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	2600 mg/m <sup>3</sup>
USA OSHA	OSHA PEL (TWA) (ppm)	1000 ppm

Toluene (108-88-3)		
USA ACGIH	ACGIH TWA (ppm)	20 ppm
USA OSHA	OSHA PEL (TWA) (ppm)	200 ppm
USA OSHA	OSHA PEL (Ceiling) (ppm)	300 ppm

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according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

### 8.2. Exposure controls

Appropriate engineering controls	: Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, etc.) below recommended exposure limits.
Personal protective equipment	: Avoid all unnecessary exposure.
Hand protection	: Wear chemically resistant protective gloves.
Eye protection	: Safety glasses or goggles are recommended when using product.
Skin and body protection	: Wear suitable protective clothing.
Respiratory protection	: A NIOSH approved respirator is recommended in poorly ventilated areas or when permissible exposure limits may be exceeded. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
Environmental exposure controls	: Maintain levels below Community environmental protection thresholds.
Other information	: Do not eat, smoke or drink where material is handled, processed or stored. Wash hands carefully before eating or smoking. Handle according to established industrial hygiene and safety practices.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	: Gas/Pressurized Liquid.
Appearance	: Clear.
Colour	: Colourless.
Odour	: Solvent.
Odour threshold	: No data available.
pH	: No data available.
Relative evaporation rate (butylacetate=1)	: No data available.
Melting point	: No data available.
Freezing point	: No data available.
Boiling point	: No data available.
Flash point	: No data available.
Self ignition temperature	: No data available.
Decomposition temperature	: No data available.
Flammability (solid, gas)	: Flammable.
Vapour pressure	: No data available.
Relative vapour density at 20 °C	: No data available.
Relative density	: No data available.
Solubility	: No data available.
Log Pow	: No data available.
Log Kow	: No data available.
Viscosity, kinematic	: No data available.
Viscosity, dynamic	: No data available.
Explosive properties	: No data available.
Oxidising properties	: No data available.
Explosive limits	: No data available.

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No dangerous reaction known under conditions of normal use.

### 10.2. Chemical stability

Stable under normal storage conditions. Extremely flammable aerosol. Contents under pressure. Container may explode if heated. Do not puncture. Do not burn.

### 10.3. Possibility of hazardous reactions

No dangerous reaction known under conditions of normal use.

### 10.4. Conditions to avoid

Heat. Incompatible materials. Sources of ignition. Air contact. Direct sunlight. Moisture.

### 10.5. Incompatible materials

Acids. Chlorine. Oxidizers. Reducing agents

### 10.6. Hazardous decomposition products

May include, and are not limited to: oxides of carbon.



# PENRAY STARTING FLUID

## Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

Acute toxicity : Not classified

5301	
LD50 oral rat	> 2000 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
LC50 inhalation rat (mg/l)	> 5 mg/l/4h

Ethyl ether (60-29-7)	
LD50 oral rat	1215 mg/kg
LD50 dermal rabbit	>20 mL/kg

n-Heptane (142-82-5)	
LD50 dermal rabbit	3000 mg/kg
LC50 inhalation rat (mg/l)	103 g/m <sup>3</sup> /4h

Ethyl alcohol (64-17-5)	
LD50 oral rat	7060 mg/kg
LC50 inhalation rat (mg/l)	124.7 mg/l/4h

Ethyl chloride (75-00-3)	
LC50 inhalation rat (mg/l)	152 g/m <sup>3</sup> /2h

Toluene (108-88-3)	
LD50 oral rat	> 5000 mg/kg
LD50 dermal rat	12124 mg/kg
LD50 dermal rabbit	8390 mg/kg
LC50 inhalation rat (mg/l)	28.1 mg/l/4h

Skin corrosion/irritation : Causes skin irritation.  
Serious eye damage/irritation : Based on available data, the classification criteria are not met.  
Respiratory or skin sensitisation : Based on available data, the classification criteria are not met.  
Germ cell mutagenicity : Based on available data, the classification criteria are not met.  
Carcinogenicity : Suspected of causing cancer.

Ethyl alcohol (64-17-5)	
IARC group	1 (in alcoholic beverages)

Ethyl chloride (75-00-3)	
IARC group	3
National Toxicity Program (NTP) Status	1

Toluene (108-88-3)	
IARC group	3

Reproductive toxicity : Based on available data, the classification criteria are not met.  
Specific target organ toxicity (single exposure) : May cause drowsiness or dizziness.  
Specific target organ toxicity (repeated exposure) : Based on available data, the classification criteria are not met.  
Aspiration hazard : May be fatal if swallowed and enters airways.  
Symptoms/injuries after inhalation : May cause drowsiness, dizziness and central nervous system depression. May cause respiratory tract irritation.  
Symptoms/injuries after skin contact : Causes skin irritation. Symptoms may include redness, edema, drying, defatting and cracking of the skin.  
Symptoms/injuries after eye contact : May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling.  
Symptoms/injuries after ingestion : May be fatal if swallowed and enters airways. This product may be aspirated into the lungs and cause chemical pneumonitis. May cause stomach distress, nausea or vomiting.

### SECTION 12: Ecological information

#### 12.1. Toxicity

Ecology - general : May cause long-term adverse effects in the aquatic environment.

#### 12.2. Persistence and degradability

5301	
Persistence and degradability	Not established.

# PENRAY STARTING FLUID

## Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

### 12.3. Bioaccumulative potential

5301

Bioaccumulative potential	Not established.
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### 12.4. Mobility in soil

No additional information available

### 12.5. Other adverse effects

No additional information available

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Waste disposal recommendations : This material must be disposed of in accordance with all local, state, provincial, and federal regulations. The generation of waste should be avoided or minimized wherever possible.

Additional information : Flammable vapours may accumulate in the container. Do not incinerate closed containers.

## SECTION 14: Transport information

In accordance with DOT

### 14.1. UN number

UN-No. : UN1950

### 14.2. UN proper shipping name

Proper Shipping Name : Aerosols flammable

Department of Transportation Hazard Classes : 2.1

Hazard labels :



### 14.3. Additional information

Other information : No supplementary information available.

Special transport precautions : Do not handle until all safety precautions have been read and understood.

## SECTION 15: Regulatory information

### 15.1. US Federal regulations

#### Heptane, branched, cyclic and linear (426260-76-6)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

#### Ethyl ether (60-29-7)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

EPA TSCA Regulatory Flag : T - T - indicates a substance that is the subject of a Section 4 test rule under TSCA.

#### Carbon dioxide (124-38-9)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

#### n-Heptane (142-82-5)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

EPA TSCA Regulatory Flag : T - T - indicates a substance that is the subject of a Section 4 test rule under TSCA.

#### Ethyl alcohol (64-17-5)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

#### Ethyl chloride (75-00-3)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Listed on SARA Section 313 (Specific toxic chemical listings)

EPA TSCA Regulatory Flag : T - T - indicates a substance that is the subject of a Section 4 test rule under TSCA.

SARA Section 313 - Emission Reporting : 1.0 %

#### Toluene (108-88-3)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Listed on SARA Section 313 (Specific toxic chemical listings)

SARA Section 313 - Emission Reporting : 1.0 %

### 15.2. US State regulations

5301

State or local regulations	This product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.
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# PENRAY STARTING FLUID

## Safety Data Sheet

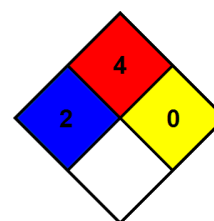
according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

### SOURCE AGENCY CARCINOGEN CLASSIFICATIONS:

IARC	International Agency for Research on Cancer.
	1 - Carcinogenic to humans; 2A - Probably carcinogenic to humans; 2B - Possibly carcinogenic to humans; 3 - Not classifiable; 4 - Probably not carcinogenic to humans.
NTP	National Toxicology Program.
	1 - Evidence of Carcinogenicity; 2 - Known Human Carcinogens; 3 - Reasonably anticipated to be Human Carcinogen; 4 - Substances delisted from report on Carcinogens; 5 - Twelfth Report - Items under consideration.

### SECTION 16: Other information

Indication of changes : None.  
Date of issue : 05/28/2014  
Other information : None.  
  
NFPA health hazard : 2  
NFPA fire hazard : 4  
NFPA reactivity : 0



*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product*

# Safety Data Sheet



## 1. Identification

<b>Product Name:</b>	PRO +LSPR 6PK FLAT GRAY PRIMER	<b>Revision Date:</b>	3/4/2020
<b>Product Identifier:</b>	7582838	<b>Supersedes Date:</b>	4/11/2019
<b>Recommended Use:</b>	Primer / Aerosols		
<b>Supplier:</b>	Rust-Oleum Corporation 11 Hawthorn Parkway Vernon Hills, IL 60061 USA	<b>Manufacturer:</b>	Rust-Oleum Corporation 11 Hawthorn Parkway Vernon Hills, IL 60061 USA
<b>Preparer:</b>	Regulatory Department		
<b>Emergency Telephone:</b>	24 Hour Hotline: 847-367-7700		

## 2. Hazard Identification

### Classification

#### Symbol(s) of Product



#### Signal Word

Danger

#### Possible Hazards

44% of the mixture consists of ingredient(s) of unknown acute toxicity.

#### GHS HAZARD STATEMENTS

Carcinogenicity, category 1B	H350	May cause cancer.
Compressed Gas	H280	Contains gas under pressure; may explode if heated.
Eye Irritation, category 2A	H319	Causes serious eye irritation.
Flammable Aerosol, category 1	H222	Extremely flammable aerosol.
Germ Cell Mutagenicity, category 1B	H340	May cause genetic defects.
STOT, single exposure, category 3, NE	H336	May cause drowsiness or dizziness.
Skin Sensitizer, category 1	H317	May cause an allergic skin reaction.

#### GHS LABEL PRECAUTIONARY STATEMENTS

P201	Obtain special instructions before use.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. NO SMOKING.
P211	Do not spray on an open flame or other ignition source.
P251	Do not pierce or burn, even after use.
P261	Avoid breathing dust/fume/gas/mist/vapors/spray.
P264	Wash hands thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area.

P272	Contaminated work clothing should not be allowed out of the workplace.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352	IF ON SKIN: Wash with plenty of soap and water.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313	IF exposed or concerned: Get medical advice/attention.
P312	Call a POISON CENTER or doctor/physician if you feel unwell.
P321	For specific treatment see label.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P337+P313	If eye irritation persists: Get medical advice/attention.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.
P410+P403	Protect from sunlight. Store in a well-ventilated place.
P410+P412	Protect from sunlight. Do not expose to temperatures exceeding 50°C / 122°F.
P501	Dispose of contents/container in accordance with local, regional and national regulations.

**GHS SDS PRECAUTIONARY STATEMENTS**

P363 Wash contaminated clothing before reuse.

### 3. Composition / Information On Ingredients

**HAZARDOUS SUBSTANCES**

<u>Chemical Name</u>	<u>CAS-No.</u>	<u>Wt.% Range</u>	<u>GHS Symbols</u>	<u>GHS Statements</u>
Propane	74-98-6	10-25	GHS04	H280
n-Butyl Acetate	123-86-4	10-25	GHS02-GHS07	H226-336
Acetone	67-64-1	10-25	GHS02-GHS07	H225-319-332-336
Dimethyl Carbonate	616-38-6	2.5-10	GHS02	H225
Hydrous Magnesium Silicate	14807-96-6	2.5-10	Not Available	Not Available
n-Butane	106-97-8	2.5-10	GHS04	H280
Titanium Dioxide	13463-67-7	2.5-10	Not Available	Not Available
Hydrotreated Light Distillate	64742-47-8	2.5-10	GHS08	H304
Solvent Naphtha, Light Aromatic	64742-95-6	1.0-2.5	GHS07-GHS08	H304-332
1,2,4-Trimethylbenzene	95-63-6	1.0-2.5	GHS02-GHS07-GHS08	H226-304-315-319-332-335
Zinc Phosphate	7779-90-0	1.0-2.5	Not Available	Not Available
Zinc Oxide	1314-13-2	0.1-1.0	Not Available	Not Available
Solvent Naphtha, Light Aromatic	64742-95-6	0.1-1.0	GHS07-GHS08	H304-332-340-350
Methyl Ethyl Ketoxime	96-29-7	0.1-1.0	GHS05-GHS06	H302-312-317-318-331
Ethylbenzene	100-41-4	0.1-1.0	GHS02-GHS07-GHS08	H225-304-332-351-373

### 4. First-Aid Measures

**FIRST AID - EYE CONTACT:** Immediately flush eyes with plenty of water for at least 15 minutes holding eyelids open. Get medical attention. Do NOT allow rubbing of eyes or keeping eyes closed.

**FIRST AID - SKIN CONTACT:** Wash skin with soap and water. Remove contaminated clothing. Get medical attention if irritation develops or persists.

**FIRST AID - INHALATION:** Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get immediate medical attention. Do NOT use mouth-to-mouth resuscitation. If you experience difficulty in breathing, leave the area to obtain fresh air. If continued difficulty is experienced, get medical assistance immediately.

**FIRST AID - INGESTION:** Aspiration hazard: Do not induce vomiting or give anything by mouth because this material can enter the lungs and cause severe lung damage. Get immediate medical attention. If swallowed, get medical attention.

## 5. Fire-Fighting Measures

**EXTINGUISHING MEDIA:** Alcohol Film Forming Foam, Carbon Dioxide, Dry Chemical, Dry Sand, Water Fog

**UNUSUAL FIRE AND EXPLOSION HAZARDS:** FLASH POINT IS LESS THAN 20°F. EXTREMELY FLAMMABLE LIQUID AND VAPOR! Water spray may be ineffective. Closed containers may explode when exposed to extreme heat due to buildup of steam. Closed containers may explode when exposed to extreme heat. Vapors may form explosive mixtures with air. Vapors can travel to a source of ignition and flash back. Isolate from heat, electrical equipment, sparks and open flame. Perforation of the pressurized container may cause bursting of the can.

**SPECIAL FIREFIGHTING PROCEDURES:** Water may be used to cool closed containers to prevent pressure buildup and possible autoignition or explosion. Full protective equipment including self-contained breathing apparatus should be used. Evacuate area and fight fire from a safe distance. Use water spray to keep fire-exposed containers cool. Containers may explode when heated.

**Special Fire and Explosion Hazard (Combustible Dust):** No Information

## 6. Accidental Release Measures

**STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:** Contain spilled liquid with sand or earth. DO NOT use combustible materials such as sawdust. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Remove all sources of ignition, ventilate area and remove with inert absorbent and non-sparking tools. Dispose of according to local, state (provincial) and federal regulations. Do not incinerate closed containers. Ventilate area, isolate spilled material, and remove with inert absorbent. Dispose of contaminated absorbent, container, and unused contents in accordance with local, state, and federal regulations.

## 7. Handling and Storage

**HANDLING:** Wash thoroughly after handling. Wash hands before eating. Remove contaminated clothing and launder before reuse. Use only in a well-ventilated area. Use only with adequate ventilation. Follow all SDS and label precautions even after container is emptied because it may retain product residues. Avoid breathing fumes, vapors, or mist. Avoid contact with eyes, skin and clothing.

**STORAGE:** Keep containers tightly closed. Isolate from heat, electrical equipment, sparks and open flame. Contents under pressure. Do not store above 120 ° F. Store large quantities in buildings designed and protected for storage of flammable aerosols. Keep away from heat, sparks, flame and sources of ignition. Contents under pressure. Do not expose to heat or store above 120 ° F. Avoid excess heat. Product should be stored in tightly sealed containers and protected from heat, moisture, and foreign materials.

**Advice on Safe Handling of Combustible Dust:** No Information

## 8. Exposure Controls / Personal Protection

Chemical Name	CAS-No.	Weight % Less Than	ACGIH TLV- TWA	ACGIH TLV- STEL	OSHA PEL-TWA	OSHA PEL- CEILING
Propane	74-98-6	20.0	N.E.	N.E.	1000 ppm	N.E.
n-Butyl Acetate	123-86-4	15.0	50 ppm	150 ppm	150 ppm	N.E.
Acetone	67-64-1	15.0	250 ppm	500 ppm	1000 ppm	N.E.
Dimethyl Carbonate	616-38-6	10.0	N.E.	N.E.	N.E.	N.E.
Hydrous Magnesium Silicate	14807-96-6	10.0	2 mg/m3	N.E.	N.E.	N.E.
n-Butane	106-97-8	10.0	N.E.	1000 ppm	N.E.	N.E.
Titanium Dioxide	13463-67-7	10.0	10 mg/m3	N.E.	15 mg/m3	N.E.
Hydrotreated Light Distillate	64742-47-8	5.0	N.E.	N.E.	N.E.	N.E.
Solvent Naphtha, Light Aromatic	64742-95-6	5.0	N.E.	N.E.	N.E.	N.E.
1,2,4-Trimethylbenzene	95-63-6	5.0	N.E.	N.E.	N.E.	N.E.
Zinc Phosphate	7779-90-0	5.0	N.E.	N.E.	N.E.	N.E.
Zinc Oxide	1314-13-2	1.0	2 mg/m3	10 mg/m3	5 mg/m3	N.E.
Solvent Naphtha, Light Aromatic	64742-95-6	1.0	N.E.	N.E.	N.E.	N.E.
Methyl Ethyl Ketoxime	96-29-7	1.0	10 ppm	N.E.	N.E.	N.E.
Ethylbenzene	100-41-4	1.0	20 ppm	N.E.	100 ppm	N.E.

### PERSONAL PROTECTION

**ENGINEERING CONTROLS:** Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Use explosion-proof ventilation equipment. Provide general dilution of local exhaust ventilation in volume and pattern to keep TLV of hazardous ingredients below acceptable limits. Prevent build-up of vapors by opening all doors and windows to achieve cross-ventilation.

**RESPIRATORY PROTECTION:** A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use. A NIOSH/MSHA approved air purifying respirator with organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits.

**SKIN PROTECTION:** Use impervious gloves to prevent skin contact and absorption of this material through the skin.

**EYE PROTECTION:** Use safety eyewear designed to protect against splash of liquids.

**OTHER PROTECTIVE EQUIPMENT:** Refer to safety supervisor or industrial hygienist for further guidance regarding types of personal protective equipment and their applications. Refer to safety supervisor or industrial hygienist for further information regarding personal protective equipment and its application.

**HYGIENIC PRACTICES:** Wash thoroughly with soap and water before eating, drinking or smoking. Remove contaminated clothing immediately and launder before reuse.

**Engineering Measures for Combustible Dust:** No Information

## 9. Physical and Chemical Properties

<b>Appearance:</b>	Aerosolized Mist	<b>Physical State:</b>	Liquid
<b>Odor:</b>	Solvent Like	<b>Odor Threshold:</b>	N.E.
<b>Specific Gravity:</b>	0.886	<b>pH:</b>	N.A.
<b>Freeze Point, °C:</b>	N.D.	<b>Viscosity:</b>	N.D.
<b>Solubility in Water:</b>	Slight	<b>Partition Coefficient, n-octanol/ water:</b>	N.D.
<b>Decomposition Temp., °C:</b>	N.D.	<b>Explosive Limits, vol%:</b>	0.9 - 13.0
<b>Boiling Range, °C:</b>	-37 - 537	<b>Flash Point, °C:</b>	-96
<b>Flammability:</b>	Supports Combustion	<b>Auto-ignition Temp., °C:</b>	N.D.
<b>Evaporation Rate:</b>	Faster than Ether	<b>Vapor Pressure:</b>	N.D.
<b>Vapor Density:</b>	Heavier than Air		

(See "Other information" Section for abbreviation legend)

## 10. Stability and Reactivity

**CONDITIONS TO AVOID:** Avoid temperatures above 120°F (49°C). Avoid all possible sources of ignition.

**INCOMPATIBILITY:** Incompatible with strong oxidizing agents, strong acids and strong alkalies.

**HAZARDOUS DECOMPOSITION:** By open flame, carbon monoxide and carbon dioxide. When heated to decomposition, it emits acrid smoke and irritating fumes. Contains solvents which may form carbon monoxide, carbon dioxide, and formaldehyde.

**HAZARDOUS POLYMERIZATION:** Will not occur under normal conditions.

**STABILITY:** This product is stable under normal storage conditions.

## 11. Toxicological Information

**EFFECTS OF OVEREXPOSURE - EYE CONTACT:** Causes Serious Eye Irritation

**EFFECTS OF OVEREXPOSURE - SKIN CONTACT:** Substance may cause slight skin irritation. Prolonged or repeated contact may cause skin irritation.

**EFFECTS OF OVEREXPOSURE - INHALATION:** Harmful if inhaled. High gas, vapor, mist or dust concentrations may be harmful if inhaled. Avoid breathing fumes, spray, vapors, or mist. High vapor concentrations are irritating to the eyes, nose, throat and lungs. Prolonged or excessive inhalation may cause respiratory tract irritation.

**EFFECTS OF OVEREXPOSURE - INGESTION:** Harmful if swallowed.

**EFFECTS OF OVEREXPOSURE - CHRONIC HAZARDS:** May cause central nervous system disorder (e.g., narcosis involving a loss of coordination, weakness, fatigue, mental confusion, and blurred vision) and/or damage. High concentrations may lead to central nervous system effects (drowsiness, dizziness, nausea, headaches, paralysis, and blurred vision) and/or damage. Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. IARC lists Ethylbenzene as a possible human carcinogen (group 2B). Contains Titanium Dioxide. Titanium Dioxide is listed as a Group 2B-"Possibly carcinogenic to humans" by IARC. No significant exposure to Titanium Dioxide is thought to occur during the use of products in which Titanium Dioxide is bound to other materials, such as in paints during brush application or drying. Risk of overexposure depends on duration and level of exposure to dust from repeated sanding of surfaces or spray mist and the actual concentration of Titanium Dioxide in the formula. (Ref: IARC Monograph, Vol. 93, 2010) May cause genetic defects.

**PRIMARY ROUTE(S) OF ENTRY:** Eye Contact, Ingestion, Inhalation, Skin Absorption, Skin Contact

**ACUTE TOXICITY VALUES**

The acute effects of this product have not been tested. Data on individual components are tabulated below:

<u>CAS-No.</u>	<u>Chemical Name</u>	<u>Oral LD50</u>	<u>Dermal LD50</u>	<u>Vapor LC50</u>
123-86-4	n-Butyl Acetate	10768 mg/kg Rat	>17600 mg/kg Rabbit	> 21 mg/L Rat
67-64-1	Acetone	5800 mg/kg Rat	>15700 mg/kg Rabbit	50.1 mg/L Rat
616-38-6	Dimethyl Carbonate	13000 mg/kg Rat	>5000 mg/kg Rabbit	140 mg/L Rat
14807-96-6	Hydrous Magnesium Silicate	6000	N.E.	30
106-97-8	n-Butane	N.E.	N.E.	658 mg/L Rat
13463-67-7	Titanium Dioxide	>10000 mg/kg Rat	2500 mg/kg	N.E.
64742-47-8	Hydrotreated Light Distillate	>5000 mg/kg Rat	>2000 mg/kg Rabbit	>5000 mg/L Rat
64742-95-6	Solvent Naphtha, Light Aromatic	8400 mg/kg Rat	>2000 mg/kg Rabbit	N.E.
95-63-6	1,2,4-Trimethylbenzene	3280 mg/kg Rat	>3160 mg/kg Rabbit	18 mg/L Rat
7779-90-0	Zinc Phosphate	>5000 mg/kg Rat	N.E.	N.E.
1314-13-2	Zinc Oxide	>5000 mg/kg Rat	N.E.	N.E.
64742-95-6	Solvent Naphtha, Light Aromatic	8400 mg/kg Rat	>2000 mg/kg Rabbit	N.E.
96-29-7	Methyl Ethyl Ketoxime	930 mg/kg Rat	1100 mg/kg Rabbit	>4.83 mg/L Rat
100-41-4	Ethylbenzene	3500 mg/kg Rat	15400 mg/kg Rabbit	17.4 mg/L Rat

N.E. - Not Established

**12. Ecological Information**

**ECOLOGICAL INFORMATION:** Product is a mixture of listed components. Product is a mixture of listed components.

**13. Disposal Information**

**DISPOSAL INFORMATION:** Do not incinerate closed containers. Dispose of material in accordance to local, state, and federal regulations and ordinances. This product as supplied is a USEPA defined ignitable hazardous waste. Dispose of unusable product as a hazardous waste (D001) in accordance with local, state, and federal regulation.

**14. Transport Information**

	<u>Domestic (USDOT)</u>	<u>International (IMDG)</u>	<u>Air (IATA)</u>	<u>TDG (Canada)</u>
<b>UN Number:</b>	N.A.	1950	1950	N.A.
<b>Proper Shipping Name:</b>	Paint and Related Spray Products in Ltd Qty	Aerosols	Aerosols, flammable	Aerosols
<b>Hazard Class:</b>	N.A.	2	2.1	N.A.
<b>Packing Group:</b>	N.A.	N.A.	N.A.	N.A.
<b>Limited Quantity:</b>	Yes	Yes	Yes	Yes

**15. Regulatory Information****U.S. Federal Regulations:****CERCLA - SARA Hazard Category**

This product has been reviewed according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

Gas under pressure, Carcinogenicity, Respiratory or Skin Sensitization, Serious eye damage or eye irritation, Specific target organ toxicity (single or repeated exposure), Germ cell mutagenicity

**Sara Section 313:**

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372:

Chemical Name

CAS-No.



1,2,4-Trimethylbenzene	95-63-6
Zinc Phosphate	7779-90-0
Zinc Oxide	1314-13-2
Ethylbenzene	100-41-4

**Toxic Substances Control Act:**

This product contains the following chemical substances subject to the reporting requirements of TSCA 12(b) if exported from the United States:

No TSCA 12(b) components exist in this product.

**U.S. State Regulations:****California Proposition 65:**

**WARNING:** Cancer and Reproductive Harm - [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

**16. Other Information****HMIS RATINGS**

Health: 2\*      Flammability: 4      Physical Hazard: 0      Personal Protection: X

**NFPA RATINGS**

Health: 2      Flammability: 4      Instability: 0

Maximum Incremental Reactivity: 0.68

SDS REVISION DATE: 3/4/2020

REASON FOR REVISION: Substance Chemical Name Changed  
 Substance Hazardous Flag Changed  
 Substance Hazard Threshold % Changed  
 Substance and/or Product Properties Changed in Section(s):  
 09 - Physical & Chemical Properties  
 16 - Other Information  
 Revision Statement(s) Changed

**Legend:** N.A. - Not Applicable, N.D. - Not Determined, N.E. - Not Established

Rust-Oleum Corporation believes, to the best of its knowledge, information and belief, the information contained herein to be accurate and reliable as of the date of this safety data sheet. However, because the conditions of handling, use, and storage of these materials are beyond our control, we assume no responsibility or liability for personal injury or property damage incurred by the use of these materials. Rust-Oleum Corporation makes no warranty, expressed or implied, regarding the accuracy or reliability of the data or results obtained from their use. All materials may present unknown hazards and should be used with caution. The information and recommendations in this material safety data sheet are offered for the users' consideration and examination. It is the responsibility of the user to determine the final suitability of this information and to comply with all applicable international, federal, state, and local laws and regulations.

# Safety Data Sheet



## 1. Identification

<b>Product Name:</b>	PRO +LSPR 6PK FLAT GRAY PRIMER	<b>Revision Date:</b>	3/4/2020
<b>Product Identifier:</b>	7582838	<b>Supersedes Date:</b>	4/11/2019
<b>Recommended Use:</b>	Primer / Aerosols		
<b>Supplier:</b>	Rust-Oleum Corporation 11 Hawthorn Parkway Vernon Hills, IL 60061 USA	<b>Manufacturer:</b>	Rust-Oleum Corporation 11 Hawthorn Parkway Vernon Hills, IL 60061 USA
<b>Preparer:</b>	Regulatory Department		
<b>Emergency Telephone:</b>	24 Hour Hotline: 847-367-7700		

## 2. Hazard Identification

### Classification

#### Symbol(s) of Product



#### Signal Word

Danger

#### Possible Hazards

44% of the mixture consists of ingredient(s) of unknown acute toxicity.

#### GHS HAZARD STATEMENTS

Carcinogenicity, category 1B	H350	May cause cancer.
Compressed Gas	H280	Contains gas under pressure; may explode if heated.
Eye Irritation, category 2A	H319	Causes serious eye irritation.
Flammable Aerosol, category 1	H222	Extremely flammable aerosol.
Germ Cell Mutagenicity, category 1B	H340	May cause genetic defects.
STOT, single exposure, category 3, NE	H336	May cause drowsiness or dizziness.
Skin Sensitizer, category 1	H317	May cause an allergic skin reaction.

#### GHS LABEL PRECAUTIONARY STATEMENTS

P201	Obtain special instructions before use.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. NO SMOKING.
P211	Do not spray on an open flame or other ignition source.
P251	Do not pierce or burn, even after use.
P261	Avoid breathing dust/fume/gas/mist/vapors/spray.
P264	Wash hands thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area.

P272	Contaminated work clothing should not be allowed out of the workplace.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352	IF ON SKIN: Wash with plenty of soap and water.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313	IF exposed or concerned: Get medical advice/attention.
P312	Call a POISON CENTER or doctor/physician if you feel unwell.
P321	For specific treatment see label.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P337+P313	If eye irritation persists: Get medical advice/attention.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.
P410+P403	Protect from sunlight. Store in a well-ventilated place.
P410+P412	Protect from sunlight. Do not expose to temperatures exceeding 50°C / 122°F.
P501	Dispose of contents/container in accordance with local, regional and national regulations.

**GHS SDS PRECAUTIONARY STATEMENTS**

P363 Wash contaminated clothing before reuse.

### 3. Composition / Information On Ingredients

**HAZARDOUS SUBSTANCES**

<u>Chemical Name</u>	<u>CAS-No.</u>	<u>Wt.% Range</u>	<u>GHS Symbols</u>	<u>GHS Statements</u>
Propane	74-98-6	10-25	GHS04	H280
n-Butyl Acetate	123-86-4	10-25	GHS02-GHS07	H226-336
Acetone	67-64-1	10-25	GHS02-GHS07	H225-319-332-336
Dimethyl Carbonate	616-38-6	2.5-10	GHS02	H225
Hydrous Magnesium Silicate	14807-96-6	2.5-10	Not Available	Not Available
n-Butane	106-97-8	2.5-10	GHS04	H280
Titanium Dioxide	13463-67-7	2.5-10	Not Available	Not Available
Hydrotreated Light Distillate	64742-47-8	2.5-10	GHS08	H304
Solvent Naphtha, Light Aromatic	64742-95-6	1.0-2.5	GHS07-GHS08	H304-332
1,2,4-Trimethylbenzene	95-63-6	1.0-2.5	GHS02-GHS07-GHS08	H226-304-315-319-332-335
Zinc Phosphate	7779-90-0	1.0-2.5	Not Available	Not Available
Zinc Oxide	1314-13-2	0.1-1.0	Not Available	Not Available
Solvent Naphtha, Light Aromatic	64742-95-6	0.1-1.0	GHS07-GHS08	H304-332-340-350
Methyl Ethyl Ketoxime	96-29-7	0.1-1.0	GHS05-GHS06	H302-312-317-318-331
Ethylbenzene	100-41-4	0.1-1.0	GHS02-GHS07-GHS08	H225-304-332-351-373

### 4. First-Aid Measures

**FIRST AID - EYE CONTACT:** Immediately flush eyes with plenty of water for at least 15 minutes holding eyelids open. Get medical attention. Do NOT allow rubbing of eyes or keeping eyes closed.

**FIRST AID - SKIN CONTACT:** Wash skin with soap and water. Remove contaminated clothing. Get medical attention if irritation develops or persists.

**FIRST AID - INHALATION:** Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get immediate medical attention. Do NOT use mouth-to-mouth resuscitation. If you experience difficulty in breathing, leave the area to obtain fresh air. If continued difficulty is experienced, get medical assistance immediately.

**FIRST AID - INGESTION:** Aspiration hazard: Do not induce vomiting or give anything by mouth because this material can enter the lungs and cause severe lung damage. Get immediate medical attention. If swallowed, get medical attention.

## 5. Fire-Fighting Measures

**EXTINGUISHING MEDIA:** Alcohol Film Forming Foam, Carbon Dioxide, Dry Chemical, Dry Sand, Water Fog

**UNUSUAL FIRE AND EXPLOSION HAZARDS:** FLASH POINT IS LESS THAN 20°F. EXTREMELY FLAMMABLE LIQUID AND VAPOR! Water spray may be ineffective. Closed containers may explode when exposed to extreme heat due to buildup of steam. Closed containers may explode when exposed to extreme heat. Vapors may form explosive mixtures with air. Vapors can travel to a source of ignition and flash back. Isolate from heat, electrical equipment, sparks and open flame. Perforation of the pressurized container may cause bursting of the can.

**SPECIAL FIREFIGHTING PROCEDURES:** Water may be used to cool closed containers to prevent pressure buildup and possible autoignition or explosion. Full protective equipment including self-contained breathing apparatus should be used. Evacuate area and fight fire from a safe distance. Use water spray to keep fire-exposed containers cool. Containers may explode when heated.

**Special Fire and Explosion Hazard (Combustible Dust):** No Information

## 6. Accidental Release Measures

**STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:** Contain spilled liquid with sand or earth. DO NOT use combustible materials such as sawdust. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Remove all sources of ignition, ventilate area and remove with inert absorbent and non-sparking tools. Dispose of according to local, state (provincial) and federal regulations. Do not incinerate closed containers. Ventilate area, isolate spilled material, and remove with inert absorbent. Dispose of contaminated absorbent, container, and unused contents in accordance with local, state, and federal regulations.

## 7. Handling and Storage

**HANDLING:** Wash thoroughly after handling. Wash hands before eating. Remove contaminated clothing and launder before reuse. Use only in a well-ventilated area. Use only with adequate ventilation. Follow all SDS and label precautions even after container is emptied because it may retain product residues. Avoid breathing fumes, vapors, or mist. Avoid contact with eyes, skin and clothing.

**STORAGE:** Keep containers tightly closed. Isolate from heat, electrical equipment, sparks and open flame. Contents under pressure. Do not store above 120 ° F. Store large quantities in buildings designed and protected for storage of flammable aerosols. Keep away from heat, sparks, flame and sources of ignition. Contents under pressure. Do not expose to heat or store above 120 ° F. Avoid excess heat. Product should be stored in tightly sealed containers and protected from heat, moisture, and foreign materials.

**Advice on Safe Handling of Combustible Dust:** No Information

## 8. Exposure Controls / Personal Protection

Chemical Name	CAS-No.	Weight % Less Than	ACGIH TLV- TWA	ACGIH TLV- STEL	OSHA PEL-TWA	OSHA PEL- CEILING
Propane	74-98-6	20.0	N.E.	N.E.	1000 ppm	N.E.
n-Butyl Acetate	123-86-4	15.0	50 ppm	150 ppm	150 ppm	N.E.
Acetone	67-64-1	15.0	250 ppm	500 ppm	1000 ppm	N.E.
Dimethyl Carbonate	616-38-6	10.0	N.E.	N.E.	N.E.	N.E.
Hydrous Magnesium Silicate	14807-96-6	10.0	2 mg/m3	N.E.	N.E.	N.E.
n-Butane	106-97-8	10.0	N.E.	1000 ppm	N.E.	N.E.
Titanium Dioxide	13463-67-7	10.0	10 mg/m3	N.E.	15 mg/m3	N.E.
Hydrotreated Light Distillate	64742-47-8	5.0	N.E.	N.E.	N.E.	N.E.
Solvent Naphtha, Light Aromatic	64742-95-6	5.0	N.E.	N.E.	N.E.	N.E.
1,2,4-Trimethylbenzene	95-63-6	5.0	N.E.	N.E.	N.E.	N.E.
Zinc Phosphate	7779-90-0	5.0	N.E.	N.E.	N.E.	N.E.
Zinc Oxide	1314-13-2	1.0	2 mg/m3	10 mg/m3	5 mg/m3	N.E.
Solvent Naphtha, Light Aromatic	64742-95-6	1.0	N.E.	N.E.	N.E.	N.E.
Methyl Ethyl Ketoxime	96-29-7	1.0	10 ppm	N.E.	N.E.	N.E.
Ethylbenzene	100-41-4	1.0	20 ppm	N.E.	100 ppm	N.E.

### PERSONAL PROTECTION

**ENGINEERING CONTROLS:** Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Use explosion-proof ventilation equipment. Provide general dilution of local exhaust ventilation in volume and pattern to keep TLV of hazardous ingredients below acceptable limits. Prevent build-up of vapors by opening all doors and windows to achieve cross-ventilation.

**RESPIRATORY PROTECTION:** A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use. A NIOSH/MSHA approved air purifying respirator with organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits.

**SKIN PROTECTION:** Use impervious gloves to prevent skin contact and absorption of this material through the skin.

**EYE PROTECTION:** Use safety eyewear designed to protect against splash of liquids.

**OTHER PROTECTIVE EQUIPMENT:** Refer to safety supervisor or industrial hygienist for further guidance regarding types of personal protective equipment and their applications. Refer to safety supervisor or industrial hygienist for further information regarding personal protective equipment and its application.

**HYGIENIC PRACTICES:** Wash thoroughly with soap and water before eating, drinking or smoking. Remove contaminated clothing immediately and launder before reuse.

**Engineering Measures for Combustible Dust:** No Information

## 9. Physical and Chemical Properties

<b>Appearance:</b>	Aerosolized Mist	<b>Physical State:</b>	Liquid
<b>Odor:</b>	Solvent Like	<b>Odor Threshold:</b>	N.E.
<b>Specific Gravity:</b>	0.886	<b>pH:</b>	N.A.
<b>Freeze Point, °C:</b>	N.D.	<b>Viscosity:</b>	N.D.
<b>Solubility in Water:</b>	Slight	<b>Partition Coefficient, n-octanol/ water:</b>	N.D.
<b>Decomposition Temp., °C:</b>	N.D.	<b>Explosive Limits, vol%:</b>	0.9 - 13.0
<b>Boiling Range, °C:</b>	-37 - 537	<b>Flash Point, °C:</b>	-96
<b>Flammability:</b>	Supports Combustion	<b>Auto-ignition Temp., °C:</b>	N.D.
<b>Evaporation Rate:</b>	Faster than Ether	<b>Vapor Pressure:</b>	N.D.
<b>Vapor Density:</b>	Heavier than Air		

(See "Other information" Section for abbreviation legend)

## 10. Stability and Reactivity

**CONDITIONS TO AVOID:** Avoid temperatures above 120°F (49°C). Avoid all possible sources of ignition.

**INCOMPATIBILITY:** Incompatible with strong oxidizing agents, strong acids and strong alkalies.

**HAZARDOUS DECOMPOSITION:** By open flame, carbon monoxide and carbon dioxide. When heated to decomposition, it emits acrid smoke and irritating fumes. Contains solvents which may form carbon monoxide, carbon dioxide, and formaldehyde.

**HAZARDOUS POLYMERIZATION:** Will not occur under normal conditions.

**STABILITY:** This product is stable under normal storage conditions.

## 11. Toxicological Information

**EFFECTS OF OVEREXPOSURE - EYE CONTACT:** Causes Serious Eye Irritation

**EFFECTS OF OVEREXPOSURE - SKIN CONTACT:** Substance may cause slight skin irritation. Prolonged or repeated contact may cause skin irritation.

**EFFECTS OF OVEREXPOSURE - INHALATION:** Harmful if inhaled. High gas, vapor, mist or dust concentrations may be harmful if inhaled. Avoid breathing fumes, spray, vapors, or mist. High vapor concentrations are irritating to the eyes, nose, throat and lungs. Prolonged or excessive inhalation may cause respiratory tract irritation.

**EFFECTS OF OVEREXPOSURE - INGESTION:** Harmful if swallowed.

**EFFECTS OF OVEREXPOSURE - CHRONIC HAZARDS:** May cause central nervous system disorder (e.g., narcosis involving a loss of coordination, weakness, fatigue, mental confusion, and blurred vision) and/or damage. High concentrations may lead to central nervous system effects (drowsiness, dizziness, nausea, headaches, paralysis, and blurred vision) and/or damage. Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. IARC lists Ethylbenzene as a possible human carcinogen (group 2B). Contains Titanium Dioxide. Titanium Dioxide is listed as a Group 2B-"Possibly carcinogenic to humans" by IARC. No significant exposure to Titanium Dioxide is thought to occur during the use of products in which Titanium Dioxide is bound to other materials, such as in paints during brush application or drying. Risk of overexposure depends on duration and level of exposure to dust from repeated sanding of surfaces or spray mist and the actual concentration of Titanium Dioxide in the formula. (Ref: IARC Monograph, Vol. 93, 2010) May cause genetic defects.

**PRIMARY ROUTE(S) OF ENTRY:** Eye Contact, Ingestion, Inhalation, Skin Absorption, Skin Contact

**ACUTE TOXICITY VALUES**

The acute effects of this product have not been tested. Data on individual components are tabulated below:

<u>CAS-No.</u>	<u>Chemical Name</u>	<u>Oral LD50</u>	<u>Dermal LD50</u>	<u>Vapor LC50</u>
123-86-4	n-Butyl Acetate	10768 mg/kg Rat	>17600 mg/kg Rabbit	> 21 mg/L Rat
67-64-1	Acetone	5800 mg/kg Rat	>15700 mg/kg Rabbit	50.1 mg/L Rat
616-38-6	Dimethyl Carbonate	13000 mg/kg Rat	>5000 mg/kg Rabbit	140 mg/L Rat
14807-96-6	Hydrous Magnesium Silicate	6000	N.E.	30
106-97-8	n-Butane	N.E.	N.E.	658 mg/L Rat
13463-67-7	Titanium Dioxide	>10000 mg/kg Rat	2500 mg/kg	N.E.
64742-47-8	Hydrotreated Light Distillate	>5000 mg/kg Rat	>2000 mg/kg Rabbit	>5000 mg/L Rat
64742-95-6	Solvent Naphtha, Light Aromatic	8400 mg/kg Rat	>2000 mg/kg Rabbit	N.E.
95-63-6	1,2,4-Trimethylbenzene	3280 mg/kg Rat	>3160 mg/kg Rabbit	18 mg/L Rat
7779-90-0	Zinc Phosphate	>5000 mg/kg Rat	N.E.	N.E.
1314-13-2	Zinc Oxide	>5000 mg/kg Rat	N.E.	N.E.
64742-95-6	Solvent Naphtha, Light Aromatic	8400 mg/kg Rat	>2000 mg/kg Rabbit	N.E.
96-29-7	Methyl Ethyl Ketoxime	930 mg/kg Rat	1100 mg/kg Rabbit	>4.83 mg/L Rat
100-41-4	Ethylbenzene	3500 mg/kg Rat	15400 mg/kg Rabbit	17.4 mg/L Rat

N.E. - Not Established

**12. Ecological Information**

**ECOLOGICAL INFORMATION:** Product is a mixture of listed components. Product is a mixture of listed components.

**13. Disposal Information**

**DISPOSAL INFORMATION:** Do not incinerate closed containers. Dispose of material in accordance to local, state, and federal regulations and ordinances. This product as supplied is a USEPA defined ignitable hazardous waste. Dispose of unusable product as a hazardous waste (D001) in accordance with local, state, and federal regulation.

**14. Transport Information**

	<u>Domestic (USDOT)</u>	<u>International (IMDG)</u>	<u>Air (IATA)</u>	<u>TDG (Canada)</u>
<b>UN Number:</b>	N.A.	1950	1950	N.A.
<b>Proper Shipping Name:</b>	Paint and Related Spray Products in Ltd Qty	Aerosols	Aerosols, flammable	Aerosols
<b>Hazard Class:</b>	N.A.	2	2.1	N.A.
<b>Packing Group:</b>	N.A.	N.A.	N.A.	N.A.
<b>Limited Quantity:</b>	Yes	Yes	Yes	Yes

**15. Regulatory Information****U.S. Federal Regulations:****CERCLA - SARA Hazard Category**

This product has been reviewed according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

Gas under pressure, Carcinogenicity, Respiratory or Skin Sensitization, Serious eye damage or eye irritation, Specific target organ toxicity (single or repeated exposure), Germ cell mutagenicity

**Sara Section 313:**

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372:

Chemical Name

CAS-No.

1,2,4-Trimethylbenzene	95-63-6
Zinc Phosphate	7779-90-0
Zinc Oxide	1314-13-2
Ethylbenzene	100-41-4

**Toxic Substances Control Act:**

This product contains the following chemical substances subject to the reporting requirements of TSCA 12(b) if exported from the United States:

No TSCA 12(b) components exist in this product.

**U.S. State Regulations:****California Proposition 65:**

**WARNING:** Cancer and Reproductive Harm - [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

**16. Other Information****HMIS RATINGS**

Health: 2\*      Flammability: 4      Physical Hazard: 0      Personal Protection: X

**NFPA RATINGS**

Health: 2      Flammability: 4      Instability: 0

Maximum Incremental Reactivity: 0.68

SDS REVISION DATE: 3/4/2020

REASON FOR REVISION: Substance Chemical Name Changed  
 Substance Hazardous Flag Changed  
 Substance Hazard Threshold % Changed  
 Substance and/or Product Properties Changed in Section(s):  
 09 - Physical & Chemical Properties  
 16 - Other Information  
 Revision Statement(s) Changed

**Legend:** N.A. - Not Applicable, N.D. - Not Determined, N.E. - Not Established

Rust-Oleum Corporation believes, to the best of its knowledge, information and belief, the information contained herein to be accurate and reliable as of the date of this safety data sheet. However, because the conditions of handling, use, and storage of these materials are beyond our control, we assume no responsibility or liability for personal injury or property damage incurred by the use of these materials. Rust-Oleum Corporation makes no warranty, expressed or implied, regarding the accuracy or reliability of the data or results obtained from their use. All materials may present unknown hazards and should be used with caution. The information and recommendations in this material safety data sheet are offered for the users' consideration and examination. It is the responsibility of the user to determine the final suitability of this information and to comply with all applicable international, federal, state, and local laws and regulations.

SDS Revision Date:  
01/07/2018

## 1. Identification of the substance/mixture and of the company/undertaking

### 1.1. Product identifier

**Product Identity** SAF-T-EZE REGULAR ANTI-SEIZE  
**Alternate Names** Part Numbers: 80102, 80112, 80122,80125, 80127,  
80137, 80153, 80155, 80157, 80158, 80160, 80161,  
80165, 80178, 80189, 80199  
Product Type: Lubricating Grease

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

**Intended use** Lubricating Grease  
**Application Method** See Technical Data Sheet.

### 1.3. Details of the supplier of the safety data sheet

**Company Name** SAF-T-LOK International Corporation  
300 EISENHOWER LANE NORTH  
LOMBARD, IL 60148

### Emergency

**CHEMTREC (USA)** (800) 424-9300  
**24 hour Emergency Telephone No.** (703) 527-3887  
**Customer Service: SAF-T-LOK International Corporation** (630) 495-2001

## 2. Hazard identification of the product

### 2.1. Classification of the substance or mixture

Aquatic Chronic 2;H411 Toxic to aquatic life with long lasting effects.

### 2.2. Label elements

Using the Toxicity Data listed in section 11 and 12 the product is labeled as follows.



H411 Toxic to aquatic life with long lasting effects.



**[Prevention]:**

P273 Avoid release to the environment.

**[Response]:**

P391 Collect spillage.

**[Storage]:**

No GHS storage statements

**[Disposal]:**

P501 Dispose of contents / container in accordance with local / national regulations.

**3. Composition/information on ingredients**

This product contains the following substances that present a hazard within the meaning of the relevant State and Federal Hazardous Substances regulations.

Ingredient/Chemical Designations	Weight %	GHS Classification	Notes
Petroleum distillates, hydrotreated heavy naphthenic CAS Number: 0064742-52-5	50 - 75	Acute Tox. 4;H312	[1]
Graphite CAS Number: 0007782-42-5	10 - 25		[1][2]
Copper CAS Number: 0007440-50-8	10-25		[1][2]
Zinc oxide CAS Number: 0001314-13-2	1.0 - 10	Aquatic Acute 1;H400 Aquatic Chronic 1;H410	[1][2]
Aluminum CAS Number: 0007429-90-5	1.0-10		[1][2]

[1] Substance classified with a health or environmental hazard.

[2] Substance with a workplace exposure limit.

[3] PBT-substance or vPvB-substance.

\*The full texts of the phrases are shown in Section 16.

**4. First aid measures**

**4.1. Description of first aid measures**

**General**

In all cases of doubt, or when symptoms persist, seek medical attention.

## Safety Data Sheet REGULAR ANTI-SEIZE

SDS Revision Date:

01/07/2018

<b>Inhalation</b>	Never give anything by mouth to an unconscious person. Remove to fresh air, keep patient warm and at rest. If breathing is irregular or stopped, give artificial respiration. If unconscious place in the recovery position and obtain immediate medical attention. Give nothing by mouth.
<b>Eyes</b>	Irrigate copiously with clean water for at least 15 minutes, holding the eyelids apart and seek medical attention.
<b>Skin</b>	Remove contaminated clothing. Wash skin thoroughly with soap and water or use a recognized skin cleanser.
<b>Ingestion</b>	If swallowed obtain immediate medical attention. Keep at rest. Do NOT induce vomiting.

### 4.2. Most important symptoms and effects, both acute and delayed

#### Overview

Skin Contact: Usually no effect, however, as with any chemical, prolonged, excessive, or repeated exposure may cause mild to moderate skin irritation, exhibited by redness, drying and cracking of unprotected skin.

Eye Contact: May irritate with slight pain and redness.

Respiratory/ Inhalation: Usually none, however, as with any chemical product, some irritation may occur.

Ingestion: Amounts transferred to mouth by fingers, etc, during normal operation should not cause injury.

Medical conditions generally aggravated by exposure: None known, however any chemical product may enhance allergies already present in certain individuals.

This product does not require exceptional labeling due to the evaluation procedure of the "General Classification guideline for preparations of the EU". See section 2 for further details.

## 5. Fire-fighting measures

### 5.1. Extinguishing media

Recommended extinguishing media; alcohol resistant foam, CO<sub>2</sub>, dry chemical

### 5.2. Special hazards arising from the substance or mixture

Hazardous decomposition: None

### 5.3. Advice for fire-fighters

Air mask and procedures for fighting chemical fires. Do not inhale gases.

ERG Guide No. ----

## 6. Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

Put on appropriate personal protective equipment (see section 8).

### 6.2. Environmental precautions

Do not allow spills to enter drains or waterways.

Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

### 6.3. Methods and material for containment and cleaning up

Prevent material from entering floor drains, sewers, or any bodies of water.

Scoop up into waste container or soak up with absorbent material. Store in a closed container until disposal.

## 7. Handling and storage

### 7.1. Precautions for safe handling

No special precautions necessary if used properly. Avoid breathing vapors. Wash hands thoroughly at mealtime and end of shift.

See section 2 for further details. - [Prevention]:

### 7.2. Conditions for safe storage, including any incompatibilities

Handle containers carefully to prevent damage and spillage.

Isolated storage facility/ warehouse not required. Store in a cool, dry location (60-90°F) in a well-ventilated area in original container. Keep container tightly closed when not in use.

Incompatible materials: No data available.

See section 2 for further details. - [Storage]:

### 7.3. Specific end use(s)

None

## 8. Exposure controls and personal protection

### 8.1. Control parameters

CAS No.	Ingredient	Exposure	
		Source	Value
0001314-13-2	Zinc oxide	OSHA	TWA 5 mg/m3 (fume) TWA 15 mg/m3 (total dust) TWA 5 mg/m3 (resp dust)
		ACGIH	TWA: 2 mg/m3 STEL: 10 mg/m3 A1, 1, Revised 2003,
		NIOSH	No Established Limit
		Supplier	No Established Limit
		OSHA	TWA 15 mg/m3 (total) TWA 5 mg/m3 (resp)

## Safety Data Sheet REGULAR ANTI-SEIZE

SDS Revision Date:

01/07/2018

0007429-90-5	Aluminum	ACGIH	TWA 1.0 mg/m <sup>3</sup> Revised 2008
		NIOSH	TWA 10 mg/m <sup>3</sup> (total) TWA 5 mg/m <sup>3</sup> (resp)
		Supplier	No Established Limit
0007440-50-8	Copper	OSHA	TWA: mg/m <sup>3</sup> [Note: the PEL also applies to other copper compounds 9as Cu) except copper fume.]
		ACGIH	TWA: 0.2 mg/m <sup>3</sup> (fume) 1 mg/m <sup>3</sup> (dusts/mists)
		NIOSH	TWA: 1 mg/m <sup>3</sup> [Note: The REL also applies to other copper compounds (as Cu) except copper fume.]
0007782-42-5	Graphite	Supplier	No Established Limit
		OSHA	TWA 15mg/m <sup>3</sup> TWA mppcf
		ACGIH	TWA 2 mg/m <sup>3</sup>
0064742-52-5	Petroleum distillates, hydrotreated heavy naphthenic	NIOSH	TWA 2.5 mg/m <sup>3</sup> (resp)
		Supplier	No Established Limit
		OSHA	No Established Limit
0064742-52-5	Petroleum distillates, hydrotreated heavy naphthenic	ACGIH	No Established Limit
		NIOSH	No Established Limit
		Supplier	No Established Limit

Contains mineral oil. The exposure limits for oil mist are 5 mg/m<sup>3</sup> OSHA PEL and 10 mg/m<sup>3</sup> ACGIH.

### Carcinogen Data

CAS No.	Ingredient	Source	Value
0001314-13-2	Zinc oxide	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
0007429-90-5	Aluminum	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: Yes; Group 4: No;
007440-50-8	Copper	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: Yes; Group 4: No;
007782-42-5	Graphite	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: Yes; Group 4: No;
0064742-52-5	Petroleum distillates, hydrotreated heavy naphthenic	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: Yes; Group 4: No;

### 8.2. Exposure controls

#### Respiratory

No respiratory protection required, but normal good ventilation is recommended. Forced ventilation may be required if concentrations exceed normal use exposure.

#### Eyes

Not required if application method is proper. Avoid contact with eyes.

#### Skin

Wear overalls to keep skin contact to a minimum. Use impermeable gloves (neoprene, butyl rubber, natural rubber), as necessary to avoid skin contact, as well as proper clothing

or plastic apron. Wash hands before eating, drinking, or using restroom.

**Engineering Controls** Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and any vapor below occupational exposure limits suitable respiratory protection must be worn.

**Other Work Practices** Eye wash stations should be located within 100 feet or 10 second walk of the work area. Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

See section 2 for further details. - [Prevention]:

## 9. Physical and chemical properties

<b>Appearance</b>	Silver grey Paste
<b>Odor</b>	Mild/Inoffensive
<b>Odor threshold</b>	Not Measured
<b>pH</b>	Not Determined
<b>Melting point / freezing point</b>	Not Determined
<b>Boiling point</b>	>600° F (316°C)
<b>Flash Point</b>	410° F (210° C) (C.O.C.)
<b>Evaporation rate (Ether = 1)</b>	Not Determined
<b>Flammability (solid, gas)</b>	Not Applicable
<b>Upper/lower flammability or explosive limits</b>	<b>Lower Explosive Limit:</b> N/A <b>Upper Explosive Limit:</b> N/A
<b>Vapor pressure (Pa) (mm Hg.)</b>	< 5 @ 30° F
<b>Vapor Density</b>	N/A
<b>Specific Gravity</b>	1.2
<b>Solubility in Water</b>	Insoluble
<b>Partition coefficient n-octanol/water (Log Kow)</b>	Not Measured
<b>Auto-ignition temperature</b>	Not Measured
<b>Decomposition temperature</b>	Not Measured
<b>Viscosity (cSt)</b>	Not Measured
<b>VOC %</b>	<0.1% (cut)
<b>% Solid</b>	35-48%

**9.2. Other information**

DMSO extract IP346: Less than 3.0 wt% (mineral oil component only)

## 10. Stability and reactivity

**10.1. Reactivity**

Hazardous Polymerization will not occur.

**10.2. Chemical stability**

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Stable under normal circumstances.

**10.3. Possibility of hazardous reactions**

No data available.

**10.4. Conditions to avoid**

Strong oxidizing agents

**10.5. Incompatible materials**

No data available.

**10.6. Hazardous decomposition products**

None

### 11. Toxicological information

**Acute toxicity**

Ingredient	Oral LD50, mg/kg	Skin LD50, mg/kg	Inhalation Vapor LD50, mg/L/4hr	Inhalation Dust/Mist LD50, mg/L/4hr	Inhalation Gas LD50, ppm
Petroleum distillates, hydrotreated heavy naphthenic – (64742-52-5)	5,000.00 Rat – Category: 5	No data available	2,000.00, Rabbit – Category: 4	No data available	No data available
Zinc oxide - (1314-13-2)	5,000.00, Rat - Category: 5	No data available	No data available	2.50, Mouse - Category: 4	No data available
Copper – (7440-50-8)	2,500.00, Rat - Category: 5	>2,000.00, Rat - Category: 5	No data available	5.11, Rat - Category: NA	No data available
Graphite - (7782-42-5)	No data available	No data available	No data available	No data available	No data available
Aluminum – (7429-90-5)	No data available	No data available	No data available	No data available	No data available

Note: When no route specific LD50 data is available for an acute toxin, the converted acute toxicity point estimate was used in the calculation of the product's ATE (Acute Toxicity Estimate).

Classification	Category	Hazard Description
Acute toxicity (oral)	---	Not Applicable
Acute toxicity (dermal)	---	Not Applicable
Acute toxicity (inhalation)	---	Not Applicable
Skin corrosion/irritation	---	Not Applicable
Serious eye damage/irritation	---	Not Applicable
Respiratory sensitization	---	Not Applicable
Skin sensitization	---	Not Applicable
Germ cell mutagenicity	---	Not Applicable
Carcinogenicity	---	Not Applicable
Reproductive toxicity	---	Not Applicable
STOT-single exposure	---	Not Applicable

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STOT-repeated exposure	---	Not Applicable
Aspiration hazard	---	Not Applicable

### 12. Ecological information

#### 12.1. Toxicity

No additional information provided for this product. See Section 3 for chemical specific data.

Zinc Oxide is toxic to aquatic life with long lasting effects.

#### Aquatic Ecotoxicity

Ingredient	96 hr LC50 fish, mg/l	48 hr EC50 crustacea, mg/l	ErC50 algae, mg/l
Petroleum distillates, hydrotreated heavy naphthenic – (64742-52-5)	5,000.00 Oncorhynchus mykiss	1,000.00 Daphnia Magna	1,000.00 (96 hr), Scenedesmus subspicatus
Zinc oxide - (1314-13-2)	1.10, Oncorhynchus mykiss	0.098, Daphnia magna	0.042 (72 hr), Pseudokirchneriella subcapitata
Graphite – (7782-42-5)	Not Available	Not Available	Not Availableq
Aluminum – (7429-90-5)	Not Available	Not Available	Not Available
Copper – (7440-50-8)	0.0103, Pimephales promelas	0.0025, Daphnia magna	0.018 (72 hr), Pseudokirchneriella subcapitata

#### 12.2. Persistence and degradability

There is no data available on the preparation itself.

#### 12.3. Bioaccumulative potential

Not Measured

#### 12.4. Mobility in soil

No data available.

#### 12.5. Results of PBT and vPvB assessment

This product contains no PBT/vPvB chemicals.

#### 12.6. Other adverse effects

No data available.

### 13. Disposal considerations

#### 13.1. Waste treatment methods

Observe all federal, state and local regulations when disposing of this substance.

### 14. Transport information

DOT (Domestic Surface)    IMO / IMDG (Ocean Transportation)    ICAO/IATA

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	<b>Transportation)</b>		
<b>14.1. UN number</b>	Not Applicable	Not Regulated	Not Regulated
<b>14.2. UN proper shipping name</b>	Not Regulated	Environmentally hazardous substance, liquid, N.O.S	Not Regulated
<b>14.3. Transport hazard class(es)</b>	<b>DOT Hazard Class:</b> Not Applicable <b>DOT Label:</b> ---	<b>IMDG:</b> 9 <b>Sub Class:</b> Not Applicable	<b>Air Class:</b> Not Applicable
<b>14.4. Packing group</b>	Not Applicable	Not Applicable	Not Applicable
<b>14.5. Environmental hazards</b>			
<b>IMDG</b>	Marine Pollutant: Yes ( Zinc oxide )		
<b>14.6. Special precautions for user</b>			
	No further information		

## 15. Regulatory information

**Regulatory Overview** The regulatory data in Section 15 is not intended to be all-inclusive, only selected regulations are represented.

**Toxic Substance Control Act ( TSCA )** All components of this material are either listed or exempt from listing on the TSCA Inventory.

**WHMIS Classification** Not Regulated

**US EPA Tier II Hazards**

**Fire:** No  
**Sudden Release of Pressure:** No  
**Reactive:** No  
**Immediate (Acute):** No  
**Delayed (Chronic):** No

**EPCRA 311/312 Chemicals and RQs:**  
Copper (5,000.00)

**EPCRA 302 Extremely Hazardous :**  
(No Product Ingredients Listed)

**EPCRA 313 Toxic Chemicals:**  
Zinc oxide

**Proposition 65 - Carcinogens (>0.0%):**  
(No Product Ingredients Listed)

**Proposition 65 - Developmental Toxins (>0.0%):**  
(No Product Ingredients Listed)

**Proposition 65 - Female Repro Toxins (>0.0%):**  
(No Product Ingredients Listed)

**Proposition 65 - Male Repro Toxins (>0.0%):**  
(No Product Ingredients Listed)



**N.J. RTK Substances (>1%):**

Zinc oxide  
Graphite  
Aluminum  
Copper

**Penn RTK Substances (>1%):**

Zinc oxide  
Graphite  
Aluminum  
Copper

**16. Other information**

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. SAF-T-LOK accepts no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to our products. Customers/users of this product must comply with all applicable health and safety laws, regulations, and orders.

The full text of the phrases appearing in section 3 is:

H312 May be harmful in contact with skin.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

**This is the first version in the GHS SDS format. Listings of changes from previous versions in other formats are not applicable.**

The information on this material safety data sheet represents our current data and best opinion as to the proper use in handling of this product under normal conditions. Any use of the product which is not in conformance with this data sheet or which involves using the product in combination with any other product or any other process is the responsibility of the user. SAF-T-LOK International Corporation specifically disclaims all warranties, express or implied, including warranties of merchantability and fitness for a particular purpose, arising from sale or use of SAF-T-LOK International Corporation products.

End of Document



# Material Safety Data Sheet

## Section I - Product and Company Identification

Supplier Name	Pyramex Safety Products, LLC
Address (number, street, state & zip code)	281A Moore Lane Collierville, TN 38017
Phone Number	1-800-736-8673
Fax Number	1-901-861-4967
Emergency Phone Number	<b>Call INFOTRAC: 1-800-535-5053</b>
Product Name	Pyramex Safety Lens Cleaning Towelette
Trade Names and Synonyms	<b>Towelette</b> , LCT1, LCT100, LCT100SP, LCTAHS, LCTFAS, LCTHAR, LCTWES, LCTSTA, LCC100
Date Issued	<b>12/6/2007</b>
Date Revised	<b>12/3/2009</b>

## Section II - Hazards Identification

### Potential Health Effects

Principal Routes of Exposure	Skin contact
Acute Toxicity	
Eyes	Vapor May cause irritation.
Inhalation	May be harmful if inhaled. Avoid breathing vapors. May cause irritation of respiratory tract. May cause central nervous system depression with nausea, headache, dizziness, and vomiting.
Skin	May be harmful in contact with skin. May cause irritation.
Ingestion	May be harmful if swallowed. May cause gastro-intestinal irritation, nausea, vomiting and diarrhea.
Chronic Effects	Avoid repeated exposure. Contains a known or suspected reproductive toxin.
Aggravated Medical Conditions	Central nervous system. Preexisting eye disorders. Blood Disorders. Kidney disorders. Liver disorders. Overexposure may cause female and male reproductive disorder(s). Skin Disorders. Respiratory disorders.
Interactions with other Chemicals	Use of Alcoholic beverages may enhance toxic effects.

## Section III - Composition/Information on Ingredients

Component	CAS#	%(WT)
Water	773-18-5	60-85
Isopropyl Alcohol	67-63-0	10-30
Anti-Fog	56-81-5	<1
Anti-Static	68391-01-5	<1
Supplier Trade Secret	Proprietary	5-10

## Section IV - First Aid Measures

EYES	Flush well with water, also under eyelids, for at least 15 minutes. Get Medical assistance if symptoms persist.
SKIN	Wash well with soap and water. If irritation persists, or allergic reaction occurs, call a physician.
Inhalation	Remove to fresh air and give oxygen if needed. If not breathing, give artificial respiration and call for Medical assistance.
Ingestion	<b>DO NOT</b> induce vomiting. Rinse Mouth. Drink Plenty of water. Never give anything by mouth to an unconscious person. Consult a physician.
Notes to Physicians	Treat symptomatically

<b>Section V - Fire-Fighting Measures</b>			
<b>Extinguishing Media</b>	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.		
<b>Uniform Fire Code</b>	Irritant: Liquid Combustible Liquid III-B		
<b>Flash Point</b>	Not available		
<b>Hazardous Byproducts of Combustion</b>	Carbon oxides		
<b>Explosion Data</b>			
<b>Sensitivity to Mechanical Impact</b>	Not sensitive		
<b>Sensitivity to Static Discharge</b>	Yes		
<b>Protective Equipment</b>	Wear Self contained breathing apparatus pressure-demand, MSHA/NIOSH approved (or equivalent), and full protective gear.		
<b>Special Precautions - NFPA</b>			
<b>Health Hazard</b>	2		
<b>Flammability</b>	1		
<b>Stability</b>	0		
<b>Section VI - Accidental Release Measures</b>			
<b>Personal Precautions</b>	Use personal protective equipment. Avoid contact with skin and eyes. Remove all sources of ignition.		
<b>Containment Methods</b>	Prevent further leakage or spillage if safe to do so.		
<b>Clean-up Methods</b>	Use personal protective equipment. Soak up with absorbent material. Pick up and transfer to properly labeled containers.		
<b>Section VII - Handling and Storage</b>			
<b>Handling</b>	Handle in accordance with good industrial hygiene and safety practices. Avoid contact with skin and clothing. Wear personal protective equipment. Keep away from open flames, hot surfaces and sources of ignition. Keep out of the reach of children.		
<b>Storage</b>	Keep container tightly closed. Keep away from open flames, hot surfaces and sources of ignition. Keep out of the reach of Children.		
<b>Section VIII - Exposure Controls/Personal Protection</b>			
<b>Exposure Guidelines</b>			
Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Isopropyl Alcohol	+400 ppm STEL TWA: 200 ppm	TWA: 400 ppm TWA: 980 mg/m <sup>3</sup> (vacated) TWA: 400 ppm (vacated) TWA: 980 mg/m <sup>3</sup> (vacated) STEL: 1225 mg/m <sup>3</sup> (vacated) STEL: 500 ppm	IDLH: 2000 ppm 10% LEL TWA: 400 PPM TWA: 980 mg/m <sup>3</sup> STEL: 1225 mg/m <sup>3</sup> STEL: 500 PPM
Supplier Trade Secret	TWA: 20 ppm	TWA: 50 ppm TWA: 240 mg/m <sup>3</sup> (vacated) TWA: 25 ppm (vacated) TWA: 120 mg/m <sup>3</sup> Skin	IDLH: 700 ppm TWA: 5 ppm TWA: 24 mg/m <sup>3</sup>
<b>Engineering Measures</b>		Showers. Eyewash Stations. Ventilation Systems	
<b>Personal Protective Equipment</b>			
<b>Eye &amp; Face Protection</b>		No special equipment required	
<b>Skin &amp; Body Protection</b>		Protective gloves	
<b>Respiratory Protection</b>		If exposure limits are exceeded or irritation is experienced. NIOSH/MSHA approved respiratory protection should be worn. Positive pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.	
<b>Hygiene Measures</b>		When using, do not eat, drink or smoke. Remove and wash contaminated clothing before re-use. Provide regular cleaning of equipment, work area and clothing.	

## Section IX - Physical and Chemical Properties

<b>Appearance</b>	White solid
<b>Odor</b>	Mild Alcohol Smell
<b>Physical State</b>	Solid. Solid containing liquid. Moist paper
<b>pH</b>	7

## Section X - Stability and Reactivity

<b>Stability</b>	Stable under recommended storage conditions
<b>Incompatibility (Material to Avoid)</b>	Strong oxidizing agents. Acids. Chlorinated compounds
<b>Conditions to Avoid</b>	Heat, Flames, Sparks
<b>Hazardous Decomposition or By-Products</b>	Carbon oxides
<b>Hazardous Polymerization</b>	Will Not Occur

## Section XI - Toxicological Information

<b>Acute Toxicity</b>	May be harmful by inhalation, ingestion or skin absorption
-----------------------	--

Chemical Name	LD50 Oral	LD50 Dermal	LD50 Inhalation
Water	90 mL/kg (Rat)		
Isopropyl Alcohol	4396 mg/kg (Rat)	12800 mg/kg (Rat) 2270 mg/kg (Rabbit)	72.6mg/L (Rat) 4h
Supplier Trade Secret	470 mg/kg (Rat)	220 mg/kg (Rat) 2270 mg/kg (Rabbit)	2.21 mg/L (Rat) 4h 450 ppm (rat) 4h

<b>Chronic Toxicity</b>	Avoid repeated exposure. Contains a known or suspected reproductive toxin.
-------------------------	--

### Carcinogenicity

Chemical Name	ACGIH	IARC	NTP	OSHA
Supplier Trade Secret	A3			

ACGIH: American Conference of Governmental Industrial Hygienists

A3: Animal Carcinogen

<b>Target Organ Effects</b>	Blood, Central Nervous System (CNS), Eyes, Hematopoietic System, Kidney, Liver, Respiratory System, Skin.
-----------------------------	---

## Section XII - Ecological Information

### Ecotoxicity

The environmental impact of this product has not been fully investigated. Ecotoxicity effects of component substances follows:

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Isopropyl Alcohol	EC50>1000mg/L 72h EC50>1000mg/L 96h	LC50=61200 mg/L Pimephales promelas 96h LC50=94900 mg/L Pimephales promelas 96h LC50=9640 mg/L Pimephales promelas 96h	EC > 5035390 mg/L 5 min.	EC50 = 13299 mg/L 48h
Supplier Trade Secret		LC50=1490 mg/L Lepomis macrochirus 96h		LC50 1698-1940 mg/L 24h EC50=1720 mg/L 24h

Chemical Name	Log Pow
Isopropyl Alcohol	=0.05 25A deg. C
Supplier Trade Secret	=0.81 25A deg. C

## Section XIII - Disposal Considerations

<b>Waste Disposal Methods</b>	This material as supplied is not a hazardous waste according to Federal regulations (40 CFR 261). This material could become a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local regulations for additional requirements.
-------------------------------	--

<b>Contaminated Materials</b>	Dispose of in accordance with local regulations.
-------------------------------	--

This product contains one or more substances that are listed with the State of California as a hazardous waste:

Chemical Name		California Hazardous Waste Status		
Isopropyl Alcohol		Toxic. Ignitable.		
Section XIV - Transport Information				
DOT, TDG, MEX, ICAO, ITAT, IMDG/IMO, RID, ADR, ADN - Product not regulated.				
Section XV - Regulatory Information				
International Inventories				
TSC -----Complies	IECSC -----Does not comply			
DSL -----Does not comply	KECL -----Does not comply			
EINECS/ELINCS ---Does not comply	PICCS -----Does not comply			
ENCS -----Does not comply	AICS -----Does not comply			
U.S. Federal Regulations				
SARA 313				
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains the following chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, part 372.				
Chemical Name	CAS No.	% by Weight	SARA 313 - Threshold Values %	
Isopropyl Alcohol	67-63-0	10-30	1	
Supplier Trade Secret	Proprietary	5-10	1	
SARA 313/312 Hazard Categories				
Acute Health Hazard	Yes			
Chronic Health Hazard	Yes			
Fire Hazard	No			
Sudden Pressure Release Hazard	No			
Reactive Hazard	No			
Clean Water Act				
This Product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)				
Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	
Isopropyl Alcohol			X	
Clean Air Act, Sec. 112 Hazardous Air Pollutants (HAPS)(see 40 CFR 61)				
This product contains the following substances which are listed hazardous air pollutants (HAPS) under Sec. 112 of the Clean Air Act.				
Chemical Name	CAS No.	% by Weight	HAPs Data	VOC Chemicals
Supplier Trade Secret	Proprietary	5-10	Present (includes mono-and di-ethers of ethylene glycol and triethylene glycol, except ethylene glycol monobutyl ether [EGBE]. See 40 CFR 63.62 for redefinition of glycol ethers listed as hazardous air pollutants.	Group I
CERCLA				
This material as supplied does not contain any substances regulated as hazardous substances under the Comprehensive Environmental response Compensation and Liability Act(CERCLA)(40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA)(40 CFR 355). There may be specific reporting requirements at the local, regional or state level pertaining to releases of this material.				

**U.S. State Regulations****California Proposition 65**

This Product does not contain any Proposition 65 Chemicals.

**International Regulations****Mexico - Grade**

Moderate risk - Grade 2

Chemical Name	Carcinogen Status	Exposure Limits
Isopropyl Alcohol		Mexico: TWA=26 ppm
		Mexico: TWA=120 mg/m3
		Mexico: STEL=360 mg/m3
		Mexico: STEL=75 ppm
Supplier Trade Secret		Mexico: TWA=400 ppm
		Mexico: TWA=980 mg/m3
		Mexico: STEL=1225 mg/m3
		Mexico: STEL=500 ppm

**Canada**

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR), and the MSDS contains all of the information required by the CPR.

**WHMIS Hazard Class**

B3 Combustible Liquid  
D2B Toxic Materials

Chemical Name	National Pollutant Release Inventory
Isopropyl Alcohol	X
Supplier Trade Secret	X

**Section XVI - Other Information**

**Disclaimer:** The information in this MSDS was obtained from sources, which we believe are reliable. However, the information is provided without any representation or warranty, expressed or implied, regarding the accuracy or correctness.

The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, Pyramex Safety Products, LLC and its Divisions and Subsidiaries, Officers and Employees do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product.

## MATERIAL SAFETY DATA SHEET

MSDS 0011

## Section 1 -- PRODUCT AND COMPANY IDENTIFICATION

		HMIS CODES
PRODUCT NAME	RectorSeal No. 5	Health 1 Flammability 2 Reactivity 0
PRODUCT CODES	25112, 25191, 25271, 25300, 25431, 25551, 25552, 25631, 25633, 25780, 25790, 25793	PPI B
CHEMICAL FAMILY	Organic	
USE	Pipe Thread Sealant	
MANUFACTURER'S NAME	The RectorSeal Corporation 2601 Spenwick Drive Houston, Texas 77055 USA	EMERGENCY TELEPHONE NO. Chemtrec 24 Hours (800)424-9300 USA (703)527-3887 International
DATE OF VALIDATION	January 9, 2013	TECHNICAL SERVICE TELEPHONE NO. (800)231-3345 or (713)263-8001
DATE OF PREPARATION	January 9, 2013	

## Section 2 -- HAZARDS IDENTIFICATION

## EMERGENCY OVERVIEW

OSHA Hazards

Combustible

TARGET ORGANS

Not Classified

GHS CLASSIFICATION

PHYSICAL HAZARDS

Combustible liquid (Category 4)

HEALTH HAZARDS

Acute Toxicity:

Oral: Not Classified

Dermal: Not Classified

Inhalation: Not Classified

Skin Corrosion/Irritation: Not Classified

Serious Eye Damage/Eye Irritation: Not Classified

Skin Sensitization: Not Classified

Respiratory Sensitization: Not Classified

Germ Cell Mutagenicity: Not Classified

Carcinogenicity: See Section 11

Reproductive Toxicology: Not Classified

Target Organ Systemic Toxicity - Single Exposure: Not Classified

Target Organ Systemic Toxicity - Repeated Exposure: Not Classified

Aspiration Toxicity: Not Classified

GHS Label elements, including precautionary statements

Pictogram: Harmful / Irritant

Signal Word: Warning

Hazard Statements

H303 - May be harmful if swallowed.

H313 - May be harmful in contact with skin.

H335 + H336 - May cause respiratory irritation, and drowsiness or dizziness.

Precautionary Statements

P102 - Keep out of reach of children.

P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking

P240 - Ground/Bond container and receiving equipment

P261 - Avoid breathing dust/fume/gas/mist/vapors/spray

P262 - Do not get in eyes, on skin, or on clothing.

P264 - Wash hands thoroughly after handling.

P280 - Wear protective gloves/protective clothing/eye protection/face protection.

P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

P362 - Take off contaminated clothing and wash before reuse.

EUH066 - Repeated exposure may cause skin dryness or cracking

Precautionary Statements - EU No. 1272/2008

## SUMMARY OF ACUTE HAZARDS

Irritation to eyes, nose and throat; drowsiness, narcosis, tremors and other CNS effects at high concentration.

## ROUTE OF EXPOSURE, SIGNS AND SYMPTOMS

## INHALATION

Nasal and respiratory irritation, dizziness, narcosis, headache, nausea, CNS depression and unconsciousness.

## EYE CONTACT

Watering, blurred vision, inflammation and irritation which can result in corneal injury.

## SKIN CONTACT

Irritation, dermatitis.

## INGESTION

Nausea, vomiting; CNS depression; irritation of gastrointestinal tract, liver and peritoneal wall; lung congestion.

## SUMMARY OF CHRONIC HAZARDS

Skin irritation and dermatitis. Possible liver and kidney damage.

## MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE

Individuals with pre-existing or chronic diseases of the eyes, skin, respiratory system, cardiovascular system, gastrointestinal system, liver or kidneys may have increased susceptibility to excessive exposures.

## Section 3 -- COMPOSITION/INFORMATION ON INGREDIENTS

-----  
 INGREDIENT: Diacetone Alcohol  
 PERCENTAGE BY WEIGHT: 20-30  
 CAS NUMBER: 123-42-2  
 EC# : 204-626-7  
 =====

## Section 4 -- FIRST AID MEASURES

-----  
 If INHALED: If overcome by exposure, remove victim to fresh air immediately. Give oxygen or artificial respiration as needed. Obtain emergency medical attention. Prompt action is essential.  
 If on SKIN: Wash with soap and water. If irritation occurs, seek medical attention.  
 If in EYES: Flush eyes with large amounts of water for 15 minutes. Get medical attention.  
 If SWALLOWED: If swallowed, call a physician immediately. Only induce vomiting at the instruction of a physician. Never give anything by mouth to an unconscious person.  
 =====

## Section 5 -- FIRE FIGHTING MEASURES

-----  
 EXTINGUISHING MEDIA  
 Foam, dry chemical, carbon dioxide or water fog.  
 SPECIAL FIRE FIGHTING PROCEDURES: Wear self-contained breathing apparatus (SCBA) and other protective clothing. Hazardous decomposition products possible (see Section 10).  
 UNUSUAL FIRE AND EXPLOSION HAZARDS: Combustible - moderate flash point. Vapors heavier than air and may travel along the ground or to low spots at considerable distances to a source of ignition resulting in potential flashback. Burning liquid may float on water. Heat may build up pressure and rupture containers.  
 =====

## Section 6 -- ACCIDENTAL RELEASE MEASURES

-----  
 STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Remove all sources of ignition. Use absorbent materials to prevent footing hazard and to contain. Ventilate area with natural or explosion-proof, forced air ventilation. Avoid flushing into sewers, drains, waterways, and soil. Wear protective clothing and respiratory protection during cleanup.  
 =====

## Section 7 -- HANDLING AND STORAGE

-----  
 PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING: Keep container closed and upright when not in use. Do not store near heat, sparks, or open flames.  
 OTHER PRECAUTIONS: Avoid prolonged or repeated contact with skin or clothing. Empty containers may contain residues; treat as if full and observe all products precautions. Do not reuse empty containers.  
 KEEP OUT OF REACH OF CHILDREN.  
 =====

## Section 8 -- EXPOSURE CONTROLS/PERSONAL PROTECTION

-----  

INGREDIENT	UNITS
Diacetone Alcohol	
ACGIH TLV	50 ppm
OSHA PEL	50 ppm

 =====

RESPIRATORY PROTECTION (SPECIFY TYPE): In confined poorly ventilated areas, use NIOSH/MSHA approved air purifying or supplied air purifying or supplied air respirators.  
 VENTILATION - LOCAL EXHAUST: Acceptable  
 SPECIAL: Explosion-proof equipment.  
 MECHANICAL (GENERAL): Preferable  
 OTHER: N/A  
 PROTECTIVE GLOVES: Wear rubber gloves.  
 EYE PROTECTION: Chemical splash goggles (ANSI Z-87.1 or equivalent)  
 OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Coveralls recommended.  
 WORK/HYGIENIC PRACTICES: Where use can result in skin contact, wash exposed areas thoroughly before eating, drinking, smoking, or leaving work area. Launder contaminated clothing before reuse.  
 =====

## Section 9 -- PHYSICAL AND CHEMICAL PROPERTIES

-----  
 BOILING POINT: 322 F (161 C) @ 760mm Hg  
 SPECIFIC GRAVITY (H20 = 1): 1.38  
 VAPOR PRESSURE (mm Hg): 0.3 @ 68 F (20 C)  
 MELTING POINT: N/A  
 VAPOR DENSITY (AIR = 1): 1.1  
 EVAPORATION RATE (ETHYL ACETATE = 1): 0.14  
 APPEARANCE/ODOR: Yellow Paste/Mild Odor  
 SOLUBILITY IN WATER: 23%  
 VOLATILE ORGANIC COMPOUNDS(VOC)Content (Theoretical Percentage By Weight): 23% or (317 g/L)  
 Flash POINT: 150 F (65 C) SETA CC  
 LOWER EXPLOSION LIMIT: N/D  
 UPPER EXPLOSION LIMIT: N/D  
 =====

## Section 10 -- STABILITY AND REACTIVITY

-----  
 STABILITY: Stable  
 CONDITIONS TO AVOID: Heat, sparks, open flames, and strong oxidizing. Temperatures above 500 F (260 C).  
 INCOMPATIBILITY (MATERIALS TO AVOID): Gaseous oxygen, strong oxidizing materials, molten alkali metals.  
 HAZARDOUS DECOMPOSITION PRODUCTS: CO, CO2 and fragmented hydrocarbons.  
 HAZARDOUS POLYMERIZATION: Will not occur.  
 =====



Section 11 -- TOXICOLOGY INFORMATION

CHRONIC HEALTH HAZARDS

No ingredients in this product is an IARC, NTP or OSHA Lister carcinogen.

TOXICOLOGY DATA

Ingredient Name

Diacetone Alcohol

Oral-Rat LD50:4000 mg/kg  
Inhalation-Human TCLo: 100 ppm

Section 12 -- Ecological Information

ECOLOGICAL DATA

Ingredient Name

Diacetone Alcohol

Food Chain Concentration Potential N/A  
WATERFOWL TOXICITY N/A  
BOD N/A  
AQUATIC TOXICITY N/A

Section 13 -- DISPOSAL CONSIDERATIONS

Waste Classification: Non-regulated solid waste

Disposal Method: Approved landfill

Waste from this product is not considered hazardous as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261. Dispose of in accordance with Federal, State, and Local regulation regarding pollution.

Section 14 -- TRANSPORTATION INFORMATION

DOT: Non-Regulated

OCEAN (IMDG): Non-Regulated

AIR (IATA): Non-Regulated

WHMIS (CANADA): Non-Regulated

Section 15 -- REGULATORY INFORMATION

REGULATORY DATA

Ingredient Name

Diacetone Alcohol

SARA 313 N/A  
TSCA Inventory Yes  
CERCLA RQ N/A  
RCRA Code N/A

Section 16 -- OTHER INFORMATION

This document is prepared pursuant to the OSHA Hazard Communication Standard (29 CFR 1910.1200). The information herein is given in good faith, but no warranty, expressed or implied is made. Consult RectorSeal for further information: (713) 263-8001



SAFETY DATA SHEET

RECTORSEAL® NO.5® SPECIAL

Low-temperature, low-odor pipe thread sealant

SECTION 1 – PRODUCT AND COMPANY INFORMATION

Product Name

Rectorseal® No.5® Special

Product Codes

26551, 26431, 26390, 26271, 26191, 26112

Chemical Family

Organic

Use

Pipe thread sealant

Manufacturer's Name

The RectorSeal Corporation  
2601 Spenwick Drive  
Houston, Texas 77055 USA

Date of Validation

January 23, 2015

Date of Preparation

October 10, 2012

HMIS Codes

Health 1  
Flammability 1  
Reactivity 0  
PPI B

Emergency Telephone No.

Chemtrec 24 Hours  
(800)-424-9300 USA  
(703)-527-3887 International

Technical Service Telephone No.

(800)-231-3345 or (713)-263-8001

SECTION 2 – HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

OSHA Hazards

Target Organ Effect, Teratogen, Reproductive hazard

Target Organs

Liver, Kidney, Testes.

GHS CLASSIFICATION

Eye irritation (Category 2B)  
Reproductive toxicity (Category 2)

## GHS Label elements, including precautionary statements



GHS08: Health Hazard/ Target Organ Toxicity

Signal word: **Warning**

### Hazard statement(s)

H320 - Causes eye irritation.

H361 - Suspected of damaging fertility or the unborn child.

### Precautionary statement(s)

P281 - Use personal protective equipment as required.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

## Summary Of Acute Hazards

Irritation to eyes, nose and throat; drowsiness, narcosis, tremors and other CNS effects at high concentration.

## Route Of Exposure, Signs And Symptoms

### INHALATION

Nasal and respiratory irritation, dizziness, narcosis, headache, nausea, CNS depression and unconsciousness.

### EYE CONTACT

Watering, blurred vision, inflammation and irritation which can result in corneal injury.

### SKIN CONTACT

Irritation, dermatitis.

### INGESTION

Nausea, vomiting; CNS depression; irritation of gastrointestinal tract, liver and peritoneal wall; lung congestion.

## SUMMARY OF CHRONIC HAZARDS

Skin irritation and dermatitis. Possible liver and kidney damage.

## MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE

Individuals with pre-existing or chronic diseases of the eyes, skin, respiratory system, cardiovascular system, gastrointestinal system, liver or kidneys may have increased susceptibility to excessive exposures.

## SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient:	Diethylene Glycol Methyl Ether
Percentage by weight:	16 Max
CAS Number:	111-77-3
EC#:	203-906-6

## SECTION 4 – FIRST AID MEASURES

- If inhaled: If overcome by exposure, remove victim to fresh air immediately. Give oxygen or artificial respiration as needed. Obtain emergency medical attention. Prompt action is essential.
- If on skin: Immediately flush with large amounts of water for at least 15 minutes. Get prompt medical attention.
- If in eyes: Flush eyes with large amounts of water for 15 minutes. Get medical attention.
- If swallowed: If swallowed, call a physician immediately. Only induce vomiting at the instruction of a physician. Never give anything by mouth to an unconscious person.

## SECTION 5 – FIRE FIGHTING MEASURES

### Extinguishing Media

Foam, dry chemical, carbon dioxide or water fog.

**Special Fire Fighting Procedures:** Wear self-contained breathing apparatus (SCBA) and other protective clothing. Hazardous decomposition products possible (see Section 10).

**Unusual Fire And Explosion Hazards:** None known.

## SECTION 6 – ACCIDENTAL RELEASE MEASURES

**Steps To Be Taken In Case Material Is Released Or Spilled:** Remove all sources of ignition. Use absorbent materials to prevent footing hazard and to contain. Ventilate area with natural or explosion-proof, forced air ventilation. Avoid flushing into sewers, drains, waterways, and soil. Wear protective clothing and respiratory protection during cleanup.

## SECTION 7 – HANDLING AND STORAGE

**Precautions To Be Taken In Handling And Storing:** Keep container closed and upright when not in use. Do not store near heat, sparks, or open flames.

**Other Precautions:** Avoid prolonged or repeated contact with skin or clothing. Empty containers may contain residues; treat as if full and observe all products precautions. Do not reuse empty containers.

KEEP OUT OF REACH OF CHILDREN.

## SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredient Units

### Diethylene Glycol Methyl Ether

ACGIH TLV: N/D

OSHA PEL: N/D

**Respiratory Protection (Specify Type):** In confined poorly ventilated areas, use NIOSH/MSHA approved air purifying or supplied air purifying or supplied air respirators.

**Ventilation – Local Exhaust:** Acceptable

**Special:** Explosion-proof equipment.

**Mechanical (General):** Preferable

**Other:** N/A

**Protective Gloves:** Wear rubber gloves.

**Eye Protection:** Chemical splash goggles (ANSI Z-87.1 or equivalent)

**Other Protective Clothing Or Equipment:** Coveralls recommended.

**Work/Hygienic Practices:** Where use can result in skin contact, wash exposed areas thoroughly before eating, drinking, smoking, or leaving work area. Launder contaminated clothing before reuse.

## SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Boiling point: 374°F (190°C) @ 760 mmHg

Specific gravity (H<sub>2</sub>O = 1): 1.40

Vapor pressure (mmHg): 0.25 @ 77°F (20°C)

Melting point: N/A

Vapor Density (Air = 1): >1

Evaporation rate (Ethyl Acetate = 1): <1

Appearance/Odor: Gray paste/Mild odor

Solubility in water: 16%

Volatile Organic Compounds (VOC) Content  
(theoretical percentage by weight): 16% or (160 g/L)

Flash point: 208°F (98°C) SETA CC

Lower explosion limit: N/D

Upper explosion limit: N/D

## SECTION 10 – STABILITY AND REACTIVITY

**Stability:** Stable

**Conditions To Avoid:** Heat, sparks, open flames, and strong oxidizing. Temperatures above 500°F (260°C).

**Incompatibility (Materials To Avoid):** Gaseous oxygen, strong oxidizing materials, molten alkali metals.

**Hazardous Decomposition Products:** CO, CO<sub>2</sub> and fragmented hydrocarbons.

**Hazardous Polymerization:** Will not occur.

## SECTION 11 – TOXICOLOGY INFORMATION

### Chronic Health Hazards

No ingredient in this product is an IARC, NTP or OSHA Lister carcinogen.

### Toxicology Data

#### Diethylene Glycol Methyl Ether

Oral-Rat LD50: 5500 mg/kg  
Inhalation-Rat LC50: N/D

## SECTION 12 – ECOLOGICAL INFORMATION

### Ecological Data

Ingredient Name:	<b>Diethylene Glycol Methyl Ether</b>
Food Chain Concentration Potential	N/A
Waterfowl Toxicity	N/A
BOD	34%
Aquatic Toxicity	N/A

## SECTION 13 – DISPOSAL CONSIDERATIONS

**Waste Classification:** Non-regulated solid waste

**Disposal Method:** Approved landfill

Waste from this product is not considered hazardous as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261. Dispose of in accordance with federal, state, and local regulation regarding pollution.

## SECTION 14 – TRANSPORTATION INFORMATION

DOT:	Non-regulated
Ocean (IMDG):	Non-regulated
Air (IATA):	Non-regulated
WHMIS (Canada):	Non-regulated

## SECTION 15 – REGULATORY INFORMATION

### Regulatory Data

Ingredient Name:	Diethylene Glycol Methyl Ether
SARA 313	Yes
TSCA Inventory	Yes
CERCLA RQ	N/A
RCRA Code	N/A

## SECTION 16 – OTHER INFORMATION

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Consult RectorSeal for further information: (713) 263-8001

# Safety Data Sheet



## 1. Identification

<b>Product Name:</b>	ROHPER LSPR 6PK FLAT COLD GALV COMPOUND	<b>Revision Date:</b>	11/5/2018
<b>Product Identifier:</b>	V2185838	<b>Supersedes Date:</b>	11/5/2018
<b>Recommended Use:</b>	Galvanizing Compound/Aerosol		
<b>Supplier:</b>	Rust-Oleum Corporation 11 Hawthorn Parkway Vernon Hills, IL 60061 USA	<b>Manufacturer:</b>	Rust-Oleum Corporation 11 Hawthorn Parkway Vernon Hills, IL 60061 USA
	Rust-Oleum Canada (ROCA) 200 Confederation Parkway Concord, ON L4K 4T8 Canada Emergency Phone: 800-387-3625		
<b>Preparer:</b>	Regulatory Department		
<b>Emergency Telephone:</b>	24 Hour Hotline: 847-367-7700		

## 2. Hazard Identification

### Classification

### Symbol(s) of Product



### Signal Word

Danger

### Possible Hazards

17% of the mixture consists of ingredient(s) of unknown acute toxicity.

### GHS HAZARD STATEMENTS

Flammable Aerosol, category 1	H222	Extremely flammable aerosol.
Compressed Gas	H280	Contains gas under pressure; may explode if heated.
Carcinogenicity, category 2	H351	Suspected of causing cancer.
STOT, repeated exposure, category 1	H372	Causes damage to organs through prolonged or repeated exposure.
Acute Toxicity, Oral, category 4	H302	Harmful if swallowed.

### GHS LABEL PRECAUTIONARY STATEMENTS

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P211	Do not spray on an open flame or other ignition source.
P251	Do not pierce or burn, even after use.
P410+P412	Protect from sunlight. Do not expose to temperatures exceeding 50°C / 122°F.
P410+P403	Protect from sunlight. Store in a well-ventilated place.
P201	Obtain special instructions before use.



P280	Wear protective gloves/protective clothing/eye protection/face protection.
P308+P313	IF exposed or concerned: Get medical advice/attention.
P405	Store locked up.
P501	Dispose of contents/container in accordance with local, regional and national regulations.
P260	Do not breathe dust/fume/gas/mist/vapors/spray.
P264	Wash hands thoroughly after handling.
P314	Get medical advice/attention if you feel unwell.
P330	Rinse mouth.
P301+P312	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

**GHS SDS PRECAUTIONARY STATEMENTS**

P270 Do not eat, drink or smoke when using this product.

### 3. Composition / Information On Ingredients

**HAZARDOUS SUBSTANCES**

<u>Chemical Name</u>	<u>CAS-No.</u>	<u>Wt.%</u>	<u>GHS Symbols</u>	<u>GHS Statements</u>
Zinc	7440-66-6	48	GHS07	H302
n-Butyl Acetate	123-86-4	20	GHS02-GHS07	H226-336
Propane	74-98-6	10	GHS04	H280
Hydrotreated Light Distillate	64742-47-8	5.7	GHS08	H304
n-Butane	106-97-8	4.8	GHS04	H280
Xylenes (o-, m-, p- isomers)	1330-20-7	3.6	GHS02-GHS07	H226-315-319-332
Zinc Oxide	1314-13-2	1.7	Not Available	Not Available
Stoddard Solvent	8052-41-3	1.6	GHS08	H304-372
Ethylbenzene	100-41-4	0.8	GHS02-GHS07-GHS08	H225-304-332-351-373

### 4. First-Aid Measures

**FIRST AID - EYE CONTACT:** Immediately flush eyes with plenty of water for at least 15 minutes holding eyelids open. Get medical attention. Do NOT allow rubbing of eyes or keeping eyes closed.

**FIRST AID - SKIN CONTACT:** Wash skin with soap and water. Remove contaminated clothing. Get medical attention if irritation develops or persists.

**FIRST AID - INHALATION:** Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get immediate medical attention. Do NOT use mouth-to-mouth resuscitation. If you experience difficulty in breathing, leave the area to obtain fresh air. If continued difficulty is experienced, get medical assistance immediately.

**FIRST AID - INGESTION:** Aspiration hazard: Do not induce vomiting or give anything by mouth because this material can enter the lungs and cause severe lung damage. Get immediate medical attention. If swallowed, get medical attention.

### 5. Fire-Fighting Measures

**EXTINGUISHING MEDIA:** Alcohol Film Forming Foam, Carbon Dioxide, Dry Chemical, Dry Sand, Water Fog

**UNUSUAL FIRE AND EXPLOSION HAZARDS:** FLASH POINT IS LESS THAN 20°F. EXTREMELY FLAMMABLE LIQUID AND VAPOR! Water spray may be ineffective. Closed containers may explode when exposed to extreme heat due to buildup of steam. Closed containers may explode when exposed to extreme heat. Vapors may form explosive mixtures with air. Vapors can travel to a source of ignition and flash back. Isolate from heat, electrical equipment, sparks and open flame. Perforation of the pressurized container may cause bursting of the can. No unusual fire or explosion hazards noted. Keep containers tightly closed.

**SPECIAL FIREFIGHTING PROCEDURES:** Full protective equipment including self-contained breathing apparatus should be used. Evacuate area and fight fire from a safe distance. Water may be used to cool closed containers to prevent pressure buildup and possible autoignition or explosion. Use water spray to keep fire-exposed containers cool. Containers may explode when heated.

**Special Fire and Explosion Hazard (Combustible Dust):** No Information

## 6. Accidental Release Measures

**STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:** Contain spilled liquid with sand or earth. DO NOT use combustible materials such as sawdust. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Remove all sources of ignition, ventilate area and remove with inert absorbent and non-sparking tools. Dispose of according to local, state (provincial) and federal regulations. Do not incinerate closed containers. Ventilate area, isolate spilled material, and remove with inert absorbent. Dispose of contaminated absorbent, container, and unused contents in accordance with local, state, and federal regulations.

## 7. Handling and Storage

**HANDLING:** Wash thoroughly after handling. Wash hands before eating. Remove contaminated clothing and launder before reuse. Use only with adequate ventilation. Follow all SDS and label precautions even after container is emptied because it may retain product residues. Avoid breathing fumes, vapors, or mist. Avoid contact with eyes, skin and clothing.

**STORAGE:** Keep containers tightly closed. Isolate from heat, electrical equipment, sparks and open flame. Contents under pressure. Do not store above 120 ° F. Store large quantities in buildings designed and protected for storage of flammable aerosols. Product should be stored in tightly sealed containers and protected from heat, moisture, and foreign materials. Store in a dry, well ventilated place. Keep container tightly closed when not in use. Keep away from heat, sparks, flame and sources of ignition. Avoid excess heat.

**Advice on Safe Handling of Combustible Dust:** No Information

## 8. Exposure Controls / Personal Protection

Chemical Name	CAS-No.	Weight % Less Than	ACGIH TLV- TWA	ACGIH TLV- STEL	OSHA PEL-TWA	OSHA PEL- CEILING
Zinc	7440-66-6	50.0	N.E.	N.E.	N.E.	N.E.
n-Butyl Acetate	123-86-4	20.0	50 ppm	150 ppm	150 ppm	N.E.
Propane	74-98-6	15.0	N.E.	N.E.	1000 ppm	N.E.
Hydrotreated Light Distillate	64742-47-8	10.0	N.E.	N.E.	N.E.	N.E.
n-Butane	106-97-8	5.0	N.E.	1000 ppm	N.E.	N.E.
Xylenes (o-, m-, p- isomers)	1330-20-7	5.0	100 ppm	150 ppm	100 ppm	N.E.
Zinc Oxide	1314-13-2	5.0	2 mg/m <sup>3</sup>	10 mg/m <sup>3</sup>	5 mg/m <sup>3</sup>	N.E.
Stoddard Solvent	8052-41-3	5.0	100 ppm	N.E.	500 ppm	N.E.
Ethylbenzene	100-41-4	1.0	20 ppm	N.E.	100 ppm	N.E.

### PERSONAL PROTECTION

**ENGINEERING CONTROLS:** Use explosion-proof ventilation equipment. Provide general dilution of local exhaust ventilation in volume and pattern to keep TLV of hazardous ingredients below acceptable limits. Prevent build-up of vapors by opening all doors and windows to achieve cross-ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.

**RESPIRATORY PROTECTION:** A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use. A NIOSH/MSHA approved air purifying respirator with organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits.

**SKIN PROTECTION:** Use gloves to prevent prolonged skin contact. Nitrile or Neoprene gloves may afford adequate skin protection.

**EYE PROTECTION:** Use safety eyewear designed to protect against splash of liquids.

**OTHER PROTECTIVE EQUIPMENT:** Refer to safety supervisor or industrial hygienist for further guidance regarding types of personal protective equipment and their applications.

**HYGIENIC PRACTICES:** Wash thoroughly with soap and water before eating, drinking or smoking. Remove contaminated clothing immediately and launder before reuse.

**Engineering Measures for Combustible Dust:** No Information

## 9. Physical and Chemical Properties

<b>Appearance:</b>	Aerosolized Mist	<b>Physical State:</b>	Liquid
<b>Odor:</b>	Solvent Like	<b>Odor Threshold:</b>	N.E.
<b>Relative Density:</b>	1.322	<b>pH:</b>	N.A.
<b>Freeze Point, °C:</b>	N.D.	<b>Viscosity:</b>	N.D.
<b>Solubility in Water:</b>	Slight	<b>Partition Coefficient, n-octanol/ water:</b>	N.D.
<b>Decomposition Temp., °C:</b>	N.D.	<b>Explosive Limits, vol%:</b>	0.8 - 9.5
<b>Boiling Range, °C:</b>	-37 - 204	<b>Flash Point, °C:</b>	-96
<b>Flammability:</b>	Supports Combustion	<b>Auto-ignition Temp., °C:</b>	N.D.
<b>Evaporation Rate:</b>	Faster than Ether	<b>Vapor Pressure:</b>	N.D.
<b>Vapor Density:</b>	Heavier than Air		

(See "Other information" Section for abbreviation legend)

## 10. Stability and Reactivity

**CONDITIONS TO AVOID:** Avoid temperatures above 120°F (49°C). Avoid all possible sources of ignition.

**INCOMPATIBILITY:** Incompatible with strong oxidizing agents, strong acids and strong alkalies.

**HAZARDOUS DECOMPOSITION:** By open flame, carbon monoxide and carbon dioxide. When heated to decomposition, it emits acrid smoke and irritating fumes. Contains solvents which may form carbon monoxide, carbon dioxide, and formaldehyde.

**HAZARDOUS POLYMERIZATION:** Will not occur under normal conditions.

**STABILITY:** This product is stable under normal storage conditions.

## 11. Toxicological Information

**EFFECTS OF OVEREXPOSURE - EYE CONTACT:** Causes Serious Eye Irritation

**EFFECTS OF OVEREXPOSURE - SKIN CONTACT:** May cause skin irritation. Allergic reactions are possible.

**EFFECTS OF OVEREXPOSURE - INHALATION:** High gas, vapor, mist or dust concentrations may be harmful if inhaled. High vapor concentrations are irritating to the eyes, nose, throat and lungs. Harmful if inhaled. Avoid breathing fumes, spray, vapors, or mist. Prolonged or excessive inhalation may cause respiratory tract irritation.

**EFFECTS OF OVEREXPOSURE - INGESTION:** Harmful if swallowed.

**EFFECTS OF OVEREXPOSURE - CHRONIC HAZARDS:** Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Overexposure to xylene in laboratory animals has been associated with liver abnormalities, kidney, lung, spleen, eye and blood damage as well as reproductive disorders. Effects in humans, due to chronic overexposure, have included liver, cardiac abnormalities and nervous system damage. IARC lists Ethylbenzene as a possible human carcinogen (group 2B). May cause central nervous system disorder (e.g., narcosis involving a loss of coordination, weakness, fatigue, mental confusion, and blurred vision) and/or damage. High concentrations may lead to central nervous system effects (drowsiness, dizziness, nausea, headaches, paralysis, and blurred vision) and/or damage.

**PRIMARY ROUTE(S) OF ENTRY:** Eye Contact, Ingestion, Inhalation, Skin Absorption, Skin Contact

### ACUTE TOXICITY VALUES

The acute effects of this product have not been tested. Data on individual components are tabulated below:

<u>CAS-No.</u>	<u>Chemical Name</u>	<u>Oral LD50</u>	<u>Dermal LD50</u>	<u>Vapor LC50</u>
7440-66-6	Zinc	630 mg/kg Rat	N.E.	N.E.
123-86-4	n-Butyl Acetate	10768 mg/kg Rat	>17600 mg/kg Rabbit	> 21 mg/L Rat
64742-47-8	Hydrotreated Light Distillate	>5000 mg/kg Rat	>2000 mg/kg Rabbit	>5000 mg/L Rat
106-97-8	n-Butane	N.E.	N.E.	658 mg/L Rat
1330-20-7	Xylenes (o-, m-, p- isomers)	3500 mg/kg Rat	>4350 mg/kg Rabbit	29.08 mg/L Rat
1314-13-2	Zinc Oxide	>5000 mg/kg Rat	N.E.	N.E.
100-41-4	Ethylbenzene	3500 mg/kg Rat	15400 mg/kg Rabbit	17.4 mg/L Rat

N.E. - Not Established

## 12. Ecological Information

**ECOLOGICAL INFORMATION:** Product is a mixture of listed components.

## 13. Disposal Information

**DISPOSAL INFORMATION:** Do not incinerate closed containers. This product as supplied is a USEPA defined ignitable hazardous waste. Dispose of unusable product as a hazardous waste (D001) in accordance with local, state, and federal regulation.

## 14. Transport Information

	<u>Domestic (USDOT)</u>	<u>International (IMDG)</u>	<u>Air (IATA)</u>	<u>TDG (Canada)</u>
<b>UN Number:</b>	N.A.	1950	1950	N.A.
<b>Proper Shipping Name:</b>	Paint and Related Spray Products in Ltd Qty	Aerosols	Aerosols, flammable	Aerosols
<b>Hazard Class:</b>	N.A.	2	2.1	N.A.
<b>Packing Group:</b>	N.A.	N.A.	N.A.	N.A.
<b>Limited Quantity:</b>	Yes	Yes	Yes	Yes

## 15. Regulatory Information

### U.S. Federal Regulations:

#### CERCLA - SARA Hazard Category

This product has been reviewed according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

Gas under pressure, Carcinogenicity, Acute Toxicity (any route of exposure), Specific target organ toxicity (single or repeated exposure)

#### Sara Section 313:

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372:

<u>Chemical Name</u>	<u>CAS-No.</u>
Zinc	7440-66-6
Xylenes (o-, m-, p- isomers)	1330-20-7
Zinc Oxide	1314-13-2
Ethylbenzene	100-41-4

#### Toxic Substances Control Act:

This product contains the following chemical substances subject to the reporting requirements of TSCA 12(b) if exported from the United States:

No TSCA 12(b) components exist in this product.

### U.S. State Regulations:

#### California Proposition 65:

**WARNING:** Cancer and Reproductive Harm - [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

**16. Other Information****HMIS RATINGS**

**Health:** 2\*    **Flammability:** 4    **Physical Hazard:** 0    **Personal Protection:** X

**NFPA RATINGS**

**Health:** 2    **Flammability:** 4    **Instability:** 0

**Maximum Incremental Reactivity:** 0.68

**SDS REVISION DATE:** 11/5/2018

**REASON FOR REVISION:** Substance and/or Product Properties Changed in Section(s):  
01 - Identification

Legend: N.A. - Not Applicable, N.E. - Not Established, N.D. - Not Determined

The manufacturer believes, to the best of its knowledge, information and belief, the information contained herein to be accurate and reliable as of the date of this safety data sheet. However, because the conditions of handling, use, and storage of these materials are beyond our control, we assume no responsibility or liability for personal injury or property damage incurred by the use of these materials. The manufacturer makes no warranty, expressed or implied, regarding the accuracy or reliability of the data or results obtained from their use. All materials may present unknown hazards and should be used with caution. The information and recommendations in this material safety data sheet are offered for the users' consideration and examination. It is the responsibility of the user to determine the final suitability of this information and to comply with all applicable international, federal, state, and local laws and regulations.

**Safety Data Sheet**  
 according to 1907/2006/EC (REACH),  
 1272/2008/EC (CLP), and GHS

Printing date 2/25/2013

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### 1 Identification of the substance/mixture and of the company/undertaking

- **1.1 Product identifier**
- **Trade name: Ronsonol Lighter Fluid**
- **CAS Number:**  
68410-97-9
- **Application of the substance / the preparation Fuel**
- **1.3 Details of the supplier of the Safety Data Sheet**
- **Manufacturer/Supplier:**  
Zippo Manufacturing Company  
33 Barbour Street  
Bradford, PA 16701  
Phone: 814-368-2700
- **Further information obtainable from:** Product Safety Department
- **1.4 Emergency telephone number:**  
ChemTel Inc.  
(800)255-3924, +1 (813)248-0585



### 2 Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**



GHS02 flame

Flam. Liq. 2 H225 Highly flammable liquid and vapour.



GHS08 health hazard

Asp. Tox. 1 H304 May be fatal if swallowed and enters airways.

- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**



Xn; Harmful

R65: Harmful: may cause lung damage if swallowed.



F; Highly flammable

R11: Highly flammable.

- **Information concerning particular hazards for human and environment:**

The classification as a carcinogen or mutagen need not apply if it can be shown that the substance contains less than 0,1 % w/w benzene (CAS No 71-43-2 / EINECS No 200-753-7). This product contains less than 0.1% benzene by weight and is not classified as carcinogenic.

- **2.2 Label elements**

- **Labelling according to Regulation (EC) No 1272/2008**

The substance is classified and labelled according to the CLP regulation.

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## · Hazard pictograms



GHS02 GHS08

## · Signal word Danger

## · Hazard-determining components of labelling:

Distillates (petroleum), light distillate hydrotreating process, low-boiling

## · Hazard statements

H225 Highly flammable liquid and vapour.

H304 May be fatal if swallowed and enters airways.

Restricted to professional users.

## · Precautionary statements

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P103 Read label before use.

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P241 Use explosion-proof electrical/ventilating/lighting/equipment.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P240 Ground/bond container and receiving equipment.

P233 Keep container tightly closed.

P242 Use only non-sparking tools.

P243 Take precautionary measures against static discharge.

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

P331 Do NOT induce vomiting.

P370+P378 In case of fire: Use for extinction: CO2, powder or water spray.

P405 Store locked up.

P403+P235 Store in a well-ventilated place. Keep cool.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

## · Hazard description:

## · WHMIS-symbols:

B2 - Flammable liquid



## · NFPA ratings (scale 0 - 4)



Health = 1

Fire = 3

Reactivity = 0

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- **HMIS-ratings (scale 0 - 4)**

HEALTH	1	Health = *1
FIRE	3	Fire = 3
REACTIVITY	0	Reactivity = 0

- **2.3 Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

### 3 Composition/information on ingredients

- **3.1 Substances**
- **CAS No. Description**  
68410-97-9 Distillates (petroleum), light distillate hydrotreating process, low-boiling
- **Dangerous components:** N/A
- **Additional information:**  
The classification as a carcinogen or mutagen need not apply if it can be shown that the substance contains less than 0,1 % w/w benzene (CAS No 71-43-2 / EINECS No 200-753-7). This product contains less than 0.1% benzene by weight and is not classified as carcinogenic.

### 4 First aid measures

- **4.1 Description of first aid measures**
- **After inhalation:**  
Supply fresh air; consult doctor in case of complaints.  
In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:**  
Immediately wash with water and soap and rinse thoroughly.  
If skin irritation continues, consult a doctor.
- **After eye contact:**  
Remove contact lenses if worn.  
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:**  
Do not induce vomiting; call for medical help immediately.  
Rinse out mouth and then drink plenty of water.  
A person vomiting while laying on their back should be turned onto their side.
- **4.2 Most important symptoms and effects, both acute and delayed**  
No further relevant information available.
- **Hazards** Danger of pulmonary oedema.
- **4.3 Indication of any immediate medical attention and special treatment needed**  
If swallowed or in case of vomiting, danger of entering the lungs.

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**5 Firefighting measures**

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:** CO<sub>2</sub>, sand, extinguishing powder. Do not use water.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **5.2 Special hazards arising from the substance or mixture** No further relevant information available.
- **5.3 Advice for firefighters**
- **Protective equipment:**  
Wear self-contained respiratory protective device.  
Wear fully protective suit.
- **Additional information** Cool endangered receptacles with water spray.

**6 Accidental release measures**

- **6.1 Personal precautions, protective equipment and emergency procedures**  
Wear protective equipment. Keep unprotected persons away.  
Ensure adequate ventilation  
Particular danger of slipping on leaked/spilled product.
- **6.2 Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
Dispose contaminated material as waste according to item 13.  
Do not flush with water or aqueous cleansing agents
- **6.4 Reference to other sections**  
See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

**7 Handling and storage**

- **7.1 Precautions for safe handling**  
Ensure good ventilation/exhaustion at the workplace.  
Prevent formation of aerosols.
- **Information about fire - and explosion protection:**  
Keep ignition sources away - Do not smoke.  
Protect from heat.  
Protect against electrostatic charges.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Store in a cool location.
- **Information about storage in one common storage facility:**  
Store away from oxidizing agents.  
Store away from foodstuffs.
- **Further information about storage conditions:**  
Store in cool, dry conditions in well sealed receptacles.

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- Protect from heat and direct sunlight.  
 · **7.3 Specific end use(s)** No further relevant information available.

## 8 Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.

- **8.1 Control parameters**

- **Ingredients with limit values that require monitoring at the workplace:**

**68410-97-9 Distillates (petroleum), light distillate hydrotreating process, low-boiling**

PEL (USA)	Short-term value: 5 mg/m <sup>3</sup>
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As Mist

TLV (USA)	Short-term value: 5 mg/m <sup>3</sup>
-----------	---------------------------------------

Inhalable Fraction

- **Additional information:** The lists valid during the making were used as basis.

- **8.2 Exposure controls**

- **Personal protective equipment:**

- **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.

Wash hands before breaks and at the end of work.

- **Respiratory protection:** Use suitable respiratory protective device in case of insufficient ventilation.

- **Protection of hands:** Not required.

- **Material of gloves:** Not required.

- **Eye protection:**



Safety glasses

## 9 Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**

- **General Information**

- **Appearance:**

<b>Form:</b>	Liquid
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<b>Colour:</b>	According to product specification
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- **Odour:** Characteristic

- **Odour threshold:** Not determined.

- **pH-value:** Not determined.

- **Change in condition**

<b>Melting point/Melting range:</b>	Undetermined.
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<b>Boiling point/Boiling range:</b>	45°C (113 °F)
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· <b>Flash point:</b>	- 7°C (20°F)
· <b>Flammability (solid, gaseous):</b>	Not applicable.
· <b>Ignition temperature:</b>	
· <b>Decomposition temperature:</b>	Not determined.
· <b>Self-igniting:</b>	Product is not selfigniting.
· <b>Danger of explosion:</b>	Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
· <b>Explosion limits:</b>	
<b>Lower:</b>	Not determined.
<b>Upper:</b>	Not determined.
· <b>Vapour pressure:</b>	Not determined.
· <b>Density at 20°C:</b>	0,71 g/cm <sup>3</sup>
· <b>Relative density</b>	Not determined.
· <b>Vapour density</b>	Not determined.
· <b>Evaporation rate at 20°C</b>	> 1 (Water = 1)
· <b>Solubility in / Miscibility with water:</b>	Not miscible or difficult to mix.
· <b>Segregation coefficient (n-octanol/water):</b>	Not determined.
· <b>Viscosity:</b>	
<b>Dynamic:</b>	Not determined.
<b>Kinematic:</b>	Not determined.
· <b>9.2 Other information</b>	No further relevant information available.

**10 Stability and reactivity**

- **10.1 Reactivity**
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:**  
No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions**  
Forms explosive gas mixture with air.  
Can react violently with oxygen rich (oxidizing) material. Danger of Explosion.  
Flammable vapour-air mixtures may develop if stored in large receptacles and above room temperature.
- **10.4 Conditions to avoid**  
Keep ignition sources away - Do not smoke.  
Store away from oxidizing agents.
- **10.5 Incompatible materials:** No further relevant information available.

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· **10.6 Hazardous decomposition products:** Carbon monoxide and carbon dioxide

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**11 Toxicological information**

- **11.1 Information on toxicological effects**
- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:** Vapours have narcotic effect.

**12 Ecological information**

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability** Not easily biodegradable
- **12.3 Bioaccumulative potential** May be accumulated in organism
- **12.4 Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**  
 Water hazard class 3 (German Regulation) (Self-assessment): extremely hazardous for water  
 Do not allow product to reach ground water, water course or sewage system, even in small quantities.  
 Danger to drinking water if even extremely small quantities leak into the ground.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

**13 Disposal considerations**

- **13.1 Waste treatment methods**
- **Recommendation**  
 Can be burned with household garbage after consulting with the waste disposal facility operator and the pertinent authorities and adhering to the necessary technical regulations.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

**14 Transport information**

- **14.1 UN-Number**
- **DOT, ADR, IMDG, IATA** UN1268

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· 14.2 UN proper shipping name	PETROLEUM DISTILLATES, N.O.S.
· DOT, IMDG, IATA	
· ADR	1268 PETROLEUM DISTILLATES, N.O.S.

· 14.3 Transport hazard class(es)

· DOT



· Class	3 Flammable liquids.
· Label	3

· ADR



· Class	3 (F1) Flammable liquids.
· Label	3

· IMDG, IATA



· Class	3 Flammable liquids.
· Label	3

· 14.4 Packing group

· DOT, ADR, IMDG, IATA II

· 14.5 Environmental hazards:

· Marine pollutant: No

· 14.6 Special precautions for user

Warning: Flammable liquids.

· Danger code (Kemler):

33

· EMS Number:

F-E, S-E

· 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable.

· Transport/Additional information:

· ADR

· Tunnel restriction code

D/E

· UN "Model Regulation":

UN1268, PETROLEUM DISTILLATES, N.O.S., 3, II

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**15 Regulatory information**

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **United States (USA)**
- **SARA**

- **Section 355 (extremely hazardous substances):**

Substance is not listed.

- **Section 313 (Specific toxic chemical listings):**

Substance is not listed.

- **TSCA (Toxic Substances Control Act):**

Substance is listed.

- **Proposition 65 (California):**

- **Chemicals known to cause cancer:**

Substance is not listed.

- **Chemicals known to cause reproductive toxicity for females:**

Substance is not listed.

- **Chemicals known to cause reproductive toxicity for males:**

Substance is not listed.

- **Chemicals known to cause developmental toxicity:**

Substance is not listed.

- **Carcinogenic Categories**

- **EPA (Environmental Protection Agency)**

Substance is not listed.

- **TLV (Threshold Limit Value established by ACGIH)**

Substance is not listed.

- **NIOSH-Ca (National Institute for Occupational Safety and Health)**

Substance is not listed.

- **OSHA-Ca (Occupational Safety & Health Administration)**

Substance is not listed.

- **Canada**

- **Canadian Domestic Substances List (DSL)**

Substance is listed.

- **Canadian Ingredient Disclosure list (limit 0.1%)**

Substance is not listed.

- **Canadian Ingredient Disclosure list (limit 1%)**

Ingredients are listed as required.

Substance is not listed.

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**15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.**16 Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

**Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)  
IMDG: International Maritime Code for Dangerous Goods  
DOT: US Department of Transportation  
IATA: International Air Transport Association  
GHS: Globally Harmonized System of Classification and Labelling of Chemicals  
ACGIH: American Conference of Governmental Industrial Hygienists  
CAS: Chemical Abstracts Service (division of the American Chemical Society)  
NFPA: National Fire Protection Association (USA)  
HMIS: Hazardous Materials Identification System (USA)  
WHMIS: Workplace Hazardous Materials Information System (Canada)

# Material Safety Data Sheet

24 Hour Assistance:  
1-847-367-7700  
Rust-Oleum Corp.  
www.rustoleum.com

## Section 1 - Chemical Product / Company Information

Product Name: Rust-Oleum High Performance Industrial Enamel Aerosol Topcoats (Hard Hat) Revision Date: 04/05/2006

Identification Number: V2123838, V2134838, V2147838, V2155838, V2156838, V2167838, V2170838, V2171838, V2174838, V2175838, V2178838, V2179838, V2183838, V2184838, V2188838, V2124838, V2125838, V2133838, V2137838, V2138838, V2143838, V2148838, V2163838, V2164838, V2177838, V2187838, V2190838, V2192838, V2196838, 209567

Product Use/Class: Topcoats/Aerosol

Supplier: Rust-Oleum Corporation  
11 Hawthorn Parkway  
Vernon Hills, IL 60061  
USA

Manufacturer: Rust-Oleum Corporation  
11 Hawthorn Parkway  
Vernon Hills, IL 60061  
USA

Preparer: Regulatory Department

## Section 2 - Composition / Information On Ingredients

<u>Chemical Name</u>	<u>CAS Number</u>	<u>Weight % Less Than</u>	<u>ACGIH TLV-TWA</u>	<u>ACGIH TLV-STEL</u>	<u>OSHA PEL-TWA</u>	<u>OSHA PEL-CEILING</u>
Acetone	67-64-1	30.0	500 PPM	750 PPM	750 PPM	N.E.
Liquefied Petroleum Gas	68476-86-8	30.0	1000 PPM	N.E.	1000 PPM	N.E.
Titanium Dioxide	13463-67-7	15.0	10 mg/m3	N.E.	10 mg/m3	N.E.
Magnesium Silicate	14807-96-6	15.0	10 mg/m3	N.E.	15 mg/m3	N.E.
N-Butyl Acetate	123-86-4	10.0	150 PPM	200 PPM	150 PPM	N.E.
Xylene	1330-20-7	10.0	100 PPM	150 PPM	100 PPM	N.E.
Methyl Ethyl Ketone	78-93-3	10.0	200 PPM	300 PPM	200 PPM	N.E.
Stoddard Solvents	8052-41-3	5.0	100 PPM	N.E.	500 PPM	N.E.
Ethylene Glycol Monobutyl Ether	111-76-2	5.0	20 PPM	N.E.	50 PPM	N.E.
Toluene	108-88-3	5.0	50 PPM	150 PPM	200 PPM	300 PPM
Ethylbenzene	100-41-4	5.0	100 PPM	125 PPM	100 PPM	N.E.
Aromatic Hydrocarbon	64742-95-6	5.0	N.E.	N.E.	N.E.	N.E.
1,2,4-Trimethylbenzene	95-63-6	5.0	25 PPM	N.E.	N.E.	N.E.
Pigment Black 7	1333-86-4	5.0	3.5 mg/m3	N.E.	3.5 mg/m3	N.E.
Pigment Yellow 17	4531-49-1	5.0	2 mg/m3	N.E.	5 mg/m3	N.E.
Pigment Violet 32	12225-08-0	1.0	N.E.	N.E.	N.E.	N.E.
Pigment Red 122	980-26-7	1.0	15mg/m3	N.E.	5mg/m3	N.E.

## Section 3 - Hazards Identification

\*\*\* Emergency Overview \*\*\*: Harmful if inhaled. May affect the brain or nervous system causing dizziness, headache or nausea. Vapors may cause flash fire or explosion. Extremely flammable liquid and vapor. Contents Under Pressure. Harmful if swallowed.

Effects Of Overexposure - Eye Contact: Causes eye irritation.



Effects Of Overexposure - Skin Contact: May be harmful if absorbed through skin. Prolonged or repeated contact may cause skin irritation. Substance may cause slight skin irritation.

Effects Of Overexposure - Inhalation: High vapor concentrations are irritating to the eyes, nose, throat and lungs. Avoid breathing vapors or mists. High gas, vapor, mist or dust concentrations may be harmful if inhaled. Harmful if inhaled.

Effects Of Overexposure - Ingestion: Aspiration hazard if swallowed; can enter lungs and cause damage. Substance may be harmful if swallowed.

Effects Of Overexposure - Chronic Hazards: IARC lists Ethylbenzene as a possible human carcinogen (group 2B). May cause central nervous system disorder (e.g., narcosis involving a loss of coordination, weakness, fatigue, mental confusion, and blurred vision) and/or damage. Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Overexposure to xylene in laboratory animals has been associated with liver abnormalities, kidney, lung, spleen, eye and blood damage as well as reproductive disorders. Effects in humans, due to chronic overexposure, have included liver, cardiac abnormalities and nervous system damage. Overexposure to toluene in laboratory animals has been associated with liver abnormalities, kidney, lung and spleen damage. Effects in humans have included liver and cardiac abnormalities. Overexposure to methyl ethyl ketone in laboratory animals has been associated with liver abnormalities, kidney and lung damage. Fetotoxic/embryotoxic effects from inhalation have been seen in rats exposed to >1000ppm during gestation.

Contains carbon black. Chronic inflammation, lung fibrosis, and lung tumors have been observed in some rats experimentally exposed for long periods of time to excessive concentrations of carbon black and several insoluble fine dust particles. Tumors have not been observed in other animal species (i.e., mouse and hamster) under similar circumstances and study conditions. Epidemiological studies of North American workers show no evidence of clinically significant adverse health effects due to occupational exposure to carbon black.

Carbon black is listed as a Group 2B-"Possibly carcinogenic to humans" by IARC and is proposed to be listed as A4- "not classified as a human carcinogen" by the American Conference of Governmental Industrial Hygienists. Significant exposure is not anticipated during brush application or drying. Risk of overexposure depends on duration and level of exposure to dust from repeated sanding of surfaces or spray mist and the actual concentration of carbon black in the formula.

Primary Route(s) Of Entry: Skin Contact, Skin Absorption, Inhalation, Eye Contact

## **Section 4 - First Aid Measures**

First Aid - Eye Contact: Hold eyelids apart and flush with plenty of water for at least 15 minutes. Get medical attention.

First Aid - Skin Contact: Wash with soap and water. Get medical attention if irritation develops or persists.

First Aid - Inhalation: If you experience difficulty in breathing, leave the area to obtain fresh air. If continued difficulty is experienced, get medical assistance immediately.

First Aid - Ingestion: Aspiration hazard: Do not induce vomiting or give anything by mouth because this material can enter the lungs and cause severe lung damage. Get immediate medical attention.

## **Section 5 - Fire Fighting Measures**

Flash Point: -156 F  
(Setaflash)

LOWER EXPLOSIVE LIMIT: 0.7 %  
UPPER EXPLOSIVE LIMIT : 32.5 %

Extinguishing Media: Dry Chemical, Foam, Water Fog

Unusual Fire And Explosion Hazards: FLASH POINT IS LESS THAN 20 °. F. - EXTREMELY FLAMMABLE LIQUID

AND VAPOR! Water spray may be ineffective. Closed containers may explode when exposed to extreme heat. Vapors may form explosive mixtures with air. Vapors can travel to a source of ignition and flash back. Keep containers tightly closed. Isolate from heat, electrical equipment, sparks and open flame. Perforation of the pressurized container may cause bursting of the can.

Special Firefighting Procedures: Evacuate area and fight fire from a safe distance.

## **Section 6 - Accidental Release Measures**

Steps To Be Taken If Material Is Released Or Spilled: Contain spilled liquid with sand or earth. DO NOT use combustible materials such as sawdust. Remove all sources of ignition, ventilate area and remove with inert absorbent and non-sparking tools. Dispose of according to local, state (provincial) and federal regulations. Do not incinerate closed containers.

## **Section 7 - Handling And Storage**

Handling: Use only in a well-ventilated area. Avoid breathing vapor or mist. Follow all MSDS/label precautions even after container is emptied because it may retain product residues. Wash thoroughly after handling. Wash hands before eating.

Storage: Contents under pressure. Do not expose to heat or store above 120 ° F. Do not store above 120 ° F. Store large quantities in buildings designed and protected for storage of NFPA Class I flammable liquids. Keep containers tightly closed. Isolate from heat, electrical equipment, sparks and open flame.

## **Section 8 - Exposure Controls / Personal Protection**

Engineering Controls: Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Prevent build-up of vapors by opening all doors and windows to achieve cross-ventilation. Use explosion-proof ventilation equipment.

Respiratory Protection: A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use. A NIOSH/MSHA approved air purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits.

Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection.

Skin Protection: Nitrile or Neoprene gloves may afford adequate skin protection. Use impervious gloves to prevent skin contact and absorption of this material through the skin.

Eye Protection: Use safety eyewear designed to protect against splash of liquids.

Other protective equipment: Refer to safety supervisor or industrial hygienist for further information regarding personal protective equipment and its application.

Hygienic Practices: Wash thoroughly with soap and water before eating, drinking or smoking.

## **Section 9 - Physical And Chemical Properties**

Boiling Range:

-34 - 900 F

Vapor Density:

Heavier than Air

Odor:	Solvent-like	Odor Threshold:	ND
Appearance:	Liquid	Evaporation Rate:	Faster than Ether
Solubility in H <sub>2</sub> O:	Slight		
Freeze Point:	ND	Specific Gravity:	0.8660
Vapor Pressure:	ND	PH:	ND
Physical State:	Liquid		

(See section 16 for abbreviation legend)

## Section 10 - Stability And Reactivity

Conditions To Avoid: Avoid temperatures above 120 ° F. Avoid all possible sources of ignition.

Incompatibility: Incompatible with strong oxidizing agents, strong acids and strong alkalies.

Hazardous Decomposition: By open flame, carbon monoxide and carbon dioxide. When heated to decomposition, it emits acrid smoke and irritating fumes.

Hazardous Polymerization: Will not occur under normal conditions.

Stability: This product is stable under normal storage conditions.

## Section 11 - Toxicological Information

Product LD50: ND

Product LC50: ND

<u>Chemical Name</u>	<u>LD50</u>	<u>LC50</u>
Acetone	N.D.	N.D.
Liquefied Petroleum Gas	N.D.	N.D.
Titanium Dioxide	>7500 mg/kg (ORAL, RAT)	N.D.
Magnesium Silicate	N.D.	TCLo:11mg/m <sup>3</sup> inh.
N-Butyl Acetate	13100 mg/kg (ORAL, RAT)	2000 PPM (INH 4 Hr, RAT)
Xylene	N.D.	N.D.
Methyl Ethyl Ketone	N.D.	N.D.
Stoddard Solvents	N.D.	N.D.
Ethylene Glycol Monobutyl Ether	1519 mg/kg (ORAL, MOUSE)	700 PPM (INH 7 Hr, RAT)
Toluene	N.D.	N.D.
Ethylbenzene	3500 mg/kg (ORAL, RAT)	N.D.
Aromatic Hydrocarbon	N.D.	N.D.
1,2,4-Trimethylbenzene	N.D.	18000 mg/m <sup>3</sup> (RAT, 4 HR)
Pigment Black 7	>8000 mg/kg (ORAL, RAT)	N.D.
Pigment Yellow 17	N.D.	N.D.
Pigment Violet 32	>10000 mg/kg (ORAL, RAT)	N.D.
Pigment Red 122	N.D.	N.D.

## Section 12 - Ecological Information

Ecological Information: Product is a mixture of listed components.

## Section 13 - Disposal Information

Disposal Information: Dispose of material in accordance to local, state and federal regulations and ordinances. Do

not allow to enter storm drains or sewer systems.

## Section 14 - Transportation Information

DOT Proper Shipping Name:	Aerosol	Packing Group:	---
DOT Technical Name:	---	Hazard Subclass:	---
DOT Hazard Class:	2.1	Resp. Guide Page:	126
DOT UN/NA Number:	UN1950		

## Section 15 - Regulatory Information

### CERCLA - SARA Hazard Category

This product has been reviewed according to the EPA "Hazard Categories" promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

IMMEDIATE HEALTH HAZARD, CHRONIC HEALTH HAZARD, FIRE HAZARD

### SARA Section 313:

Listed below are the substances (if any) contained in this product that are subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372:

<u>Chemical Name</u>	<u>CAS Number</u>
Xylene	1330-20-7
Methyl Ethyl Ketone	78-93-3
Ethylene Glycol Monobutyl Ether	111-76-2
Toluene	108-88-3
Ethylbenzene	100-41-4
1,2,4-Trimethylbenzene	95-63-6

### Toxic Substances Control Act:

Listed below are the substances (if any) contained in this product that are subject to the reporting requirements of TSCA 12(B) if exported from the United States:

None known

### U.S. State Regulations: As follows -

#### New Jersey Right-to-Know:

The following materials are non-hazardous, but are among the top five components in this product.

<u>Chemical Name</u>	<u>CAS Number</u>
Alkyd Resin	MIXTURE

#### Pennsylvania Right-to-Know:

The following non-hazardous ingredients are present in the product at greater than 3%.

**Chemical Name**

Alkyd Resin  
Barium Sulfate  
Calcium Carbonate  
Yellow Iron Oxide

**CAS Number**

MIXTURE  
7727-43-7  
1317-65-3  
51274-00-1

**California Proposition 65:**

WARNING! This product contains a chemical(s) known by the State of California to cause cancer.

WARNING! This product contains a chemical(s) known to the state of California to cause birth defects or other reproductive harm.

**International Regulations: As follows -****CANADIAN WHMIS:**

This MSDS has been prepared in compliance with Controlled Product Regulations except for the use of the 16 headings.

**CANADIAN WHMIS CLASS:** AB5, D2A, D2B

<b>Section 16 - Other Information</b>
---------------------------------------

**HMIS Ratings:**

Health: 2

Flammability: 4

Reactivity: 0

Personal Protection: X

**VOLATILE ORGANIC COMPOUNDS, g/l:****REASON FOR REVISION:**

**Legend:** N.A. - Not Applicable, N.E. - Not Established, N.D. - Not Determined

The information contained on this MSDS has been checked and should be accurate. However, it is the responsibility of the user to comply with all Federal, State, and Local laws and regulations.

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## 1. Identification of the substance/mixture and of the company/undertaking

### 1.1. Product identifier

**Product Identity** SAF-T-EZE REGULAR ANTI-SEIZE  
**Alternate Names** Part Numbers: 80102, 80112, 80122, 80125, 80127, 80137, 80153, 80155, 80157, 80158, 80160, 80161, 80165, 80178, 80189, 80199  
Product Type: Lubricating Grease

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

**Intended use** Lubricating Grease  
**Application Method** See Technical Data Sheet.

### 1.3. Details of the supplier of the safety data sheet

**Company Name** SAF-T-LOK International Corporation  
300 EISENHOWER LANE NORTH  
LOMBARD, IL 60148

### Emergency

**CHEMTREC (USA)** (800) 424-9300  
**24 hour Emergency Telephone No.** (703) 527-3887  
**Customer Service: SAF-T-LOK International Corporation** (630) 495-2001

## 2. Hazard identification of the product

### 2.1. Classification of the substance or mixture

Aquatic Chronic 2;H411 Toxic to aquatic life with long lasting effects.

### 2.2. Label elements

Using the Toxicity Data listed in section 11 and 12 the product is labeled as follows.



H411 Toxic to aquatic life with long lasting effects.

**[Prevention]:**

P273 Avoid release to the environment.

**[Response]:**

P391 Collect spillage.

**[Storage]:**

No GHS storage statements

**[Disposal]:**

P501 Dispose of contents / container in accordance with local / national regulations.

**3. Composition/information on ingredients**

This product contains the following substances that present a hazard within the meaning of the relevant State and Federal Hazardous Substances regulations.

Ingredient/Chemical Designations	Weight %	GHS Classification	Notes
Petroleum distillates, hydrotreated heavy naphthenic CAS Number: 0064742-52-5	50 - 75	Acute Tox. 4;H312	[1]
Graphite CAS Number: 0007782-42-5	10 - 25		[1][2]
Copper CAS Number: 0007440-50-8	10-25		[1][2]
Zinc oxide CAS Number: 0001314-13-2	1.0 - 10	Aquatic Acute 1;H400 Aquatic Chronic 1;H410	[1][2]
Aluminum CAS Number: 0007429-90-5	1.0-10		[1][2]

[1] Substance classified with a health or environmental hazard.

[2] Substance with a workplace exposure limit.

[3] PBT-substance or vPvB-substance.

\*The full texts of the phrases are shown in Section 16.

**4. First aid measures**

**4.1. Description of first aid measures**

**General**

In all cases of doubt, or when symptoms persist, seek medical attention.

<b>Inhalation</b>	Never give anything by mouth to an unconscious person. Remove to fresh air, keep patient warm and at rest. If breathing is irregular or stopped, give artificial respiration. If unconscious place in the recovery position and obtain immediate medical attention. Give nothing by mouth.
<b>Eyes</b>	Irrigate copiously with clean water for at least 15 minutes, holding the eyelids apart and seek medical attention.
<b>Skin</b>	Remove contaminated clothing. Wash skin thoroughly with soap and water or use a recognized skin cleanser.
<b>Ingestion</b>	If swallowed obtain immediate medical attention. Keep at rest. Do NOT induce vomiting.

#### **4.2. Most important symptoms and effects, both acute and delayed**

##### **Overview**

Skin Contact: Usually no effect, however, as with any chemical, prolonged, excessive, or repeated exposure may cause mild to moderate skin irritation, exhibited by redness, drying and cracking of unprotected skin.

Eye Contact: May irritate with slight pain and redness.

Respiratory/ Inhalation: Usually none, however, as with any chemical product, some irritation may occur.

Ingestion: Amounts transferred to mouth by fingers, etc, during normal operation should not cause injury.

Medical conditions generally aggravated by exposure: None known, however any chemical product may enhance allergies already present in certain individuals.

This product does not require exceptional labeling due to the evaluation procedure of the "General Classification guideline for preparations of the EU". See section 2 for further details.

## **5. Fire-fighting measures**

### **5.1. Extinguishing media**

Recommended extinguishing media; alcohol resistant foam, CO<sub>2</sub>, dry chemical

### **5.2. Special hazards arising from the substance or mixture**

Hazardous decomposition: None

### **5.3. Advice for fire-fighters**

Air mask and procedures for fighting chemical fires. Do not inhale gases.



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## 6. Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

Put on appropriate personal protective equipment (see section 8).

### 6.2. Environmental precautions

Do not allow spills to enter drains or waterways.

Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

### 6.3. Methods and material for containment and cleaning up

Prevent material from entering floor drains, sewers, or any bodies of water.

Scoop up into waste container or soak up with absorbent material. Store in a closed container until disposal.

## 7. Handling and storage

### 7.1. Precautions for safe handling

No special precautions necessary if used properly. Avoid breathing vapors. Wash hands thoroughly at mealtime and end of shift.

See section 2 for further details. - [Prevention]:

### 7.2. Conditions for safe storage, including any incompatibilities

Handle containers carefully to prevent damage and spillage.

Isolated storage facility/ warehouse not required. Store in a cool, dry location (60-90°F) in a well-ventilated area in original container. Keep container tightly closed when not in use.

Incompatible materials: No data available.

See section 2 for further details. - [Storage]:

### 7.3. Specific end use(s)

None

## 8. Exposure controls and personal protection

### 8.1. Control parameters

#### Exposure

CAS No.	Ingredient	Source	Value
0001314-13-2	Zinc oxide	OSHA	TWA 5 mg/m3 (fume) TWA 15 mg/m3 (total dust) TWA 5 mg/m3 (resp dust)
		ACGIH	TWA: 2 mg/m3 STEL: 10 mg/m3 A1, 1, Revised 2003,
		NIOSH	No Established Limit
		Supplier	No Established Limit
		OSHA	TWA 15 mg/m3 (total) TWA 5 mg/m3 (resp)

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0007429-90-5	Aluminum	ACGIH	TWA 1.0 mg/m <sup>3</sup> Revised 2008
		NIOSH	TWA 10 mg/m <sup>3</sup> (total) TWA 5 mg/m <sup>3</sup> (resp)
		Supplier	No Established Limit
0007440-50-8	Copper	OSHA	TWA: mg/m <sup>3</sup> [Note: the PEL also applies to other copper compounds 9as Cu) except copper fume.]
		ACGIH	TWA: 0.2 mg/m <sup>3</sup> (fume) 1 mg/m <sup>3</sup> (dusts/mists)
		NIOSH	TWA: 1 mg/m <sup>3</sup> [Note: The REL also applies to other copper compounds (as Cu) except copper fume.]
0007782-42-5	Graphite	Supplier	No Established Limit
		OSHA	TWA 15mg/m <sup>3</sup> TWA mppcf
		ACGIH	TWA 2 mg/m <sup>3</sup>
0064742-52-5	Petroleum distillates, hydrotreated heavy naphthenic	NIOSH	TWA 2.5 mg/m <sup>3</sup> (resp)
		Supplier	No Established Limit
		OSHA	No Established Limit
0064742-52-5	Petroleum distillates, hydrotreated heavy naphthenic	ACGIH	No Established Limit
		NIOSH	No Established Limit
		Supplier	No Established Limit

Contains mineral oil. The exposure limits for oil mist are 5 mg/m<sup>3</sup> OSHA PEL and 10 mg/m<sup>3</sup> ACGIH.

### Carcinogen Data

CAS No.	Ingredient	Source	Value
0001314-13-2	Zinc oxide	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
0007429-90-5	Aluminum	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: Yes; Group 4: No;
007440-50-8	Copper	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: Yes; Group 4: No;
007782-42-5	Graphite	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: Yes; Group 4: No;
0064742-52-5	Petroleum distillates, hydrotreated heavy naphthenic	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: Yes; Group 4: No;

## 8.2. Exposure controls

### Respiratory

No respiratory protection required, but normal good ventilation is recommended. Forced ventilation may be required if concentrations exceed normal use exposure.

### Eyes

Not required if application method is proper. Avoid contact with eyes.

### Skin

Wear overalls to keep skin contact to a minimum. Use impermeable gloves (neoprene, butyl rubber, natural rubber), as necessary to avoid skin contact, as well as proper clothing

or plastic apron. Wash hands before eating, drinking, or using restroom.

**Engineering Controls** Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and any vapor below occupational exposure limits suitable respiratory protection must be worn.

**Other Work Practices** Eye wash stations should be located within 100 feet or 10 second walk of the work area. Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

See section 2 for further details. - [Prevention]:

## 9. Physical and chemical properties

<b>Appearance</b>	Silver grey Paste
<b>Odor</b>	Mild/Inoffensive
<b>Odor threshold</b>	Not Measured
<b>pH</b>	Not Determined
<b>Melting point / freezing point</b>	Not Determined
<b>Boiling point</b>	>600° F (316°C)
<b>Flash Point</b>	410° F (210° C) (C.O.C.)
<b>Evaporation rate (Ether = 1)</b>	Not Determined
<b>Flammability (solid, gas)</b>	Not Applicable
<b>Upper/lower flammability or explosive limits</b>	<b>Lower Explosive Limit:</b> N/A <b>Upper Explosive Limit:</b> N/A
<b>Vapor pressure (Pa) (mm Hg.)</b>	< 5 @ 30° F
<b>Vapor Density</b>	N/A
<b>Specific Gravity</b>	1.2
<b>Solubility in Water</b>	Insoluble
<b>Partition coefficient n-octanol/water (Log Kow)</b>	Not Measured
<b>Auto-ignition temperature</b>	Not Measured
<b>Decomposition temperature</b>	Not Measured
<b>Viscosity (cSt)</b>	Not Measured
<b>VOC %</b>	<0.1% (cut)
<b>% Solid</b>	35-48%

**9.2. Other information**

DMSO extract IP346: Less than 3.0 wt% (mineral oil component only)

## 10. Stability and reactivity

**10.1. Reactivity**

Hazardous Polymerization will not occur.

**10.2. Chemical stability**

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Stable under normal circumstances.

**10.3. Possibility of hazardous reactions**

No data available.

**10.4. Conditions to avoid**

Strong oxidizing agents

**10.5. Incompatible materials**

No data available.

**10.6. Hazardous decomposition products**

None

## 11. Toxicological information

**Acute toxicity**

Ingredient	Oral LD50, mg/kg	Skin LD50, mg/kg	Inhalation Vapor LD50, mg/L/4hr	Inhalation Dust/Mist LD50, mg/L/4hr	Inhalation Gas LD50, ppm
Petroleum distillates, hydrotreated heavy naphthenic – (64742-52-5)	5,000.00 Rat – Category: 5	No data available	2,000.00, Rabbit – Category: 4	No data available	No data available
Zinc oxide - (1314-13-2)	5,000.00, Rat - Category: 5	No data available	No data available	2.50, Mouse - Category: 4	No data available
Copper – (7440-50-8)	2,500.00, Rat - Category: 5	>2,000.00, Rat - Category: 5	No data available	5.11, Rat - Category: NA	No data available
Graphite - (7782-42-5)	No data available	No data available	No data available	No data available	No data available
Aluminum – (7429-90-5)	No data available	No data available	No data available	No data available	No data available

Note: When no route specific LD50 data is available for an acute toxin, the converted acute toxicity point estimate was used in the calculation of the product's ATE (Acute Toxicity Estimate).

Classification	Category	Hazard Description
Acute toxicity (oral)	---	Not Applicable
Acute toxicity (dermal)	---	Not Applicable
Acute toxicity (inhalation)	---	Not Applicable
Skin corrosion/irritation	---	Not Applicable
Serious eye damage/irritation	---	Not Applicable
Respiratory sensitization	---	Not Applicable
Skin sensitization	---	Not Applicable
Germ cell mutagenicity	---	Not Applicable
Carcinogenicity	---	Not Applicable
Reproductive toxicity	---	Not Applicable
STOT-single exposure	---	Not Applicable

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STOT-repeated exposure	---	Not Applicable
Aspiration hazard	---	Not Applicable

## 12. Ecological information

### 12.1. Toxicity

No additional information provided for this product. See Section 3 for chemical specific data.

Zinc Oxide is toxic to aquatic life with long lasting effects.

### Aquatic Ecotoxicity

Ingredient	96 hr LC50 fish, mg/l	48 hr EC50 crustacea, mg/l	ErC50 algae, mg/l
Petroleum distillates, hydrotreated heavy naphthenic – (64742-52-5)	5,000.00 Oncorhynchus mykiss	1,000.00 Daphnia Magna	1,000.00 (96 hr), Scenedesmus subspicatus
Zinc oxide - (1314-13-2)	1.10, Oncorhynchus mykiss	0.098, Daphnia magna	0.042 (72 hr), Pseudokirchneriella subcapitata
Graphite – (7782-42-5)	Not Available	Not Available	Not Available
Aluminum – (7429-90-5)	Not Available	Not Available	Not Available
Copper – (7440-50-8)	0.0103, Pimephales promelas	0.0025, Daphnia magna	0.018 (72 hr), Pseudokirchneriella subcapitata

### 12.2. Persistence and degradability

There is no data available on the preparation itself.

### 12.3. Bioaccumulative potential

Not Measured

### 12.4. Mobility in soil

No data available.

### 12.5. Results of PBT and vPvB assessment

This product contains no PBT/vPvB chemicals.

### 12.6. Other adverse effects

No data available.

## 13. Disposal considerations

### 13.1. Waste treatment methods

Observe all federal, state and local regulations when disposing of this substance.

## 14. Transport information

DOT (Domestic Surface)    IMO / IMDG (Ocean Transportation)    ICAO/IATA

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	<b>Transportation)</b>		
<b>14.1. UN number</b>	Not Applicable	Not Regulated	Not Regulated
<b>14.2. UN proper shipping name</b>	Not Regulated	Environmentally hazardous substance, liquid, N.O.S	Not Regulated
<b>14.3. Transport hazard class(es)</b>	<b>DOT Hazard Class:</b> Not Applicable <b>DOT Label:</b> ---	<b>IMDG:</b> 9 <b>Sub Class:</b> Not Applicable	<b>Air Class:</b> Not Applicable
<b>14.4. Packing group</b>	Not Applicable	Not Applicable	Not Applicable
<b>14.5. Environmental hazards</b>			
<b>IMDG</b>	Marine Pollutant: Yes ( Zinc oxide )		
<b>14.6. Special precautions for user</b>			
	No further information		

**15. Regulatory information**

<b>Regulatory Overview</b>	The regulatory data in Section 15 is not intended to be all-inclusive, only selected regulations are represented.		
<b>Toxic Substance Control Act ( TSCA )</b>	All components of this material are either listed or exempt from listing on the TSCA Inventory.		
<b>WHMIS Classification</b>	Not Regulated		
<b>US EPA Tier II Hazards</b>	<b>Fire:</b> No	<b>Sudden Release of Pressure:</b> No	<b>Reactive:</b> No
	<b>Immediate (Acute):</b> No	<b>Delayed (Chronic):</b> No	
<b>EPCRA 311/312 Chemicals and RQs:</b>	Copper (5,000.00)		
<b>EPCRA 302 Extremely Hazardous :</b>	(No Product Ingredients Listed)		
<b>EPCRA 313 Toxic Chemicals:</b>	Zinc oxide		
<b>Proposition 65 - Carcinogens (&gt;0.0%):</b>	(No Product Ingredients Listed)		
<b>Proposition 65 - Developmental Toxins (&gt;0.0%):</b>	(No Product Ingredients Listed)		
<b>Proposition 65 - Female Repro Toxins (&gt;0.0%):</b>	(No Product Ingredients Listed)		
<b>Proposition 65 - Male Repro Toxins (&gt;0.0%):</b>	(No Product Ingredients Listed)		

**N.J. RTK Substances (>1%):**

Zinc oxide  
Graphite  
Aluminum  
Copper

**Penn RTK Substances (>1%):**

Zinc oxide  
Graphite  
Aluminum  
Copper

**16. Other information**

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. SAF-T-LOK accepts no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to our products. Customers/users of this product must comply with all applicable health and safety laws, regulations, and orders.

The full text of the phrases appearing in section 3 is:

H312 May be harmful in contact with skin.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

**This is the first version in the GHS SDS format. Listings of changes from previous versions in other formats are not applicable.**

The information on this material safety data sheet represents our current data and best opinion as to the proper use in handling of this product under normal conditions. Any use of the product which is not in conformance with this data sheet or which involves using the product in combination with any other product or any other process is the responsibility of the user. SAF-T-LOK International Corporation specifically disclaims all warranties, express or implied, including warranties of merchantability and fitness for a particular purpose, arising from sale or use of SAF-T-LOK International Corporation products.

End of Document



# SAFETY DATA SHEET

## 1. Identification

<b>Product identifier</b>	<b>SCRUBS® Hand Cleaner Towels</b>
<b>Other means of identification</b>	
<b>Part Number</b>	42201, 42210, 42225, 42230, 42232, 42256, 42260, 42272, 42274, 42280
<b>Recommended use</b>	A deep cleaning hand cleaner towel designed for removing heavy dirt, oil and greases from hands.
<b>Recommended restrictions</b>	None known.
<b>Manufacturer/Importer/Supplier/Distributor information</b>	
<b>Manufacturer</b>	
<b>Company name</b>	ITW Pro Brands
<b>Address</b>	805 E. Old 56 Highway Olathe, KS 66061
<b>Country</b>	(U.S.A.)
	Tel: +1 800-443-9536
<b>In Case of Emergency</b>	1-800-535-5053 (Infotrac)

## 2. Hazard(s) identification

<b>Physical hazards</b>	Not classified.
<b>Health hazards</b>	Not classified.
<b>Environmental hazards</b>	Not classified.
<b>OSHA defined hazards</b>	Not classified.
<b>Label elements</b>	
<b>Hazard symbol</b>	None.
<b>Signal word</b>	None.
<b>Hazard statement</b>	The mixture does not meet the criteria for classification.
<b>Precautionary statement</b>	
<b>Prevention</b>	Observe good industrial hygiene practices.
<b>Response</b>	Wash hands after handling.
<b>Storage</b>	Store away from incompatible materials.
<b>Disposal</b>	Dispose of waste and residues in accordance with local authority requirements.
<b>Hazard(s) not otherwise classified (HNOC)</b>	None known.
<b>Supplemental information</b>	None.

## 3. Composition/information on ingredients

### Mixtures

<b>Chemical name</b>	<b>Common name and synonyms</b>	<b>CAS number</b>	<b>%</b>
Alcohols, C12-15, ethoxylated		68131-39-5	1 - 3
Distillates Petroleum Hydrotreated Light		64742-47-8	1 - 3
d-limonene		5989-27-5	1 - 3
Neopentyl Glycol		126-30-7	0.1 - 1
Phenoxyethanol		122-99-6	0.1 - 1
Sodium Dodecanol Sulfosuccinate		577-11-7	0.1 - 1

## 4. First-aid measures

<b>Inhalation</b>	Move to fresh air. Call a physician if symptoms develop or persist.
<b>Skin contact</b>	Wash off with soap and water. Get medical attention if irritation develops and persists.



<b>Eye contact</b>	Rinse with water. Get medical attention if irritation develops and persists.
<b>Ingestion</b>	Rinse mouth. Get medical attention if symptoms occur.
<b>Most important symptoms/effects, acute and delayed</b>	Direct contact with eyes may cause temporary irritation.
<b>Indication of immediate medical attention and special treatment needed</b>	Treat symptomatically.
<b>General information</b>	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

## 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO <sub>2</sub> ).
<b>Unsuitable extinguishing media</b>	Do not use water jet as an extinguisher, as this will spread the fire.
<b>Specific hazards arising from the chemical</b>	During fire, gases hazardous to health may be formed.
<b>Special protective equipment and precautions for firefighters</b>	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
<b>Fire fighting equipment/instructions</b>	Move containers from fire area if you can do so without risk.
<b>Specific methods</b>	Use standard firefighting procedures and consider the hazards of other involved materials.
<b>General fire hazards</b>	No unusual fire or explosion hazards noted.

## 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	Keep unnecessary personnel away. For personal protection, see section 8 of the SDS.
<b>Methods and materials for containment and cleaning up</b>	Mechanically pick up material and place in a proper container for disposal. Clean surface thoroughly to remove residual contamination. Following product recovery, flush area with water. For waste disposal, see section 13 of the SDS.
<b>Environmental precautions</b>	Avoid discharge into drains, water courses or onto the ground.

## 7. Handling and storage

<b>Precautions for safe handling</b>	Avoid prolonged exposure. Observe good industrial hygiene practices.
<b>Conditions for safe storage, including any incompatibilities</b>	Store in tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

## 8. Exposure controls/personal protection

### Occupational exposure limits

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

#### U.S. - OSHA Components

	Type	Value	Form
Distillates Petroleum Hydrotreated Light (CAS 64742-47-8)	PEL	5 mg/m <sup>3</sup>	Oil mist

#### ACGIH Components

	Type	Value	Form
Distillates Petroleum Hydrotreated Light (CAS 64742-47-8)	TWA	5 mg/m <sup>3</sup>	Oil mist

<b>Biological limit values</b>	No biological exposure limits noted for the ingredient(s).
<b>Appropriate engineering controls</b>	Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

## Individual protection measures, such as personal protective equipment

**Eye/face protection** Wear safety glasses with side shields (or goggles).

### Skin protection

**Hand protection** Wear appropriate chemical resistant gloves.

**Other** Wear suitable protective clothing.

**Respiratory protection** In case of insufficient ventilation, wear suitable respiratory equipment.

**Thermal hazards** Wear appropriate thermal protective clothing, when necessary.

**General hygiene considerations** Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

## 9. Physical and chemical properties

### Appearance

**Physical state** Liquid.

**Form** Liquid.

**Color** Colorless-blue / white

**Odor** Citrus

**Odor threshold** Not available.

**pH** 6

**Melting point/freezing point** Not available.

**Initial boiling point and boiling range** 212 °F (100 °C)

**Flash point** Not available.

**Evaporation rate** Not available.

**Flammability (solid, gas)** Not applicable.

### Upper/lower flammability or explosive limits

**Flammability limit - lower (%)** Not available.

**Flammability limit - upper (%)** Not available.

**Explosive limit - lower (%)** Not available.

**Explosive limit - upper (%)** Not available.

**Vapor pressure** Not available.

**Vapor density** > 1

**Relative density** Not available.

### Solubility(ies)

**Solubility (water)** Miscible.

**Partition coefficient (n-octanol/water)** Not available.

**Auto-ignition temperature** Not available.

**Decomposition temperature** Not available.

**Viscosity** Not available.

### Other information

**Explosive properties** Not explosive.

**Oxidizing properties** Not oxidizing.

**Specific gravity** 0.995

**VOC** 0 % per US State and Federal Consumer Product Regulations

## 10. Stability and reactivity

**Reactivity** The product is stable and non-reactive under normal conditions of use, storage and transport.

**Chemical stability** Material is stable under normal conditions.

<b>Possibility of hazardous reactions</b>	No dangerous reaction known under conditions of normal use.
<b>Conditions to avoid</b>	Contact with incompatible materials.
<b>Incompatible materials</b>	Strong oxidizing agents.
<b>Hazardous decomposition products</b>	Carbon oxides.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Inhalation</b>	Prolonged inhalation may be harmful.
<b>Skin contact</b>	No adverse effects due to skin contact are expected.
<b>Eye contact</b>	Direct contact with eyes may cause temporary irritation.
<b>Ingestion</b>	Expected to be a low ingestion hazard.

**Symptoms related to the physical, chemical and toxicological characteristics** Direct contact with eyes may cause temporary irritation.

### Information on toxicological effects

**Acute toxicity** Not expected to be acutely toxic.

Components	Species	Test Results
Alcohols, C12-15, ethoxylated (CAS 68131-39-5)		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rat	> 2000 mg/kg, 24 Hours
<b>Oral</b>		
LD50	Rat	> 5000 mg/kg
Distillates Petroleum Hydrotreated Light (CAS 64742-47-8)		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rabbit	> 2000 mg/kg
<b>Inhalation</b>		
<i>Vapor</i>		
LC50	Rat	> 0.1 mg/l, 8 Hours
<b>Oral</b>		
LD50	Rat	> 5000 mg/kg
d-limonene (CAS 5989-27-5)		
<b>Acute</b>		
<b>Oral</b>		
LD50	Rat	> 2000 mg/kg
Neopentyl Glycol (CAS 126-30-7)		
<b>Acute</b>		
<b>Oral</b>		
LD50	Rat	> 6400 mg/kg
Phenoxyethanol (CAS 122-99-6)		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rabbit	> 2200 mg/kg, 24 Hours
<b>Oral</b>		
LD50	Rat	1400 mg/kg
Sodium Dodecanol Sulfosuccinate (CAS 577-11-7)		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rabbit	> 10000 mg/kg, 24 Hours

<b>Skin corrosion/irritation</b>	Prolonged skin contact may cause temporary irritation.
<b>Serious eye damage/eye irritation</b>	Direct contact with eyes may cause temporary irritation.
<b>Respiratory or skin sensitization</b>	
<b>Respiratory sensitization</b>	Not a respiratory sensitizer.
<b>Skin sensitization</b>	This product is not expected to cause skin sensitization.
<b>Germ cell mutagenicity</b>	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
<b>Carcinogenicity</b>	This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.
<b>IARC Monographs. Overall Evaluation of Carcinogenicity</b>	
d-limonene (CAS 5989-27-5)	3 Not classifiable as to carcinogenicity to humans.
<b>OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)</b>	
Not listed.	
<b>US. National Toxicology Program (NTP) Report on Carcinogens</b>	
Not listed.	
<b>Reproductive toxicity</b>	This product is not expected to cause reproductive or developmental effects.
<b>Specific target organ toxicity - single exposure</b>	Not classified.
<b>Specific target organ toxicity - repeated exposure</b>	Not classified.
<b>Aspiration hazard</b>	Not an aspiration hazard.
<b>Chronic effects</b>	Prolonged inhalation may be harmful.
<b>Further information</b>	This product has no known adverse effect on human health.

## 12. Ecological information

**Ecotoxicity** The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Components	Species		Test Results
Alcohols, C12-15, ethoxylated (CAS 68131-39-5)			
<b>Aquatic</b>			
Crustacea	EC50	Water flea (Ceriodaphnia dubia)	0.37 - 0.43 mg/l, 48 hours
Fish	LC50	Channel catfish (Ictalurus punctatus)	1.04 - 1.39 mg/l, 96 hours
Distillates Petroleum Hydrotreated Light (CAS 64742-47-8)			
<b>Aquatic</b>			
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	2.9 mg/l, 96 hours
d-limonene (CAS 5989-27-5)			
<b>Aquatic</b>			
Crustacea	EC50	Water flea (Daphnia pulex)	69.6 mg/l, 48 hours
Fish	LC50	Fathead minnow (Pimephales promelas)	0.619 - 0.796 mg/l, 96 hours
Phenoxyethanol (CAS 122-99-6)			
<b>Aquatic</b>			
Fish	LC50	Fathead minnow (Pimephales promelas)	337 - 352 mg/l, 96 hours
Sodium Dodecanol Sulfosuccinate (CAS 577-11-7)			
<b>Aquatic</b>			
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	20 - 40 mg/l, 96 hours

**Persistence and degradability** No data is available on the degradability of any ingredients in the mixture.

### Bioaccumulative potential

#### Partition coefficient n-octanol / water (log Kow)

d-limonene	4.232
Phenoxyethanol	1.16

**Mobility in soil** Not established.

**Other adverse effects** None known.

### 13. Disposal considerations

**Disposal instructions** Collect and reclaim or dispose in sealed containers at licensed waste disposal site.

**Local disposal regulations** Dispose in accordance with all applicable regulations.

**Hazardous waste code** The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

**Waste from residues / unused products** Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

**Contaminated packaging** Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

### 14. Transport information

**DOT**  
Not regulated as dangerous goods.

**IATA**  
Not regulated as dangerous goods.

**IMDG**  
Not regulated as dangerous goods.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not applicable.

**General information** This material is not regulated by any mode of transportation.

### 15. Regulatory information

**US federal regulations** This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

#### Toxic Substances Control Act (TSCA)

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**  
Not regulated.

#### CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

#### SARA 304 Emergency release notification

Not regulated.

#### OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

#### Superfund Amendments and Reauthorization Act of 1986 (SARA)

##### SARA 302 Extremely hazardous substance

Not listed.

**SARA 311/312 Hazardous chemical** No

##### SARA 313 (TRI reporting)

Not regulated.

#### Other federal regulations

##### Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

##### Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

**Safe Drinking Water Act (SDWA)** Not regulated.

#### US state regulations

##### California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

## International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
Taiwan	Taiwan Chemical Substance Inventory (TCSI)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

## 16. Other information, including date of preparation or last revision

**Issue date** 04-11-2019

**Revision date** 06-03-2019

**Version #** 02

### Disclaimer

ITW Pro Brands cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.

### Revision information

Accidental release measures: Methods and materials for containment and cleaning up  
Physical & Chemical Properties: Multiple Properties  
Transport Information: Proper Shipping Name/Packing Group  
HazReg Data: International Inventories  
GHS: Classification



# SAFETY DATA SHEET

## 1. Identification

<b>Product identifier</b>	<b>SCRUBS® Hand Cleaner Towels</b>
<b>Other means of identification</b>	
<b>Part Number</b>	42201, 42210, 42225, 42230, 42232, 42256, 42260, 42272, 42274, 42280
<b>Recommended use</b>	A deep cleaning hand cleaner towel designed for removing heavy dirt, oil and greases from hands.
<b>Recommended restrictions</b>	None known.
<b>Manufacturer/Importer/Supplier/Distributor information</b>	
<b>Manufacturer</b>	
<b>Company name</b>	ITW Pro Brands
<b>Address</b>	805 E. Old 56 Highway Olathe, KS 66061
<b>Country</b>	(U.S.A.)
	Tel: +1 800-443-9536
<b>In Case of Emergency</b>	1-800-535-5053 (Infotrac)

## 2. Hazard(s) identification

<b>Physical hazards</b>	Not classified.
<b>Health hazards</b>	Not classified.
<b>Environmental hazards</b>	Not classified.
<b>OSHA defined hazards</b>	Not classified.
<b>Label elements</b>	
<b>Hazard symbol</b>	None.
<b>Signal word</b>	None.
<b>Hazard statement</b>	The mixture does not meet the criteria for classification.
<b>Precautionary statement</b>	
<b>Prevention</b>	Observe good industrial hygiene practices.
<b>Response</b>	Wash hands after handling.
<b>Storage</b>	Store away from incompatible materials.
<b>Disposal</b>	Dispose of waste and residues in accordance with local authority requirements.
<b>Hazard(s) not otherwise classified (HNOC)</b>	None known.
<b>Supplemental information</b>	None.

## 3. Composition/information on ingredients

### Mixtures

<b>Chemical name</b>	<b>Common name and synonyms</b>	<b>CAS number</b>	<b>%</b>
Alcohols, C12-15, ethoxylated		68131-39-5	1 - 3
Distillates Petroleum Hydrotreated Light		64742-47-8	1 - 3
d-limonene		5989-27-5	1 - 3
Neopentyl Glycol		126-30-7	0.1 - 1
Phenoxyethanol		122-99-6	0.1 - 1
Sodium Dodecanol Sulfosuccinate		577-11-7	0.1 - 1

## 4. First-aid measures

<b>Inhalation</b>	Move to fresh air. Call a physician if symptoms develop or persist.
<b>Skin contact</b>	Wash off with soap and water. Get medical attention if irritation develops and persists.

<b>Eye contact</b>	Rinse with water. Get medical attention if irritation develops and persists.
<b>Ingestion</b>	Rinse mouth. Get medical attention if symptoms occur.
<b>Most important symptoms/effects, acute and delayed</b>	Direct contact with eyes may cause temporary irritation.
<b>Indication of immediate medical attention and special treatment needed</b>	Treat symptomatically.
<b>General information</b>	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

## 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO <sub>2</sub> ).
<b>Unsuitable extinguishing media</b>	Do not use water jet as an extinguisher, as this will spread the fire.
<b>Specific hazards arising from the chemical</b>	During fire, gases hazardous to health may be formed.
<b>Special protective equipment and precautions for firefighters</b>	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
<b>Fire fighting equipment/instructions</b>	Move containers from fire area if you can do so without risk.
<b>Specific methods</b>	Use standard firefighting procedures and consider the hazards of other involved materials.
<b>General fire hazards</b>	No unusual fire or explosion hazards noted.

## 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	Keep unnecessary personnel away. For personal protection, see section 8 of the SDS.
<b>Methods and materials for containment and cleaning up</b>	Mechanically pick up material and place in a proper container for disposal. Clean surface thoroughly to remove residual contamination. Following product recovery, flush area with water. For waste disposal, see section 13 of the SDS.
<b>Environmental precautions</b>	Avoid discharge into drains, water courses or onto the ground.

## 7. Handling and storage

<b>Precautions for safe handling</b>	Avoid prolonged exposure. Observe good industrial hygiene practices.
<b>Conditions for safe storage, including any incompatibilities</b>	Store in tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

## 8. Exposure controls/personal protection

### Occupational exposure limits

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

#### U.S. - OSHA Components

	Type	Value	Form
Distillates Petroleum Hydrotreated Light (CAS 64742-47-8)	PEL	5 mg/m <sup>3</sup>	Oil mist

#### ACGIH Components

	Type	Value	Form
Distillates Petroleum Hydrotreated Light (CAS 64742-47-8)	TWA	5 mg/m <sup>3</sup>	Oil mist

<b>Biological limit values</b>	No biological exposure limits noted for the ingredient(s).
<b>Appropriate engineering controls</b>	Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.



## Individual protection measures, such as personal protective equipment

<b>Eye/face protection</b>	Wear safety glasses with side shields (or goggles).
<b>Skin protection</b>	
<b>Hand protection</b>	Wear appropriate chemical resistant gloves.
<b>Other</b>	Wear suitable protective clothing.
<b>Respiratory protection</b>	In case of insufficient ventilation, wear suitable respiratory equipment.
<b>Thermal hazards</b>	Wear appropriate thermal protective clothing, when necessary.
<b>General hygiene considerations</b>	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

## 9. Physical and chemical properties

### Appearance

<b>Physical state</b>	Liquid.
<b>Form</b>	Liquid.
<b>Color</b>	Colorless-blue / white
<b>Odor</b>	Citrus
<b>Odor threshold</b>	Not available.
<b>pH</b>	6
<b>Melting point/freezing point</b>	Not available.
<b>Initial boiling point and boiling range</b>	212 °F (100 °C)
<b>Flash point</b>	Not available.
<b>Evaporation rate</b>	Not available.
<b>Flammability (solid, gas)</b>	Not applicable.

### Upper/lower flammability or explosive limits

<b>Flammability limit - lower (%)</b>	Not available.
<b>Flammability limit - upper (%)</b>	Not available.
<b>Explosive limit - lower (%)</b>	Not available.
<b>Explosive limit - upper (%)</b>	Not available.

<b>Vapor pressure</b>	Not available.
<b>Vapor density</b>	> 1
<b>Relative density</b>	Not available.

### Solubility(ies)

<b>Solubility (water)</b>	Miscible.
<b>Partition coefficient (n-octanol/water)</b>	Not available.

**Auto-ignition temperature** Not available.

**Decomposition temperature** Not available.

**Viscosity** Not available.

### Other information

<b>Explosive properties</b>	Not explosive.
<b>Oxidizing properties</b>	Not oxidizing.
<b>Specific gravity</b>	0.995
<b>VOC</b>	0 % per US State and Federal Consumer Product Regulations

## 10. Stability and reactivity

**Reactivity** The product is stable and non-reactive under normal conditions of use, storage and transport.

**Chemical stability** Material is stable under normal conditions.

<b>Possibility of hazardous reactions</b>	No dangerous reaction known under conditions of normal use.
<b>Conditions to avoid</b>	Contact with incompatible materials.
<b>Incompatible materials</b>	Strong oxidizing agents.
<b>Hazardous decomposition products</b>	Carbon oxides.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Inhalation</b>	Prolonged inhalation may be harmful.
<b>Skin contact</b>	No adverse effects due to skin contact are expected.
<b>Eye contact</b>	Direct contact with eyes may cause temporary irritation.
<b>Ingestion</b>	Expected to be a low ingestion hazard.

**Symptoms related to the physical, chemical and toxicological characteristics** Direct contact with eyes may cause temporary irritation.

### Information on toxicological effects

**Acute toxicity** Not expected to be acutely toxic.

Components	Species	Test Results
Alcohols, C12-15, ethoxylated (CAS 68131-39-5)		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rat	> 2000 mg/kg, 24 Hours
<b>Oral</b>		
LD50	Rat	> 5000 mg/kg
Distillates Petroleum Hydrotreated Light (CAS 64742-47-8)		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rabbit	> 2000 mg/kg
<b>Inhalation</b>		
<i>Vapor</i>		
LC50	Rat	> 0.1 mg/l, 8 Hours
<b>Oral</b>		
LD50	Rat	> 5000 mg/kg
d-limonene (CAS 5989-27-5)		
<b>Acute</b>		
<b>Oral</b>		
LD50	Rat	> 2000 mg/kg
Neopentyl Glycol (CAS 126-30-7)		
<b>Acute</b>		
<b>Oral</b>		
LD50	Rat	> 6400 mg/kg
Phenoxyethanol (CAS 122-99-6)		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rabbit	> 2200 mg/kg, 24 Hours
<b>Oral</b>		
LD50	Rat	1400 mg/kg
Sodium Dodecanol Sulfosuccinate (CAS 577-11-7)		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rabbit	> 10000 mg/kg, 24 Hours

<b>Skin corrosion/irritation</b>	Prolonged skin contact may cause temporary irritation.
<b>Serious eye damage/eye irritation</b>	Direct contact with eyes may cause temporary irritation.
<b>Respiratory or skin sensitization</b>	
<b>Respiratory sensitization</b>	Not a respiratory sensitizer.
<b>Skin sensitization</b>	This product is not expected to cause skin sensitization.
<b>Germ cell mutagenicity</b>	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
<b>Carcinogenicity</b>	This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.
<b>IARC Monographs. Overall Evaluation of Carcinogenicity</b>	
d-limonene (CAS 5989-27-5)	3 Not classifiable as to carcinogenicity to humans.
<b>OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)</b>	
Not listed.	
<b>US. National Toxicology Program (NTP) Report on Carcinogens</b>	
Not listed.	
<b>Reproductive toxicity</b>	This product is not expected to cause reproductive or developmental effects.
<b>Specific target organ toxicity - single exposure</b>	Not classified.
<b>Specific target organ toxicity - repeated exposure</b>	Not classified.
<b>Aspiration hazard</b>	Not an aspiration hazard.
<b>Chronic effects</b>	Prolonged inhalation may be harmful.
<b>Further information</b>	This product has no known adverse effect on human health.

## 12. Ecological information

**Ecotoxicity** The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Components	Species	Test Results
Alcohols, C12-15, ethoxylated (CAS 68131-39-5)		
<b>Aquatic</b>		
Crustacea	EC50	Water flea (Ceriodaphnia dubia) 0.37 - 0.43 mg/l, 48 hours
Fish	LC50	Channel catfish (Ictalurus punctatus) 1.04 - 1.39 mg/l, 96 hours
Distillates Petroleum Hydrotreated Light (CAS 64742-47-8)		
<b>Aquatic</b>		
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss) 2.9 mg/l, 96 hours
d-limonene (CAS 5989-27-5)		
<b>Aquatic</b>		
Crustacea	EC50	Water flea (Daphnia pulex) 69.6 mg/l, 48 hours
Fish	LC50	Fathead minnow (Pimephales promelas) 0.619 - 0.796 mg/l, 96 hours
Phenoxyethanol (CAS 122-99-6)		
<b>Aquatic</b>		
Fish	LC50	Fathead minnow (Pimephales promelas) 337 - 352 mg/l, 96 hours
Sodium Dodecanol Sulfosuccinate (CAS 577-11-7)		
<b>Aquatic</b>		
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss) 20 - 40 mg/l, 96 hours

**Persistence and degradability** No data is available on the degradability of any ingredients in the mixture.

### Bioaccumulative potential

#### Partition coefficient n-octanol / water (log Kow)

d-limonene	4.232
Phenoxyethanol	1.16

**Mobility in soil** Not established.

**Other adverse effects** None known.

### 13. Disposal considerations

**Disposal instructions** Collect and reclaim or dispose in sealed containers at licensed waste disposal site.

**Local disposal regulations** Dispose in accordance with all applicable regulations.

**Hazardous waste code** The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

**Waste from residues / unused products** Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

**Contaminated packaging** Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

### 14. Transport information

**DOT**  
Not regulated as dangerous goods.

**IATA**  
Not regulated as dangerous goods.

**IMDG**  
Not regulated as dangerous goods.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not applicable.

**General information** This material is not regulated by any mode of transportation.

### 15. Regulatory information

**US federal regulations** This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

#### Toxic Substances Control Act (TSCA)

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**  
Not regulated.

#### CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

#### SARA 304 Emergency release notification

Not regulated.

#### OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

#### Superfund Amendments and Reauthorization Act of 1986 (SARA)

**SARA 302 Extremely hazardous substance**  
Not listed.

**SARA 311/312 Hazardous chemical** No

**SARA 313 (TRI reporting)**  
Not regulated.

#### Other federal regulations

**Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**  
Not regulated.

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**  
Not regulated.

**Safe Drinking Water Act (SDWA)** Not regulated.

#### US state regulations

##### California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

## International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
Taiwan	Taiwan Chemical Substance Inventory (TCSI)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

## 16. Other information, including date of preparation or last revision

**Issue date** 04-11-2019

**Revision date** 06-03-2019

**Version #** 02

### Disclaimer

ITW Pro Brands cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.

### Revision information

Accidental release measures: Methods and materials for containment and cleaning up  
Physical & Chemical Properties: Multiple Properties  
Transport Information: Proper Shipping Name/Packing Group  
HazReg Data: International Inventories  
GHS: Classification



# SAFETY DATA SHEET

## 1. Identification

**Product identifier** SCRUBS® In-A-Bucket Hand Cleaner Towels

**Other means of identification**

**Part Number** 42201, 42210, 42230, 42232, 42256, 42260, 42272, 42274, 42280

**Recommended use** A cleaner wipe designed for removing dirt and grease from hands.

**Recommended restrictions** None known.

### Manufacturer/Importer/Supplier/Distributor information

#### Manufacturer

**Company name** ITW Pro Brands

**Address** 805 E. Old 56 Highway  
Olathe, KS 66061

**Country** (U.S.A.)

**Tel:** +1 800-443-9536

**In Case of Emergency** 1-800-535-5053 (Infotrac)

## 2. Hazard(s) identification

**Physical hazards** Not classified.

**Health hazards** Not classified.

**Environmental hazards** Not classified.

**OSHA defined hazards** Not classified.

#### Label elements

**Hazard symbol** None.

**Signal word** None.

**Hazard statement** The mixture does not meet the criteria for classification.

**Precautionary statement**

**Prevention** Observe good industrial hygiene practices.

**Response** Not available.

**Storage** Store away from incompatible materials.

**Disposal** Dispose of waste and residues in accordance with local authority requirements.

**Hazard(s) not otherwise classified (HNOC)** None known.

**Supplemental information** None.

## 3. Composition/information on ingredients

#### Mixtures

Chemical name	Common name and synonyms	CAS number	%
Distillates Petroleum Hydrotreated Light		64742-47-8	1 - 3
Sodium Dodecanol Sulfosuccinate		577-11-7	0.5 - 1
Dimethyl Glutarate		1119-40-0	< 0.5
D-limonene		5989-27-5	< 0.5
Phenoxyethanol		122-99-6	< 0.5

## 4. First-aid measures

**Inhalation** Move to fresh air. Call a physician if symptoms develop or persist.

**Skin contact** Get medical attention if irritation develops and persists.

**Eye contact** Rinse with water. Get medical attention if irritation develops and persists.

<b>Ingestion</b>	Rinse mouth. Get medical attention if symptoms occur.
<b>Most important symptoms/effects, acute and delayed</b>	Direct contact with eyes may cause temporary irritation.
<b>Indication of immediate medical attention and special treatment needed</b>	Treat symptomatically.
<b>General information</b>	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

## 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).
<b>Unsuitable extinguishing media</b>	Do not use water jet as an extinguisher, as this will spread the fire.
<b>Specific hazards arising from the chemical</b>	During fire, gases hazardous to health may be formed.
<b>Special protective equipment and precautions for firefighters</b>	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
<b>Fire fighting equipment/instructions</b>	Move containers from fire area if you can do so without risk.
<b>Specific methods</b>	Use standard firefighting procedures and consider the hazards of other involved materials.
<b>General fire hazards</b>	No unusual fire or explosion hazards noted.

## 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	Keep unnecessary personnel away. For personal protection, see section 8 of the SDS.
<b>Methods and materials for containment and cleaning up</b>	<p>Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.</p> <p>Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.</p> <p>Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. Mechanically pick up material and place in a proper container for disposal.</p>
<b>Environmental precautions</b>	Avoid discharge into drains, water courses or onto the ground.

## 7. Handling and storage

<b>Precautions for safe handling</b>	Avoid prolonged exposure. Observe good industrial hygiene practices.
<b>Conditions for safe storage, including any incompatibilities</b>	Store in tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

## 8. Exposure controls/personal protection

### Occupational exposure limits

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

#### U.S. - OSHA Components

Components	Type	Value	Form
Distillates Petroleum Hydrotreated Light (CAS 64742-47-8)	PEL	5 mg/m3	Oil mist

#### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
Glycerin (CAS 56-81-5)	PEL	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.

ACGIH Components	Type	Value	Form
Distillates Petroleum Hydrotreated Light (CAS 64742-47-8)	TWA	5 mg/m3	Oil mist

US. Workplace Environmental Exposure Level (WEEL) Guides Components	Type	Value	Form
Propylene Glycol (CAS 57-55-6)	TWA	10 mg/m3	Aerosol.

<b>Biological limit values</b>	No biological exposure limits noted for the ingredient(s).
<b>Appropriate engineering controls</b>	Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.
<b>Individual protection measures, such as personal protective equipment</b>	
<b>Eye/face protection</b>	Wear safety glasses with side shields (or goggles).
<b>Skin protection</b>	
<b>Hand protection</b>	Wear appropriate chemical resistant gloves.
<b>Other</b>	Wear suitable protective clothing.
<b>Respiratory protection</b>	In case of insufficient ventilation, wear suitable respiratory equipment.
<b>Thermal hazards</b>	Wear appropriate thermal protective clothing, when necessary.
<b>General hygiene considerations</b>	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

## 9. Physical and chemical properties

### Appearance

<b>Physical state</b>	Liquid.
<b>Form</b>	Liquid.
<b>Color</b>	Colorless-blue / white

**Odor** Citrus

**Odor threshold** Not available.

**pH** 6

**Melting point/freezing point** Not available.

**Initial boiling point and boiling range** 212 °F (100 °C)

**Flash point** Not available.

**Evaporation rate** Not available.

**Flammability (solid, gas)** Not applicable.

### Upper/lower flammability or explosive limits

**Flammability limit - lower (%)** Not available.

**Flammability limit - upper (%)** Not available.

**Explosive limit - lower (%)** Not available.

**Explosive limit - upper (%)** Not available.

**Vapor pressure** Not available.

**Vapor density** > 1

**Relative density** Not available.

### Solubility(ies)

**Solubility (water)** Miscible.

**Partition coefficient (n-octanol/water)** Not available.



<b>Auto-ignition temperature</b>	Not available.
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	Not available.
<b>Other information</b>	
<b>Explosive properties</b>	Not explosive.
<b>Oxidizing properties</b>	Not oxidizing.
<b>Specific gravity</b>	0.995
<b>VOC</b>	0 % per US State and Federal Consumer Product Regulations

## 10. Stability and reactivity

<b>Reactivity</b>	The product is stable and non-reactive under normal conditions of use, storage and transport.
<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	No dangerous reaction known under conditions of normal use.
<b>Conditions to avoid</b>	Avoid temperatures exceeding the decomposition temperature. Contact with incompatible materials.
<b>Incompatible materials</b>	Strong oxidizing agents.
<b>Hazardous decomposition products</b>	Carbon oxides.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Inhalation</b>	Not available.
<b>Skin contact</b>	No adverse effects due to skin contact are expected.
<b>Eye contact</b>	Direct contact with eyes may cause temporary irritation.
<b>Ingestion</b>	Expected to be a low ingestion hazard.

**Symptoms related to the physical, chemical and toxicological characteristics** Direct contact with eyes may cause temporary irritation.

### Information on toxicological effects

**Acute toxicity** Not expected to be acutely toxic.

Components	Species	Test Results
3-iodo-2-propynyl-butylcarbamate (CAS 55406-53-6)		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rabbit	> 2000 mg/kg
<b>Oral</b>		
LD50	Rat	1.1 g/kg
Alcohols, C12-15, ethoxylated (CAS 68131-39-5)		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rat	> 2000 mg/kg, 24 Hours
<b>Inhalation</b>		
<i>Vapor</i>		
LC50	Rat	> 100 mg/m <sup>3</sup> , 6 Hours
Distillates Petroleum Hydrotreated Light (CAS 64742-47-8)		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rabbit	> 2000 mg/kg
<b>Inhalation</b>		
<i>Vapor</i>		
LC50	Rat	> 0.1 mg/l, 8 Hours

Components	Species	Test Results
<b>Oral</b> LD50	Rat	> 5000 mg/kg
D-limonene (CAS 5989-27-5)		
<b>Acute</b>		
<b>Oral</b> LD50	Rat	> 2000 mg/kg
Glycerin (CAS 56-81-5)		
<b>Acute</b>		
<b>Oral</b> LD50	Rat	18000 mg/kg
Phenoxyethanol (CAS 122-99-6)		
<b>Acute</b>		
<b>Dermal</b> LD50	Rabbit	> 2200 mg/kg, 24 Hours
<b>Oral</b> LD50	Rat	1400 mg/kg
Propylene Glycol (CAS 57-55-6)		
<b>Acute</b>		
<b>Dermal</b> LD50	Rabbit	> 2000 mg/kg, 24 Hours
<b>Oral</b> LD50	Rat	22000 mg/kg
Sodium Dodecanol Sulfosuccinate (CAS 577-11-7)		
<b>Acute</b>		
<b>Dermal</b> LD50	Rabbit	> 10000 mg/kg, 24 Hours
<b>Oral</b> LD50	Rat	> 1300 mg/kg
<b>Skin corrosion/irritation</b>	Prolonged skin contact may cause temporary irritation.	
<b>Serious eye damage/eye irritation</b>	Direct contact with eyes may cause temporary irritation.	
<b>Respiratory or skin sensitization</b>		
<b>Respiratory sensitization</b>	Not a respiratory sensitizer.	
<b>Skin sensitization</b>	This product is not expected to cause skin sensitization.	
<b>Germ cell mutagenicity</b>	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.	
<b>Carcinogenicity</b>	This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.	
<b>IARC Monographs. Overall Evaluation of Carcinogenicity</b>		
D-limonene (CAS 5989-27-5)	3 Not classifiable as to carcinogenicity to humans.	
<b>OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)</b>		
Not listed.		
<b>US. National Toxicology Program (NTP) Report on Carcinogens</b>		
Not listed.		
<b>Reproductive toxicity</b>	This product is not expected to cause reproductive or developmental effects.	
<b>Specific target organ toxicity - single exposure</b>	Not classified.	
<b>Specific target organ toxicity - repeated exposure</b>	Not classified.	
<b>Aspiration hazard</b>	Not available.	
<b>Chronic effects</b>	Prolonged inhalation may be harmful.	

**Further information**

This product has no known adverse effect on human health.

**12. Ecological information****Ecotoxicity**

The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Components		Species	Test Results
3-iodo-2-propynyl-butylcarbamate (CAS 55406-53-6)			
<b>Aquatic</b>			
<i>Acute</i>			
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	0.05 - 0.089 mg/l, 96 hours
Alcohols, C12-15, ethoxylated (CAS 68131-39-5)			
<b>Aquatic</b>			
<i>Acute</i>			
Crustacea	EC50	Water flea (Ceriodaphnia dubia)	0.37 - 0.43 mg/l, 48 hours
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	0.96 - 1.4 mg/l, 96 hours
Distillates Petroleum Hydrotreated Light (CAS 64742-47-8)			
<b>Aquatic</b>			
<i>Acute</i>			
Fish	LC50	Bluegill (Lepomis macrochirus)	2.2 mg/l, 4 days
D-limonene (CAS 5989-27-5)			
<b>Aquatic</b>			
<i>Acute</i>			
Crustacea	EC50	Water flea (Daphnia pulex)	69.6 mg/l, 48 hours
Fish	LC50	Fathead minnow (Pimephales promelas)	0.619 - 0.796 mg/l, 96 hours
Glycerin (CAS 56-81-5)			
<b>Aquatic</b>			
<i>Acute</i>			
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	51000 - 57000 mg/l, 96 hours
Phenoxyethanol (CAS 122-99-6)			
<b>Aquatic</b>			
<i>Acute</i>			
Fish	LC50	Fathead minnow (Pimephales promelas)	337 - 352 mg/l, 96 hours
Propylene Glycol (CAS 57-55-6)			
<b>Aquatic</b>			
<i>Acute</i>			
Crustacea	EC50	Water flea (Daphnia magna)	> 10000 mg/l, 48 hours
Fish	LC50	Fathead minnow (Pimephales promelas)	710 mg/l, 96 hours
Sodium Dodecanol Sulfosuccinate (CAS 577-11-7)			
<b>Aquatic</b>			
<i>Acute</i>			
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	20 - 40 mg/l, 96 hours

**Persistence and degradability**

No data is available on the degradability of any ingredients in the mixture.

**Bioaccumulative potential****Partition coefficient n-octanol / water (log Kow)**

D-limonene	4.57
Glycerin	-1.76
Phenoxyethanol	1.16
Propylene Glycol	-0.92

**Mobility in soil**

Not established.

**Other adverse effects**

None known.

### 13. Disposal considerations

<b>Disposal instructions</b>	Collect and reclaim or dispose in sealed containers at licensed waste disposal site.
<b>Local disposal regulations</b>	Dispose in accordance with all applicable regulations.
<b>Hazardous waste code</b>	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
<b>Waste from residues / unused products</b>	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
<b>Contaminated packaging</b>	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

### 14. Transport information

#### DOT

Not regulated as dangerous goods.

#### IATA

Not regulated as dangerous goods.

#### IMDG

Not regulated as dangerous goods.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not applicable.

**General information** This material is not regulated by any mode of transportation.

### 15. Regulatory information

**US federal regulations** This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

#### Toxic Substances Control Act (TSCA)

##### TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

#### CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

#### SARA 304 Emergency release notification

Not regulated.

#### OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

#### Superfund Amendments and Reauthorization Act of 1986 (SARA)

##### SARA 302 Extremely hazardous substance

Not listed.

**SARA 311/312 Hazardous chemical** No

##### SARA 313 (TRI reporting)

Not regulated.

#### Other federal regulations

##### Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

##### Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

**Safe Drinking Water Act (SDWA)** Not regulated.

##### FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace

Glycerin (CAS 56-81-5)

Other Flavoring Substances with OSHA PEL's

#### US state regulations

##### US. New Jersey Worker and Community Right-to-Know Act

3-iodo-2-propynyl-butylcarbamate (CAS 55406-53-6)

Glycerin (CAS 56-81-5)  
Propylene Glycol (CAS 57-55-6)

### California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

### International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Industrial Chemicals (AICIS)	No
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
Taiwan	Taiwan Chemical Substance Inventory (TCSI)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

## 16. Other information, including date of preparation or last revision

**Issue date** 03-05-2021

**Version #** 01

### Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. ITW Pro Brands cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use.

**Section 1: PRODUCT & COMPANY IDENTIFICATION**

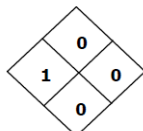
Product Name: Simple Green® All-Purpose Cleaner  
 Additional Names: Simple Green® Concentrated Cleaner Degreaser Deodorizer  
 Simple Green® Scrubbing Pad (Fluid in pad only)

Manufacturer’s Part Number: *\*Please refer to page 4*

Company: Sunshine Makers, Inc.  
 15922 Pacific Coast Highway  
 Huntington Beach, CA 92649 USA  
 Telephone: 800-228-0709 • 562-795-6000 Fax: 562-592-3830  
 Emergency Phone: Chem-Tel 24-Hour Emergency Service: 800-255-3924

**Section 2: HAZARDS IDENTIFICATION**

**Emergency Overview:** CAUTION. Irritant. This is a Green colored liquid with a sassafras added odor. Scrubbing pad is a green fibrous rectangle infused with Simple Green Cleaner.



NFPA/HMIS Rating:  
 Health = 1 = slight  
 Fire, Reactivity, and Special = 0 = minimal

**Potential Health Effects**

**Eye Contact:** Mildly irritating.  
**Skin Contact:** No adverse effects expected under typical use conditions. Prolonged exposure may cause dryness. Chemically sensitive individuals may experience mild irritation.  
**Ingestion:** May cause stomach or intestinal irritation if swallowed.  
**Inhalation:** No adverse effects expected under typical use conditions. Adequate ventilation should be present for prolonged usage in small enclosed areas.

**Section 3: COMPOSITION/INFORMATION ON INGREDIENTS**

<u>Ingredient</u>	<u>CAS Number</u>	<u>Percent Range</u>
Water	7732-18-5	≥ 78%
2-butoxyethanol	111-76-2	≤ 5%
Ethoxylated Alcohol	68439-46-3	≤ 5%
Tetrapotassium Pyrophosphate	7320-34-5	≤ 5%
Sodium Citrate	68-04-2	≤ 5%
Fragrance	Proprietary Mixture	≤ 1%
Colorant	Proprietary Mixture	≤ 1%

**Section 4: FIRST AID MEASURES**

**If Inhaled:** If adverse effect occurs, move to fresh air.  
**If on skin:** If adverse effect occurs, rinse skin with water.  
**If in eyes:** Flush with plenty of water. After 5 minutes of flushing, remove contact lenses, if present. Continue flushing for at least 10 more minutes. If irritation persists seek medical attention.  
**If ingested:** Drink plenty of water to dilute.

**Section 5: FIRE FIGHTING MEASURES**

This formula is stable, non-flammable, and will not burn. No special procedures necessary

**Flammability:** Non-flammable  
**Flash Point:** Non-flammable

**Suitable Extinguishing Media:** Use Dry chemical, CO2, water spray or “alcohol” foam.  
**Extinguishing Media to Avoid** High volume jet water.  
**Special Exposure Hazards:** In event of fire created carbon oxides, oxides of phosphorus may be formed.  
**Special Protective Equipment:** Wear positive pressure self-contained breathing apparatus; Wear full protective clothing.

**Section 6: ACCIDENTAL RELEASE MEASURES**

**Personal Precautions:** See section 8 – personal protection.

**Environmental Precautions:** Do not allow into open waterways and ground water systems.

**Method for Clean Up:** Dilute with water and rinse into sanitary sewer system or soak up with inert absorbent material.

**Section 7: HANDLING AND STORAGE**

**Handling:** Keep container tightly closed. Ensure adequate ventilation. Keep out of reach of children.

**Storage:** Keep in cool dry area.

**Section 8: EXPOSURE CONTROLS / PERSONAL PROTECTION**

<b>Exposure Limit Values:</b>	OSHA PEL	ACGIH TLV
2-butoxyethanol	TWA 50 ppm (240 mg/m <sup>3</sup> )	20 ppm (97 mg/m <sup>3</sup> )
Tetrapotassium Pyrophosphate		5 mg/m <sup>3</sup>

**Exposure Controls:**

**Eye Contact:** Use protective glasses if splashing or spray-back is likely.  
**Respiratory:** Use in well ventilated areas.  
**Skin Contact:** Prolonged exposure or dermal sensitive individuals should use protective gloves.

**Section 9: PHYSICAL AND CHEMICAL PROPERTIES**

<b>Appearance:</b>	Green Liquid	<b>Vapor Pressure:</b>	18 mmHg @20°C; 23.5 mmHg @26°C	
<b>Odor:</b>	Added Sassafras odor	<b>Density:</b>	8.5 lb/gal;	
<b>Specific Gravity:</b>	1.010 ± 0.010	<b>Water Solubility:</b>	100%	
<b>pH:</b>	9.5 ± 0.5	<b>VOC composite Partial Pressure:</b>	TBD	
<b>Boiling Point:</b>	~210°F (98 °C)	<b>VOC:</b>	CARB Method 310	3.8%
<b>Freezing Point:</b>	~ 32°F (0 °C)		SCAQMD Method 313	2.8%
<b>Nutrient Content:</b>	Phosphorous: 0.28% Chloride: ~110 ppm	Sulfur: ~180 ppm Fluorine: ~90 ppm		

## Section 10: STABILITY AND REACTIVITY

Stability: Stable  
 Materials to Avoid: None known  
 Hazardous Decomposition Products: Normal products of combustion - CO, CO<sub>2</sub>; Oxides of Phosphorous may occur.

## Section 11: TOXICOLOGICAL INFORMATION

Acute Toxicity: Oral LD<sub>50</sub> (rat) > 5 g/kg body weight  
 Dermal LD<sub>50</sub> (rabbit) > 5 g/kg body weight  
 Toxicity calculated from ingredients using OECD SERIES ON TESTING AND ASSESSMENT Number 33

Carcinogens: No ingredients are listed by OSHA, IARC, or NTP as known or suspected carcinogens.

## Section 12: ECOLOGICAL INFORMATION

Hazard to wild mammals: Low, based on toxicology profile  
 Hazard to avian species: Low, based on toxicology profile  
 Hazard to aquatic organisms: Low, based on toxicology profile  
 Chemical Fate Information: Readily Biodegradable per OECD 301D, Closed Bottle Test

## Section 13: DISPOSAL CONSIDERATIONS

Appropriate Method for Disposal:

Unused Product: \*Dilute with water to use concentration and dispose by sanitary sewer.  
 Used Product: \*This product can enter into clarifiers and oil/water separators. Used product may be hazardous depending on the cleaning application and resulting contaminants.  
 Empty Containers: \*Triple-rinse with water and offer for recycling if available in your area. Otherwise, dispose as non-hazardous waste.

\*Dispose of used or unused product, and empty containers in accordance with the local, State, Provincial, and Federal regulations for your location. Never dispose of used degreasing rinsates into lakes, streams, and open bodies of water or storm drains.

## Section 14: TRANSPORT INFORMATION

U.S. Department of Transportation (DOT) / Canadian TDG: Not Regulated

IMO / IDMG: Not classified as Dangerous  
 ICAO/ IATA: Not classified as Dangerous  
 ADR/RID: Not classified as Dangerous

U.N. Number	Not Required	Proper Shipping Name:	Detergent Solution
Hazard Class:	Non-Hazardous	Marine Pollutant:	No



**Section 15: REGULATORY INFORMATION**

All components are listed on: EINECS, TSCA, DSL and AICS Inventory.

No components listed under: Clean Air Act Section 112; Clean Water Act 307 & 311

SARA Title III 2-butoxyethanol is subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 as Category N230 – Certain Glycol Ethers.

RCRA Status: Not a hazardous waste CERCLA Status: No components listed

State Right To Know Lists

2-butoxyethanol Illinois, Massachusetts, New Jersey, Pennsylvania, Rhode Island

**WHMIS Classification** – Category D, subcategory 2B, eye irritant

Name	Toxic Substances List – Schedule 1 – CEPA (Canadian Environmental Protection Act)	NPRI Inventory
2-butoxyethanol	Yes	No

This product has been classified according to the hazard criteria of the CPR and the MSDS contains all the information required by Canada’s Controlled Products Regulation.

**Section 16: OTHER INFORMATION**

Questions about the information found on this MSDS should be directed to:

SUNSHINE MAKERS, INC. – TECHNICAL DEPARTMENT

15922 Pacific Coast Hwy. Huntington Beach, CA 92649

Phone: 800/228-0709 [8am-5pm Pacific time, Mon-Fri] Fax: 562/592-3830 Email: infoweb@simplegreen.com

CAGE CODE 1Z575

GSA/FSS - CONTRACT NO. GS-07F-0065J

Scrubbing Pad GSA/BPA - CONTRACT NO. GS-07F-BSIMP

National Stock Numbers & Industrial Part Numbers:

Simple Green	Part Number	NSN	Size
	13012	7930-01-342-5315	24 oz spray (12/case)
	13005	7930-01-306-8369	1 Gallon (6/case)
	13006	7930-01-342-5316	5 Gallon
	13016	7930-01-342-5317	15 Gallon
	13008	7930-01-342-4145	55 Gallon
	13103	N/A	2oz samples
	13225	N/A	2.5 Gallon
	13275	N/A	275 Gallon tote
	48049	N/A	1 Gallon Conc. w/ 32oz dilution
<b>Scrubbing Pad</b>	10224	7930-01-346-9148	Each (24/case)

**Retail Numbers:**

Part Number	Size
13002	16 oz Trigger (12/case)
13005	1 Gallon (6/case)
13013	24 oz Trigger (12/case)
13014	67 oz / 2 L (6/case)
13033	32 oz Trigger (12/case)
80007	Tier display holding 13005 (36/Tier)

part number is for both industrial and retail

**\*\*International Part Numbers May Differ.**

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**Section 1: PRODUCT & COMPANY IDENTIFICATION**

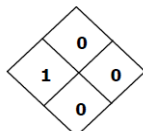
Product Name: Simple Green® All-Purpose Cleaner  
 Additional Names: Simple Green® Concentrated Cleaner Degreaser Deodorizer  
 Simple Green® Scrubbing Pad (Fluid in pad only)

Manufacturer’s Part Number: *\*Please refer to page 4*

Company: Sunshine Makers, Inc.  
 15922 Pacific Coast Highway  
 Huntington Beach, CA 92649 USA  
 Telephone: 800-228-0709 • 562-795-6000 Fax: 562-592-3830  
 Emergency Phone: Chem-Tel 24-Hour Emergency Service: 800-255-3924

**Section 2: HAZARDS IDENTIFICATION**

**Emergency Overview:** CAUTION. Irritant. This is a Green colored liquid with a sassafras added odor. Scrubbing pad is a green fibrous rectangle infused with Simple Green Cleaner.



NFPA/HMIS Rating:  
 Health = 1 = slight  
 Fire, Reactivity, and Special = 0 = minimal

**Potential Health Effects**

**Eye Contact:** Mildly irritating.  
**Skin Contact:** No adverse effects expected under typical use conditions. Prolonged exposure may cause dryness. Chemically sensitive individuals may experience mild irritation.  
**Ingestion:** May cause stomach or intestinal irritation if swallowed.  
**Inhalation:** No adverse effects expected under typical use conditions. Adequate ventilation should be present for prolonged usage in small enclosed areas.

**Section 3: COMPOSITION/INFORMATION ON INGREDIENTS**

<u>Ingredient</u>	<u>CAS Number</u>	<u>Percent Range</u>
Water	7732-18-5	≥ 78%
2-butoxyethanol	111-76-2	≤ 5%
Ethoxylated Alcohol	68439-46-3	≤ 5%
Tetrapotassium Pyrophosphate	7320-34-5	≤ 5%
Sodium Citrate	68-04-2	≤ 5%
Fragrance	Proprietary Mixture	≤ 1%
Colorant	Proprietary Mixture	≤ 1%

**Section 4: FIRST AID MEASURES**

**If Inhaled:** If adverse effect occurs, move to fresh air.  
**If on skin:** If adverse effect occurs, rinse skin with water.  
**If in eyes:** Flush with plenty of water. After 5 minutes of flushing, remove contact lenses, if present. Continue flushing for at least 10 more minutes. If irritation persists seek medical attention.  
**If ingested:** Drink plenty of water to dilute.

**Section 5: FIRE FIGHTING MEASURES**

This formula is stable, non-flammable, and will not burn. No special procedures necessary

**Flammability:** Non-flammable  
**Flash Point:** Non-flammable

**Suitable Extinguishing Media:** Use Dry chemical, CO2, water spray or “alcohol” foam.  
**Extinguishing Media to Avoid** High volume jet water.  
**Special Exposure Hazards:** In event of fire created carbon oxides, oxides of phosphorus may be formed.  
**Special Protective Equipment:** Wear positive pressure self-contained breathing apparatus; Wear full protective clothing.

**Section 6: ACCIDENTAL RELEASE MEASURES**

**Personal Precautions:** See section 8 – personal protection.

**Environmental Precautions:** Do not allow into open waterways and ground water systems.

**Method for Clean Up:** Dilute with water and rinse into sanitary sewer system or soak up with inert absorbent material.

**Section 7: HANDLING AND STORAGE**

**Handling:** Keep container tightly closed. Ensure adequate ventilation. Keep out of reach of children.

**Storage:** Keep in cool dry area.

**Section 8: EXPOSURE CONTROLS / PERSONAL PROTECTION**

<b>Exposure Limit Values:</b>	OSHA PEL	ACGIH TLV
2-butoxyethanol	TWA 50 ppm (240 mg/m <sup>3</sup> )	20 ppm (97 mg/m <sup>3</sup> )
Tetrapotassium Pyrophosphate		5 mg/m <sup>3</sup>

**Exposure Controls:**

**Eye Contact:** Use protective glasses if splashing or spray-back is likely.  
**Respiratory:** Use in well ventilated areas.  
**Skin Contact:** Prolonged exposure or dermal sensitive individuals should use protective gloves.

**Section 9: PHYSICAL AND CHEMICAL PROPERTIES**

<b>Appearance:</b>	Green Liquid	<b>Vapor Pressure:</b>	18 mmHg @20°C; 23.5 mmHg @26°C	
<b>Odor:</b>	Added Sassafras odor	<b>Density:</b>	8.5 lb/gal;	
<b>Specific Gravity:</b>	1.010 ± 0.010	<b>Water Solubility:</b>	100%	
<b>pH:</b>	9.5 ± 0.5	<b>VOC composite Partial Pressure:</b>	TBD	
<b>Boiling Point:</b>	~210°F (98 °C)	<b>VOC:</b>	CARB Method 310	3.8%
<b>Freezing Point:</b>	~ 32°F (0 °C)		SCAQMD Method 313	2.8%
<b>Nutrient Content:</b>	Phosphorous: 0.28% Chloride: ~110 ppm	Sulfur: ~180 ppm Fluorine: ~90 ppm		

**Section 10: STABILITY AND REACTIVITY**

Stability: Stable  
Materials to Avoid: None known  
Hazardous Decomposition Products: Normal products of combustion - CO, CO<sub>2</sub>; Oxides of Phosphorous may occur.

**Section 11: TOXICOLOGICAL INFORMATION**

Acute Toxicity: Oral LD<sub>50</sub> (rat) > 5 g/kg body weight  
Dermal LD<sub>50</sub> (rabbit) > 5 g/kg body weight  
Toxicity calculated from ingredients using OECD SERIES ON TESTING AND ASSESSMENT Number 33

Carcinogens: No ingredients are listed by OSHA, IARC, or NTP as known or suspected carcinogens.

**Section 12: ECOLOGICAL INFORMATION**

Hazard to wild mammals: Low, based on toxicology profile  
Hazard to avian species: Low, based on toxicology profile  
Hazard to aquatic organisms: Low, based on toxicology profile  
Chemical Fate Information: Readily Biodegradable per OECD 301D, Closed Bottle Test

**Section 13: DISPOSAL CONSIDERATIONS**

Appropriate Method for Disposal:

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Used Product: \*This product can enter into clarifiers and oil/water separators. Used product may be hazardous depending on the cleaning application and resulting contaminants.  
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ADR/RID: Not classified as Dangerous

U.N. Number: Not Required  
Hazard Class: Non-Hazardous  
Proper Shipping Name: Detergent Solution  
Marine Pollutant: No

**Section 15: REGULATORY INFORMATION**

All components are listed on: EINECS, TSCA, DSL and AICS Inventory.

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2-butoxyethanol Illinois, Massachusetts, New Jersey, Pennsylvania, Rhode Island

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Name	Toxic Substances List – Schedule 1 – CEPA (Canadian Environmental Protection Act)	NPRI Inventory
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CAGE CODE 1Z575

GSA/FSS - CONTRACT NO. GS-07F-0065J

Scrubbing Pad GSA/BPA - CONTRACT NO. GS-07F-BSIMP

National Stock Numbers & Industrial Part Numbers:

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## SECTION 1: IDENTIFICATION

### 1.1. IDENTIFICATION

Product form : Mixture  
 Product name : SKC-S Aerosol

### 1.2. RELEVANT IDENTIFIED USES OF THE SUBSTANCE OR MIXTURE AND USES ADVISED AGAINST

Recommended use : Non-Destructive Testing.

### 1.3. DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET

<b>Manufacturer</b>	<b>Distributor</b>
Magnaflux 155 Harlem Ave. Glenview, IL 60025 - USA T 847-657-5300	

### 1.4. EMERGENCY TELEPHONE NUMBER

Emergency number : CHEMTREC 800-424-9300

## SECTION 2: HAZARD IDENTIFICATION

### 2.1. CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

#### GHS classification

Flam. Aerosol 1  
 Press. Gas (Comp.)  
 Skin Irrit. 2  
 STOT SE 3  
 Asp. Tox. 1

### 2.2. LABEL ELEMENTS

#### GHS labelling

Hazard pictograms (GHS) :



Signal word (GHS) :

Danger

Hazard statements (GHS) :

Extremely flammable aerosol. Contains gas under pressure; may explode if heated. May be fatal if swallowed and enters airways. Causes skin irritation. May cause drowsiness or dizziness.

Precautionary statements (GHS) :

Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use. Avoid breathing dust/fume/gas/mist/vapours/spray. Wash hands, forearms and face thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection. If swallowed: Immediately call a poison center/doctor. Do NOT induce vomiting. If on skin: Wash with plenty of water. Take off contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical advice/attention. If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor if you feel unwell. Store in a well-ventilated place. Store locked up. Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F. Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

### 2.3. OTHER HAZARDS

No additional information available

### 2.4. UNKNOWN ACUTE TOXICITY

Not applicable

### SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.1. SUBSTANCES

Not applicable

#### 3.2. MIXTURES

Name	Product identifier	%
Naphtha, petroleum, hydrotreated light	(CAS-No.) 64742-49-0	96.40
Carbon dioxide	(CAS-No.) 124-38-9	3.60

### SECTION 4: FIRST AID MEASURES

#### 4.1. DESCRIPTION OF FIRST AID MEASURES

- First-aid measures after inhalation : If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a POISON CENTER or doctor/physician if you feel unwell.
- First-aid measures after skin contact : In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Call a physician if irritation develops and persists.
- First-aid measures after eye contact : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
- First-aid measures after ingestion : IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Do NOT induce vomiting. Never give anything by mouth to an unconscious person.

#### 4.2. MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED

- Symptoms/effects after inhalation : May cause irritation to the respiratory tract. May cause drowsiness or dizziness.
- Symptoms/effects after skin contact : Causes skin irritation. Symptoms may include redness, edema, drying, defatting and cracking of the skin.
- Symptoms/effects after eye contact : May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling.
- Symptoms/effects after ingestion : May be fatal if swallowed and enters airways. This product may be aspirated into the lungs and cause chemical pneumonitis. May cause stomach distress, nausea or vomiting.

#### 4.3. INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED

Symptoms may not appear immediately. In case of accident or if you feel unwell, seek medical advice immediately (show the label or SDS where possible).

### SECTION 5: FIREFIGHTING MEASURES

#### 5.1. EXTINGUISHING MEDIA

- Suitable extinguishing media : Dry chemical. Carbon dioxide. Water fog. Foam.
- Unsuitable extinguishing media : Do not use water jet.

#### 5.2. SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE

- Fire hazard : Extremely flammable aerosol. Products of combustion may include, and are not limited to: oxides of carbon.
- Explosion hazard : Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries.
- Reactivity : No dangerous reaction known under conditions of normal use.

#### 5.3. ADVICE FOR FIREFIGHTERS

- Firefighting instructions : Move containers away from the fire area if this can be done without risk. DO NOT fight fire when fire reaches explosives. Evacuate area.
- Protection during firefighting : Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA). Use water spray to keep fire-exposed containers cool.

### SECTION 6: ACCIDENTAL RELEASE MEASURES

#### 6.1. PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

- General measures : Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Remove ignition sources. Use special care to avoid static electric charges. Use only non-sparking tools. Avoid breathing vapour or mist.

##### 6.1.1. FOR NON-EMERGENCY PERSONNEL

No additional information available

##### 6.1.2. FOR EMERGENCY RESPONDERS

No additional information available

**6.2. ENVIRONMENTAL PRECAUTIONS**

Do not allow to enter into surface water or drains. Prevent entry to sewers and public waters.

**6.3. METHODS AND MATERIAL FOR CONTAINMENT AND CLEANING UP**

- For containment : Stop leak without risks if possible. Dilute with water. Absorb and/or contain spill with inert material (sand, vermiculite or other appropriate material), then place in suitable container. Do not flush into surface water or sewer system. Wear recommended personal protective equipment. Use explosion-proof equipment.
- Methods for cleaning up : Scoop up material and place in a disposal container. Provide ventilation.

**6.4. REFERENCE TO OTHER SECTIONS**

For further information refer to section 8: "Exposure controls/personal protection"

**SECTION 7: HANDLING AND STORAGE**

**7.1. PRECAUTIONS FOR SAFE HANDLING**

- Additional hazards when processed : Hazardous waste due to potential risk of explosion. Pressurized container: Do not pierce or burn, even after use.
- Precautions for safe handling : Keep away from sources of ignition - No smoking. Do not spray on an open flame or other ignition source. Do not pierce or burn, even after use. Use non-sparking tools. Use explosion-proof equipment. Take precautionary measures against static discharge. Avoid breathing vapour or mist. Avoid contact with skin and eyes. Do not swallow. When using do not eat, drink or smoke. Use only outdoors or in a well-ventilated area.
- Hygiene measures : Launder contaminated clothing before reuse. Wash hands before eating, drinking, or smoking.

**7.2. CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES**

- Technical measures : Proper grounding procedures to avoid static electricity should be followed.
- Storage conditions : Keep locked up and out of reach of children. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatibles. Do not expose to temperatures exceeding 50 °C/ 122 °F.

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

**8.1. CONTROL PARAMETERS**

Naphtha, petroleum, hydrotreated light (64742-49-0)		
ACGIH	ACGIH TWA	247 ppm/8h
Carbon dioxide (124-38-9)		
ACGIH	ACGIH TWA (ppm)	5000 ppm
ACGIH	ACGIH STEL (ppm)	30000 ppm
OSHA	OSHA PEL (TWA) (mg/m³)	9000 mg/m³
OSHA	OSHA PEL (TWA) (ppm)	5000 ppm
IDLH	US IDLH (ppm)	40000 ppm
NIOSH	NIOSH REL (TWA) (mg/m³)	9000 mg/m³
NIOSH	NIOSH REL (TWA) (ppm)	5000 ppm
NIOSH	NIOSH REL (STEL) (mg/m³)	54000 mg/m³
NIOSH	NIOSH REL (STEL) (ppm)	30000 ppm

**8.2. EXPOSURE CONTROLS**

- Appropriate engineering controls : Ensure good ventilation of the work station. Use explosion-proof ventilation equipment.
- Hand protection : Wear suitable gloves resistant to chemical penetration.
- Eye protection : Safety glasses or goggles are recommended when using product.
- Skin and body protection : Wear suitable protective clothing.
- Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
- Environmental exposure controls : Avoid release to the environment.
- Other information : Handle in accordance with good industrial hygiene and safety procedures. Do not eat, drink or smoke when using this product.



**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES****9.1. INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES**

Physical state	: Gas/Pressurized Liquid
Appearance	: Clear
Colour	: Colourless
Odour	: Hydrocarbon
Odour threshold	: No data available
pH	: Not applicable
Melting point	: No data available
Freezing point	: Not applicable
Boiling point	: No data available
Flash point	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Flammability (solid, gas)	: Extremely flammable aerosol
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Solubility	: No data available
Partition coefficient n-octanol/water	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive limits	: No data available
Explosive properties	: Pressurised container: May burst if heated.
Oxidising properties	: No data available

**9.2. OTHER INFORMATION**

VOC content	: 745.77 g/l
Heat of combustion	: 39.14 kJ/g

**SECTION 10: STABILITY AND REACTIVITY****10.1. REACTIVITY**

No dangerous reaction known under conditions of normal use.

**10.2. CHEMICAL STABILITY**

Extremely flammable aerosol. Contents under pressure. Container may explode if heated. Do not puncture. Do not burn. Extreme risk of explosion by shock, friction, fire or other sources of ignition.

**10.3. POSSIBILITY OF HAZARDOUS REACTIONS**

No dangerous reaction known under conditions of normal use.

**10.4. CONDITIONS TO AVOID**

Sources of ignition. Heat. Incompatible materials. Direct sunlight.

**10.5. INCOMPATIBLE MATERIALS**

Oxidizing agents.

**10.6. HAZARDOUS DECOMPOSITION PRODUCTS**

May include, and are not limited to: oxides of carbon.

**SECTION 11: TOXICOLOGICAL INFORMATION****11.1. INFORMATION ON TOXICOLOGICAL EFFECTS**

Acute toxicity (oral)	: Not classified.
Acute toxicity (dermal)	: Not classified.
Acute toxicity (inhalation)	: Not classified.

Naphtha, petroleum, hydrotreated light (64742-49-0)	
LD50 oral rat	> 5000 mg/kg
LD50 dermal rabbit	> 3160 mg/kg
LC50 inhalation rat	73680 ppm/4h

Skin corrosion/irritation	: Causes skin irritation. pH: Not applicable
Serious eye damage/irritation	: Not classified. pH: Not applicable
Respiratory or skin sensitisation	: Not classified.
Germ cell mutagenicity	: Not classified.
Carcinogenicity	: Not classified.
Reproductive toxicity	: Not classified.
STOT-single exposure	: May cause drowsiness or dizziness.
STOT-repeated exposure	: Not classified.
Aspiration hazard	: May be fatal if swallowed and enters airways.

SKC-S Aerosol	
Vaporizer	Aerosol

Symptoms/effects after inhalation	: May cause irritation to the respiratory tract. May cause drowsiness or dizziness.
Symptoms/effects after skin contact	: Causes skin irritation. Symptoms may include redness, edema, drying, defatting and cracking of the skin.
Symptoms/effects after eye contact	: May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling.
Symptoms/effects after ingestion	: May be fatal if swallowed and enters airways. This product may be aspirated into the lungs and cause chemical pneumonitis. May cause stomach distress, nausea or vomiting.

## SECTION 12: ECOLOGICAL INFORMATION

### 12.1. TOXICITY

Ecology - general	: May cause long-term adverse effects in the aquatic environment.
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### 12.2. PERSISTENCE AND DEGRADABILITY

SKC-S Aerosol	
Persistence and degradability	Not established.

### 12.3. BIOACCUMULATIVE POTENTIAL

SKC-S Aerosol	
Bioaccumulative potential	Not established.

Carbon dioxide (124-38-9)	
BCF fish 1	(no bioaccumulation)

### 12.4. MOBILITY IN SOIL

No additional information available

### 12.5. OTHER ADVERSE EFFECTS

Effect on the global warming	: No known effects from this product.
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## SECTION 13: DISPOSAL CONSIDERATIONS

### 13.1. WASTE TREATMENT METHODS

Product/Packaging disposal recommendations	: Dispose in a safe manner in accordance with local/national regulations.
Additional information	: Flammable vapours may accumulate in the container. Pressurized container: Do not pierce or burn, even after use.

Prepared according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012 and the Hazardous Products Regulations (HPR) WHMIS 2015

## SECTION 14: TRANSPORT INFORMATION

In accordance with DOT/TDG/IATA/IMDG

DOT	: Consumables, Limited Quantity
Transportation of Dangerous Goods	: Consumables, Limited Quantity
IATA	: UN1950, Aerosols Flammable, 2.1
IMDG	: UN1950, Aerosols, 2.1 (Limited Quantity)

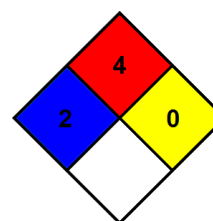
## SECTION 15: REGULATORY INFORMATION

### 15.1. FEDERAL REGULATIONS

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory.

All components of this product are listed, or excluded from listing, on the Canadian DSL (Domestic Substances List) and NDSL (Non-Domestic Substances List) inventories.

NFPA health hazard	: 2
NFPA fire hazard	: 4
NFPA reactivity	: 0



### 15.2. INTERNATIONAL REGULATIONS

No additional information available

### 15.3. US STATE REGULATIONS

California Proposition 65 - This product contains, or may contain, trace quantities of a substance(s) known to the state of California to cause cancer, developmental and/or reproductive harm

#### Carbon dioxide (124-38-9)

U.S. - New Jersey - Right to Know Hazardous Substance List  
 U.S. - Pennsylvania - RTK (Right to Know) List

## SECTION 16: OTHER INFORMATION

Revision date	: 08/23/2017
Other information	: None.
Prepared by	: Nexreg Compliance Inc. <a href="http://www.Nexreg.com">www.Nexreg.com</a>



SDS HazCom 2012 - WHMIS 2015 (Nexreg\_MAGNAFLUX)

*Disclaimer: We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind. The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. It is the user's responsibility to satisfy oneself as to the suitability and completeness of this information for the user's own particular use.*



# GHS SAFETY DATA SHEET

## Spears® Primer-70 Low VOC Primer for PVC and CPVC Plastic Pipe

Date Revised: SEPT 2015

Supersedes: MAY 2013

### SECTION I - PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** Spears® Primer-70 Low VOC Primer for PVC and CPVC Plastic Pipe  
**PRODUCT USE:** Low VOC Primer for PVC and CPVC Plastic Pipe  
**MANUFACTURER:** Spears® Manufacturing Company  
 15853 Olden Street, Sylmar, CA 91342  
 Tel. 818-364-1611

**SUPPLIER:****EMERGENCY:** Transportation/Medical Issues: Tel. 800-535-5053 or 352-323-3500 (outside of USA) INFOTRAC

### SECTION 2 - HAZARDS IDENTIFICATION

**GHS CLASSIFICATION:**

Health		Environmental		Physical	
Acute Toxicity:	Category 4	Acute Toxicity:	None Known	Flammable Liquid	Category 2
Skin Irritation:	Category 3	Chronic Toxicity:	None Known		
Skin Sensitization:	NO				
Eye:	Category 2B				

**GHS LABEL:****Signal Word:**  
Danger**WHMIS CLASSIFICATION:** CLASS B, DIVISION 2Hazard Statements

H225: Highly flammable liquid and vapor  
 H319: Causes serious eye irritation  
 H332: Harmful if inhaled  
 H335: May cause respiratory irritation  
 H336: May cause drowsiness or dizziness  
 H351: Suspected of causing cancer  
 EUH019: May form explosive peroxides

Precautionary Statements

P210: Keep away from heat/sparks/open flames/hot surfaces - No smoking  
 P261: Avoid breathing dust/fume/gas/mist/vapors/spray  
 P280: Wear protective gloves/protective clothing/eye protection/face protection  
 P304+P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing  
 P403+P233: Store in a well ventilated place. Keep container tightly closed  
 P501: Dispose of contents/container in accordance with local regulation

### SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

	CAS#	EINECS #	REACH	CONCENTRATION
			Pre-registration Number	% by Weight
Tetrahydrofuran (THF)	109-99-9	203-726-8	05-2116297729-22-0000	45 - 59
Methyl Ethyl Ketone (MEK)	78-93-3	201-159-0	05-2116297728-24-0000	19 - 29
Cyclohexanone	108-94-1	203-631-1	05-2116297718-25-0000	5 - 15
Acetone	67-64-1	200-662-2	05-2116297713-35-0000	6 - 21

All of the constituents of this adhesive product are listed on the TSCA inventory of chemical substances maintained by the US EPA, or are exempt from that listing.

\* Indicates this chemical is subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 (40CFR372).

# indicates that this chemical is found on Proposition 65's List of chemicals known to the State of California to cause cancer or reproductive toxicity.

### SECTION 4 - FIRST AID MEASURES

**Contact with eyes:** Flush eyes immediately with plenty of water for 15 minutes and seek medical advice immediately.  
**Skin contact:** Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water. If irritation develops, seek medical advice.  
**Inhalation:** Remove to fresh air. If breathing is stopped, give artificial respiration. If breathing is difficult, give oxygen. Seek medical advice.  
**Ingestion:** Rinse mouth with water. Give 1 or 2 glasses of water or milk to dilute. Do not induce vomiting. Seek medical advice immediately.

**Likely Routes of Exposure:** Inhalation, Eye and Skin Contact**Acute symptoms and effects:**

**Inhalation:** Severe overexposure may result in nausea, dizziness, headache. Can cause drowsiness, irritation of eyes and nasal passages.  
**Eye Contact:** Vapors slightly uncomfortable. Overexposure may result in severe eye injury with corneal or conjunctival inflammation on contact with the liquid.  
**Skin Contact:** Liquid contact may remove natural skin oils resulting in skin irritation. Dermatitis may occur with prolonged contact.  
**Ingestion:** May cause nausea, vomiting, diarrhea and mental sluggishness.

**Chronic (long-term) effects:** Category 2 Carcinogen

### SECTION 5 - FIREFIGHTING MEASURES

<b>Suitable Extinguishing Media:</b>	Dry chemical powder, carbon dioxide gas, foam, Halon, water fog.	HMIS	NFPA	0-Minimal
<b>Unsuitable Extinguishing Media:</b>	Water spray or stream.	Health	2	1-Slight
<b>Exposure Hazards:</b>	Inhalation and dermal contact.	Flammability	3	2-Moderate
<b>Combustion Products:</b>	Oxides of carbon, hydrogen chloride and smoke.	Reactivity	0	3-Serious
		PPE	B	4-Severe

**Protection for Firefighters:** Self-contained breathing apparatus or full-face positive pressure airline masks.

### SECTION 6 - ACCIDENTAL RELEASE MEASURES

**Personal precautions:** Keep away from heat, sparks and open flame.  
 Provide sufficient ventilation, use explosion-proof exhaust ventilation equipment or wear suitable respiratory protective equipment.  
 Prevent contact with skin or eyes (see section 8).

**Environmental Precautions:** Prevent product or liquids contaminated with product from entering sewers, drains, soil or open water course.**Methods for Cleaning up:** Clean up with sand or other inert absorbent material. Transfer to a closable steel vessel.**Materials not to be used for clean up:** Aluminum or plastic containers.

### SECTION 7 - HANDLING AND STORAGE

**Handling:** Avoid breathing of vapor; avoid contact with eyes, skin and clothing.  
 Keep away from ignition sources, use only electrically grounded handling equipment and ensure adequate ventilation/fume exhaust hoods.  
 Do not eat, drink or smoke while handling.

**Storage:** Store in ventilated room or shade below 44 °C (110 °F) and away from direct sunlight.  
 Keep away from ignition sources and incompatible materials: caustics, ammonia, inorganic acids, chlorinated compounds, strong oxidizers and isocyanates.  
 Follow all precautionary information on container label, product bulletins and solvent cementing literature.

## SECTION 8 - PRECAUTIONS TO CONTROL EXPOSURE / PERSONAL PROTECTION

### EXPOSURE LIMITS:

Component	ACGIH TLV	ACGIH STEL	OSHA PEL	OSHA STEL:	OSHA PEL-Ceiling	CAL/OSHA PEL	CAL/OSHA Ceiling	CAL/OSHA STEL
Tetrahydrofuran (THF)	50 ppm	100 ppm	200 ppm	N/E	N/E	200 ppm	N/E	250 ppm
Methyl Ethyl Ketone (MEK)	200 ppm	300 ppm	200 ppm	N/E	N/E	200 ppm	N/E	300 ppm
Cyclohexanone	20 ppm	50 ppm	50 ppm	N/E	N/E	25 ppm	N/E	N/E
Acetone	500 ppm	750 ppm	1000 ppm	N/E	N/E	500 ppm	3000 ppm	750 ppm

**Engineering Controls:** Use local exhaust as needed.

**Monitoring:** Maintain breathing zone airborne concentrations below exposure limits.

**Personal Protective Equipment (PPE):**

**Eye Protection:** Avoid contact with eyes, wear splash-proof chemical goggles, face shield, safety glasses (spectacles) with brow guards and side shields, etc. as may be appropriate for the exposure.

**Skin Protection:** Prevent contact with the skin as much as possible. Butyl rubber gloves should be used for frequent immersion.

Use of solvent-resistant gloves or solvent-resistant barrier cream should provide adequate protection when normal adhesive application practices and procedures are used for making structural bonds.

**Respiratory Protection:** Prevent inhalation of the solvents. Use in a well-ventilated room. Open doors and/or windows to ensure airflow and air changes. Use local exhaust ventilation to remove airborne contaminants from employee breathing zone and to keep contaminants below levels listed above.

With normal use, the Exposure Limit Value will not usually be reached. When limits approach, use respiratory protection equipment.

## SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance:</b>	Clear or purple, thin liquid	<b>Odor Threshold:</b>	0.88 ppm (Cyclohexanone)
<b>Odor:</b>	Ethereal	<b>Boiling Range:</b>	56°C (133°F) to 156°C (313°F)
<b>pH:</b>	Not Applicable	<b>Evaporation Rate:</b>	> 1.0 (BUAC = 1)
<b>Melting/Freezing Point:</b>	-108.5 °C (-163.3 °F) Based on first melting component: THF	<b>Flammability:</b>	Category 2
<b>Boiling Point:</b>	56 °C (133 °F) Based on first boiling component: Acetone	<b>Flammability Limits:</b>	LEL: 1.1% based on Cyclohexanone UEL: 12.8% based on Acetone
<b>Flash Point:</b>	-20 °C (-4 °F) TCC based on Acetone	<b>Vapor Pressure:</b>	190 mm Hg @ 20 °C (68 °F) Acetone
<b>Specific Gravity:</b>	0.857 ± 0.01 @ 23°C ± 2° (73°F ± 3.6°)	<b>Vapor Density:</b>	>2.0 (Air = 1)
<b>Solubility:</b>	Soluble in water.	<b>Other Data: Viscosity:</b>	Water-thin
<b>Partition Coefficient n-octanol/water:</b>	Not Available		
<b>Auto-ignition Temperature:</b>	321 °C (610 °F) based on THF		
<b>Decomposition Temperature:</b>	Not Applicable		
<b>VOC Content:</b>	When applied as directed, per SCAQMD Rule 1168, Test Method 316A, VOC content is: ≤ 550 g/l.		

## SECTION 10 - STABILITY AND REACTIVITY

<b>Stability:</b>	Stable
<b>Hazardous decomposition products:</b>	None in normal use. When forced to burn, this product gives off oxides of carbon, hydrogen chloride and smoke.
<b>Conditions to avoid:</b>	Keep away from heat, sparks, open flame and other ignition sources.
<b>Incompatible Materials:</b>	Oxidizers, strong acids and bases, amines, ammonia

## SECTION 11 - TOXICOLOGICAL INFORMATION

Toxicity:	LD50	LC50	Target Organs
Tetrahydrofuran (THF)	Oral: 2842 mg/kg (rat)	Inhalation 3 hrs. 21,000 mg/m <sup>3</sup> (rat)	STOT SE3
Methyl Ethyl Ketone (MEK)	Oral: 2737 mg/kg (rat), Dermal: 6480 mg/kg (rabbit)	Inhalation 8 hrs. 23,500 mg/m <sup>3</sup> (rat)	STOT SE3
Cyclohexanone	Oral: 1535 mg/kg (rat), Dermal: 948 mg/kg (rabbit)	Inhalation 4 hrs. 8,000 PPM (rat)	
Acetone	Oral: 5800 mg/kg (rat)	Inhalation 50,100 mg/m <sup>3</sup> (rat)	STOT SE3

Reproductive Effects	Teratogenicity	Mutagenicity	Embryotoxicity	Sensitization to Product	Synergistic Products
Not Established	Not Established	Not Established	Not Established	Not Established	Not Established

## SECTION 12 - ECOLOGICAL INFORMATION

<b>Ecotoxicity:</b>	None Known
<b>Mobility:</b>	In normal use, emission of volatile organic compounds (VOC's) to the air takes place, typically at a rate of ≤ 550g/l.
<b>Degradability:</b>	Biodegradable
<b>Bioaccumulation:</b>	Minimal to none.

## SECTION 13 - WASTE DISPOSAL CONSIDERATIONS

Follow local and national regulations. Consult disposal expert.

## SECTION 14 - TRANSPORT INFORMATION

<b>Proper Shipping Name:</b>	Flammable Liquid, n.o.s. (Tetrahydrofuran, Acetone)	<b>EXCEPTION for Ground Shipping</b>
<b>Hazard Class:</b>	3	
<b>Secondary Risk:</b>	None	<b>DOT Limited Quantity:</b> Up to 1L per inner packaging, 30 kg gross weight per package.
<b>Identification Number:</b>	UN 1993	<b>Consumer Commodity:</b> Depending on packaging, these quantities may qualify under DOT as "ORM-D"
<b>Packing Group:</b>	PG II	
<b>Label Required:</b>	Class 3 Flammable Liquid	
<b>Marine Pollutant:</b>	NO	
<b>TDG INFORMATION</b>		
<b>TDG CLASS:</b>	FLAMMABLE LIQUID 3	
<b>SHIPPING NAME:</b>	Flammable Liquid, n.o.s. (Acetone, Tetrahydrofuran)	
<b>UN NUMBER/PACKING GROUP:</b>	FLAMMABLE UN 1993, PG II	

## SECTION 15 - REGULATORY INFORMATION

<b>Precautionary Label Information:</b>	Highly Flammable, Irritant	Ingredient Listings: USA TSCA, Europe EINECS, Canada DSL, Australia AICS, Korea ECL/TCCL, Japan MITI (ENCS)
<b>Symbols:</b>	F, Xi	
<b>Risk Phrases:</b>	R11: Highly flammable. R20: Harmful by inhalation R36/37: Irritating to eyes and respiratory system.	R66: Repeated exposure may cause skin dryness or cracking R67: Vapors may cause drowsiness and dizziness
<b>Safety Phrases:</b>	S9: Keep container in a well-ventilated place. S16: Keep away from sources of ignition - No smoking. S25: Avoid contact with eyes.	S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S33: Take precautionary measures against static discharges. S46: If swallowed, seek medical advice immediately and show this container or label.

## SECTION 16 - OTHER INFORMATION

<b>Specification Information:</b>		
<b>Department issuing data sheet:</b>	Environmental Health & Safety	All ingredients are compliant with the requirements of the European Directive on RoHS (Restriction of Hazardous Substances).
<b>E-mail address:</b>	EHSInfo@SpearsMfg.net	
<b>Training necessary:</b>	Yes, training in practices and procedures contained in product literature.	
<b>Reissue date / reason for reissue:</b>	09/01/15 / Updated GHS Standard Format	
<b>Intended Use of Product:</b>	Primer for PVC and CPVC Plastic Pipe	
This product is intended for use by skilled individuals at their own risk. The information contained herein is based on data considered accurate based on current state of knowledge and experience. However, no warranty is expressed or implied regarding the accuracy of this data or the results to be obtained from the use thereof.		

# SAFETY DATA SHEET



Version 17.2 replaces Version 17.1  
Revision date: 22.08.2018  
According to (EU) No. 2015/830

## SECTION 1

### IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

- 1.1 Product identifier:** SPOTCHECK® SKC-S - aerosol
- 1.2 Relevant identified uses of the mixture and uses advised against:**  
**Relevant identified uses:** Solvent cleaner used in penetrant inspection.  
**Uses advised against:** This product is not recommended for any use other than the identified uses above.
- 1.3 Details of the supplier of the safety data sheet**  
**Manufacturer:** Magnaflux® (A Division of ITW Ltd)  
**Address:** Faraday Road, South Dorcan Industrial Estate, Swindon, UK  
**Postcode:** SN3 5HE  
**Telephone/fax number:** Telephone: +44 (0)1793 524566  
Fax: +44 (0)1793 490459  
Web: [www.eu.magnaflux.com](http://www.eu.magnaflux.com)  
**Email address of competent person responsible for SDS:** support.eu@magnaflux.com  
**National contact:** None appointed.
- 1.4 Emergency telephone number:** DURING OFFICE HOURS, CALL  
T: +44 (0)1793 524566 (English only)  
**Opening hours:** Office hours (GMT) Monday - Thursday 8am - 5pm, Friday 8am - 4pm  
OUT OF OFFICE HOURS, CALL  
T: +44(0)203 394 9866

## SECTION 2

### HAZARDS IDENTIFICATION

- 2.1 Classification of the substance or mixture:**  
**Classification according to Regulation (EC) No 1272/2008 (CLP):** **Physical and Chemical Hazard:** Aerosol 1 H222, H229  
**Health Hazard:** Skin Irrit. 2 H315  
STOT SE 3 H336  
**Environmental Hazard:** Aquatic Chronic 2 H411  
**Additional information:** No other information.

For full text of hazard statements and EU hazard statements see SECTION 16.

# SAFETY DATA SHEET

2.2

## Label Elements:

Labelling according to regulation (EC) No 1272/2008 [CLP]



## Signal Word:

DANGER

## Hazard Statement(s):

H222: Extremely flammable aerosol.  
H229: Pressurised container: may burst if heated.  
H315: Causes skin irritation  
H336: May cause drowsiness or dizziness  
H411: Toxic to aquatic life with long lasting effects

## Precautionary Statement(s):

P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P211: Do not spray on an open flame or other ignition source.  
P251 Do not pierce or burn even after use.  
P410 + P412: Protect from sunlight. Do not expose to temperatures exceeding 50 °C.  
P261: Avoid breathing dust/fume/gas/mist/vapours/spray.  
P280: Wear protective gloves/protective clothing/eye protection/face protection.  
P501: Dispose of contents/container to hazardous waste or special collection point.  
P271: Use only outdoors or in a well ventilated area.  
P302+352: IF ON SKIN: Wash with soap and water  
P264: Wash thoroughly after handling.  
P362+P364: Take off contaminated clothing and wash it before reuse.

## Supplementary Precautionary Statement(s):

## Supplementary Hazard Information (EU)

None

## Hazard Determining Component(s)

Hydrocarbons, C7 – C9, isoalkanes

2.3

## Other hazards:

Pressurised container: protect from sunlight and do not expose to temperatures exceeding 50 °C. Vapours can form explosive mixtures with air.

# SAFETY DATA SHEET

## SECTION 3

## COMPOSITION / INFORMATION ON INGREDIENTS

### 3.2 Mixtures

Ingredient Name	CAS No	EC No	REACH Registration Number	% Weight	Classification according to Regulation (EC) No 1272/2008 [CLP]	Additional information
Hydrocarbons, C7- C9, isoalkanes		921-728-3	01-2119471305-42	60 -100	Flam. Liq 2: H225 Skin Irrit. 2: H315 STOT SE3: H336 Asp. Tox. 1: H304 (note1) Aquatic Chronic 2: H411	No other information
Hydrocarbons, C3-4-rich petroleum distillate petroleum gas (1.3 butadiene < 0.1%)	68512-91-4	270-990-9	(note2)	10-30	Press. Gas H280 Flam. Gas 1 H220	(note3)
1. Mixtures classified as Asp. Tox. 1 H304 need not be labelled when placed on the market in aerosol containers or in containers fitted with a sealed spray attachment. 2. Exempted from the obligation to register in accordance with art.2(7)(a) of REACH Regulation No 1907/2006 3. Not classified as carcinogen, less than 0.1% w/w 1,3 butadiene (EINECS no 203-450-8)						

*Note: Hazard statement(s) in this section apply only to raw materials, not necessarily to finished products.*

*\*See Section 16 for hazard statement(s) text in full.*

## SECTION 4

## FIRST AID MEASURES

### 4.1 Description of first aid measures:

#### General notes:

If symptoms persist, seek medical attention. Show this safety data sheet to the doctor in attendance. Remove to fresh air. Keep at rest. If not breathing give artificial respiration. Seek prompt medical attention if discomfort persists.

#### Following inhalation:

#### Following skin contact:

Flush with water, use soap if available. Contaminated clothing should be washed before re-use. Seek medical attention if irritation persists. Flush eyes with large amounts of water for at least 15 minutes with eyelids held open. Seek medical attention if irritation persists.

#### Following eye contact:

#### Following ingestion:

Unlikely route of exposure. Rinse mouth with water. Do NOT induce vomiting. If vomiting occurs, keep head low so that stomach contents don't enter the lungs. Never give anything by mouth to an unconscious person. Seek medical attention immediately.

#### Self-protection of the first aider:

No action shall be taken involving any personal risk or without suitable training. If it is suspected that the mixture is still present, wear appropriate personal protective equipment.

### 4.2 Most important symptoms, both acute and delayed:

Prolonged skin contact may cause redness and irritation.

In high concentrations, vapours are anaesthetic and may cause headache, fatigue, dizziness and central nervous system effects.

Fumes from the stomach contents may be inhaled resulting in the same symptoms as inhalation. Avoid vomiting and normal rinse of stomach because of risk of aspiration. May cause discomfort to the eyes. Symptoms: redness and pain.

### 4.3 Indication of any immediate medical attention and special treatment needed:

None known.



# SAFETY DATA SHEET

## SECTION 5

### FIREFIGHTING MEASURES

- 5.1 Extinguishing media:**  
**Suitable extinguishing media:** Carbon dioxide, foam, dry chemical, water fog or spray.
- 5.2 Unsuitable extinguishing media:** Do not use water jet.  
**Special hazards arising from the substance or mixture:** Evacuate immediate area. Shut off 'fuel' to fire. If possible keep unaffected containers cool with water spray. Aerosols may explode in a fire. Aerosol contents are extremely flammable.
- Hazardous combustion products:** Smoke, soot and oxides of carbon. Burning vapour may give off toxic fumes.
- 5.3 Advice for fire-fighter:**  
Warn firefighters that aerosols are involved. Self contained breathing apparatus and full protective clothing must be worn. Water spray should be used to cool containers. Contaminated extinguishing water must be disposed of in accordance with official regulations.

## SECTION 6

### ACCIDENTAL RELEASE MEASURES

- 6.1 Personal precautions, protective equipment and emergency procedures:**  
Suitable protective equipment (see Section 8) should be worn to prevent any contamination of skin, eyes and personal clothing.
- For non-emergency personnel:** Remove ignition sources. Avoid breathing vapours, mist or gas.
- For emergency responders:** Remove ignition sources. Avoid breathing vapours, mist or gas. Keep unnecessary people at a safe distance.
- 6.2 Environmental precautions:**  
Prevent liquid from entering drains, sewers and watercourses. Notify the Environment Agency or water authorities if a major spillage occurs.
- 6.3 Methods and material for containment and cleaning up:**  
Eliminate sources of ignition. Take measures to prevent the build-up of electrostatic charge.  
Avoid breathing vapours. Ventilate surrounding area.
- For containment:** Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite). Place in a UN approved container for disposal.  
Large spills should be pumped (using an earthed explosion proof pump) into UN approved containers pending disposal. Dispose of waste according to local/national regulations.
- For cleaning up:** Do not flush away residues with water.
- Other information:** No other information.
- 6.4 Reference to other sections:**  
For Personal Protective Equipment see Section 8. For disposal information see Section 13.

# SAFETY DATA SHEET

## SECTION 7

## HANDLING & STORAGE

- 7.1 Precautions for safer handling:**  
**Protective Measures:** Wear suitable protective clothing such as chemical resistant gloves, apron and goggles/face mask to protect from splashes. Ensure adequate exhaust ventilation when in use.  
**Measures to prevent fire:** Avoid contact with skin and eyes. Do not breathe product spray or mist. Risk of vapour concentration in low areas. Aerosol contents are highly flammable and volatile. Keep away from sources of ignition – no smoking. Take measures to prevent the build-up of electrostatic charge. Equipment should be earthed. Use explosion proof electrical/ventilating/lighting equipment. Use only non-sparking tools. Wash thoroughly after handling.  
**Advice on general occupational hygiene:**
- 7.2 Conditions for safe storage, including any incompatibilities:**  
**Technical measures and storage conditions:** Store in a cool dry area away from heat and sources of ignition.  
**Packaging materials:** Store in original container.  
**Requirements for storage rooms and vessels:** Pressurised container: protect from sunlight and do not expose to temperatures exceeding 50 °C. Recommended storage temperature 10 °C to 30 °C.  
**Further information on storage conditions:** Rotate stock and check regularly for damaged items.
- 7.3 Specific end use(s):**  
**Recommendations:** Use only for Non Destructive Testing (NDT) applications.  
**Industrial sector specific solutions:** See product data sheet for further information.

## SECTION 8

## EXPOSURE CONTROLS / PERSONAL PROTECTION

- 8.1 Control parameters:**  
**Occupational exposure limit values:**  
 Occupational exposure figures have been set for some of the components of this preparation based on GESTIS International Limit Values or manufacturers' recommendation.

Ingredient name	Country	Limit value - 8 hours		Limit value - short term	
		ppm	mg /m <sup>3</sup>	ppm	mg /m <sup>3</sup>
Hydrocarbons, C7 – C9, isoalkanes	UK	241	1200		

Data obtained from GESTIS International Limit Values, EH40, supplier's SDS

**Note:** Where no specific short-term exposure limit is listed, a figure three times the long-term exposure limit should be used.

# SAFETY DATA SHEET

## Derived No Effect Level (DNEL) - Hydrocarbons, C7 – C9, isoalkanes

End User	Exposure Route	Exposure Time	Effects	DNEL
Worker	Inhalation	Long term	Systemic	2035 mg/m <sup>3</sup>
Worker	Dermal	Long term	Systemic	773 mg/kg bw/day

**Note:** The Derived No Effect Level (DNEL) is an estimated safe level of exposure that is derived from toxicity data in accordance with specific guidance within the European REACH regulation. The DNEL may differ from an Occupational Exposure Limit (OEL) for the same chemical. OELs may be recommended by an individual company, a government regulatory body or an expert organization, such as the Scientific Committee for Occupational Exposure Limits (SCOEL) or the American Conference of Governmental Industrial Hygienists (ACGIH). OELs are considered to be safe exposure levels for a typical worker in an occupational setting for an 8-hour work shift, 40 hour work week, as a time weighted average (TWA) or a 15 minute short-term exposure limit (STEL). While also considered to be protective of health, OELs are derived by a process different from that of REACH.

## Predicted No Effect Concentration (PNEC) - Hydrocarbons, C7 – C9, isoalkanes

Water - Fresh Water	No data available: testing technically not feasible
Water - Marine Water	No data available: testing technically not feasible
Water - Intermittent release	No data available: testing technically not feasible
Sediment - Fresh water	No data available: testing technically not feasible
Sediment - Marine water	No data available: testing technically not feasible
Soil	No data available: testing technically not feasible
Sewage Treatment plant	No data available: testing technically not feasible

### 8.2 Exposure controls:

Concentrations of product vapours and mists in the working atmosphere must be kept as low as is reasonably practicable. Exposure should be minimised by the use of appropriate containment, engineering control and ventilation measures. Where this is not possible, personal protective equipment should be worn as indicated below where appropriate.

#### Appropriate engineering controls:

Provide adequate ventilation, including appropriate local extraction, to ensure that the defined occupational exposure limits are not exceeded

#### Personal protection equipment:

##### Eye and face protection:

Safety glasses with side-shields conforming to EN166.

##### Skin protection - hand:

Protective gloves conforming to EN374-3. Use chemical resistant gloves recommended by glove manufacturer as being suitable for **isoparaffins**, if hand exposure is unavoidable.

Protective gloves made of **nitrile rubber** are suitable, although other types may be more suitable in other circumstances. For prolonged exposure, recommended gloves with protective index 6, > 480 minutes permeation time according to EN374.

Consult the glove manufacturer for exact breakthrough time. Glove manufacturer's directions for use should be observed.

##### Skin protection – other:

Wear impervious, flame retardant antistatic protective clothing. The type of protective equipment must be selected according to the concentration and amount of dangerous substance at the specific workplace.

# SAFETY DATA SHEET

<b>Respiratory protection:</b>	In case of insufficient ventilation, wear suitable respiratory equipment. Filter type A. (EN 136, 140, 405, 149, 143) For higher level protection use type ABEK-P3 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under CEN standards.
<b>Thermal hazards:</b>	Not applicable.
<b>Environmental exposure controls:</b>	Avoid any release to the environment.

## SECTION 9

### PHYSICAL & CHEMICAL PROPERTIES

<b>9.1</b>	<b>Information on basic physical and chemical properties:</b>	
	<b>Appearance:</b>	Aerosol containing mobile clear liquid.
	<b>Odour:</b>	Mild hydrocarbon.
	<b>Odour threshold:</b>	No data available.
	<b>pH:</b>	Neutral.
	<b>Melting point/freezing point:</b>	No data available.
	<b>Initial boiling point and boiling range:</b>	113 – 143 °C.
	<b>Flash point (PMCC):</b>	-40 °C (aerosol propellant).
	<b>Evaporation rate (BuAc = 100):</b>	155.
	<b>Flammability (solid, gas) (Limits in air):</b>	No data available.
	<b>Upper/lower flammability or explosive limits:</b>	0.7 – 6.0% (Vol%)
	<b>Vapour pressure:</b>	1.627 kPa @ 20 °C.
	<b>Vapour density (Air = 1):</b>	> 1.
	<b>Relative density:</b>	0.72 g/cm <sup>3</sup> .
	<b>Solubility:</b>	Insoluble.
	<b>Partition coefficient: n-octanol/water:</b>	No data available.
	<b>Auto-ignition temperature:</b>	> 200 °C.
	<b>Decomposition temperature:</b>	No data available.
	<b>Viscosity (ASTM D445):</b>	0.86 mm <sup>2</sup> /s @ 25 °C.
	<b>Explosive properties:</b>	Under normal conditions no danger of explosion.
	<b>Oxidising properties:</b>	No data available.

**Note: properties relate to the bulk product only unless otherwise stated.**

<b>9.2</b>	<b>Other information:</b>	No other information.
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## SECTION 10

### STABILITY & REACTIVITY

<b>10.1</b>	<b>Reactivity:</b>	No specific reactivity hazards associated with this product.
<b>10.2</b>	<b>Chemical stability</b>	Stable under normal conditions of use and applications.
<b>10.3</b>	<b>Possibility of hazardous reactions:</b>	No data available.
<b>10.4</b>	<b>Conditions to avoid:</b>	Keep away from sources of ignition, hot surfaces and direct sun light.
<b>10.5</b>	<b>Incompatible materials:</b>	Strong oxidising agents.
<b>10.6</b>	<b>Hazardous decomposition materials:</b>	None under normal conditions of use. Smoke, soot and oxides of carbon on combustion.

# SAFETY DATA SHEET

## SECTION 11

## TOXICOLOGICAL INFORMATION

**11.1 Information on toxicological effects:** based on data for component materials.

<b>Acute toxicity - oral:</b>	Based on the available data, the classification criteria are not met.
<b>Acute toxicity – dermal:</b>	Based on the available data, the classification criteria are not met.
<b>Acute toxicity – inhalation:</b>	Based on the available data, the classification criteria are not met.
<b>Skin corrosion/irritation:</b>	Skin Irrit. 2 H315: Causes skin irritation.
<b>Serious eye damage/irritation:</b>	Based on the available data, the classification criteria are not met.
<b>Respiratory sensitisation:</b>	Data lacking.
<b>Skin sensitisation:</b>	Based on the available data, the classification criteria are not met.
<b>Germ cell mutagenicity:</b>	Based on the available data, the classification criteria are not met.
<b>Carcinogenicity:</b>	Data lacking.
<b>Reproductive toxicity:</b>	Based on the available data, the classification criteria are not met.
<b>STOT single exposure:</b>	STOT Single Exp. 3 H336: May cause drowsiness or dizziness. Affected organs: central nervous system Route of exposure: inhalation
<b>STOT repeated exposure:</b>	Based on the available data, the classification criteria are not met.
<b>Aspiration hazard:</b>	Mixtures from Aerosol Dispensors - need not be classified as Asp. Tox. 1 - H304 as the aerosol spray is fine and a pool of product may not be formed in the mouth.
<b>Information on likely Routes of Exposure and Potential Health Effects:</b>	
<b>Inhalation:</b>	Vapour concentrations above the recommended exposure levels are irritating to the eyes and respiratory tract, may cause headaches and dizziness, are anaesthetic and may have other central nervous system effects.
<b>Ingestion:</b>	Not a likely route of exposure. However, harmful: May cause lung damage if swallowed. Ingestion may cause irritation of the mouth, throat and digestive tract. Small amounts of product aspirated into the respiratory system during ingestion or from vomiting may cause bronchopneumonia or pulmonary edema.
<b>Eye contact:</b>	May cause redness and pain.
<b>Skin contact:</b>	Frequent or prolonged contact with the product may produce irritation and/or skin dryness and cracking. Product will have a de-fatting effect on the skin.
<b>Toxicity Test Results:</b>	based on data for component materials, where available.

### Hydrocarbons, C7 – C9, isoalkanes

Acute Toxicity – oral	LD50 (rat)	> 5000 mg/kg
Acute Toxicity – dermal	LD50 (rabbit)	> 2000 mg/kg
Acute Toxicity – inhalation	LC50 (rat)	21 mg/l (4 h; vapour)

**Other Information:** No other information.

# SAFETY DATA SHEET

## SECTION 12

## ECOLOGICAL INFORMATION

Based on data for component materials

### 12.1 Toxicity:

#### Hydrocarbons, C7 – C9, isoalkanes

Fish	Oncorhynchus mykiss	LL50	96h	18.4 mg/l
Aquatic Invertebrates	Daphnia magna	EL50	48h	2.4 mg/l
Aquatic Plants	Pseudokirchneriella subcapitata	EL50	72h	29 mg/l

- 12.2 Persistence and degradability:** Hydrocarbons, C7 – C9, isoalkanes - Biodegradable.
- 12.3 Bioaccumulative potential:** No data available.
- Partition coefficient: n-octanol/water (log Kow):** No data available.
- Bioconcentration factor (BCF):** No data available.
- 12.4 Mobility in soil:** The product is immiscible with water and will spread on the water surface. Product is highly volatile - will partition rapidly to air.
- 12.5 Results of PBT and vPvB assessment:** This mixture does not contain any substances that are assessed to be a PBT or vPvB.
- 12.6 Other adverse effects:** No data available.

## SECTION 13

## DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods:

Dispose of waste and residues in accordance with local authority requirements. Seek the advice of an approved waste disposal contractor for disposal at a licensed facility in accordance with national legislation.

#### Product/packing disposal:

Empty containers may contain residual product and flammable vapours. Do not pierce or burn container, even after use. Do NOT remove labels. Keep away from sources of ignition.

#### Waste codes/waste designations according to LoW:

16 05 04\* gases in pressure containers containing dangerous substances.

NOTE: Waste codes are assigned based upon the most common uses for this material and may not reflect contaminants resulting from actual use. Waste producers need to assess the actual process used when generating the waste and its contaminants in order to assign the proper waste code(s).

#### Waste treatment – relevant information:

Dispose of waste and residues in accordance with local authority requirements. Seek the advice of an approved waste disposal contractor for disposal at a licensed facility in accordance with national legislation. Do not empty down the drain.

#### Sewage disposal – relevant information:

#### Other disposal recommendations:

Use a licensed waste contractor

# SAFETY DATA SHEET

## SECTION 14

## TRANSPORT INFORMATION

14.1	<b>UN number:</b>	ADR/RID:	UN1950
		IMDG:	UN1950
		IATA:	UN1950
14.2	<b>UN proper shipping name:</b>	ADR/RID:	AEROSOLS, flammable
		IMDG:	AEROSOLS, flammable
		IATA:	AEROSOLS, flammable
14.3	<b>Transport hazard class(es):</b>	ADR/RID:	2.1
		IMDG:	2.1
		IATA:	2.1
14.4	<b>Packing group:</b>	ADR/RID:	N/A
		IMDG:	N/A
		IATA:	N/A
14.5	<b>Environmental hazards:</b>	ADR/RID:	Yes
		IMDG:	Marine Pollutant: Yes
		IATA:	Yes
14.6	<b>Special precautions for user:</b>		
	ADR/RID – Tunnel code:	(D)	
	IMDG – Ems:	F-D, S-U	
	IATA/ICAO – PAX:	203	
	IATA/ICAO – CAO:	203	
14.7	<b>Transport in bulk according to Annex II of Marpol 73/78 and the IBC code:</b>		
	Not applicable		

## SECTION 15

## REGULATORY INFORMATION

15.1	<b>Safety, health and environmental regulations/legislation specific for the substance or mixture:</b>		
	<b>EU Regulations:</b>		
	This data sheet complies with the requirements of Regulation (EC) No 1272/2008 on the classification, labelling and packaging of substances and mixtures.		
	Safety data sheet as required by EC-Regulations 1907/2006 and REACH Annex II Amendment (EU) No. 2015/830.		
	<b>Information according to 2013/10/EU and 2008/47/EC amendment of the aerosol directive 75/324/EEC.</b>		
	This data sheet is complied according Dir 2013/10/EU, 2008/47/EEC amendment of the aerosol directive 75/324/EEC.		
	<b>Extra label elements:</b> Pressured container: protect from sunlight and do not expose to temperatures exceeding 50 °C. Do not pierce or burn, even after use. Do not spray on a naked flame or any incandescent material.		
	Mixtures classified as Asp. Tox. 1 H304 need not be labelled when placed on the market in aerosol containers or in containers fitted with a sealed spray attachment.		
	<b>National regulations (Germany):</b>		
	<b>Wassergefährdungskategorie (water hazard class):</b>	WGK 2 - Hazard to waters.	
	<b>Technische Anleitung Luft (TA-Luft):</b>	Class 5.2.5 Organic Substances, except dusts	
15.2	<b>Chemical safety assessment:</b>		
	No data available		

# SAFETY DATA SHEET

## SECTION 16

## OTHER INFORMATION

### (i) Indication of changes:

Version 17.2 updated in Section 1.3.

Vertical lines on the left hand side indicate an amendment from the previous version.

### (ii) Abbreviations and acronyms:

ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road (Accord européen relatif au transport international des marchandises Dangereuses par Route)
CAS No.	Chemical Abstracts Service number
CEN	European Committee for Standardisation
CLP	Classification, Labelling Packaging Regulation; Regulation (EC) No 1272/2008
ECHA	European Chemicals Agency
EC50	Half Maximal Effective Concentration
EC number	EINECS and ELINCS number
EINECS	European Inventory of Existing Commercial Substances
ELINCS	European List of notified Chemical Substances
GHS	Globally Harmonized System
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Lethal Concentration to 50% of a test population
LD50	Lethal Dose to 50% of a test population
MPI	Magnetic Particle Inspection
NDT	Non-Destructive Testing
OEL	Occupational Exposure Limit
PBT	Persistent, Bioaccumulative and Toxic Substance
PMCC	Pensky-Martens closed cup method
PPE	Personal Protection Equipment
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation EC (No) 1907/2006
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail (Reglement International concernant le transport des marchandises Dangereuses par chemin de fer)
SDS	Safety Data Sheet
STOT RE	Specific Target Organ Toxicity, Repeat Exposure
STOT SE	Specific Target Organ Toxicity, Single Exposure
TA-Luft	Technical Instructions on Air Quality Control (Technische Anleitung zur Reinhaltung der Luft)
vPvB	Very Persistent and Very Bioaccumulative
WEL	Workplace Exposure Limit
WGK	German Water Hazard Class (Wassergefährdungsklasse)

### (iii) Key literature and sources of data:

- Supplier's safety data sheets for components listed in Section 3.
- European Chemicals Agency, <http://echa.europa.eu/>
- GESTIS International Limit Values Database, [http://limitvalue.ifa.dguv.de/Webform\\_gw.aspx](http://limitvalue.ifa.dguv.de/Webform_gw.aspx)
- Occupational Exposure Limits EH40/2005.
- Commission regulation (EU) 2015/830.
- Control of Substances Hazardous to Health Regulations 2002.
- Hazardous waste regulations 2005.
- Health & Safety at Work Act 1974.
- Regulation (EC) No. 1907/2006 (REACH).
- Regulation (EC) No. 1272/2008 (CLP).



# SAFETY DATA SHEET

(iv) **Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 (CLP):**

Classification according to Regulation (EC) No 1272/2008	Classification procedure
Aerosol. 1: H222, H229	Test Method
Skin Irrit. 2: H315	Calculation Method
STOT SE3: H336:	Calculation Method
Aquatic Chronic 2: H411	Calculation Method

(v) **Hazard statements (number and full text):**

H220: Extremely flammable gas.  
H225: Highly flammable liquid and vapour  
H222: Extremely flammable aerosol.  
H229: Pressurised container: may explode if heated.  
H280: Contains gas under pressure; may burst if heated.  
H304: May be fatal if swallowed and enters airways  
H315: Causes skin irritation  
H336: May cause drowsiness or dizziness  
H411: Toxic to aquatic life with long lasting effects

**Hazard Class and Category Code (full text):**

Aerosol 1: Aerosol  
Aquatic Chronic 2: Hazardous to the aquatic environment  
Asp. Tox. 1: Aspiration hazard  
Flam. Gas 1: Flammable Gas  
Flam. Liq. 2: Flammable liquid  
Press. Gas: Gases under pressure  
Skin Irrit. 2: Skin corrosion/irritation  
STOT SE 3: Specific target organ toxicity - single exposure

**Relevant precautionary statements (number and full text):**

P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P211: Do not spray on an open flame or other ignition source.  
P251 Do not pierce or burn even after use.  
P261: Avoid breathing dust/fume/gas/mist/vapours/spray.  
P271: Use only outdoors or in a well ventilated area.  
P410 + P412: Protect from sunlight. Do not expose to temperatures exceeding 50 °C.  
P280: Wear protective gloves/protective clothing/eye protection/face protection  
P302+352: IF ON SKIN: Wash with soap and water  
P362+P364: Take off contaminated clothing and wash it before reuse.  
P264: Wash thoroughly after handling.  
P501: Dispose of contents/container to hazardous waste or special collection point.

(vi) **Training advice:**

Chemical hazard awareness training, incorporating labelling, Safety Data Sheets (SDS), Personal Protective Equipment (PPE) and hygiene. Chemical hazard risk assessment. Provide adequate information, instruction and training to operators.

# SAFETY DATA SHEET

## DISCLAIMER

The information and recommendations contained herein are based upon data believed to be up-to-date and correct. However, no guarantee or warranty of any kind, express or implied, is made with respect to the information and recommendations contained herein. We accept no responsibility and disclaim all liability for any harmful effects that may be caused by (incorrect) use, handling, purchase, resale, or exposure to our product. Customers and users of our product must comply with all applicable health and safety laws, regulations, and orders. In particular, they are under an obligation to carry out a risk assessment for the particular work places and to take adequate risk management measures in accordance with the national implementation legislation of EU Directives 89/391/EEC and 98/24/EC amended by Directive 2014/27/EU.

<b>Revision summary:</b>	<b>Revision Comments</b>	This SDS is valid from the Revision Date. If you require a SDS for the product manufactured before the Revision Date please contact us at support.eu@magnaflux.com.
	<b>Revision Date</b>	22.08.2018
	<b>Version</b>	17.2

# SAFETY DATA SHEET



Version 16.1 replaces Version 15.1  
Revision date: 01.04.2016  
According to (EU) No. 2015/830

## SECTION 1

### IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

- 1.1 Product identifier:** SPOTCHECK® SKC-S - aerosol
- 1.2 Relevant identified uses of the mixture and uses advised against:**  
**Relevant identified uses:** Solvent cleaner used in penetrant inspection.  
**Uses advised against:** This product is not recommended for any use other than the identified uses above.
- 1.3 Details of the supplier of the safety data sheet**  
**Manufacturer:** Magnaflux® (A Division of ITW Ltd)  
**Address:** Faraday Road, South Dorcan Industrial Estate, Swindon, UK  
**Postcode:** SN3 5HE  
**Telephone/fax number:** Telephone: +44 (0)1793 524566  
Fax: +44 (0)1793 490459  
Web: [www.eu.magnaflux.com](http://www.eu.magnaflux.com)  
**Email address of competent person responsible for SDS:** datasheets@magnaflux.co.uk  
**National contact:** None appointed.
- 1.4 Emergency telephone number:** T: +44 (0)1793 524566 (office hours)  
**Opening hours:** Office hours (GMT) Monday - Thursday 8am - 5pm, Friday 8am - 4pm  
**Other comments:** Emergency telephone service is provided in English only.

## SECTION 2

### HAZARDS IDENTIFICATION

- 2.1 Classification of the substance or mixture:**  
**Classification according to Regulation (EC) No 1272/2008 (CLP):** **Physical and Chemical Hazard:** Aerosol 1 H222, H229  
**Health Hazard:** Skin Irrit. 2 H315  
STOT SE 3 H336  
**Environmental Hazard:** Aquatic Chronic 2 H411  
**Additional information:** No other information.

For full text of hazard statements and EU hazard statements see SECTION 16.

- 2.2 Label Elements:**  
Labelling according to regulation (EC) No 1272/2008 [CLP]



**Signal Word:**

DANGER

# SAFETY DATA SHEET

## Hazard Statement(s):

H222: Extremely flammable aerosol.  
 H229: Pressurised container: may burst if heated.  
 H315: Causes skin irritation  
 H336: May cause drowsiness or dizziness  
 H411: Toxic to aquatic life with long lasting effects

## Precautionary Statement(s):

P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
 P211: Do not spray on an open flame or other ignition source.  
 P251 Do not pierce or burn even after use.  
 P410 + P412: Protect from sunlight. Do not expose to temperatures exceeding 50 °C.  
 P261: Avoid breathing dust/fume/gas/mist/vapours/spray.  
 P280: Wear protective gloves/protective clothing/eye protection/face protection.  
 P501: Dispose of contents/container to hazardous waste or special collection point.  
 P271: Use only outdoors or in a well ventilated area.  
 P302+352: IF ON SKIN: Wash with soap and water  
 P264: Wash thoroughly after handling.  
 P362+P364: Take off contaminated clothing and wash it before reuse.

## Supplementary Precautionary Statement(s):

None

## Supplementary Hazard Information (EU)

### Hazard Determining Component(s)

Hydrocarbons, C7 – C9, isoalkanes

## 2.3

### Other hazards:

Pressurised container: protect from sunlight and do not expose to temperatures exceeding 50 °C. Vapours can form explosive mixtures with air.

## SECTION 3

## COMPOSITION / INFORMATION ON INGREDIENTS

### 3.2 Mixtures

Ingredient Name	CAS No	EC No	REACH Registration Number	% Weight	Classification according to Regulation (EC) No 1272/2008 [CLP]	Additional information
Hydrocarbons, C7- C9, isoalkanes		921-728-3	01-2119471305-42	60 -100	Flam. Liq 2: H225 Skin Irrit. 2: H315 STOT SE3: H336 Asp. Tox. 1: H304 (note1) Aquatic Chronic 2: H411	No other information
Hydrocarbons, C3-4-rich petroleum distillate petroleum gas (1,3 butadiene < 0.1%)	68512-91-4	270-990-9	(note2)	10-30	Press. Gas H280 Flam. Gas 1 H220	(note3)
1. Mixtures classified as Asp. Tox. 1 H304 need not be labelled when placed on the market in aerosol containers or in containers fitted with a sealed spray attachment. 2. Exempted from the obligation to register in accordance with art.2(7)(a) of REACH Regulation No 1907/2006 3. Not classified as carcinogen, less than 0.1% w/w 1,3 butadiene (EINECS no 203-450-8)						

Note: Hazard statement(s) in this section apply only to raw materials, not necessarily to finished products.

\*See Section 16 for hazard statement(s) text in full.

# SAFETY DATA SHEET

## SECTION 4

## FIRST AID MEASURES

- 4.1 Description of first aid measures:**
- General notes:** If symptoms persist, seek medical attention. Show this safety data sheet to the doctor in attendance.
- Following inhalation:** Remove to fresh air. Keep at rest. If not breathing give artificial respiration. Seek prompt medical attention if discomfort persists.
- Following skin contact:** Flush with water, use soap if available. Contaminated clothing should be washed before re-use. Seek medical attention if irritation persists.
- Following eye contact:** Flush eyes with large amounts of water for at least 15 minutes with eyelids held open. Seek medical attention if irritation persists.
- Following ingestion:** Unlikely route of exposure. Rinse mouth with water. Do NOT induce vomiting. If vomiting occurs, keep head low so that stomach contents don't enter the lungs. Never give anything by mouth to an unconscious person. Seek medical attention immediately.
- Self-protection of the first aider:** No action shall be taken involving any personal risk or without suitable training. If it is suspected that the mixture is still present, wear appropriate personal protective equipment.
- 4.2 Most important symptoms, both acute and delayed:**  
Prolonged skin contact may cause redness and irritation.  
In high concentrations, vapours are anaesthetic and may cause headache, fatigue, dizziness and central nervous system effects.  
Fumes from the stomach contents may be inhaled resulting in the same symptoms as inhalation. Avoid vomiting and normal rinse of stomach because of risk of aspiration. May cause discomfort to the eyes. Symptoms: redness and pain.
- 4.3 Indication of any immediate medical attention and special treatment needed:**  
None known.

## SECTION 5

## FIREFIGHTING MEASURES

- 5.1 Extinguishing media:**  
**Suitable extinguishing media:** Carbon dioxide, foam, dry chemical, water fog or spray.
- 5.2 Unsuitable extinguishing media:** Do not use water jet.  
**Special hazards arising from the substance or mixture:** Evacuate immediate area. Shut off 'fuel' to fire. If possible keep unaffected containers cool with water spray.  
Aerosols may explode in a fire.  
Aerosol contents are extremely flammable.  
**Hazardous combustion products:** Smoke, soot and oxides of carbon. Burning vapour may give off toxic fumes.
- 5.3 Advice for fire-fighter:**  
Warn firefighters that aerosols are involved. Self contained breathing apparatus and full protective clothing must be worn. Water spray should be used to cool containers. Contaminated extinguishing water must be disposed of in accordance with official regulations.

# SAFETY DATA SHEET

## SECTION 6

## ACCIDENTAL RELEASE MEASURES

- 6.1 Personal precautions, protective equipment and emergency procedures:**  
Suitable protective equipment (see Section 8) should be worn to prevent any contamination of skin, eyes and personal clothing.
- For non-emergency personnel:** Remove ignition sources. Avoid breathing vapours, mist or gas.
- For emergency responders:** Remove ignition sources. Avoid breathing vapours, mist or gas. Keep unnecessary people at a safe distance.
- 6.2 Environmental precautions:**  
Prevent liquid from entering drains, sewers and watercourses. Notify the Environment Agency or water authorities if a major spillage occurs.
- 6.3 Methods and material for containment and cleaning up:**  
Eliminate sources of ignition. Take measures to prevent the build-up of electrostatic charge.  
Avoid breathing vapours. Ventilate surrounding area.
- For containment:** Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite). Place in a UN approved container for disposal.  
Large spills should be pumped (using an earthed explosion proof pump) into UN approved containers pending disposal. Dispose of waste according to local/national regulations.
- For cleaning up:** Do not flush away residues with water.
- Other information:** No other information.
- 6.4 Reference to other sections:**  
For Personal Protective Equipment see Section 8. For disposal information see Section 13.

## SECTION 7

## HANDLING & STORAGE

- 7.1 Precautions for safer handling:**
- Protective Measures:** Wear suitable protective clothing such as chemical resistant gloves, apron and goggles/face mask to protect from splashes. Ensure adequate exhaust ventilation when in use.  
Avoid contact with skin and eyes. Do not breathe product spray or mist. Risk of vapour concentration in low areas.
- Measures to prevent fire:** Aerosol contents are highly flammable and volatile. Keep away from sources of ignition – no smoking.  
Take measures to prevent the build-up of electrostatic charge.  
Equipment should be earthed. Use explosion proof electrical/ventilating/lighting equipment. Use only non-sparking tools.
- Advice on general occupational hygiene:** Wash thoroughly after handling.

# SAFETY DATA SHEET

7.2	<b>Conditions for safe storage, including any incompatibilities:</b> <b>Technical measures and storage conditions:</b> <b>Packaging materials:</b>	Store in a cool dry area away from heat and sources of ignition. Store in original container.
	<b>Requirements for storage rooms and vessels:</b>	Pressurised container: protect from sunlight and do not expose to temperatures exceeding 50 °C. Recommended storage temperature 10 °C to 30 °C.
	<b>Further information on storage conditions:</b>	Rotate stock and check regularly for damaged items.
7.3	<b>Specific end use(s):</b> <b>Recommendations:</b>	Use only for Non Destructive Testing (NDT) applications.
	<b>Industrial sector specific solutions:</b>	See product data sheet for further information.

## SECTION 8

### EXPOSURE CONTROLS / PERSONAL PROTECTION

**8.1 Control parameters:**  
**Occupational exposure limit values:**  
 Occupational exposure figures have been set for some of the components of this preparation based on GESTIS International Limit Values or manufacturers' recommendation.

Ingredient name	Country	Limit value - 8 hours		Limit value - short term	
		ppm	mg /m <sup>3</sup>	ppm	mg /m <sup>3</sup>
Hydrocarbons, C7 – C9, isoalkanes	UK	241	1200		

Data obtained from GESTIS International Limit Values, EH40, supplier's SDS

**Note:** Where no specific short-term exposure limit is listed, a figure three times the long-term exposure limit should be used.

**Derived No Effect Level (DNEL) - Hydrocarbons, C7 – C9, isoalkanes**

End User	Exposure Route	Exposure Time	Effects	DNEL
Worker	Inhalation	Long term	Systemic	2035 mg/m <sup>3</sup>
Worker	Dermal	Long term	Systemic	773 mg/kg bw/day

**Note:** The Derived No Effect Level (DNEL) is an estimated safe level of exposure that is derived from toxicity data in accordance with specific guidance within the European REACH regulation. The DNEL may differ from an Occupational Exposure Limit (OEL) for the same chemical. OELs may be recommended by an individual company, a government regulatory body or an expert organization, such as the Scientific Committee for Occupational Exposure Limits (SCOEL) or the American Conference of Governmental Industrial Hygienists (ACGIH). OELs are considered to be safe exposure levels for a typical worker in an occupational setting for an 8-hour work shift, 40 hour work week, as a time weighted average (TWA) or a 15 minute short-term exposure limit (STEL). While also considered to be protective of health, OELs are derived by a process different from that of REACH.

**Predicted No Effect Concentration (PNEC) - Hydrocarbons, C7 – C9, isoalkanes**

Water - Fresh Water	No data available: testing technically not feasible
Water - Marine Water	No data available: testing technically not feasible
Water - Intermittent release	No data available: testing technically not feasible
Sediment - Fresh water	No data available: testing technically not feasible
Sediment - Marine water	No data available: testing technically not feasible
Soil	No data available: testing technically not feasible
Sewage Treatment plant	No data available: testing technically not feasible

# SAFETY DATA SHEET

## 8.2 Exposure controls:

Concentrations of product vapours and mists in the working atmosphere must be kept as low as is reasonably practicable. Exposure should be minimised by the use of appropriate containment, engineering control and ventilation measures. Where this is not possible, personal protective equipment should be worn as indicated below where appropriate.

### Appropriate engineering controls:

Provide adequate ventilation, including appropriate local extraction, to ensure that the defined occupational exposure limits are not exceeded

### Personal protection equipment:

#### Eye and face protection:

Safety glasses with side-shields conforming to EN166.

#### Skin protection - hand:

Protective gloves conforming to EN374-3. Use chemical resistant gloves recommended by glove manufacturer as being suitable for **isoparaffins**, if hand exposure is unavoidable. Protective gloves made of **nitrile rubber** are suitable, although other types may be more suitable in other circumstances. For prolonged exposure, recommended gloves with protective index 6, > 480 minutes permeation time according to EN374.

#### Skin protection – other:

Consult the glove manufacturer for exact breakthrough time. Glove manufacturer's directions for use should be observed. Wear impervious, flame retardant antistatic protective clothing. The type of protective equipment must be selected according to the concentration and amount of dangerous substance at the specific workplace.

#### Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment. Filter type A. (EN 136, 140, 405, 149, 143) For higher level protection use type ABEK-P3 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under CEN standards.

#### Thermal hazards:

Not applicable.

#### Environmental exposure controls:

Avoid any release to the environment.

## SECTION 9

## PHYSICAL & CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties:

#### Appearance:

Aerosol containing mobile clear liquid.

#### Odour:

Mild hydrocarbon.

#### Odour threshold:

No data available.

#### pH:

Neutral.

#### Melting point/freezing point:

No data available.

#### Initial boiling point and boiling range:

113 – 143 °C.

#### Flash point (PMCC):

-40 °C (aerosol propellant).

#### Evaporation rate (BuAc = 100):

155.

#### Flammability (solid, gas) (Limits in air):

No data available.

#### Upper/lower flammability or explosive limits:

0.7 – 6.0% (Vol%)



# SAFETY DATA SHEET

Vapour pressure:	1.627 kPa @ 20 °C.
Vapour density (Air = 1):	> 1.
Relative density:	0.72 g/cm <sup>3</sup> .
Solubility:	Insoluble.
Partition coefficient: n-octanol/water:	No data available.
Auto-ignition temperature:	> 200 °C.
Decomposition temperature:	No data available.
Viscosity (ASTM D445):	0.86 mm <sup>2</sup> /s @ 25 °C.
Explosive properties:	Under normal conditions no danger of explosion.
Oxidising properties:	No data available.

Note: properties relate to the bulk product only unless otherwise stated.

9.2 Other information:  
No other information.

## SECTION 10 STABILITY & REACTIVITY

10.1	Reactivity:	No specific reactivity hazards associated with this product.
10.2	Chemical stability	Stable under normal conditions of use and applications.
10.3	Possibility of hazardous reactions:	No data available.
10.4	Conditions to avoid:	Keep away from sources of ignition, hot surfaces and direct sun light.
10.5	Incompatible materials:	Strong oxidising agents.
10.6	Hazardous decomposition materials:	None under normal conditions of use. Smoke, soot and oxides of carbon on combustion.

## SECTION 11 TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects: based on data for component materials.

Acute toxicity - oral:	Based on the available data, the classification criteria are not met.
Acute toxicity – dermal:	Based on the available data, the classification criteria are not met.
Acute toxicity – inhalation:	Based on the available data, the classification criteria are not met.
Skin corrosion/irritation:	Skin Irrit. 2 H315: Causes skin irritation.
Serious eye damage/irritation:	Based on the available data, the classification criteria are not met.
Respiratory sensitisation:	Data lacking.
Skin sensitisation:	Based on the available data, the classification criteria are not met.
Germ cell mutagenicity:	Based on the available data, the classification criteria are not met.
Carcinogenicity:	Data lacking.
Reproductive toxicity:	Based on the available data, the classification criteria are not met.

# SAFETY DATA SHEET

**STOT single exposure:** STOT Single Exp. 3 H336: May cause drowsiness or dizziness.  
Affected organs: central nervous system  
Route of exposure: inhalation

**STOT repeated exposure:** Based on the available data, the classification criteria are not met.

**Aspiration hazard:** Mixtures from Aerosol Dispensors - need not be classified as Asp. Tox. 1 - H304 as the aerosol spray is fine and a pool of product may not be formed in the mouth.

## Information on likely Routes of Exposure and Potential Health Effects:

**Inhalation:** Vapour concentrations above the recommended exposure levels are irritating to the eyes and respiratory tract, may cause headaches and dizziness, are anaesthetic and may have other central nervous system effects.

**Ingestion:** Not a likely route of exposure. However, harmful: May cause lung damage if swallowed. Ingestion may cause irritation of the mouth, throat and digestive tract. Small amounts of product aspirated into the respiratory system during ingestion or from vomiting may cause bronchopneumonia or pulmonary edema.

**Eye contact:** May cause redness and pain.

**Skin contact:** Frequent or prolonged contact with the product may produce irritation and/or skin dryness and cracking. Product will have a de-fatting effect on the skin.

**Toxicity Test Results:** based on data for component materials, where available.

### Hydrocarbons, C7 – C9, isoalkanes

Acute Toxicity – oral	LD50 (rat)	> 5000 mg/kg
Acute Toxicity – dermal	LD50 (rabbit)	> 2000 mg/kg
Acute Toxicity – inhalation	LC50 (rat)	21 mg/l (4 h; vapour)

**Other Information:** No other information.

## SECTION 12 ECOLOGICAL INFORMATION

Based on data for component materials

### 12.1 Toxicity:

#### Hydrocarbons, C7 – C9, isoalkanes

Fish	Oncorhynchus mykiss	LL50	96h	18.4 mg/l
Aquatic Invertebrates	Daphnia magna	EL50	48h	2.4 mg/l
Aquatic Plants	Pseudokirchneriella subcapitata	EL50	72h	29 mg/l

**12.2 Persistence and degradability:** Hydrocarbons, C7 – C9, isoalkanes - Biodegradable.

**12.3 Bioaccumulative potential:** No data available.

**Partition coefficient: n-octanol/water (log Kow):** No data available.

**Bioconcentration factor (BCF):** No data available.

# SAFETY DATA SHEET

12.4	<b>Mobility in soil:</b>	The product is immiscible with water and will spread on the water surface. Product is highly volatile - will partition rapidly to air.
12.5	<b>Results of PBT and vPvB assessment:</b>	This mixture does not contain any substances that are assessed to be a PBT or vPvB.
12.6	<b>Other adverse effects:</b>	No data available.

## SECTION 13 DISPOSAL CONSIDERATIONS

13.1	<b>Waste treatment methods:</b>	Dispose of waste and residues in accordance with local authority requirements. Seek the advice of an approved waste disposal contractor for disposal at a licensed facility in accordance with national legislation.
	<b>Product/packing disposal:</b>	Empty containers may contain residual product and flammable vapours. Do not pierce or burn container, even after use. Do NOT remove labels. Keep away from sources of ignition.
	<b>Waste codes/waste designations according to LoW:</b>	16 05 04* gases in pressure containers containing dangerous substances.

NOTE: Waste codes are assigned based upon the most common uses for this material and may not reflect contaminants resulting from actual use. Waste producers need to assess the actual process used when generating the waste and its contaminants in order to assign the proper waste code(s).

<b>Waste treatment – relevant information:</b>	Dispose of waste and residues in accordance with local authority requirements. Seek the advice of an approved waste disposal contractor for disposal at a licensed facility in accordance with national legislation
<b>Sewage disposal – relevant information:</b>	Do not empty down the drain.
<b>Other disposal recommendations:</b>	Use a licensed waste contractor

## SECTION 14 TRANSPORT INFORMATION

14.1	<b>UN number:</b>	ADR/RID: UN1950 IMDG: UN1950 IATA: UN1950
14.2	<b>UN proper shipping name:</b>	ADR/RID: AEROSOLS, flammable IMDG: AEROSOLS, flammable IATA: AEROSOLS, flammable
14.3	<b>Transport hazard class(es):</b>	ADR/RID: 2.1 IMDG: 2.1 IATA: 2.1
14.4	<b>Packing group:</b>	ADR/RID: N/A IMDG: N/A IATA: N/A
14.5	<b>Environmental hazards:</b>	ADR/RID: Yes IMDG: Marine Pollutant: Yes IATA: Yes

# SAFETY DATA SHEET

- 14.6 Special precautions for user:**  
ADR/RID – Tunnel code: (D)  
IMDG – Ems: F-D, S-U  
IATA/ICAO – PAX: 203  
IATA/ICAO – CAO: 203
- 14.7 Transport in bulk according to Annex II of Marpol 73/78 and the IBC code:**  
Not applicable

## SECTION 15 REGULATORY INFORMATION

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture:**  
**EU Regulations:**  
This data sheet complies with the requirements of Regulation (EC) No 1272/2008 on the classification, labelling and packaging of substances and mixtures.  
Safety data sheet as required by EC-Regulations 1907/2006 and REACH Annex II Amendment (EU) No. 2015/830.  
**Information according to 2013/10/EU and 2008/47/EC amendment of the aerosol directive 75/324/EEC.**  
This data sheet is complied according Dir 2013/10/EU, 2008/47/EEC amendment of the aerosol directive 75/324/EEC.  
**Extra label elements:** Pressured container: protect from sunlight and do not expose to temperatures exceeding 50 °C. Do not pierce or burn, even after use. Do not spray on a naked flame or any incandescent material.  
Mixtures classified as Asp. Tox. 1 H304 need not be labelled when placed on the market in aerosol containers or in containers fitted with a sealed spray attachment.
- National regulations (Germany):**  
**Wassergefährdungsklasse (water hazard class):** WGK 2 - Hazard to waters.  
**TechnischeAnleitungLuft (TA-Luft):** Class 5.2.5 Organic Substances, except dusts
- 15.2 Chemical safety assessment:**  
No data available

## SECTION 16 OTHER INFORMATION

- (i) Indication of changes:**  
This safety data sheet has been updated to meet the requirements of Regulation EU No 2015/830 and Regulation (EC) No 1272/2008. Removal of the Classification according to 67/548/EEC as amended & Directive 1999/45/EC. Version 16.1 also updated in Section 8 due to updated safety information.  
Vertical lines on the left hand side indicate an amendment from the previous version.
- (ii) Abbreviations and acronyms:**
- |           |   |
|-----------|---|
| ADR       | European Agreement concerning the International Carriage of Dangerous Goods by Road (Accord européen relatif au transport international des marchandises Dangereuses par Route) |
| CAS No.   | Chemical Abstracts Service number   |
| CEN       | European Committee for Standardisation  |
| CLP       | Classification, Labelling Packaging Regulation; Regulation (EC) No 1272/2008  |
| ECHA      | European Chemicals Agency   |
| EC50      | Half Maximal Effective Concentration  |
| EC number | EINECS and ELINCS number  |
| EINECS    | European Inventory of Existing Commercial Substances  |
| ELINCS    | European List of notified Chemical Substances   |
| GHS       | Globally Harmonized System  |
| IATA      | International Air Transport Association   |
| IMDG      | International Maritime Dangerous Goods  |

# SAFETY DATA SHEET

LC50	Lethal Concentration to 50% of a test population
LD50	Lethal Dose to 50% of a test population
MPI	Magnetic Particle Inspection
NDT	Non-Destructive Testing
OEL	Occupational Exposure Limit
PBT	Persistent, Bioaccumulative and Toxic Substance
PMCC	Pensky-Martens closed cup method
PPE	Personal Protection Equipment
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation EC (No) 1907/2006
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail (Reglement International concernant le transport des marchandises Dangereuses par chemin de fer)
SDS	Safety Data Sheet
STOT RE	Specific Target Organ Toxicity, Repeat Exposure
STOT SE	Specific Target Organ Toxicity, Single Exposure
TA-Luft	Technical Instructions on Air Quality Control (Technische Anleitung zur Reinhaltung der Luft)
vPvB	Very Persistent and Very Bioaccumulative
WEL	Workplace Exposure Limit
WGK	German Water Hazard Class (Wassergefährdungsklasse)

**(iii) Key literature and sources of data:**

- Supplier's safety data sheets for components listed in Section 3.
- European Chemicals Agency, <http://echa.europa.eu/>
- GESTIS International Limit Values Database, [http://limitvalue.ifa.dguv.de/Webform\\_gw.aspx](http://limitvalue.ifa.dguv.de/Webform_gw.aspx)
- Occupational Exposure Limits EH40/2005.
- Commission regulation (EU) 2015/830.
- Control of Substances Hazardous to Health Regulations 2002.
- Hazardous waste regulations 2005.
- Health & Safety at Work Act 1974.
- REACH Directive (EC) 1907/2006.

**(iv) Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 (CLP):**

Classification according to Regulation (EC) No 1272/2008	Classification procedure
Aerosol. 1: H222, H229	Test Method
Skin Irr. 2: H315	Calculation Method
STOT SE3: H336:	Calculation Method
Aquatic Chronic 2: H411	Calculation Method

**(v) Hazard statements (number and full text):**

- H220: Extremely flammable gas.
- H225: Highly flammable liquid and vapour
- H222: Extremely flammable aerosol.
- H229: Pressurised container: may explode if heated.
- H280: Contains gas under pressure; may burst if heated.
- H304: May be fatal if swallowed and enters airways
- H315: Causes skin irritation
- H336: May cause drowsiness or dizziness
- H411: Toxic to aquatic life with long lasting effects

**Hazard Class and Category Code (full text):**

- Aerosol 1: Aerosol
- Aquatic Chronic 2: Hazardous to the aquatic environment
- Asp. Tox. 1: Aspiration hazard
- Flam. Gas 1: Flammable Gas
- Flam. Liq. 2: Flammable liquid
- Press. Gas: Gases under pressure
- Skin Irrit. 2: Skin corrosion/irritation
- STOT SE 3: Specific target organ toxicity - single exposure

# SAFETY DATA SHEET

## Relevant precautionary statements (number and full text):

P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P211: Do not spray on an open flame or other ignition source.

P251 Do not pierce or burn even after use.

P261: Avoid breathing dust/fume/gas/mist/vapours/spray.

P271: Use only outdoors or in a well ventilated area.

P410 + P412: Protect from sunlight. Do not expose to temperatures exceeding 50 °C.

P280: Wear protective gloves/protective clothing/eye protection/face protection

P302+352: IF ON SKIN: Wash with soap and water

P362+P364: Take off contaminated clothing and wash it before reuse.

P264: Wash thoroughly after handling.

P501: Dispose of contents/container to hazardous waste or special collection point.

(vi)

## Training advice:

Chemical hazard awareness training, incorporating labelling, Safety Data Sheets (SDS), Personal Protective Equipment (PPE) and hygiene. Chemical hazard risk assessment. Provide adequate information, instruction and training to operators.

## DISCLAIMER

The information and recommendations contained herein are based upon data believed to be up-to-date and correct. However, no guarantee or warranty of any kind, express or implied, is made with respect to the information and recommendations contained herein. We accept no responsibility and disclaim all liability for any harmful effects that may be caused by (incorrect) use, handling, purchase, resale, or exposure to our product. Customers and users of our product must comply with all applicable health and safety laws, regulations, and orders. In particular, they are under an obligation to carry out a risk assessment for the particular work places and to take adequate risk management measures in accordance with the national implementation legislation of EU Directives 89/391/EEC and 98/24/EC amended by Directive 2014/27/EU.

<b>Revision summary:</b>	<b>Revision Comments</b>	This SDS is valid from the Revision Date. If you require a SDS for the product manufactured before the Revision Date please contact us at <a href="mailto:datasheets@magnaflux.co.uk">datasheets@magnaflux.co.uk</a> .
	<b>Revision Date</b>	01.04.2016
	<b>Version</b>	16.1

# SAFETY DATA SHEET



Version 16.1 replaces Version 15.1  
Revision date: 01.04.2016  
According to (EU) No. 2015/830

## SECTION 1

### IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

- 1.1 Product identifier:** SPOTCHECK® SKC-S - aerosol
- 1.2 Relevant identified uses of the mixture and uses advised against:**  
**Relevant identified uses:** Solvent cleaner used in penetrant inspection.  
**Uses advised against:** This product is not recommended for any use other than the identified uses above.
- 1.3 Details of the supplier of the safety data sheet**  
**Manufacturer:** Magnaflux® (A Division of ITW Ltd)  
**Address:** Faraday Road, South Dorcan Industrial Estate, Swindon, UK  
**Postcode:** SN3 5HE  
**Telephone/fax number:** Telephone: +44 (0)1793 524566  
Fax: +44 (0)1793 490459  
Web: [www.eu.magnaflux.com](http://www.eu.magnaflux.com)  
**Email address of competent person responsible for SDS:** datasheets@magnaflux.co.uk  
**National contact:** None appointed.
- 1.4 Emergency telephone number:** T: +44 (0)1793 524566 (office hours)  
**Opening hours:** Office hours (GMT) Monday - Thursday 8am - 5pm, Friday 8am - 4pm  
**Other comments:** Emergency telephone service is provided in English only.

## SECTION 2

### HAZARDS IDENTIFICATION

- 2.1 Classification of the substance or mixture:**  
**Classification according to Regulation (EC) No 1272/2008 (CLP):** **Physical and Chemical Hazard:** Aerosol 1 H222, H229  
**Health Hazard:** Skin Irrit. 2 H315  
STOT SE 3 H336  
**Environmental Hazard:** Aquatic Chronic 2 H411  
**Additional information:** No other information.

For full text of hazard statements and EU hazard statements see SECTION 16.

- 2.2 Label Elements:**  
Labelling according to regulation (EC) No 1272/2008 [CLP]



**Signal Word:**

DANGER

# SAFETY DATA SHEET

## Hazard Statement(s):

H222: Extremely flammable aerosol.  
 H229: Pressurised container: may burst if heated.  
 H315: Causes skin irritation  
 H336: May cause drowsiness or dizziness  
 H411: Toxic to aquatic life with long lasting effects

## Precautionary Statement(s):

P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
 P211: Do not spray on an open flame or other ignition source.  
 P251 Do not pierce or burn even after use.  
 P410 + P412: Protect from sunlight. Do not expose to temperatures exceeding 50 °C.  
 P261: Avoid breathing dust/fume/gas/mist/vapours/spray.  
 P280: Wear protective gloves/protective clothing/eye protection/face protection.  
 P501: Dispose of contents/container to hazardous waste or special collection point.  
 P271: Use only outdoors or in a well ventilated area.  
 P302+352: IF ON SKIN: Wash with soap and water  
 P264: Wash thoroughly after handling.  
 P362+P364: Take off contaminated clothing and wash it before reuse.

## Supplementary Precautionary Statement(s):

None

## Supplementary Hazard Information (EU)

### Hazard Determining Component(s)

Hydrocarbons, C7 – C9, isoalkanes

## 2.3

### Other hazards:

Pressurised container: protect from sunlight and do not expose to temperatures exceeding 50 °C. Vapours can form explosive mixtures with air.

## SECTION 3

## COMPOSITION / INFORMATION ON INGREDIENTS

### 3.2 Mixtures

Ingredient Name	CAS No	EC No	REACH Registration Number	% Weight	Classification according to Regulation (EC) No 1272/2008 [CLP]	Additional information
Hydrocarbons, C7- C9, isoalkanes		921-728-3	01-2119471305-42	60 -100	Flam. Liq 2: H225 Skin Irrit. 2: H315 STOT SE3: H336 Asp. Tox. 1: H304 (note1) Aquatic Chronic 2: H411	No other information
Hydrocarbons, C3-4-rich petroleum distillate petroleum gas (1,3 butadiene < 0.1%)	68512-91-4	270-990-9	(note2)	10-30	Press. Gas H280 Flam. Gas 1 H220	(note3)
1. Mixtures classified as Asp. Tox. 1 H304 need not be labelled when placed on the market in aerosol containers or in containers fitted with a sealed spray attachment. 2. Exempted from the obligation to register in accordance with art.2(7)(a) of REACH Regulation No 1907/2006 3. Not classified as carcinogen, less than 0.1% w/w 1,3 butadiene (EINECS no 203-450-8)						

Note: Hazard statement(s) in this section apply only to raw materials, not necessarily to finished products.

\*See Section 16 for hazard statement(s) text in full.



# SAFETY DATA SHEET

## SECTION 4

## FIRST AID MEASURES

- 4.1 Description of first aid measures:**
- General notes:** If symptoms persist, seek medical attention. Show this safety data sheet to the doctor in attendance.
- Following inhalation:** Remove to fresh air. Keep at rest. If not breathing give artificial respiration. Seek prompt medical attention if discomfort persists.
- Following skin contact:** Flush with water, use soap if available. Contaminated clothing should be washed before re-use. Seek medical attention if irritation persists.
- Following eye contact:** Flush eyes with large amounts of water for at least 15 minutes with eyelids held open. Seek medical attention if irritation persists.
- Following ingestion:** Unlikely route of exposure. Rinse mouth with water. Do NOT induce vomiting. If vomiting occurs, keep head low so that stomach contents don't enter the lungs. Never give anything by mouth to an unconscious person. Seek medical attention immediately.
- Self-protection of the first aider:** No action shall be taken involving any personal risk or without suitable training. If it is suspected that the mixture is still present, wear appropriate personal protective equipment.
- 4.2 Most important symptoms, both acute and delayed:**  
Prolonged skin contact may cause redness and irritation.  
In high concentrations, vapours are anaesthetic and may cause headache, fatigue, dizziness and central nervous system effects.  
Fumes from the stomach contents may be inhaled resulting in the same symptoms as inhalation. Avoid vomiting and normal rinse of stomach because of risk of aspiration. May cause discomfort to the eyes. Symptoms: redness and pain.
- 4.3 Indication of any immediate medical attention and special treatment needed:**  
None known.

## SECTION 5

## FIREFIGHTING MEASURES

- 5.1 Extinguishing media:**  
**Suitable extinguishing media:** Carbon dioxide, foam, dry chemical, water fog or spray.
- 5.2 Unsuitable extinguishing media:** Do not use water jet.  
**Special hazards arising from the substance or mixture:** Evacuate immediate area. Shut off 'fuel' to fire. If possible keep unaffected containers cool with water spray.  
Aerosols may explode in a fire.  
Aerosol contents are extremely flammable.  
**Hazardous combustion products:** Smoke, soot and oxides of carbon. Burning vapour may give off toxic fumes.
- 5.3 Advice for fire-fighter:**  
Warn firefighters that aerosols are involved. Self contained breathing apparatus and full protective clothing must be worn. Water spray should be used to cool containers. Contaminated extinguishing water must be disposed of in accordance with official regulations.

# SAFETY DATA SHEET

## SECTION 6

## ACCIDENTAL RELEASE MEASURES

- 6.1 Personal precautions, protective equipment and emergency procedures:**  
Suitable protective equipment (see Section 8) should be worn to prevent any contamination of skin, eyes and personal clothing.
- For non-emergency personnel:** Remove ignition sources. Avoid breathing vapours, mist or gas.
- For emergency responders:** Remove ignition sources. Avoid breathing vapours, mist or gas. Keep unnecessary people at a safe distance.
- 6.2 Environmental precautions:**  
Prevent liquid from entering drains, sewers and watercourses. Notify the Environment Agency or water authorities if a major spillage occurs.
- 6.3 Methods and material for containment and cleaning up:**  
Eliminate sources of ignition. Take measures to prevent the build-up of electrostatic charge.  
Avoid breathing vapours. Ventilate surrounding area.
- For containment:** Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite). Place in a UN approved container for disposal.  
Large spills should be pumped (using an earthed explosion proof pump) into UN approved containers pending disposal. Dispose of waste according to local/national regulations.
- For cleaning up:** Do not flush away residues with water.
- Other information:** No other information.
- 6.4 Reference to other sections:**  
For Personal Protective Equipment see Section 8. For disposal information see Section 13.

## SECTION 7

## HANDLING & STORAGE

- 7.1 Precautions for safer handling:**
- Protective Measures:** Wear suitable protective clothing such as chemical resistant gloves, apron and goggles/face mask to protect from splashes. Ensure adequate exhaust ventilation when in use.  
Avoid contact with skin and eyes. Do not breathe product spray or mist. Risk of vapour concentration in low areas.
- Measures to prevent fire:** Aerosol contents are highly flammable and volatile. Keep away from sources of ignition – no smoking.  
Take measures to prevent the build-up of electrostatic charge.  
Equipment should be earthed. Use explosion proof electrical/ventilating/lighting equipment. Use only non-sparking tools.
- Advice on general occupational hygiene:** Wash thoroughly after handling.

# SAFETY DATA SHEET

7.2	<b>Conditions for safe storage, including any incompatibilities:</b> <b>Technical measures and storage conditions:</b> <b>Packaging materials:</b>	Store in a cool dry area away from heat and sources of ignition. Store in original container.
	<b>Requirements for storage rooms and vessels:</b>	Pressurised container: protect from sunlight and do not expose to temperatures exceeding 50 °C. Recommended storage temperature 10 °C to 30 °C.
	<b>Further information on storage conditions:</b>	Rotate stock and check regularly for damaged items.
7.3	<b>Specific end use(s):</b> <b>Recommendations:</b>	Use only for Non Destructive Testing (NDT) applications.
	<b>Industrial sector specific solutions:</b>	See product data sheet for further information.

## SECTION 8

## EXPOSURE CONTROLS / PERSONAL PROTECTION

- 8.1 **Control parameters:**  
**Occupational exposure limit values:**  
 Occupational exposure figures have been set for some of the components of this preparation based on GESTIS International Limit Values or manufacturers' recommendation.

Ingredient name	Country	Limit value - 8 hours		Limit value - short term	
		ppm	mg /m <sup>3</sup>	ppm	mg /m <sup>3</sup>
Hydrocarbons, C7 – C9, isoalkanes	UK	241	1200		

Data obtained from GESTIS International Limit Values, EH40, supplier's SDS

**Note:** Where no specific short-term exposure limit is listed, a figure three times the long-term exposure limit should be used.

### Derived No Effect Level (DNEL) - Hydrocarbons, C7 – C9, isoalkanes

End User	Exposure Route	Exposure Time	Effects	DNEL
Worker	Inhalation	Long term	Systemic	2035 mg/m <sup>3</sup>
Worker	Dermal	Long term	Systemic	773 mg/kg bw/day

**Note:** The Derived No Effect Level (DNEL) is an estimated safe level of exposure that is derived from toxicity data in accordance with specific guidance within the European REACH regulation. The DNEL may differ from an Occupational Exposure Limit (OEL) for the same chemical. OELs may be recommended by an individual company, a government regulatory body or an expert organization, such as the Scientific Committee for Occupational Exposure Limits (SCOEL) or the American Conference of Governmental Industrial Hygienists (ACGIH). OELs are considered to be safe exposure levels for a typical worker in an occupational setting for an 8-hour work shift, 40 hour work week, as a time weighted average (TWA) or a 15 minute short-term exposure limit (STEL). While also considered to be protective of health, OELs are derived by a process different from that of REACH.

### Predicted No Effect Concentration (PNEC) - Hydrocarbons, C7 – C9, isoalkanes

Water - Fresh Water	No data available: testing technically not feasible
Water - Marine Water	No data available: testing technically not feasible
Water - Intermittent release	No data available: testing technically not feasible
Sediment - Fresh water	No data available: testing technically not feasible
Sediment - Marine water	No data available: testing technically not feasible
Soil	No data available: testing technically not feasible
Sewage Treatment plant	No data available: testing technically not feasible

# SAFETY DATA SHEET

## 8.2 Exposure controls:

Concentrations of product vapours and mists in the working atmosphere must be kept as low as is reasonably practicable. Exposure should be minimised by the use of appropriate containment, engineering control and ventilation measures. Where this is not possible, personal protective equipment should be worn as indicated below where appropriate.

### Appropriate engineering controls:

Provide adequate ventilation, including appropriate local extraction, to ensure that the defined occupational exposure limits are not exceeded

### Personal protection equipment:

#### Eye and face protection:

Safety glasses with side-shields conforming to EN166.

#### Skin protection - hand:

Protective gloves conforming to EN374-3. Use chemical resistant gloves recommended by glove manufacturer as being suitable for **isoparaffins**, if hand exposure is unavoidable. Protective gloves made of **nitrile rubber** are suitable, although other types may be more suitable in other circumstances. For prolonged exposure, recommended gloves with protective index 6, > 480 minutes permeation time according to EN374.

#### Skin protection – other:

Consult the glove manufacturer for exact breakthrough time. Glove manufacturer's directions for use should be observed. Wear impervious, flame retardant antistatic protective clothing. The type of protective equipment must be selected according to the concentration and amount of dangerous substance at the specific workplace.

#### Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment. Filter type A. (EN 136, 140, 405, 149, 143) For higher level protection use type ABEK-P3 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under CEN standards.

#### Thermal hazards:

Not applicable.

#### Environmental exposure controls:

Avoid any release to the environment.

## SECTION 9

## PHYSICAL & CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties:

#### Appearance:

Aerosol containing mobile clear liquid.

#### Odour:

Mild hydrocarbon.

#### Odour threshold:

No data available.

#### pH:

Neutral.

#### Melting point/freezing point:

No data available.

#### Initial boiling point and boiling range:

113 – 143 °C.

#### Flash point (PMCC):

-40 °C (aerosol propellant).

#### Evaporation rate (BuAc = 100):

155.

#### Flammability (solid, gas) (Limits in air):

No data available.

#### Upper/lower flammability or explosive limits:

0.7 – 6.0% (Vol%)

# SAFETY DATA SHEET

Vapour pressure:	1.627 kPa @ 20 °C.
Vapour density (Air = 1):	> 1.
Relative density:	0.72 g/cm <sup>3</sup> .
Solubility:	Insoluble.
Partition coefficient: n-octanol/water:	No data available.
Auto-ignition temperature:	> 200 °C.
Decomposition temperature:	No data available.
Viscosity (ASTM D445):	0.86 mm <sup>2</sup> /s @ 25 °C.
Explosive properties:	Under normal conditions no danger of explosion.
Oxidising properties:	No data available.

Note: properties relate to the bulk product only unless otherwise stated.

9.2 Other information:  
No other information.

## SECTION 10 STABILITY & REACTIVITY

10.1	Reactivity:	No specific reactivity hazards associated with this product.
10.2	Chemical stability	Stable under normal conditions of use and applications.
10.3	Possibility of hazardous reactions:	No data available.
10.4	Conditions to avoid:	Keep away from sources of ignition, hot surfaces and direct sun light.
10.5	Incompatible materials:	Strong oxidising agents.
10.6	Hazardous decomposition materials:	None under normal conditions of use. Smoke, soot and oxides of carbon on combustion.

## SECTION 11 TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects: based on data for component materials.

Acute toxicity - oral:	Based on the available data, the classification criteria are not met.
Acute toxicity – dermal:	Based on the available data, the classification criteria are not met.
Acute toxicity – inhalation:	Based on the available data, the classification criteria are not met.
Skin corrosion/irritation:	Skin Irrit. 2 H315: Causes skin irritation.
Serious eye damage/irritation:	Based on the available data, the classification criteria are not met.
Respiratory sensitisation:	Data lacking.
Skin sensitisation:	Based on the available data, the classification criteria are not met.
Germ cell mutagenicity:	Based on the available data, the classification criteria are not met.
Carcinogenicity:	Data lacking.
Reproductive toxicity:	Based on the available data, the classification criteria are not met.

# SAFETY DATA SHEET

**STOT single exposure:** STOT Single Exp. 3 H336: May cause drowsiness or dizziness.  
Affected organs: central nervous system  
Route of exposure: inhalation

**STOT repeated exposure:** Based on the available data, the classification criteria are not met.

**Aspiration hazard:** Mixtures from Aerosol Dispensers - need not be classified as Asp. Tox. 1 - H304 as the aerosol spray is fine and a pool of product may not be formed in the mouth.

## Information on likely Routes of Exposure and Potential Health Effects:

**Inhalation:** Vapour concentrations above the recommended exposure levels are irritating to the eyes and respiratory tract, may cause headaches and dizziness, are anaesthetic and may have other central nervous system effects.

**Ingestion:** Not a likely route of exposure. However, harmful: May cause lung damage if swallowed. Ingestion may cause irritation of the mouth, throat and digestive tract. Small amounts of product aspirated into the respiratory system during ingestion or from vomiting may cause bronchopneumonia or pulmonary edema.

**Eye contact:** May cause redness and pain.

**Skin contact:** Frequent or prolonged contact with the product may produce irritation and/or skin dryness and cracking. Product will have a de-fatting effect on the skin.

**Toxicity Test Results:** based on data for component materials, where available.

### Hydrocarbons, C7 – C9, isoalkanes

Acute Toxicity – oral	LD50 (rat)	> 5000 mg/kg
Acute Toxicity – dermal	LD50 (rabbit)	> 2000 mg/kg
Acute Toxicity – inhalation	LC50 (rat)	21 mg/l (4 h; vapour)

**Other Information:** No other information.

## SECTION 12 ECOLOGICAL INFORMATION

Based on data for component materials

### 12.1 Toxicity:

#### Hydrocarbons, C7 – C9, isoalkanes

Fish	Oncorhynchus mykiss	LL50	96h	18.4 mg/l
Aquatic Invertebrates	Daphnia magna	EL50	48h	2.4 mg/l
Aquatic Plants	Pseudokirchneriella subcapitata	EL50	72h	29 mg/l

**12.2 Persistence and degradability:** Hydrocarbons, C7 – C9, isoalkanes - Biodegradable.

**12.3 Bioaccumulative potential:** No data available.

**Partition coefficient: n-octanol/water (log Kow):** No data available.

**Bioconcentration factor (BCF):** No data available.

# SAFETY DATA SHEET

12.4	<b>Mobility in soil:</b>	The product is immiscible with water and will spread on the water surface. Product is highly volatile - will partition rapidly to air.
12.5	<b>Results of PBT and vPvB assessment:</b>	This mixture does not contain any substances that are assessed to be a PBT or vPvB.
12.6	<b>Other adverse effects:</b>	No data available.

## SECTION 13 DISPOSAL CONSIDERATIONS

13.1	<b>Waste treatment methods:</b>	Dispose of waste and residues in accordance with local authority requirements. Seek the advice of an approved waste disposal contractor for disposal at a licensed facility in accordance with national legislation.
	<b>Product/packing disposal:</b>	Empty containers may contain residual product and flammable vapours. Do not pierce or burn container, even after use. Do NOT remove labels. Keep away from sources of ignition.
	<b>Waste codes/waste designations according to LoW:</b>	16 05 04* gases in pressure containers containing dangerous substances.

NOTE: Waste codes are assigned based upon the most common uses for this material and may not reflect contaminants resulting from actual use. Waste producers need to assess the actual process used when generating the waste and its contaminants in order to assign the proper waste code(s).

<b>Waste treatment – relevant information:</b>	Dispose of waste and residues in accordance with local authority requirements. Seek the advice of an approved waste disposal contractor for disposal at a licensed facility in accordance with national legislation
<b>Sewage disposal – relevant information:</b>	Do not empty down the drain.
<b>Other disposal recommendations:</b>	Use a licensed waste contractor

## SECTION 14 TRANSPORT INFORMATION

14.1	<b>UN number:</b>	ADR/RID: UN1950 IMDG: UN1950 IATA: UN1950
14.2	<b>UN proper shipping name:</b>	ADR/RID: AEROSOLS, flammable IMDG: AEROSOLS, flammable IATA: AEROSOLS, flammable
14.3	<b>Transport hazard class(es):</b>	ADR/RID: 2.1 IMDG: 2.1 IATA: 2.1
14.4	<b>Packing group:</b>	ADR/RID: N/A IMDG: N/A IATA: N/A
14.5	<b>Environmental hazards:</b>	ADR/RID: Yes IMDG: Marine Pollutant: Yes IATA: Yes

# SAFETY DATA SHEET

- 14.6 Special precautions for user:**  
ADR/RID – Tunnel code: (D)  
IMDG – Ems: F-D, S-U  
IATA/ICAO – PAX: 203  
IATA/ICAO – CAO: 203
- 14.7 Transport in bulk according to Annex II of Marpol 73/78 and the IBC code:**  
Not applicable

## SECTION 15 REGULATORY INFORMATION

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture:**  
**EU Regulations:**  
This data sheet complies with the requirements of Regulation (EC) No 1272/2008 on the classification, labelling and packaging of substances and mixtures.  
Safety data sheet as required by EC-Regulations 1907/2006 and REACH Annex II Amendment (EU) No. 2015/830.  
**Information according to 2013/10/EU and 2008/47/EC amendment of the aerosol directive 75/324/EEC.**  
This data sheet is complied according Dir 2013/10/EU, 2008/47/EEC amendment of the aerosol directive 75/324/EEC.  
**Extra label elements:** Pressured container: protect from sunlight and do not expose to temperatures exceeding 50 °C. Do not pierce or burn, even after use. Do not spray on a naked flame or any incandescent material.  
Mixtures classified as Asp. Tox. 1 H304 need not be labelled when placed on the market in aerosol containers or in containers fitted with a sealed spray attachment.
- National regulations (Germany):**  
**Wassergefährdungsklasse (water hazard class):** WGK 2 - Hazard to waters.  
**TechnischeAnleitungLuft (TA-Luft):** Class 5.2.5 Organic Substances, except dusts
- 15.2 Chemical safety assessment:**  
No data available

## SECTION 16 OTHER INFORMATION

- (i) Indication of changes:**  
This safety data sheet has been updated to meet the requirements of Regulation EU No 2015/830 and Regulation (EC) No 1272/2008. Removal of the Classification according to 67/548/EEC as amended & Directive 1999/45/EC. Version 16.1 also updated in Section 8 due to updated safety information.  
Vertical lines on the left hand side indicate an amendment from the previous version.
- (ii) Abbreviations and acronyms:**
- |           |   |
|-----------|---|
| ADR       | European Agreement concerning the International Carriage of Dangerous Goods by Road (Accord européen relatif au transport international des marchandises Dangereuses par Route) |
| CAS No.   | Chemical Abstracts Service number   |
| CEN       | European Committee for Standardisation  |
| CLP       | Classification, Labelling Packaging Regulation; Regulation (EC) No 1272/2008  |
| ECHA      | European Chemicals Agency   |
| EC50      | Half Maximal Effective Concentration  |
| EC number | EINECS and ELINCS number  |
| EINECS    | European Inventory of Existing Commercial Substances  |
| ELINCS    | European List of notified Chemical Substances   |
| GHS       | Globally Harmonized System  |
| IATA      | International Air Transport Association   |
| IMDG      | International Maritime Dangerous Goods  |



# SAFETY DATA SHEET

LC50	Lethal Concentration to 50% of a test population
LD50	Lethal Dose to 50% of a test population
MPI	Magnetic Particle Inspection
NDT	Non-Destructive Testing
OEL	Occupational Exposure Limit
PBT	Persistent, Bioaccumulative and Toxic Substance
PMCC	Pensky-Martens closed cup method
PPE	Personal Protection Equipment
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation EC (No) 1907/2006
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail (Reglement International concernant le transport des marchandises Dangereuses par chemin de fer)
SDS	Safety Data Sheet
STOT RE	Specific Target Organ Toxicity, Repeat Exposure
STOT SE	Specific Target Organ Toxicity, Single Exposure
TA-Luft	Technical Instructions on Air Quality Control (Technische Anleitung zur Reinhaltung der Luft)
vPvB	Very Persistent and Very Bioaccumulative
WEL	Workplace Exposure Limit
WGK	German Water Hazard Class (Wassergefährdungsklasse)

**(iii) Key literature and sources of data:**

- Supplier's safety data sheets for components listed in Section 3.
- European Chemicals Agency, <http://echa.europa.eu/>
- GESTIS International Limit Values Database, [http://limitvalue.ifa.dguv.de/Webform\\_gw.aspx](http://limitvalue.ifa.dguv.de/Webform_gw.aspx)
- Occupational Exposure Limits EH40/2005.
- Commission regulation (EU) 2015/830.
- Control of Substances Hazardous to Health Regulations 2002.
- Hazardous waste regulations 2005.
- Health & Safety at Work Act 1974.
- REACH Directive (EC) 1907/2006.

**(iv) Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 (CLP):**

Classification according to Regulation (EC) No 1272/2008	Classification procedure
Aerosol. 1: H222, H229	Test Method
Skin Irr. 2: H315	Calculation Method
STOT SE3: H336:	Calculation Method
Aquatic Chronic 2: H411	Calculation Method

**(v) Hazard statements (number and full text):**

- H220: Extremely flammable gas.  
H225: Highly flammable liquid and vapour  
H222: Extremely flammable aerosol.  
H229: Pressurised container: may explode if heated.  
H280: Contains gas under pressure; may burst if heated.  
H304: May be fatal if swallowed and enters airways  
H315: Causes skin irritation  
H336: May cause drowsiness or dizziness  
H411: Toxic to aquatic life with long lasting effects

**Hazard Class and Category Code (full text):**

- Aerosol 1: Aerosol  
Aquatic Chronic 2: Hazardous to the aquatic environment  
Asp. Tox. 1: Aspiration hazard  
Flam. Gas 1: Flammable Gas  
Flam. Liq. 2: Flammable liquid  
Press. Gas: Gases under pressure  
Skin Irrit. 2: Skin corrosion/irritation  
STOT SE 3: Specific target organ toxicity - single exposure

# SAFETY DATA SHEET

## Relevant precautionary statements (number and full text):

P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P211: Do not spray on an open flame or other ignition source.

P251 Do not pierce or burn even after use.

P261: Avoid breathing dust/fume/gas/mist/vapours/spray.

P271: Use only outdoors or in a well ventilated area.

P410 + P412: Protect from sunlight. Do not expose to temperatures exceeding 50 °C.

P280: Wear protective gloves/protective clothing/eye protection/face protection

P302+352: IF ON SKIN: Wash with soap and water

P362+P364: Take off contaminated clothing and wash it before reuse.

P264: Wash thoroughly after handling.

P501: Dispose of contents/container to hazardous waste or special collection point.

(vi)

## Training advice:

Chemical hazard awareness training, incorporating labelling, Safety Data Sheets (SDS), Personal Protective Equipment (PPE) and hygiene. Chemical hazard risk assessment.

Provide adequate information, instruction and training to operators.

## DISCLAIMER

The information and recommendations contained herein are based upon data believed to be up-to-date and correct. However, no guarantee or warranty of any kind, express or implied, is made with respect to the information and recommendations contained herein. We accept no responsibility and disclaim all liability for any harmful effects that may be caused by (incorrect) use, handling, purchase, resale, or exposure to our product. Customers and users of our product must comply with all applicable health and safety laws, regulations, and orders. In particular, they are under an obligation to carry out a risk assessment for the particular work places and to take adequate risk management measures in accordance with the national implementation legislation of EU Directives 89/391/EEC and 98/24/EC amended by Directive 2014/27/EU.

<b>Revision summary:</b>	<b>Revision Comments</b>	This SDS is valid from the Revision Date. If you require a SDS for the product manufactured before the Revision Date please contact us at <a href="mailto:datasheets@magnaflux.co.uk">datasheets@magnaflux.co.uk</a> .
	<b>Revision Date</b>	01.04.2016
	<b>Version</b>	16.1

## Safety Data Sheet

Printing date 01/11/2021

Revised On 01/11/2021

## 1 Identification of the substance and manufacturer

**Trade name:** SPRA-GALV PRIMER  
**Product code:** 0000160845  
**Recommended use:** Paint and coatings application.  
**Uses advised against:** Any that differs from the recommended use.  
**Manufacturer/Supplier:** Seymour of Sycamore  
 917 Crosby Avenue  
 Sycamore, IL 60178 USA  
 phone: 815-895-9101  
 www.seymourpaint.com

**Emergency telephone number:** 1-800-255-3924

Seymour of Sycamore  
 3041 Dougall Avenue, Suite 503  
 Windsor, ONT N9E 1S3 CANADA  
 phone: 800-435-4482  
 www.seymourpaint.com

## 2 Hazard(s) identification

## Classification of the substance or mixture

Flam. Aerosol 1 H222 Extremely flammable aerosol.  
 Press. Gas H280 Contains gas under pressure; may explode if heated.  
 Skin Irrit. 2 H315 Causes skin irritation.  
 Repr. 1B H360 May damage fertility or the unborn child.  
 STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.

Additional information:  
GHS Hazard pictograms

GHS02 GHS04 GHS07 GHS08

Signal word  
Hazard statements

Danger  
 Extremely flammable aerosol.  
 Contains gas under pressure; may explode if heated.  
 Causes skin irritation.  
 May damage fertility or the unborn child.

## Precautionary statements

May cause damage to organs through prolonged or repeated exposure.  
 Obtain special instructions before use.  
 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.  
 Do not spray on an open flame or other ignition source.  
 Pressurized container: Do not pierce or burn, even after use.  
 Do not breathe dust/fume/gas/mist/vapors/spray.  
 Wash thoroughly after handling.  
 Store in a well-ventilated place.  
 Store locked up.  
 Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.  
 Dispose of contents/container in accordance with local/regional/national/international regulations.

## 3 Composition/information on ingredients

## Chemical characterization: Mixtures

**Chemical Description:** This product is a mixture of the substances listed below with nonhazardous additions.

## Dangerous components:

108-88-3	Toluene	≥15-<20%
74-98-6	propane	5-10%
110-19-0	Isobutyl Acetate	5-10%
106-97-8	n-butane	5-10%
64742-47-8	Mineral Spirits	5-10%

## 4 First-aid measures

**After inhalation:** Supply fresh air; consult doctor in case of complaints.  
**After skin contact:** Remove contaminated clothing. Wash exposed area with soap and water.  
**After eye contact:** Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.  
**After swallowing:** Rinse mouth with water. Do not induce vomiting.  
**Most important symptoms and effects:** Dizziness  
**Indication of any immediate medical attention needed:** No further relevant information available.

## 5 Fire-fighting measures

**Extinguishing agents:** CO<sub>2</sub>, extinguishing powder or water spray. Fight larger fires with water spray.  
**Special hazards:** Can form explosive gas-air mixtures.  
**Protective equipment for firefighters:** A respiratory protective device may be necessary.

(Contd. on page 2)

## Safety Data Sheet

Printing date 01/11/2021

Revised On 01/11/2021

Trade name: SPRA-GALV PRIMER

(Contd. of page 1)

**6 Accidental release measures****Personal precautions, protective equipment and emergency procedures:**

Use respiratory protective device against the effects of fumes/dust/aerosol.

**Methods and material for containment and cleaning up:**

Dispose contaminated material as waste according to section 13.

**7 Handling and storage****Precautions for safe handling**

Use only in well ventilated areas.

**Storage requirements:**

Keep away from sources of heat and direct sunlight. Do not warehouse in subfreezing conditions. Store locked up.

**8 Exposure controls/personal protection****Components with limit values that require monitoring at the workplace:****108-88-3 Toluene**

PEL (USA) Long-term value: 200 ppm  
Ceiling limit value: 300; 500\* ppm  
\*10-min peak per 8-hr shift

REL (USA) Short-term value: 560 mg/m<sup>3</sup>, 150 ppm  
Long-term value: 375 mg/m<sup>3</sup>, 100 ppm

TLV (USA) Long-term value: 20 ppm  
BEI, NIC-OTO

**74-98-6 propane**

PEL (USA) Long-term value: 1800 mg/m<sup>3</sup>, 1000 ppm

REL (USA) Long-term value: 1800 mg/m<sup>3</sup>, 1000 ppm

TLV (USA) refer to Appendix F in TLVs&BEIs book; D, EX

**110-19-0 Isobutyl Acetate**

PEL (USA) Long-term value: 700 mg/m<sup>3</sup>, 150 ppm

REL (USA) Long-term value: 700 mg/m<sup>3</sup>, 150 ppm

TLV (USA) Short-term value: 712 mg/m<sup>3</sup>, 150 ppm  
Long-term value: 238 mg/m<sup>3</sup>, 50 ppm

**106-97-8 n-butane**

REL (USA) Long-term value: 1900 mg/m<sup>3</sup>, 800 ppm

TLV (USA) Short-term value: 2370 mg/m<sup>3</sup>, 1000 ppm  
(EX)

**Hygienic protection:**

Immediately remove all soiled and contaminated clothing.

Wash hands after use.

Store protective clothing separately.

Avoid contact with the eyes and skin.

Do not eat or drink while working.

**Breathing equipment:**

A respirator is generally not necessary when using this product outdoors or in large open areas. In cases where short and/or long term overexposure exists, a charcoal filter respirator should be worn.

If you suspect overexposure conditions exist, please consult an authority on chemical hygiene.

**Hand protection:**

Nitrile gloves.

**Eye protection:**

The glove material must be impermeable and resistant to the substance.

Tightly sealed goggles

**9 Physical and chemical properties****Appearance:**

Aerosol.

**Odor:**

Aromatic

**Odor threshold:**

Not determined.

**pH-value:**

Not determined.

**Melting point/Melting range**

Undetermined.

**Boiling point:**

-44 °C (-47.2 °F)

**Flash point:**

-19 °C (-2.2 °F)

**Flammability (solid, gas):**

Extremely flammable.

**Decomposition temperature:**

Not determined.

**Auto igniting:**

Product is not self-igniting.

**Danger of explosion:**

In use, may form flammable/explosive vapour-air mixture.

**Lower Explosion Limit:**

Not determined.

**Upper Explosion Limit:**

Not determined.

**Vapor pressure:**

Not determined.

**Relative Density:**

Between 0.77 and 0.85 (Water equals 1.00)

**Vapor density**

Not determined.

(Contd. on page 3)

## Safety Data Sheet

Printing date 01/11/2021

Revised On 01/11/2021

Trade name: SPRA-GALV PRIMER

Evaporation rate: Not applicable.  
 Partition coefficient: n-octanol/water: Not determined.  
 Solubility: Not determined.  
 Viscosity: Not determined.

(Contd. of page 2)

**10 Stability and reactivity**

Reactivity: Stable at normal temperatures.  
 Conditions to avoid: Do not allow can to exceed 120 degrees Fahrenheit. Do not warehouse in subfreezing temperatures.  
 Chemical stability: Not fully evaluated.  
 Possibility of hazardous reactions: No dangerous reactions known.  
 Incompatible materials: No further relevant information available.  
 Hazardous decomposition: No dangerous decomposition products known.

**11 Toxicological information**

LD/LC50 values that are relevant for classification:

**110-19-0 Isobutyl Acetate**

Oral LD50 4,763 mg/kg (rbt)

Information on toxicological effects: No data available.  
 Skin effects: No irritant effect.  
 Eye effects: Irritating effect.  
 Sensitization: No sensitizing effects known.

**12 Ecological information**

Aquatic toxicity: Hazardous for water, do not empty into drains.  
 Persistence and degradability: The product is degradable after prolonged exposure to natural weathering processes.  
 Other information: This product does not contain any chlorofluorocarbons (CFC's), hydrochlorofluorocarbons (HCFC's), perfluorocarbons (PFC's), heavy metals (chromium, lead, cadmium), or chlorinated solvents.  
 Bioaccumulative potential: No further relevant information available.  
 Mobility in soil: No further relevant information available.  
 Other adverse effects: No further relevant information available.

**13 Disposal considerations**

Dispose of in accordance with local, state, and federal regulations. Do not puncture, incinerate, or compact. Partially empty cans must be disposed of responsibly. Do not heat or cut empty containers with electric or gas torches.  
 Recommendation: Completely empty cans should be recycled.  
 Recommended cleansing agent: Water, if necessary with cleansing agents.

**14 Transport information**

UN-Number: UN1950  
 DOT: UN1950  
 DOT: Aerosols, flammable  
 ADR: 1950 Aerosols, ENVIRONMENTALLY HAZARDOUS  
 Transport hazard class(es):  
 Class: 2.1  
 Marine pollutant: Symbol (fish and tree)  
 Special precautions for user: Warning: Gases  
 EMS Number: F-D,S-U  
 Packaging Group: --  
 UN "Model Regulation": UN 1950 AEROSOLS, 2.1, ENVIRONMENTALLY HAZARDOUS

**15 Regulatory information****SARA Section 355 (extremely hazardous substances):**

None of the ingredients in this product are listed.

**SARA Section 313 (Specific toxic chemical listings):**

7440-66-6 zinc powder

108-88-3 Toluene

Toxic Substances Control Act (TSCA): All hazardous ingredients are found on the inventory list of substances.  
 Canadian Domestic Substances List (DSL): All ingredients are listed or exempted.  
 Consumer Product Safety Commission (CPSC): This product complies with 16 CFR 1303 and does not contain more than 90 ppm of lead.

(Contd. on page 4)

## Safety Data Sheet

Printing date 01/11/2021

Revised On 01/11/2021

Trade name: SPRA-GALV PRIMER

(Contd. of page 3)

**California Proposition 65 chemicals known to cause cancer:**

None of the ingredients in this product are listed.

**Prop 65 chemicals known to cause birth defects or reproductive harm:**

108-88-3 Toluene

**EPA:**

7440-66-6 zinc powder

D, I, II

110-19-0 Isobutyl Acetate

D

**16 Other information****Contact:**

Regulatory Affairs

# Safety Data Sheet

acc. to OSHA HCS

Printing date 12/10/2013

Revised On 12/10/2013

## 1 Identification of the substance and manufacturer

**Trade name:** SPRAY GALV PRIMER

**Product code:** 0000160845

**Manufacturer/Supplier:** Seymour of Sycamore  
917 Crosby Avenue  
Sycamore, IL 60178  
Phone: 815-895-9101  
www.seymourpaint.com

**Emergency telephone number:** CHEMTEL 1-800-255-3924, 813-248-0585 \*if located outside the U.S.\*



## 2 Composition/information on ingredients

**Chemical Description:** This product is a mixture of the substances listed below with nonhazardous additions.

### Dangerous components:

7440-66-6	zinc powder	26.06%
108-88-3	Toluene	16.88%
74-98-6	propane	9.46%
110-19-0	isobutyl acetate	8.94%
106-97-8	n-butane	5.55%
64742-47-8	Mineral Spirits	5.16%

## 3 Hazard(s) identification

### Hazard Information for people and the environment:

Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50 °C, i.e. electric lights. Do not pierce or burn, even after use.  
Extremely flammable liquid and vapor in a pressurized container. Keep away from heat, sparks, and flame.  
Has narcotizing effect.

### Risk phrases:

Extremely flammable.  
Irritating to eyes and respiratory system.  
Harmful: danger of serious damage to health by prolonged exposure through inhalation.  
Possible risk of harm to the unborn child

### Safety phrases:

Keep out of the reach of children.  
Keep away from sources of ignition - No smoking.  
Do not breathe gas/fumes/vapour/spray.  
Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point  
Wear suitable protective clothing and gloves.  
If swallowed, seek medical advice immediately and show this container or label.  
Use only in well-ventilated areas.

### Effects of chronic overexposure:

May cause permanent brain and nervous system damage. Repeated overexposure can also damage kidneys, lungs, liver, heart, and blood. Intentional misuse by deliberately inhaling the contents may be harmful or fatal.

### NFPA ratings (0 - 4):

Health = 1  
Fire = 4  
Reactivity = 3

### HMIS-ratings (0 - 4):

Health= 1  
Fire= 4  
Physical Hazard= 3

## 4 First-aid measures

**After inhalation:** Supply fresh air; consult doctor in case of complaints.  
**After skin contact:** Remove contaminated clothing. Wash exposed area with soap and water.  
**After eye contact:** Move to fresh air. Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.  
**After swallowing:** Contact physician or poison control center.

## 5 Fire-fighting measures

**Extinguishing agents:** CO<sub>2</sub>, sand, extinguishing powder, or water spray. Fight larger fires with water spray or alcohol resistant foam.  
**Special hazards:** No further relevant information available.  
**Protective equipment for firefighters:** No special measures required.

## 6 Accidental release measures

**Personal precautions, protective equipment and emergency procedures:** Wear protective equipment. Keep unprotected persons away.  
**Environmental precautions:** Do not allow product to reach sewage systems or ground water.

(Contd. on page 2)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 12/10/2013

Revised On 12/10/2013

Trade name: SPRAY GALV PRIMER

(Contd. of page 1)

**Methods and material for containment and cleaning up:** Ensure adequate ventilation.

## 7 Handling and storage

**Fire/explosion protection:** Do not spray on a naked flame or any incandescent material. Do not smoke. Protect from electrostatic discharges.

**Storage requirements:** Observe pressurized container storage regulations. Consult with your local authorities.

## 8 Exposure controls/personal protection

### Components with limit values that require monitoring at the workplace:

#### 108-88-3 Toluene

PEL Short-term value: C 300; 500\* ppm  
Long-term value: 200 ppm  
\*10-min peak per 8-hr shift

REL Short-term value: 560 mg/m<sup>3</sup>, 150 ppm  
Long-term value: 375 mg/m<sup>3</sup>, 100 ppm

TLV Long-term value: 75 mg/m<sup>3</sup>, 20 ppm  
BEI

#### 74-98-6 propane

PEL Long-term value: 1800 mg/m<sup>3</sup>, 1000 ppm

REL Long-term value: 1800 mg/m<sup>3</sup>, 1000 ppm

TLV refer to Appendix F: minimal oxygen content

#### 110-19-0 isobutyl acetate

PEL Long-term value: 700 mg/m<sup>3</sup>, 150 ppm

REL Long-term value: 700 mg/m<sup>3</sup>, 150 ppm

TLV Long-term value: 713 mg/m<sup>3</sup>, 150 ppm

#### 106-97-8 n-butane

REL Long-term value: 1900 mg/m<sup>3</sup>, 800 ppm

TLV Short-term value: 2370 mg/m<sup>3</sup>, 1000 ppm

#### 8052-41-3 Stoddard Solvent

PEL Long-term value: 2900 mg/m<sup>3</sup>, 500 ppm

REL Short-term value: C 1800\* mg/m<sup>3</sup>  
Long-term value: 350 mg/m<sup>3</sup>  
\*15-min

TLV Long-term value: 525 mg/m<sup>3</sup>, 100 ppm

### Ingredients with biological limit values:

#### 108-88-3 Toluene

BEI 0.02 mg/L  
Medium: blood  
Time: prior to last shift of workweek  
Parameter: Toluene

0.03 mg/L  
Medium: urine  
Time: end of shift  
Parameter: Toluene

0.3 mg/g creatinine  
Medium: urine  
Time: end of shift  
Parameter: o-Cresol with hydrolysis (background)

**Hygienic protection:** Keep away from foodstuffs and animal feed. Wash hands after use.

**Breathing equipment:** A respirator is generally not necessary when using this product outdoors or in large open areas. In cases where short and/or long term overexposure exists, a charcoal filter respirator should be worn. If you suspect overexposure conditions exist, please consult an authority on chemical hygiene.

**Hand protection:** Protective gloves. The glove material must be impermeable and resistant to the substance. No glove recommendation can be given.

**Eye protection:** Tightly sealed goggles

## 9 Physical and chemical properties

**Odor:** Aromatic

**pH-value:** Not determined.

**Boiling point:** -44 °C (-47 °F)

**Flash point:** -19 °C (-2 °F)

(Contd. on page 3)

USA



# Safety Data Sheet

acc. to OSHA HCS

Printing date 12/10/2013

Revised On 12/10/2013

**Trade name:** SPRAY GALV PRIMER

(Contd. of page 2)

**Auto igniting:** Product is not self-igniting.

**Danger of explosion:** Stable at normal temperatures. Can may burst when exposed to temperatures exceeding 120 degrees fahrenheit.  
In use, may form flammable/explosive vapour-air mixture.

**Lower Explosion Limit:** Not determined.

**Upper Explosion Limit:** Not determined.

**Vapor Pressure:** 40 PSI, 2750 hPa

**Specific Gravity:** Between 0.77 and 0.85 (Water equals 1.00)

**VOC content:** 597.0 g/l / 4.98 lb/gl

**VOC content (less exempt solvents):** 47.5 %

**MIR Value:** 0.96

**Solids content:** 52.4 %

**Other information** No further relevant information available.

**10 Stability and reactivity**

**Conditions to avoid:** Do not allow the can to exceed 120 degrees Fahrenheit. Stable at normal temperatures.

**Hazardous decomposition:** No dangerous decomposition products known.

**11 Toxicological information**

**Skin effects:** No irritant effect.

**Eye effects:** Irritating effect.

**Sensitization:** No sensitizing effects known.

**Additional toxicological information:**

**Carcinogenic categories****IARC (International Agency for Research on Cancer)**

108-88-3	Toluene	3
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**NTP (National Toxicology Program)**

None of the ingredients is listed.

**12 Ecological information**

**Aquatic toxicity:** Hazardous for water, do not empty into drains.

**Other information:** This product does not contain any chlorofluorocarbons (CFC's), hydrochlorofluorocarbons (HCFC's), perfluorocarbons (PFC's), or chlorinated solvents.

**13 Disposal considerations**

Dispose of in accordance with local, state, and federal regulations. Do not puncture, incinerate, or compact. Partially empty cans must be disposed of responsibly. Do not heat or cut empty containers with electric or gas torches.

**Recommendation:** Completely empty cans should be recycled.

**14 Transport information**

**UN-Number** UN1950

**DOT** Consumer Commodity ORM-D  
AEROSOLS, flammable

**Class** 2.1

**Marine pollutant:** Symbol (fish and tree)

**EMS Number:** F-D,S-U

**Packaging Group:** --

**15 Regulatory information****SARA Section 355 (extremely hazardous substances):**

None of the ingredients in this product are listed.

**SARA Section 313 (Specific toxic chemical listings):**

7440-66-6	zinc powder
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108-88-3	Toluene
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**TSCA:** All ingredients are listed.**CPSC:** This product complies with 16 CFR 1303 and does not contain more than 90 ppm of lead.**California Proposition 65 chemicals known to cause cancer:**

None of the ingredients in this product are listed.

**California Proposition 65 chemicals know to cause developmental toxicity:**

**WHMIS Symbols for Canada:** 108-88-3 Toluene  
A - Compressed gas

(Contd. on page 4)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 12/10/2013

Revised On 12/10/2013

**Trade name: SPRAY GALV PRIMER**

D2A - Very toxic material causing other toxic effects

(Contd. of page 3)

**EPA:**

7440-66-6	zinc powder	II
108-88-3	Toluene	II
110-19-0	isobutyl acetate	D

**ACGIH:**

108-88-3	Toluene	A4
110-19-0	isobutyl acetate	A4

**NIOSH:**

7440-43-9	cadmium (non-pyrophoric)
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**16 Other information**

This product was manufactured in the U.S.A.

The information on this sheet is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

**Contact:** Regulatory Affairs

**Abbreviations and acronyms:**

IMDG: International Maritime Code for Dangerous Goods  
 DOT: US Department of Transportation  
 CAS: Chemical Abstracts Service (division of the American Chemical Society)  
 NFPA: National Fire Protection Association (USA)  
 HMIS: Hazardous Materials Identification System (USA)  
 VOC: Volatile Organic Compounds (USA, EU)  
 TSCA: Toxic Substances Control Act  
 CPSC: Consumer Product Safety Commission  
 EPA: Environmental Protection Agency  
 IARC: International Agency for the Research of Cancer  
 NIOSH: National Institute for Occupational Safety and Health

USA



# SAFETY DATA SHEET

## 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** Stay Silv® 99 Powder Brazing Flux

**Other means of identification**

**SDS number:** 200000007223

**Recommended use and restriction on use**

**Recommended use:** Metal Brazing

**Restrictions on use:** Not known. Read this SDS before using this product.

**Manufacturer/Importer/Supplier/Distributor Information**

**Company Name:** The Harris Products Group  
**Address:** 4501 Quality Place  
Mason, OH 45040-1971  
USA

**Telephone:** +1 (513) 754-2000

**Contact Person:** Safety Data Sheet Questions: [custservmason@jwharris.com](mailto:custservmason@jwharris.com)

**Company Name:** The Lincoln Electric Company of Canada LP  
**Address:** 179 Wicksteed Avenue  
Toronto, Ontario M4G 2B9  
Canada

**Telephone:** +1 (416) 421-2600

**Contact Person:** Safety Data Sheet Questions: [www.lincolnelectric.com/sds](http://www.lincolnelectric.com/sds)  
Arc Welding Safety Information: [www.lincolnelectric.com/safety](http://www.lincolnelectric.com/safety)

**Emergency telephone number:**

USA/Canada/Mexico +1 (888) 609-1762

Americas/Europe +1 (216) 383-8962

Asia Pacific +1 (216) 383-8966

Middle East/Africa +1 (216) 383-8969

**3E Company Access Code:** 333988

## 2. HAZARDS IDENTIFICATION

Classified according to the criteria of the Globally Harmonized System of Classification and Labeling of Chemicals (GHS), The United States Occupational Safety and Health Administration's Hazard Communication Standard (29 CFR 1910.1200), Canada's Hazardous Product Regulations and Mexico's Harmonized System for the Identification and Communication of Hazards and Risks from Hazardous Chemicals in the Workplace.

**Hazard Classification**

**Health Hazards**

Toxic to reproduction

Category 1B

**Label Elements**

**Hazard Symbol:**



<b>Signal Word:</b>	Danger
<b>Hazard Statement:</b>	May damage fertility. May damage the unborn child.
<b>Precautionary Statements:</b>	
<b>Prevention:</b>	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required.
<b>Response:</b>	IF exposed or concerned: Get medical advice/attention.
<b>Storage:</b>	Store locked up.
<b>Disposal:</b>	Dispose of contents/ container to an approved facility in accordance with local, regional, national and international regulations.

**Other hazards which do not result in GHS classification:** Heat rays (infrared radiation) from flame or hot metal can injure eyes. Overexposure to brazing fumes and gases can be hazardous. Read and understand the manufacturer's instructions, Safety Data Sheets and the precautionary labels before using this product.

**Substance(s) formed under the conditions of use:** Fumes produced from use of this product may contain the following constituent(s) and/or their complex metallic oxides as well as solid particles or other constituents from the solder, brazing consumable, flux material or base metal, or base metal coating not listed below. Hydrogen fluoride, a possible decomposition product, is extremely corrosive and a poison by all routes of entry. Hydrogen fluoride can penetrate the skin and produce burns, which may not be immediately painful or visible; the burns impact the lower layers of skin and bone tissue. Hydrogen fluoride exposures involving 20 percent of the body or more can be fatal through systemic fluoride poisoning.

Chemical Identity	CAS-No.
Carbon dioxide	124-38-9
Carbon monoxide	630-08-0
Nitrogen dioxide	10102-44-0
Ozone	10028-15-6

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

#### Reportable Hazardous Ingredients Mixtures

Chemical Identity	CAS number	Content in percent (%)*
Potassium fluoroborate	14075-53-7	50 - <100%
Potassium tetraborate tetrahydrate	12045-78-2	20 - <50%



Boric acid	10043-35-3	10 - <20%
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\* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

**Composition Comments:** The term "Hazardous Ingredients" should be interpreted as a term defined in Hazard Communication standards and does not necessarily imply the existence of a welding hazard. The product may contain additional non-hazardous ingredients or may form additional compounds under the condition of use. Refer to Sections 2 and 8 for more information.

#### 4. FIRST AID MEASURES

**Ingestion:** Avoid hand, clothing, food, and drink contact with fluxes, metal fume or powder which can cause ingestion of particulate during hand to mouth activities such as drinking, eating, smoking, etc. If ingested, do not induce vomiting. Contact a poison control center. Unless the poison control center advises otherwise, wash out mouth thoroughly with water. If symptoms develop, seek medical attention at once.

**Inhalation:** Move to fresh air if breathing is difficult. If breathing has stopped, perform artificial respiration and obtain medical assistance at once.

**Skin Contact:** Remove contaminated clothing and wash the skin thoroughly with soap and water. For reddened or blistered skin, or thermal burns, obtain medical assistance at once.

**Eye contact:** Do not rub eye. Any material that contacts the eye should be washed out immediately with water. If easy to do, remove contact lenses. Continue to rinse for at least 15 minutes. Get medical attention promptly if symptoms occur after washing.

#### Most important symptoms/effects, acute and delayed

**Symptoms:** Short-term (acute) overexposure to fumes and gases from welding and allied processes may result in discomfort such as metal fume fever, dizziness, nausea, or dryness or irritation of nose, throat, or eyes. May aggravate pre-existing respiratory problems (e.g. asthma, emphysema). Long-term (chronic) overexposure to fumes and gases from welding and allied processes can lead to siderosis (iron deposits in lung), central nervous system effects, bronchitis and other pulmonary effects. Refer to Section 11 for more information.

**Hazards:** The hazards associated with welding and its allied processes such as soldering and brazing are complex and may include physical and health hazards such as but not limited to electric shock, physical strains, radiation burns (eye flash), thermal burns due to hot metal or spatter and potential health effects of overexposure to fumes, gases or dusts potentially generated during the use of this product. Refer to Section 11 for more information.

#### Indication of immediate medical attention and special treatment needed

**Treatment:** Treat symptomatically.

#### 5. FIRE-FIGHTING MEASURES

**General Fire Hazards:** As shipped, this product is nonflammable. However, welding arc and sparks as well as open flames and hot surfaces associated with brazing and soldering can ignite combustible and flammable materials. Read and understand American National Standard Z49.1, "Safety in Welding, Cutting



and Allied Processes” and National Fire Protection Association NFPA 51B, “Standard for Fire Prevention during Welding, Cutting and Other Hot Work” before using this product.

#### **Suitable (and unsuitable) extinguishing media**

**Suitable extinguishing media:** Use fire-extinguishing media appropriate for surrounding materials.

**Unsuitable extinguishing media:** Do not use water jet as an extinguisher, as this will spread the fire.

**Specific hazards arising from the chemical:** During fire, gases hazardous to health may be formed.

#### **Special protective equipment and precautions for firefighters**

**Special fire fighting procedures:** Use standard firefighting procedures and consider the hazards of other involved materials.

**Special protective equipment for fire-fighters:** Selection of respiratory protection for fire fighting: follow the general fire precautions indicated in the workplace. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

### **6. ACCIDENTAL RELEASE MEASURES**

**Personal precautions, protective equipment and emergency procedures:** If airborne dust and/or fume is present, use adequate engineering controls and, if needed, personal protection to prevent overexposure. Refer to recommendations in Section 8.

**Methods and material for containment and cleaning up:** Absorb with sand or other inert absorbent. Stop the flow of material, if this is without risk. Clean up spills immediately, observing precautions in the personal protective equipment in Section 8. Avoid generating dust. Prevent product from entering any drains, sewers or water sources. Refer to Section 13 for proper disposal.

**Environmental Precautions:** Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Do not contaminate water sources or sewer. Environmental manager must be informed of all major spillages.

### **7. HANDLING AND STORAGE**

**Precautions for safe handling:** Prevent abrading consumable materials or creating dust. Provide appropriate exhaust ventilation at places where fume or dust is formed. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

Read and understand the manufacturer's instruction and the precautionary label on the product. See American National Standard Z49.1, "Safety In Welding, Cutting and Allied Processes" published by the American Welding Society, <http://pubs.aws.org> and OSHA Publication 2206 (29CFR1910), U.S. Government Printing Office, [www.gpo.gov](http://www.gpo.gov). Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. Use personal protective equipment as required.

**Conditions for safe storage, including any incompatibilities:** Store locked up.

### **8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

## Control Parameters

### Occupational Exposure Limits: US

Chemical Identity	Type	Exposure Limit Values	Source
Potassium fluoroborate - Inhalable fraction.	STEL	6 mg/m <sup>3</sup>	US. ACGIH Threshold Limit Values (02 2014)
	TWA	2 mg/m <sup>3</sup>	US. ACGIH Threshold Limit Values (02 2014)
Potassium fluoroborate - as F	REL	2.5 mg/m <sup>3</sup>	US. NIOSH: Pocket Guide to Chemical Hazards, as amended (2005)
Potassium fluoroborate	IDLH	250 mg/m <sup>3</sup>	US. NIOSH. Immediately Dangerous to Life or Health (IDLH) Values (10 2017)
Potassium fluoroborate - as F	TWA	2.5 mg/m <sup>3</sup>	US. ACGIH Threshold Limit Values (01 2021)
Potassium fluoroborate	IDLH	250 mg/m <sup>3</sup>	US. NIOSH. Immediately Dangerous to Life or Health (IDLH) Values (10 2019)
Potassium fluoroborate - as F	PEL	2.5 mg/m <sup>3</sup>	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (01 2017)
Potassium fluoroborate - Dust.	TWA	2.5 mg/m <sup>3</sup>	US. OSHA Table Z-2 (29 CFR 1910.1000) (01 2017)
Boric acid - Inhalable fraction.	TWA	2 mg/m <sup>3</sup>	US. ACGIH Threshold Limit Values (02 2012)
	STEL	6 mg/m <sup>3</sup>	US. ACGIH Threshold Limit Values (02 2012)

### Occupational Exposure Limits: Canada

Chemical Identity	Type	Exposure Limit Values	Source
Potassium fluoroborate - as F	TWA	2.5 mg/m <sup>3</sup>	Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2), as amended (07 2009)
Potassium fluoroborate - Inhalable fraction.	TWA	2 mg/m <sup>3</sup>	Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act), as amended (03 2013)
Potassium fluoroborate - as F	TWA	2.5 mg/m <sup>3</sup>	Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2), as amended (01 2019)
	TWA	2.5 mg/m <sup>3</sup>	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (06 2020)
	TWA	2.5 mg/m <sup>3</sup>	Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act), as amended (01 2021)
	TWA	2.5 mg/m <sup>3</sup>	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (01 2020)
	8 HR ACL	2.5 mg/m <sup>3</sup>	Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21), as amended (06 2016)
	15 MIN ACL	5 mg/m <sup>3</sup>	Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21), as amended (06 2016)
	TWA	2.5 mg/m <sup>3</sup>	Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety), as amended (03 2020)
Potassium tetraborate tetrahydrate - Inhalable fraction.	TWA	2 mg/m <sup>3</sup>	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (11 2010)
	STEL	6 mg/m <sup>3</sup>	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (11 2010)
Boric acid - Inhalable	STEL	6 mg/m <sup>3</sup>	Canada. British Columbia OELs. (Occupational Exposure Limits for

			Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
	TWA	2 mg/m3	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
Boric acid - Inhalable fraction.	STEL	6 mg/m3	Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act), as amended (03 2012)
	TWA	2 mg/m3	Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act), as amended (03 2012)
	TWA	2 mg/m3	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (11 2010)
	STEL	6 mg/m3	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (11 2010)
	8 HR ACL	2 mg/m3	Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21), as amended (05 2009)
	15 MIN ACL	6 mg/m3	Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21), as amended (05 2009)
Boric acid - Inhalable dust.	TWA	2 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety), as amended (03 2020)
	STEL	6 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety), as amended (03 2020)

#### Occupational Exposure Limits: Mexico

Chemical Identity	Type	Exposure Limit Values	Source
Potassium fluoroborate - as F	VLE-PPT	2.5 mg/m3	Mexico. OELs. (NOM-010-STPS-2014 Chemical Pollutants at the Workplace; Assessment and Control), as amended (04 2014)
Boric acid - Inhalable fraction.	VLE-PPT	2 mg/m3	Mexico. OELs. (NOM-010-STPS-2014 Chemical Pollutants at the Workplace; Assessment and Control), as amended (04 2014)
	VLE-CT	6 mg/m3	Mexico. OELs. (NOM-010-STPS-2014 Chemical Pollutants at the Workplace; Assessment and Control), as amended (04 2014)

#### Biological Limit Values: US

Chemical Identity	Exposure Limit Values	Source
Potassium fluoroborate (Fluoride: Sampling time: End of shift.)	3 mg/l (Urine)	ACGIH BEI (01 2021)
Potassium fluoroborate (Fluoride: Sampling time: Prior to shift.)	2 mg/l (Urine)	ACGIH BEI (01 2021)

#### Biological Limit Values: Mexico

Chemical Identity	Exposure Limit Values	Source
Potassium fluoroborate (fluorides: Sampling time: End of shift.)	10 mg/g (Creatinine in urine)	MX IBE (06 2012)
Potassium fluoroborate	3 mg/g (Creatinine in urine)	MX IBE (06 2012)



(fluorides: Sampling time: Prior to shift.)		
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**Additional exposure limits under the conditions of use: US**

Chemical Identity	Type	Exposure Limit Values		Source
Carbon dioxide	TWA	5,000 ppm		US. ACGIH Threshold Limit Values (12 2010)
	STEL	30,000 ppm		US. ACGIH Threshold Limit Values (12 2010)
	PEL	5,000 ppm	9,000 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
	STEL	30,000 ppm	54,000 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards, as amended (2005)
	REL	5,000 ppm	9,000 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards, as amended (2005)
	IDLH	40,000 ppm		US. NIOSH. Immediately Dangerous to Life or Health (IDLH) Values (10 2017)
Carbon monoxide	TWA	25 ppm		US. ACGIH Threshold Limit Values (12 2010)
	PEL	50 ppm	55 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
	REL	35 ppm	40 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards, as amended (2005)
	Ceil_Time	200 ppm	229 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards, as amended (2005)
	IDLH	1,200 ppm		US. NIOSH. Immediately Dangerous to Life or Health (IDLH) Values (10 2017)
Nitrogen dioxide	TWA	0.2 ppm		US. ACGIH Threshold Limit Values (02 2012)
	Ceiling	5 ppm	9 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
	STEL	1 ppm	1.8 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards, as amended (2005)
	IDLH	20 ppm		US. NIOSH. Immediately Dangerous to Life or Health (IDLH) Values (10 2017)
	IDLH	13 ppm		US. NIOSH. Immediately Dangerous to Life or Health (IDLH) Values (10 2017)
Ozone	PEL	0.1 ppm	0.2 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
	Ceil_Time	0.1 ppm	0.2 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards, as amended (2005)
	TWA	0.05 ppm		US. ACGIH Threshold Limit Values (03 2014)
	TWA	0.10 ppm		US. ACGIH Threshold Limit Values (03 2014)
	TWA	0.08 ppm		US. ACGIH Threshold Limit Values (03 2014)
	IDLH	5 ppm		US. NIOSH. Immediately Dangerous to Life or Health (IDLH) Values (10 2017)
	TWA	0.20 ppm		US. ACGIH Threshold Limit Values (02 2020)

**Additional exposure limits under the conditions of use: Canada**

Chemical Identity	Type	Exposure Limit Values		Source
Carbon dioxide	STEL	30,000 ppm	54,000 mg/m3	Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2), as amended (07 2009)
	TWA	5,000 ppm	9,000 mg/m3	Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2), as amended (07 2009)
	TWA	5,000 ppm		Canada. British Columbia OELs. (Occupational Exposure Limits for

				Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
	STEL	15,000 ppm		Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
	TWA	5,000 ppm		Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act), as amended (03 2011)
	STEL	30,000 ppm		Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act), as amended (03 2011)
	STEL	30,000 ppm		Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (11 2010)
	TWA	5,000 ppm		Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (11 2010)
	8 HR ACL	5,000 ppm		Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21), as amended (05 2009)
	15 MIN ACL	30,000 ppm		Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21), as amended (05 2009)
	TWA	5,000 ppm	9,000 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety), as amended (09 2017)
	STEL	30,000 ppm	54,000 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety), as amended (09 2017)
Carbon monoxide	TWA	25 ppm	29 mg/m3	Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2), as amended (07 2009)
	TWA	25 ppm		Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
	STEL	100 ppm		Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
	TWA	25 ppm		Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act), as amended (03 2011)
	TWA	25 ppm		Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (07 2010)
	8 HR ACL	25 ppm		Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21), as amended (05 2009)
	15 MIN ACL	190 ppm		Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21), as amended (05 2009)
	TWA	35 ppm	40 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety), as amended (09 2017)
	STEL	200 ppm	230 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety), as amended (09 2017)
Nitrogen dioxide	STEL	5 ppm	9.4 mg/m3	Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2), as amended (07 2009)
	TWA	3 ppm	5.6 mg/m3	Canada. Alberta OELs (Occupational

				Health & Safety Code, Schedule 1, Table 2), as amended (07 2009)
	CEILING	1 ppm		Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
	TWA	0.2 ppm		Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act), as amended (03 2012)
	STEL	5 ppm		Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (11 2010)
	TWA	3 ppm		Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (11 2010)
	8 HR ACL	3 ppm		Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21), as amended (05 2009)
	15 MIN ACL	5 ppm		Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21), as amended (05 2009)
	TWA	3 ppm	5.6 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety), as amended (09 2017)
Ozone	STEL	0.3 ppm	0.6 mg/m3	Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2), as amended (07 2009)
	TWA	0.1 ppm	0.2 mg/m3	Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2), as amended (07 2009)
	TWA	0.05 ppm		Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
	TWA	0.1 ppm		Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
	TWA	0.08 ppm		Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
	TWA	0.2 ppm		Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
	TWA	0.1 ppm	0.2 mg/m3	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (07 2010)
	STEL	0.3 ppm	0.6 mg/m3	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (07 2010)
	15 MIN ACL	0.15 ppm		Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21), as amended (05 2009)
	8 HR ACL	0.05 ppm		Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21), as amended (05 2009)
	CEILING	0.1 ppm	0.2 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety), as amended (12 2008)
	TWA	0.05 ppm		Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act), as

			amended (03 2014)
	TWA	0.08 ppm	Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act), as amended (03 2014)
	TWA	0.10 ppm	Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act), as amended (03 2014)
	TWA	0.20 ppm	Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act), as amended (02 2020)

**Additional exposure limits under the conditions of use: Mexico**

Chemical Identity	Type	Exposure Limit Values	Source
Carbon dioxide	VLE-CT	30,000 ppm	Mexico. OELs. (NOM-010-STPS-2014 Chemical Pollutants at the Workplace; Assessment and Control), as amended (04 2014)
	VLE-PPT	5,000 ppm	Mexico. OELs. (NOM-010-STPS-2014 Chemical Pollutants at the Workplace; Assessment and Control), as amended (04 2014)
Carbon monoxide	VLE-PPT	25 ppm	Mexico. OELs. (NOM-010-STPS-2014 Chemical Pollutants at the Workplace; Assessment and Control), as amended (04 2014)
Nitrogen dioxide	VLE-PPT	0.2 ppm	Mexico. OELs. (NOM-010-STPS-2014 Chemical Pollutants at the Workplace; Assessment and Control), as amended (04 2014)
Ozone	VLE-P	0.1 ppm	Mexico. OELs. (NOM-010-STPS-2014 Chemical Pollutants at the Workplace; Assessment and Control), as amended (04 2014)

**Appropriate Engineering Controls**

**Ventilation:** Use enough ventilation and local exhaust at the arc, flame or heat source to keep the fumes and gases from the worker's breathing zone and the general area. Train the operator to keep their head out of the fumes. **Keep exposure as low as possible.**

**Individual protection measures, such as personal protective equipment**
**General information:**

**Exposure Guidelines:** To reduce the potential for overexposure, use controls such as adequate ventilation and personal protective equipment (PPE). Overexposure refers to exceeding applicable local limits, the American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Values (TLVs) or the Occupational Safety and Health Administration's (OSHA) Permissible Exposure Limits (PELs). Workplace exposure levels should be established by competent industrial hygiene assessments. Unless exposure levels are confirmed to be below the applicable local limit, TLV or PEL, whichever is lower, respirator use is required. Absent these controls, overexposure to one or more compound constituents, including those in the fume or airborne particles, may occur resulting in potential health hazards. According to the ACGIH, TLVs and Biological Exposure Indices (BEIs) "represent conditions under which ACGIH believes that nearly all workers may be repeatedly exposed without adverse health effects." The ACGIH further states that the TLV-TWA should be used as a guide in the control of health hazards and should not be used to indicate a fine line between safe and dangerous exposures. See Section 10 for information on constituents which have some potential to present health hazards. Welding consumables and materials being joined may contain chromium as an unintended trace element. Materials that contain chromium may produce some amount of hexavalent chromium (CrVI) and other chromium compounds as a byproduct in the fume. In 2018, the American Conference of Governmental Industrial Hygienists (ACGIH)

lowered the Threshold Limit Value (TLV) for hexavalent chromium from 50 micrograms per cubic meter of air ( $50 \mu\text{g}/\text{m}^3$ ) to  $0.2 \mu\text{g}/\text{m}^3$ . At these new limits, CrVI exposures at or above the TLV may be possible in cases where adequate ventilation is not provided. CrVI compounds are on the IARC and NTP lists as posing a lung cancer and sinus cancer risk. Workplace conditions are unique and welding fume exposures levels vary. Workplace exposure assessments must be conducted by a qualified professional, such as an industrial hygienist, to determine if exposures are below applicable limits and to make recommendations when necessary for preventing overexposures.

**Maximum Dust Exposure Guideline™ (MDEG)™** for this product (based on content of Potassium fluoroborate) is  $3.6 \text{ mg}/\text{m}^3$ . This exposure guideline is calculated using the most conservative value of the ACGIH TLV or OSHA PEL for the stated substance. Handle to minimize generation of airborne dust. Use adequate ventilation and dust collection. Use respiratory protection, if required, to keep exposure below limits. If your local applicable exposure limits are lower than the ACGIH TLV or OSHA PEL for any of the substances listed in Section 3 of this SDS, you must take that into consideration before utilizing or applying this guideline.

**Eye/face protection:**

Wear helmet, face shield or eye protection with filter lens shade number 2 for torch soldering and 3-4 for torch brazing, and follow the recommendations as specified in ANSI Z49.1, Section 4, based on your process details. Shield others by providing appropriate screens and eye protection.

**Skin Protection**

**Hand Protection:**

Wear protective gloves. Suitable gloves can be recommended by the glove supplier.

**Other:**

**Protective Clothing:** Wear hand, head, and body protection which help to prevent injury from radiation, open flames, hot surfaces, sparks and electrical shock. See Z49.1. At a minimum, this includes welder's gloves and a protective face shield when welding, and may include arm protectors, aprons, hats, shoulder protection, as well as dark substantial clothing when welding, brazing and soldering. Wear dry gloves free of holes or split seams. Train the operator not to permit electrically live parts or electrodes from contacting the skin . . . or clothing or gloves if they are wet. Insulate yourself from the work piece and ground using dry plywood, rubber mats or other dry insulation.

**Respiratory Protection:**

Keep your head out of fumes. Use enough ventilation and local exhaust to keep fumes and gases from your breathing zone and the general area. An approved respirator should be used unless exposure assessments are below applicable exposure limits.

**Hygiene measures:**

Do not eat, drink or smoke when using the product. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Determine the composition and quantity of fumes and gases to which workers are exposed by taking an air sample from inside the welder's helmet if worn or in the worker's breathing zone. Improve ventilation if exposures are not below limits. See ANSI/AWS F1.1, F1.2, F1.3 and F1.5, available from the American Welding Society, [www.aws.org](http://www.aws.org). Do not handle until all safety precautions have been read and understood. Obtain special instructions before use.



## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance:</b>	Brazing flux.
<b>Physical state:</b>	Solid
<b>Form:</b>	Powder.
<b>Color:</b>	White
<b>Odor:</b>	No data available.
<b>Odor threshold:</b>	No data available.
<b>pH:</b>	Not applicable
<b>Melting point/freezing point:</b>	No data available.
<b>Initial boiling point and boiling range:</b>	No data available.
<b>Flash Point:</b>	No data available.
<b>Evaporation rate:</b>	No data available.
<b>Flammability (solid, gas):</b>	No data available.
<b>Upper/lower limit on flammability or explosive limits</b>	
<b>Flammability limit - upper (%):</b>	No data available.
<b>Flammability limit - lower (%):</b>	No data available.
<b>Explosive limit - upper:</b>	No data available.
<b>Explosive limit - lower:</b>	No data available.
<b>Vapor pressure:</b>	No data available.
<b>Vapor density:</b>	No data available.
<b>Density:</b>	1.6000 g/cm <sup>3</sup>
<b>Relative density:</b>	No data available.
<b>Solubility(ies)</b>	
<b>Solubility in water:</b>	No data available.
<b>Solubility (other):</b>	No data available.
<b>Partition coefficient (n-octanol/water):</b>	No data available.
<b>Auto-ignition temperature:</b>	No data available.
<b>Decomposition temperature:</b>	No data available.
<b>Viscosity:</b>	No data available.

## 10. STABILITY AND REACTIVITY

<b>Reactivity:</b>	The product is non-reactive under normal conditions of use, storage and transport.
<b>Chemical Stability:</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions:</b>	None under normal conditions.
<b>Conditions to avoid:</b>	Avoid heat or contamination.
<b>Incompatible Materials:</b>	Strong acids. Strong oxidizing substances. Strong bases.
<b>Hazardous Decomposition Products:</b>	Fumes and gases from welding and its allied processes such as brazing and soldering cannot be classified simply. The composition and quantity of both are dependent upon the metal to which the joining or hot work is applied, the process, procedure - and where applicable - the electrode or

consumable used. Other conditions which also influence the composition and quantity of the fumes and gases to which workers may be exposed include: coatings on the metal being welded or worked (such as paint, plating, or galvanizing), the number of operators and the volume of the work area, the quality and amount of ventilation, the position of the operator's head with respect to the fume plume, as well as the presence of contaminants in the atmosphere (such as chlorinated hydrocarbon vapors from cleaning and degreasing activities.)

In cases where an electrode or other applied material is consumed, the fume and gas decomposition products generated are different in percent and form from the ingredients listed in Section 3. Decomposition products of normal operation include those originating from the volatilization, reaction, or oxidation of the materials shown in Section 3, plus those from the base metal and coating, etc., as noted above. Reasonably expected fume constituents produced during arc welding and brazing include the oxides of iron, manganese and other metals present in the welding consumable or base metal. Hexavalent chromium compounds may be in the welding or brazing fume of consumables or base metals which contain chromium. Gaseous and particulate fluoride may be in the fume of consumables or flux materials which contain fluoride. Gaseous reaction products may include carbon monoxide and carbon dioxide. Ozone and nitrogen oxides may be formed by the radiation from the arc associated with welding.

## 11. TOXICOLOGICAL INFORMATION

### General information:

The International Agency for Research on Cancer (IARC) has determined welding fumes and ultraviolet radiation from welding are carcinogenic to humans (Group 1). According to IARC, welding fumes cause cancer of the lung and positive associations have been observed with cancer of the kidney. Also according to IARC, ultraviolet radiation from welding causes ocular melanoma. IARC identifies gouging, brazing, carbon arc or plasma arc cutting, and soldering as processes closely related to welding. Read and understand the manufacturer's instructions, Safety Data Sheets and the precautionary labels before using this product.

### Information on likely routes of exposure

- Inhalation:** Inhalation is the primary route of exposure. In high concentrations, dust, vapors, fumes or mists may irritate nose, throat and mucus membranes.
- Skin Contact:** Moderately irritating to skin with prolonged exposure.
- Eye contact:** HEAT RAYS (INFRARED RADIATION) from flame or hot metal can injure eyes.
- Ingestion:** Avoid ingestion - wear gloves and other appropriate personal protection - wash hands thoroughly following use or handling.

### Symptoms related to the physical, chemical and toxicological characteristics

**Inhalation:** Short-term (acute) overexposure to fumes and gases from brazing and soldering may result in discomfort such as metal fume fever, dizziness, nausea, or dryness or irritation of nose, throat, or eyes. May aggravate pre-existing respiratory problems (e.g. asthma, emphysema). Long-term (chronic) overexposure to fumes and gases from brazing and soldering can lead to siderosis (iron deposits in lung), central nervous system effects, bronchitis and other pulmonary effects. Products which contain lead or cadmium have additional specific health hazards - refer to Sections 2, 8 and 11 of this SDS. Depending on specific product composition, some products may produce hazardous concentrations of airborne oxides of cadmium, lead, zinc or fluoride compounds. Use adequate ventilation and respiratory protection during use. Avoid breathing fumes. Avoid ingestion - wear gloves and other appropriate personal protection - wash hands thoroughly following use or handling. Inhalation of fumes may cause upper respiratory tract irritation and systemic poisoning with early symptoms including headache, coughing, and a metallic taste as well as metal fume fever. Chronic cadmium exposure causes lung and kidney damage. Chronic exposure to lead causes damage to lungs, liver, kidney, nervous system as well as blood and musculoskeletal disorders. Exposures to high levels of cadmium or lead dust or fume may be immediately dangerous to life or health and can cause delayed pneumonitis with fever and chest pain, and pulmonary edema resulting in death.

**Information on toxicological effects**

**Acute toxicity (list all possible routes of exposure)**

**Oral**

**Product:** ATEmix: 17,733.33 mg/kg  
**Specified substance(s):**  
 Boric acid LD 50 (Rat): 2,660 mg/kg

**Dermal**

**Product:** Not classified for acute toxicity based on available data.

**Inhalation**

**Product:** Not classified for acute toxicity based on available data.

**Repeated dose toxicity**

**Product:** No data available.

**Skin Corrosion/Irritation**

**Product:** Not classified

**Serious Eye Damage/Eye Irritation**

**Product:** Not classified

**Respiratory or Skin Sensitization**

**Product:** Respiratory Sensitization: Not classified  
 Skin Sensitization: Not classified

**Carcinogenicity**

**Product:** Not classified

**IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:**

No carcinogenic components identified

**US. National Toxicology Program (NTP) Report on Carcinogens:**

No carcinogenic components identified

**US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050), as amended:**





No carcinogenic components identified

**Germ Cell Mutagenicity****In vitro**

**Product:** Not classified

**In vivo**

**Product:** Not classified

**Reproductive toxicity**

**Product:** May damage fertility or the unborn child.

**Specific Target Organ Toxicity - Single Exposure**

**Product:** Not classified

**Specific Target Organ Toxicity - Repeated Exposure**

**Product:** Not classified

**Aspiration Hazard**

**Product:** Not applicable

Symptoms related to the physical, chemical and toxicological characteristics under the condition of use

**Additional toxicological Information under the conditions of use:****Acute toxicity****Inhalation****Specified substance(s):**

Carbon dioxide	LC Lo (Human, 5 min): 90000 ppm
Carbon monoxide	LC 50 (Rat, 4 h): 1300 ppm
Nitrogen dioxide	LC 50 (Rat, 4 h): 88 ppm
Ozone	LC Lo (Human, 30 min): 50 ppm

**Other effects:****Specified substance(s):**

Carbon dioxide	Asphyxia
Carbon monoxide	Carboxyhemoglobinemia
Nitrogen dioxide	Lower respiratory tract irritation

**12. ECOLOGICAL INFORMATION****Ecotoxicity****Acute hazards to the aquatic environment:****Fish**

**Product:** Not classified

**Specified substance(s):**

Boric acid LC 50 (Pimephales promelas, 96 h): 79.7 mg/l

**Aquatic Invertebrates**

**Product:** Not classified

**Specified substance(s):**

Boric acid LC 50 (Hyaella azteca, 96 h): 64 mg/l

**Chronic hazards to the aquatic environment:****Fish**

**Product:** Not classified

**Aquatic Invertebrates**



**Product:** Not classified

**Toxicity to Aquatic Plants**  
**Product:** No data available.

**Persistence and Degradability**  
**Biodegradation**  
**Product:** No data available.

**Bioaccumulative potential**  
**Bioconcentration Factor (BCF)**  
**Product:** No data available.

**Mobility in soil:** No data available.

### 13. Disposal considerations

**General information:** The generation of waste should be avoided or minimized whenever possible. When practical, recycle in an environmentally acceptable, regulatory compliant manner. Dispose of non-recyclable products in accordance with all applicable Federal, State, Provincial, and Local requirements.

**Disposal instructions:** Discharge, treatment, or disposal may be subject to national, state, or local laws.

**Contaminated Packaging:** Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

### 14. TRANSPORT INFORMATION

#### DOT

UN number or ID number:  
UN Proper Shipping Name: NOT DG REGULATED  
Transport Hazard Class(es)  
Class: NR  
Label(s): –  
Packing Group: –  
Marine Pollutant: No

#### IMDG

UN number or ID number:  
UN Proper Shipping Name: NOT DG REGULATED  
Transport Hazard Class(es)  
Class: NR  
Label(s): –  
EmS No.:  
Packing Group: –  
Marine Pollutant: No

#### IATA

UN number or ID number:  
Proper Shipping Name: NOT DG REGULATED  
Transport Hazard Class(es):  
Class: NR



Label(s): –  
Packing Group: –  
Marine Pollutant: No  
Cargo aircraft only: Allowed.

**TDG**

UN number or ID number:  
UN Proper Shipping Name: NOT DG REGULATED  
Transport Hazard Class(es)  
Class: NR  
Label(s): –  
Packing Group: –  
Marine Pollutant: No

**15. REGULATORY INFORMATION****US Federal Regulations****TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

None present or none present in regulated quantities.

**US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050), as amended**

None present or none present in regulated quantities.

**CERCLA Hazardous Substance List (40 CFR 302.4):**

None present or none present in regulated quantities.

**Superfund Amendments and Reauthorization Act of 1986 (SARA)****Hazard categories**

Delayed (Chronic) Health Hazard  
Reproductive toxicity

**SARA 302 Extremely Hazardous Substance**

None present or none present in regulated quantities.

**SARA 304 Emergency Release Notification**

None present or none present in regulated quantities.

**SARA 311/312 Hazardous Chemical****Chemical Identity****Threshold Planning Quantity****SARA 313 (TRI Reporting)**

None present or none present in regulated quantities.

**Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)**

None present or none present in regulated quantities.

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):**

None present or none present in regulated quantities.

**US State Regulations****US. California Proposition 65**

No ingredient requiring a warning under CA Prop 65.

**WARNING:** This product contains or produces a chemical known to the State of California to cause cancer and birth defects (or other reproductive harm). (California Health & Safety Code Section 25249.5 et seq.)

**WARNING:** Cancer and Reproductive Harm – [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

**US. New Jersey Worker and Community Right-to-Know Act**





Korea Existing Chemicals Inv. (KECI):	One or more components are not listed or are exempt from listing.
Canada NDSL Inventory:	One or more components are not listed or are exempt from listing.
Philippines PICCS:	One or more components are not listed or are exempt from listing.
US TSCA Inventory:	One or more components are not listed or are exempt from listing.
New Zealand Inventory of Chemicals:	One or more components are not listed or are exempt from listing.
Japan ISHL Listing:	One or more components are not listed or are exempt from listing.
Japan Pharmacopoeia Listing:	One or more components are not listed or are exempt from listing.
Mexico INSQ:	One or more components are not listed or are exempt from listing.
Ontario Inventory:	One or more components are not listed or are exempt from listing.
Taiwan Chemical Substance Inventory:	On or in compliance with the inventory
Australia AICS:	One or more components are not listed or are exempt from listing.

## 16. OTHER INFORMATION

### Definitions:

**The Maximum Dust Exposure Guideline™ (MDEG)™** is provided to assist with the management of workplace exposures where granular solid welding products or other materials are being utilized. It is derived from relevant compositional data and estimates the lowest level of total airborne dust exposure, for a given product, at which some specific constituent might potentially exceed its individual exposure limit. The specific exposure limits referenced are the American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Value (TLV®) and the U. S. OSHA Permissible Exposure Limit (PEL), which ever value is the lowest. If local applicable limits for any of the substances listed in Section 3 of this SDS are lower than the TLV or PEL this must be taken into consideration before utilizing or applying this guideline. The MDEG™ is never greater than 10 mg/m<sup>3</sup> as this is the airborne exposure guideline for total particulate (total dust). **The MDEG™ is intended to serve as a general guideline to assist in the management of workplace exposure and does not replace the regular measurement and analysis of worker exposure to individual airborne dust constituents in accordance with recommended industrial hygiene practice.**

**Revision Date:** 08/12/2021

**Further Information:** Additional information is available by request.

**Disclaimer:** The Lincoln Electric Company urges each end user and recipient of this SDS to study it carefully. See also [www.lincolnelectric.com/safety](http://www.lincolnelectric.com/safety). If necessary, consult an industrial hygienist or other expert to understand this information and safeguard the environment and protect workers from potential hazards associated with the handling or use of this product. This information is believed to be accurate as of the revision date shown above. However, no warranty, expressed or implied, is given. Because the conditions or methods of use are beyond Lincoln Electric's control, we assume no liability resulting from the use of this product. Regulatory requirements are subject to change and may differ between various locations. Compliance with all applicable Federal, State, Provincial, and local laws and regulations remain the responsibility of the user.

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# SAFETY DATA SHEET

## 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** Stay Silv® White Brazing Flux

**Other means of identification**

**SDS number:** 200000007166

**Recommended use and restriction on use**

**Recommended use:** Metal Brazing

**Restrictions on use:** Not known. Read this SDS before using this product.

**Manufacturer/Importer/Supplier/Distributor Information**

**Company Name:** The Harris Products Group

**Address:** 4501 Quality Place  
Mason, OH 45040-1971  
USA

**Telephone:** +1 (513) 754-2000

**Contact Person:** Safety Data Sheet Questions: [custservmason@jwharris.com](mailto:custservmason@jwharris.com)

**Company Name:** The Lincoln Electric Company of Canada LP

**Address:** 179 Wicksteed Avenue  
Toronto, Ontario M4G 2B9  
Canada

**Telephone:** +1 (416) 421-2600

**Contact Person:** Safety Data Sheet Questions: [www.lincolnelectric.com/sds](http://www.lincolnelectric.com/sds)  
Arc Welding Safety Information: [www.lincolnelectric.com/safety](http://www.lincolnelectric.com/safety)

**Emergency telephone number:**

USA/Canada/Mexico +1 (888) 609-1762

Americas/Europe +1 (216) 383-8962

Asia Pacific +1 (216) 383-8966

Middle East/Africa +1 (216) 383-8969

**3E Company Access Code:** 333988

## 2. HAZARDS IDENTIFICATION

Classified according to the criteria of the Globally Harmonized System of Classification and Labeling of Chemicals (GHS), The United States Occupational Safety and Health Administration's Hazard Communication Standard (29 CFR 1910.1200), Canada's Hazardous Product Regulations and Mexico's Harmonized System for the Identification and Communication of Hazards and Risks from Hazardous Chemicals in the Workplace.

**Hazard Classification**

**Health Hazards**

Acute toxicity (Oral)	Category 4
Acute toxicity (Dermal)	Category 3
Acute toxicity (Inhalation - dust and mist)	Category 4
Toxic to reproduction	Category 2

**Label Elements**

**Hazard Symbol:**



**Signal Word:** Danger

**Hazard Statement:** Toxic in contact with skin.  
Harmful if swallowed or if inhaled.  
Suspected of damaging fertility or the unborn child.

**Precautionary Statements:**

**Prevention:** Wear protective gloves/protective clothing/eye protection/face protection. Avoid breathing dust/fume/gas/mist/vapors/spray. Use only outdoors or in a well-ventilated area. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required.

**Response:** IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF ON SKIN: Wash with plenty of water/... IF SWALLOWED: Call a POISON CENTRE/doctor/... if you feel unwell. Rinse mouth. Call a POISON CENTER/doctor if you feel unwell. Specific measures (see this label). Take off immediately all contaminated clothing. Wash contaminated clothing before reuse.

**Storage:** Store locked up.

**Disposal:** Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

**Other hazards which do not result in GHS classification:** Heat rays (infrared radiation) from flame or hot metal can injure eyes. Overexposure to brazing fumes and gases can be hazardous. Read and understand the manufacturer's instructions, Safety Data Sheets and the precautionary labels before using this product.

**Substance(s) formed under the conditions of use:** Fumes produced from use of this product may contain the following constituent(s) and/or their complex metallic oxides as well as solid particles or other constituents from the solder, brazing consumable, flux material or base metal, or base metal coating not listed below. Hydrogen fluoride, a possible decomposition product, is extremely corrosive and a poison by all routes of entry. Hydrogen fluoride can penetrate the skin and produce burns, which may not be immediately painful or visible; the burns impact the lower layers of skin and bone tissue. Hydrogen fluoride exposures involving 20 percent of the body or more can be fatal through systemic fluoride poisoning.

Chemical Identity	CAS-No.
Carbon dioxide	124-38-9
Carbon monoxide	630-08-0
Nitrogen dioxide	10102-44-0

Ozone	10028-15-6
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**3. COMPOSITION / INFORMATION ON INGREDIENTS**

**Reportable Hazardous Ingredients Mixtures**

Chemical Identity	CAS number	Content in percent (%)*
Potassium difluorodihydroxyborate(1-)	85392-66-1	50 - <100%
Potassium fluoride	7789-23-3	25 - <50%

\* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

**Composition Comments:** The term “Hazardous Ingredients” should be interpreted as a term defined in Hazard Communication standards and does not necessarily imply the existence of a welding hazard. The product may contain additional non-hazardous ingredients or may form additional compounds under the condition of use. Refer to Sections 2 and 8 for more information.

**4. FIRST AID MEASURES**

**Ingestion:** Avoid hand, clothing, food, and drink contact with fluxes, metal fume or powder which can cause ingestion of particulate during hand to mouth activities such as drinking, eating, smoking, etc. If ingested, do not induce vomiting. Contact a poison control center. Unless the poison control center advises otherwise, wash out mouth thoroughly with water. If symptoms develop, seek medical attention at once. Call a POISON CENTER/doctor if you feel unwell. Rinse mouth. Never give liquid to an unconscious person. Do not induce vomiting without advice from poison control center.

**Inhalation:** Move to fresh air if breathing is difficult. If breathing has stopped, perform artificial respiration and obtain medical assistance at once.

**Skin Contact:** Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash contaminated clothing before reuse. Destroy or thoroughly clean contaminated shoes. Call a POISON CENTER/doctor if you feel unwell.

**Eye contact:** Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Call a POISON CENTER/doctor if you feel unwell.

**Most important symptoms/effects, acute and delayed**

**Symptoms:** Short-term (acute) overexposure to fumes and gases from welding and allied processes may result in discomfort such as metal fume fever, dizziness, nausea, or dryness or irritation of nose, throat, or eyes. May aggravate pre-existing respiratory problems (e.g. asthma, emphysema). Long-term (chronic) overexposure to fumes and gases from welding and allied processes can lead to siderosis (iron deposits in lung), central nervous system effects, bronchitis and other pulmonary effects. Refer to Section 11 for more information.

**Hazards:** The hazards associated with welding and its allied processes such as soldering and brazing are complex and may include physical and health hazards such as but not limited to electric shock, physical strains, radiation burns (eye flash), thermal burns due to hot metal or spatter and potential health effects of overexposure to fumes, gases or dusts potentially generated during the use of this product. Refer to Section 11 for more



information.

**Indication of immediate medical attention and special treatment needed**

**Treatment:** Treat symptomatically.

**5. FIRE-FIGHTING MEASURES**

**General Fire Hazards:** As shipped, this product is nonflammable. However, welding arc and sparks as well as open flames and hot surfaces associated with brazing and soldering can ignite combustible and flammable materials. Read and understand American National Standard Z49.1, "Safety in Welding, Cutting and Allied Processes" and National Fire Protection Association NFPA 51B, "Standard for Fire Prevention during Welding, Cutting and Other Hot Work" before using this product.

**Suitable (and unsuitable) extinguishing media**

**Suitable extinguishing media:** Use fire-extinguishing media appropriate for surrounding materials.

**Unsuitable extinguishing media:** Do not use water jet as an extinguisher, as this will spread the fire.

**Specific hazards arising from the chemical:** During fire, gases hazardous to health may be formed.

**Special protective equipment and precautions for firefighters**

**Special fire fighting procedures:** Use standard firefighting procedures and consider the hazards of other involved materials.

**Special protective equipment for fire-fighters:** Selection of respiratory protection for fire fighting: follow the general fire precautions indicated in the workplace. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

**6. ACCIDENTAL RELEASE MEASURES**

**Personal precautions, protective equipment and emergency procedures:** Evacuate area. See Section 8 of the SDS for Personal Protective Equipment. Keep unauthorized personnel away.

**Methods and material for containment and cleaning up:** Absorb spill with vermiculite or other inert material, then place in a container for chemical waste. Dike far ahead of larger spill for later recovery and disposal.

**Notification Procedures:** Dike for later disposal. Prevent entry into waterways, sewer, basements or confined areas. Stop the flow of material, if this is without risk.

**Environmental Precautions:** Do not contaminate water sources or sewer. Prevent further leakage or spillage if safe to do so.

**7. HANDLING AND STORAGE**

**Precautions for safe handling:** Prevent abrading consumable materials or creating dust. Provide appropriate exhaust ventilation at places where fume or dust is formed. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

Read and understand the manufacturer's instruction and the precautionary label on the product. See American National Standard Z49.1, "Safety In

Welding, Cutting and Allied Processes" published by the American Welding Society, <http://pubs.aws.org> and OSHA Publication 2206 (29CFR1910), U.S. Government Printing Office, [www.gpo.gov](http://www.gpo.gov). Avoid contact with eyes, skin, and clothing. Wash hands thoroughly after handling. Do not taste or swallow. Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. Use personal protective equipment as required.

Conditions for safe storage, including any incompatibilities: Store locked up.

**8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

**Control Parameters**

**Occupational Exposure Limits: US**

Chemical Identity	Type	Exposure Limit Values	Source
Potassium difluorodihydroxyborate(1-) - Inhalable fraction.	STEL	6 mg/m3	US. ACGIH Threshold Limit Values, as amended (02 2014)
	TWA	2 mg/m3	US. ACGIH Threshold Limit Values, as amended (02 2014)
Potassium difluorodihydroxyborate(1-)	IDLH	250 mg/m3	US. NIOSH. Immediately Dangerous to Life or Health (IDLH) Values (10 2017)
Potassium fluoride - as F	TWA	2.5 mg/m3	US. ACGIH Threshold Limit Values, as amended (12 2010)
	PEL	2.5 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
Potassium fluoride - Dust.	TWA	2.5 mg/m3	US. OSHA Table Z-2 (29 CFR 1910.1000) (02 2006)
Potassium fluoride	IDLH	250 mg/m3	US. NIOSH. Immediately Dangerous to Life or Health (IDLH) Values (10 2017)
	IDLH	250 mg/m3	US. NIOSH. Immediately Dangerous to Life or Health (IDLH) Values (10 2017)

**Occupational Exposure Limits: Canada**

Chemical Identity	Type	Exposure Limit Values	Source
Potassium difluorodihydroxyborate(1-) - as F	TWA	2.5 mg/m3	Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2), as amended (07 2009)
Potassium difluorodihydroxyborate(1-) - Inhalable fraction.	STEL	6 mg/m3	Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act), as amended (03 2013)
	TWA	2 mg/m3	Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act), as amended (03 2013)
Potassium fluoride - as F	TWA	2.5 mg/m3	Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2), as amended (07 2009)
	TWA	2.5 mg/m3	Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2), as amended (07 2009)
	TWA	2.5 mg/m3	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
	TWA	2.5 mg/m3	Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act), as amended (03 2011)
	TWA	2.5 mg/m3	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (11 2010)

	8 HR ACL	2.5 mg/m3	Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21), as amended (05 2009)
	15 MIN ACL	5 mg/m3	Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21), as amended (05 2009)
	TWA	2.5 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment), as amended (09 2017)

**Occupational Exposure Limits: Mexico**

Chemical Identity	Type	Exposure Limit Values	Source
Potassium fluoride - as F	VLE-PPT	2.5 mg/m3	Mexico. OELs. (NOM-010-STPS-2014 Chemical Pollutants at the Workplace; Assessment and Control), as amended (04 2014)

**Biological Limit Values: US**

Chemical Identity	Exposure Limit Values	Source
Potassium fluoride (Fluoride: Sampling time: Prior to shift.)	2 mg/l (Urine)	ACGIH BEI (03 2013)
Potassium fluoride (Fluoride: Sampling time: End of shift.)	3 mg/l (Urine)	ACGIH BEI (03 2013)

**Biological Limit Values: Mexico**

Chemical Identity	Exposure Limit Values	Source
Potassium fluoride (fluorides: Sampling time: Prior to shift.)	3 mg/g (Creatinine in urine)	MX IBE (06 2012)
Potassium fluoride (fluorides: Sampling time: End of shift.)	10 mg/g (Creatinine in urine)	MX IBE (06 2012)

**Additional exposure limits under the conditions of use: US**

Chemical Identity	Type	Exposure Limit Values	Source
Carbon dioxide	TWA	5,000 ppm	US. ACGIH Threshold Limit Values, as amended (12 2010)
	STEL	30,000 ppm	US. ACGIH Threshold Limit Values, as amended (12 2010)
	PEL	5,000 ppm 9,000 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
	STEL	30,000 ppm 54,000 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards, as amended (2005)
	REL	5,000 ppm 9,000 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards, as amended (2005)
	IDLH	40,000 ppm	US. NIOSH. Immediately Dangerous to Life or Health (IDLH) Values (10 2017)
Carbon monoxide	TWA	25 ppm	US. ACGIH Threshold Limit Values, as amended (12 2010)
	PEL	50 ppm 55 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
	REL	35 ppm 40 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards, as amended (2005)
	Ceil_Time	200 ppm 229 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards, as amended (2005)
	IDLH	1,200 ppm	US. NIOSH. Immediately Dangerous to Life or Health (IDLH) Values (10 2017)
	TWA	0.2 ppm	US. ACGIH Threshold Limit Values, as amended (02 2012)
Nitrogen dioxide	Ceiling	5 ppm 9 mg/m3	US. OSHA Table Z-1 Limits for Air

				Contaminants (29 CFR 1910.1000) (02 2006)
	STEL	1 ppm	1.8 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards, as amended (2005)
	IDLH	20 ppm		US. NIOSH. Immediately Dangerous to Life or Health (IDLH) Values (10 2017)
	IDLH	13 ppm		US. NIOSH. Immediately Dangerous to Life or Health (IDLH) Values (10 2017)
Ozone	PEL	0.1 ppm	0.2 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
	Ceil_Time	0.1 ppm	0.2 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards, as amended (2005)
	TWA	0.05 ppm		US. ACGIH Threshold Limit Values, as amended (03 2014)
	TWA	0.20 ppm		US. ACGIH Threshold Limit Values, as amended (03 2014)
	TWA	0.10 ppm		US. ACGIH Threshold Limit Values, as amended (03 2014)
	TWA	0.08 ppm		US. ACGIH Threshold Limit Values, as amended (03 2014)
	IDLH	5 ppm		US. NIOSH. Immediately Dangerous to Life or Health (IDLH) Values (10 2017)

**Additional exposure limits under the conditions of use: Canada**

Chemical Identity	Type	Exposure Limit Values		Source
Carbon dioxide	STEL	30,000 ppm	54,000 mg/m3	Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2), as amended (07 2009)
	TWA	5,000 ppm	9,000 mg/m3	Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2), as amended (07 2009)
	TWA	5,000 ppm		Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
	STEL	15,000 ppm		Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
	TWA	5,000 ppm		Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act), as amended (03 2011)
	STEL	30,000 ppm		Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act), as amended (03 2011)
	STEL	30,000 ppm		Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (11 2010)
	TWA	5,000 ppm		Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (11 2010)
	8 HR ACL	5,000 ppm		Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21), as amended (05 2009)
	15 MIN ACL	30,000 ppm		Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21), as amended (05 2009)
	TWA	5,000 ppm	9,000 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment), as amended (09 2017)
	STEL	30,000 ppm	54,000 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment), as amended (09

				2017)
Carbon monoxide	TWA	25 ppm	29 mg/m <sup>3</sup>	Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2), as amended (07 2009)
	TWA	25 ppm		Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
	STEL	100 ppm		Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
	TWA	25 ppm		Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act), as amended (03 2011)
	TWA	25 ppm		Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (07 2010)
	8 HR ACL	25 ppm		Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21), as amended (05 2009)
	15 MIN ACL	190 ppm		Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21), as amended (05 2009)
	TWA	35 ppm	40 mg/m <sup>3</sup>	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment), as amended (09 2017)
	STEL	200 ppm	230 mg/m <sup>3</sup>	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment), as amended (09 2017)
Nitrogen dioxide	STEL	5 ppm	9.4 mg/m <sup>3</sup>	Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2), as amended (07 2009)
	TWA	3 ppm	5.6 mg/m <sup>3</sup>	Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2), as amended (07 2009)
	CEILING	1 ppm		Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
	TWA	0.2 ppm		Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act), as amended (03 2012)
	STEL	5 ppm		Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (11 2010)
	TWA	3 ppm		Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (11 2010)
	8 HR ACL	3 ppm		Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21), as amended (05 2009)
	15 MIN ACL	5 ppm		Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21), as amended (05 2009)
	TWA	3 ppm	5.6 mg/m <sup>3</sup>	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment), as amended (09 2017)
Ozone	STEL	0.3 ppm	0.6 mg/m <sup>3</sup>	Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2), as amended (07 2009)

	TWA	0.1 ppm	0.2 mg/m <sup>3</sup>	Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2), as amended (07 2009)
	TWA	0.05 ppm		Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
	TWA	0.1 ppm		Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
	TWA	0.08 ppm		Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
	TWA	0.2 ppm		Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
	TWA	0.1 ppm	0.2 mg/m <sup>3</sup>	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (07 2010)
	STEL	0.3 ppm	0.6 mg/m <sup>3</sup>	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (07 2010)
	15 MIN ACL	0.15 ppm		Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21), as amended (05 2009)
	8 HR ACL	0.05 ppm		Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21), as amended (05 2009)
	CEILING	0.1 ppm	0.2 mg/m <sup>3</sup>	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment), as amended (12 2008)
	TWA	0.20 ppm		Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act), as amended (03 2014)
	TWA	0.05 ppm		Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act), as amended (03 2014)
	TWA	0.08 ppm		Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act), as amended (03 2014)
	TWA	0.10 ppm		Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act), as amended (03 2014)

**Additional exposure limits under the conditions of use: Mexico**

Chemical Identity	Type	Exposure Limit Values	Source
Carbon dioxide	VLE-CT	30,000 ppm	Mexico. OELs. (NOM-010-STPS-2014 Chemical Pollutants at the Workplace; Assessment and Control), as amended (04 2014)
	VLE-PPT	5,000 ppm	Mexico. OELs. (NOM-010-STPS-2014 Chemical Pollutants at the Workplace; Assessment and Control), as amended (04 2014)
Carbon monoxide	VLE-PPT	25 ppm	Mexico. OELs. (NOM-010-STPS-2014 Chemical Pollutants at the Workplace; Assessment and Control), as amended (04 2014)
Nitrogen dioxide	VLE-PPT	0.2 ppm	Mexico. OELs. (NOM-010-STPS-2014 Chemical Pollutants at the Workplace;

			Assessment and Control), as amended (04 2014)
Ozone	VLE-P	0.1 ppm	Mexico. OELs. (NOM-010-STPS-2014 Chemical Pollutants at the Workplace; Assessment and Control), as amended (04 2014)

**Appropriate Engineering Controls**

**Ventilation:** Use enough ventilation and local exhaust at the arc, flame or heat source to keep the fumes and gases from the worker's breathing zone and the general area. Train the operator to keep their head out of the fumes. **Keep exposure as low as possible.**

**Individual protection measures, such as personal protective equipment**

**General information:**

**Exposure Guidelines:** To reduce the potential for overexposure, use controls such as adequate ventilation and personal protective equipment (PPE). Overexposure refers to exceeding applicable local limits, the American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Values (TLVs) or the Occupational Safety and Health Administration's (OSHA) Permissible Exposure Limits (PELs). Workplace exposure levels should be established by competent industrial hygiene assessments. Unless exposure levels are confirmed to be below the applicable local limit, TLV or PEL, whichever is lower, respirator use is required. Absent these controls, overexposure to one or more compound constituents, including those in the fume or airborne particles, may occur resulting in potential health hazards. According to the ACGIH, TLVs and Biological Exposure Indices (BEIs) "represent conditions under which ACGIH believes that nearly all workers may be repeatedly exposed without adverse health effects." The ACGIH further states that the TLV-TWA should be used as a guide in the control of health hazards and should not be used to indicate a fine line between safe and dangerous exposures. See Section 10 for information on constituents which have some potential to present health hazards. Welding consumables and materials being joined may contain chromium as an unintended trace element. Materials that contain chromium may produce some amount of hexavalent chromium (CrVI) and other chromium compounds as a byproduct in the fume. In 2018, the American Conference of Governmental Industrial Hygienists (ACGIH) lowered the Threshold Limit Value (TLV) for hexavalent chromium from 50 micrograms per cubic meter of air (50 µg/m<sup>3</sup>) to 0.2 µg/m<sup>3</sup>. At these new limits, CrVI exposures at or above the TLV may be possible in cases where adequate ventilation is not provided. CrVI compounds are on the IARC and NTP lists as posing a lung cancer and sinus cancer risk. Workplace conditions are unique and welding fume exposures levels vary. Workplace exposure assessments must be conducted by a qualified professional, such as an industrial hygienist, to determine if exposures are below applicable limits and to make recommendations when necessary for preventing overexposures. Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. An eye wash and safety shower must be available in the immediate work area.

**Eye/face protection:**

Wear helmet, face shield or eye protection with filter lens shade number 2 for torch soldering and 3-4 for torch brazing, and follow the recommendations as specified in ANSI Z49.1, Section 4, based on your process details. Shield others by providing appropriate screens and eye protection. Wear safety glasses with side shields (or goggles).

**Skin Protection**



<b>Hand Protection:</b>	Wear protective gloves. Suitable gloves can be recommended by the glove supplier.
<b>Other:</b>	<b>Protective Clothing:</b> Wear hand, head, and body protection which help to prevent injury from radiation, open flames, hot surfaces, sparks and electrical shock. See Z49.1. At a minimum, this includes welder's gloves and a protective face shield when welding, and may include arm protectors, aprons, hats, shoulder protection, as well as dark substantial clothing when welding, brazing and soldering. Wear dry gloves free of holes or split seams. Train the operator not to permit electrically live parts or electrodes from contacting the skin . . . or clothing or gloves if they are wet. Insulate yourself from the work piece and ground using dry plywood, rubber mats or other dry insulation. Wear chemical-resistant gloves, footwear, and protective clothing appropriate for the risk of exposure. Contact health and safety professional or manufacturer for specific information.
<b>Respiratory Protection:</b>	Keep your head out of fumes. Use enough ventilation and local exhaust to keep fumes and gases from your breathing zone and the general area. An approved respirator should be used unless exposure assessments are below applicable exposure limits.
<b>Hygiene measures:</b>	Do not eat, drink or smoke when using the product. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Determine the composition and quantity of fumes and gases to which workers are exposed by taking an air sample from inside the welder's helmet if worn or in the worker's breathing zone. Improve ventilation if exposures are not below limits. See ANSI/AWS F1.1, F1.2, F1.3 and F1.5, available from the American Welding Society, <a href="http://www.aws.org">www.aws.org</a> . Wash contaminated clothing before reuse. Avoid contact with skin. Observe good industrial hygiene practices. Wash hands before breaks and immediately after handling the product. Wash hands after handling. Do not handle until all safety precautions have been read and understood. Obtain special instructions before use.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance:</b>	Brazing flux.
<b>Physical state:</b>	Paste
<b>Form:</b>	Paste
<b>Color:</b>	White
<b>Odor:</b>	No data available.
<b>Odor threshold:</b>	No data available.
<b>pH:</b>	No data available.
<b>Melting point/freezing point:</b>	No data available.
<b>Initial boiling point and boiling range:</b>	No data available.
<b>Flash Point:</b>	No data available.
<b>Evaporation rate:</b>	No data available.
<b>Flammability (solid, gas):</b>	No data available.
<b>Upper/lower limit on flammability or explosive limits</b>	
<b>Flammability limit - upper (%):</b>	No data available.
<b>Flammability limit - lower (%):</b>	No data available.





<b>Explosive limit - upper (%):</b>	No data available.
<b>Explosive limit - lower (%):</b>	No data available.
<b>Vapor pressure:</b>	No data available.
<b>Vapor density:</b>	No data available.
<b>Density:</b>	1.6 g/cm <sup>3</sup>
<b>Relative density:</b>	No data available.
<b>Solubility(ies)</b>	
<b>Solubility in water:</b>	No data available.
<b>Solubility (other):</b>	No data available.
<b>Partition coefficient (n-octanol/water):</b>	No data available.
<b>Auto-ignition temperature:</b>	No data available.
<b>Decomposition temperature:</b>	No data available.
<b>Viscosity:</b>	No data available.

## 10. STABILITY AND REACTIVITY

<b>Reactivity:</b>	The product is non-reactive under normal conditions of use, storage and transport.
<b>Chemical Stability:</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions:</b>	None under normal conditions.
<b>Conditions to avoid:</b>	Avoid heat or contamination.
<b>Incompatible Materials:</b>	Strong acids. Strong oxidizing substances. Strong bases.
<b>Hazardous Decomposition Products:</b>	<p>Fumes and gases from welding and its allied processes such as brazing and soldering cannot be classified simply. The composition and quantity of both are dependent upon the metal to which the joining or hot work is applied, the process, procedure - and where applicable - the electrode or consumable used. Other conditions which also influence the composition and quantity of the fumes and gases to which workers may be exposed include: coatings on the metal being welded or worked (such as paint, plating, or galvanizing), the number of operators and the volume of the work area, the quality and amount of ventilation, the position of the operator's head with respect to the fume plume, as well as the presence of contaminants in the atmosphere (such as chlorinated hydrocarbon vapors from cleaning and degreasing activities.)</p> <p>In cases where an electrode or other applied material is consumed, the fume and gas decomposition products generated are different in percent and form from the ingredients listed in Section 3. Decomposition products of normal operation include those originating from the volatilization, reaction, or oxidation of the materials shown in Section 3, plus those from the base metal and coating, etc., as noted above. Reasonably expected fume constituents produced during arc welding and brazing include the oxides of iron, manganese and other metals present in the welding consumable or base metal. Hexavalent chromium compounds may be in the welding or brazing fume of consumables or base metals which contain chromium. Gaseous and particulate fluoride may be in the fume of consumables or flux materials which contain fluoride. Gaseous reaction products may include carbon monoxide and carbon dioxide. Ozone and</p>

nitrogen oxides may be formed by the radiation from the arc associated with welding.

## 11. TOXICOLOGICAL INFORMATION

**General information:** The International Agency for Research on Cancer (IARC) has determined welding fumes and ultraviolet radiation from welding are carcinogenic to humans (Group 1). According to IARC, welding fumes cause cancer of the lung and positive associations have been observed with cancer of the kidney. Also according to IARC, ultraviolet radiation from welding causes ocular melanoma. IARC identifies gouging, brazing, carbon arc or plasma arc cutting, and soldering as processes closely related to welding. Read and understand the manufacturer's instructions, Safety Data Sheets and the precautionary labels before using this product.

### Information on likely routes of exposure

**Inhalation:** Inhalation is the primary route of exposure. In high concentrations, dust, vapors, fumes or mists may irritate nose, throat and mucus membranes.

**Skin Contact:** Toxic in contact with skin.

**Eye contact:** HEAT RAYS (INFRARED RADIATION) from flame or hot metal can injure eyes.

**Ingestion:** Avoid ingestion - wear gloves and other appropriate personal protection - wash hands thoroughly following use or handling. Harmful if swallowed.

### Symptoms related to the physical, chemical and toxicological characteristics

**Inhalation:** Short-term (acute) overexposure to fumes and gases from brazing and soldering may result in discomfort such as metal fume fever, dizziness, nausea, or dryness or irritation of nose, throat, or eyes. May aggravate pre-existing respiratory problems (e.g. asthma, emphysema). Long-term (chronic) overexposure to fumes and gases from brazing and soldering can lead to siderosis (iron deposits in lung), central nervous system effects, bronchitis and other pulmonary effects. Products which contain lead or cadmium have additional specific health hazards - refer to Sections 2, 8 and 11 of this SDS. Depending on specific product composition, some products may produce hazardous concentrations of airborne oxides of cadmium, lead, zinc or fluoride compounds. Use adequate ventilation and respiratory protection during use. Avoid breathing fumes. Avoid ingestion - wear gloves and other appropriate personal protection - wash hands thoroughly following use or handling. Inhalation of fumes may cause upper respiratory tract irritation and systemic poisoning with early symptoms including headache, coughing, and a metallic taste as well as metal fume fever. Chronic cadmium exposure causes lung and kidney damage. Chronic exposure to lead causes damage to lungs, liver, kidney, nervous system as well as blood and musculoskeletal disorders. Exposures to high levels of cadmium or lead dust or fume may be immediately dangerous to life or health and can cause delayed pneumonitis with fever and chest pain, and pulmonary edema resulting in death.

### Information on toxicological effects

#### Acute toxicity (list all possible routes of exposure)

##### Oral

**Product:** ATEmix: 493.95 mg/kg

**Specified substance(s):**  
Potassium LD 50 (Rat): 875 mg/kg

difluorodihydroxyborate(1-)

Potassium fluoride LD 50 (Rat): 245 mg/kg

**Dermal**

**Product:** ATEmix: 1,000 mg/kg

**Inhalation**

**Product:** ATEmix: 1.7 mg/l

**Specified substance(s):**

Potassium fluoride LC 50 (Rat, 4 h): 1 mg/l

**Repeated dose toxicity**

**Product:** No data available.

**Skin Corrosion/Irritation**

**Product:** Not classified

**Serious Eye Damage/Eye Irritation**

**Product:** Not classified

**Respiratory or Skin Sensitization**

**Product:** Respiratory Sensitization: Not classified  
Skin Sensitization: Not classified

**Carcinogenicity**

**Product:** Not classified

**IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:**

No carcinogenic components identified

**US. National Toxicology Program (NTP) Report on Carcinogens:**

No carcinogenic components identified

**US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050), as amended:**

No carcinogenic components identified

**Germ Cell Mutagenicity**

**In vitro**

**Product:** Not classified

**In vivo**

**Product:** Not classified

**Reproductive toxicity**

**Product:** Suspected of damaging fertility or the unborn child.

**Specific Target Organ Toxicity - Single Exposure**

**Product:** Not classified

**Specific Target Organ Toxicity - Repeated Exposure**

**Product:** Not classified

**Aspiration Hazard**

**Product:** No data available.

**Symptoms related to the physical, chemical and toxicological characteristics under the condition of use**

**Additional toxicological Information under the conditions of use:**

**Acute toxicity**

**Inhalation**

**Specified substance(s):**

Carbon dioxide	LC Lo (Human, 5 min): 90000 ppm
Carbon monoxide	LC 50 (Rat, 4 h): 1300 ppm
Nitrogen dioxide	LC 50 (Rat, 4 h): 88 ppm
Ozone	LC Lo (Human, 30 min): 50 ppm

**Other effects:**

**Specified substance(s):**

Carbon dioxide	Asphyxia
Carbon monoxide	Carboxyhemoglobinemia
Nitrogen dioxide	Lower respiratory tract irritation

**12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

**Acute hazards to the aquatic environment:**

**Fish**

**Product:** Not classified

**Aquatic Invertebrates**

**Product:** Not classified

**Chronic hazards to the aquatic environment:**

**Fish**

**Product:** Not classified

**Specified substance(s):**

Potassium fluoride NOAEL (Oncorhynchus mykiss, 21 d): 4 mg/l

**Aquatic Invertebrates**

**Product:** Not classified

**Specified substance(s):**

Potassium fluoride NOAEL (Daphnia magna, 21 d): 14.1 mg/l NOAEL (Daphnia magna, 21 d): 3.7 mg/l

**Toxicity to Aquatic Plants**

**Product:** No data available.

**Persistence and Degradability**

**Biodegradation**

**Product:** No data available.

**Bioaccumulative potential**

**Bioconcentration Factor (BCF)**

**Product:** No data available.

**Mobility in soil:**

No data available.

**13. Disposal considerations**

**General information:**

The generation of waste should be avoided or minimized whenever possible. When practical, recycle in an environmentally acceptable, regulatory compliant manner. Dispose of non-recyclable products in accordance with all applicable Federal, State, Provincial, and Local



requirements.

**Disposal instructions:** Discharge, treatment, or disposal may be subject to national, state, or local laws.

**Contaminated Packaging:** Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

## 14. TRANSPORT INFORMATION

### DOT

UN Number:  
UN Proper Shipping Name: NOT DG REGULATED  
Transport Hazard Class(es)  
Class: NR  
Label(s): –  
Packing Group: –  
Marine Pollutant: No

### IMDG

UN Number:  
UN Proper Shipping Name: NOT DG REGULATED  
Transport Hazard Class(es)  
Class: NR  
Label(s): –  
EmS No.: –  
Packing Group: –  
Marine Pollutant: No

### IATA

UN Number:  
Proper Shipping Name: NOT DG REGULATED  
Transport Hazard Class(es):  
Class: NR  
Label(s): –  
Packing Group: –  
Marine Pollutant: No  
Cargo aircraft only: Allowed.

### TDG

UN Number:  
UN Proper Shipping Name: NOT DG REGULATED  
Transport Hazard Class(es)  
Class: NR  
Label(s): –  
Packing Group: –  
Marine Pollutant: No

## 15. REGULATORY INFORMATION

### US Federal Regulations

#### TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

None present or none present in regulated quantities.

#### US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050), as amended

None present or none present in regulated quantities.

**CERCLA Hazardous Substance List (40 CFR 302.4):**

None present or none present in regulated quantities.

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**Hazard categories**

Immediate (Acute) Health Hazards

Delayed (Chronic) Health Hazard

Acute toxicity (any route of exposure)

Reproductive toxicity

**SARA 302 Extremely Hazardous Substance**

None present or none present in regulated quantities.

**SARA 304 Emergency Release Notification**

None present or none present in regulated quantities.

**SARA 311/312 Hazardous Chemical**

**Chemical Identity**

Potassium difluorodihydroxyborate(1-)

Potassium fluoride

**Threshold Planning Quantity**

10000 lbs

10000 lbs

**SARA 313 (TRI Reporting)**

None present or none present in regulated quantities.

**Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)**

None present or none present in regulated quantities.

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):**

None present or none present in regulated quantities.

**US State Regulations**

**US. California Proposition 65**

No ingredient requiring a warning under CA Prop 65.

**WARNING:** This product contains or produces a chemical known to the State of California to cause cancer and birth defects (or other reproductive harm). (California Health & Safety Code Section 25249.5 et seq.)

**WARNING:** Cancer and Reproductive Harm – [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

**US. New Jersey Worker and Community Right-to-Know Act**

**Chemical Identity**

Potassium fluoride

**US. Massachusetts RTK - Substance List**

No ingredient regulated by MA Right-to-Know Law present.

**US. Pennsylvania RTK - Hazardous Substances**

**Chemical Identity**

Potassium fluoride

**US. Rhode Island RTK**

**Chemical Identity**

Potassium difluorodihydroxyborate(1-)

Potassium fluoride

**Canada Federal Regulations**

**List of Toxic Substances (CEPA, Schedule 1)**

Not Regulated

**Export Control List (CEPA 1999, Schedule 3)**

Not Regulated

**National Pollutant Release Inventory (NPRI)****Canada. National Pollutant Release Inventory (NPRI) Substances, Part 5, VOCs with Additional Reporting Requirements**

NPRI PT5 Not Regulated

**Canada. National Pollutant Release Inventory (NPRI) (Schedule 1, Parts 1-4)**

NPRI Not Regulated

**Greenhouse Gases**

Not Regulated

**Controlled Drugs and Substances Act**

CA CDSI Not Regulated

CA CDSII Not Regulated

CA CDSIII Not Regulated

CA CDSIV Not Regulated

CA CDSV Not Regulated

CA CDSVII Not Regulated

CA CDSVIII Not Regulated

**Precursor Control Regulations**

Not Regulated

**Mexico. Substances subject to reporting for the pollutant release and transfer registry (PRTR):** Not applicable**Inventory Status:**

Australia AICS:	On or in compliance with the inventory
Canada DSL Inventory List:	One or more components are not listed or are exempt from listing.
EINECS, ELINCS or NLP:	On or in compliance with the inventory
Japan (ENCS) List:	One or more components are not listed or are exempt from listing.
China Inv. Existing Chemical Substances:	On or in compliance with the inventory
Korea Existing Chemicals Inv. (KECI):	One or more components are not listed or are exempt from listing.
Canada NDSL Inventory:	One or more components are not listed or are exempt from listing.
Philippines PICCS:	One or more components are not listed or are exempt from listing.
US TSCA Inventory:	One or more components are not listed or are exempt from listing.
New Zealand Inventory of Chemicals:	On or in compliance with the inventory
Japan ISHL Listing:	One or more components are not listed or are exempt from listing.
Japan Pharmacopoeia Listing:	One or more components are not listed or are exempt from listing.
Mexico INSQ:	One or more components are not listed or are exempt from listing.
Ontario Inventory:	One or more components are not listed or are exempt from listing.
Taiwan Chemical Substance Inventory:	One or more components are not listed or are exempt from listing.

**16. OTHER INFORMATION****Definitions:****Revision Date:** 04/13/2020**Further Information:** Additional information is available by request.**Disclaimer:** The Lincoln Electric Company urges each end user and recipient of this SDS

to study it carefully. See also [www.lincolnelectric.com/safety](http://www.lincolnelectric.com/safety). If necessary, consult an industrial hygienist or other expert to understand this information and safeguard the environment and protect workers from potential hazards associated with the handling or use of this product. This information is believed to be accurate as of the revision date shown above. However, no warranty, expressed or implied, is given. Because the conditions or methods of use are beyond Lincoln Electric's control, we assume no liability resulting from the use of this product. Regulatory requirements are subject to change and may differ between various locations. Compliance with all applicable Federal, State, Provincial, and local laws and regulations remain the responsibility of the user.

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# STIHL HP (HIGH PERFORMANCE) 2-CYCLE ENGINE OIL

Packaged for Stihl Incorporated, 536 Viking Drive, Virginia Beach, VA 23452



# Safety Data Sheet

Conforms to HCS 2012 (29 CFR 1910.1200)

## Section 1. Identification

### Product identifier

<b>Product Name:</b>	STIHL HP (High Performance) 2-Cycle Engine Oil
<b>Other names:</b>	F3E
<b>Part/Product Number(s):</b>	0781-319-8008, 0781-319-8009, 0781-319-8010, <b>0781-319-8014</b> , <b>0781-319-8015</b> , <b>0781-319-8016</b> , <b>0781-319-8044</b> , <b>0781-319-8045</b> , <b>0781-319-8049</b> , 0781-319-8051, <b>7010-871-0208</b> , <b>7010-871-0177</b>
<b>Material Use:</b>	2-cycle engine fuel additive
<b>Uses advised against:</b>	Not for use in non-2-cycle engines
<b>Manufacturer:</b>	Omni Specialty Packaging, LLC 10399 Hwy 1 South Shreveport, LA 71115 1-318-524-1100
<b>Issuing date:</b>	May 21, 2015
<b>Revision date:</b>	June 2, 2015
<b>Revision number:</b>	001
<b>Company contact:</b>	OMNI EHS Department; E-Mail: <a href="mailto:sds@osp.cc">sds@osp.cc</a> ; Contact phone: 318-524-1100 (Monday-Friday, 8:00 AM – 4:00 PM, CST)
<b><u>In case of emergency:</u></b>	CHEMTREC: Within USA and Canada: 1 (800) 524-9300 (24/7) CHEMTREC Outside USA and Canada: +1 703-527-3887 (24/7)

## Section 2. Hazards Identification

**OSHA/HCS Status:** This product is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

**Classification of the substance or Mixture:** Not classified

### GHS Label Elements

#### **Hazard pictograms:**

**Signal word:** None

**Appearance:** Blue    **Physical State:** Liquid    **Odor:** Petroleum distillates

**Hazard statement:** None

### Precautionary statements

**General:** Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand.

**Prevention:** Not applicable

**Response:** Not applicable

**Storage:** Not applicable

**Disposal:** Not applicable

**Hazards not otherwise classified (HNOC):** Defatting to the skin.

**Other information:** Product diluted with gasoline must be handled with the same precautions used for gasoline. Before mixing, the Safety Data Sheet for gasoline should be consulted for any precautionary measures necessary.

### Section 3. Composition/Information on Ingredients

Petroleum mineral oil lubricant base stock with proprietary performance additives mixture.

**Substance/mixture:** Mixture

<u>Components Name</u>	<u>CAS number</u>	<u>Weight %*</u>
Lubricant Base Oil (Petroleum) Highly refined mineral oils (C15-C50)	Various	85 – 95
2-Cycle Engine Oil Additives Mixture	Proprietary	5 – 15

This product does not contain known hazardous materials at the  $\geq 1\%$  level or known carcinogens at the  $\geq 0.1\%$  level as defined by 29 CFR 1910.1200.

\* The exact percentage of composition has been withheld as a trade secret.

### Section 4. First Aid Measures

#### Description of necessary first aid measures

**General Advice:** No specific first aid measures are required. Get medical attention if irritation develops and persists.

**Eye contact:** In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Eyelids should be held away from the eyeball to ensure thorough rinsing. Check for and remove any contact lenses. Get medical attention if irritation develops and persists.

**Skin contact:** Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Get medical attention if irritation or allergic reaction develops and persists.

**Inhalation:** In case of inhalation of decomposition products in a fire, symptoms may be delayed. If inhaled, remove to fresh air. The exposed person may need to be kept under medical surveillance for 48 hours. Get medical attention if symptoms occur.

**Ingestion:** Do NOT induce vomiting. Drink plenty of water. If symptoms persist, call a physician.

**Protection of first-aiders:** No action shall be taken involving any personal risk or without suitable training. Remove all sources of ignition. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Wear personal protective clothing (see section 8).

#### Most important symptoms and effects, both acute and delayed

See Section 11 for more detailed information on health effects and symptoms.

#### **Most Important**

**Symptoms and Effects:** Personnel with pre-existing skin disorders should avoid contact with this product. Under normal use conditions, no adverse effects to health are known.

**Eye contact:** Not expected to cause prolonged or significant eye irritation.

**Skin contact:** Contact with skin is not expected to cause prolonged or significant irritation. Contact with skin is not expected to cause an allergic skin response. Not expected to be harmful to internal organs if absorbed through the skin.

**Inhalation:** Not expected to be harmful if inhaled. Contains petroleum-based mineral oil. May cause respiratory irritation or other pulmonary effects following prolonged or repeated inhalation of oil mist at airborne levels above the recommended oil mist exposure limit. Symptoms of respiratory irritation may include coughing and difficult breathing.

**Ingestion:** Not expected to be harmful if swallowed.

**Note to physician:** Treat symptomatically.

## Section 5. Fire-Fighting Measures

**Uniform Fire Code:** Class IIIB

**Flash Point:** 222°C (432°F)

### Extinguishing Media

**Suitable Media:** In case of fire, use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Use water fog, alcohol resistant foam, dry chemical, carbon dioxide (CO<sub>2</sub>) extinguisher or spray.

**Unsuitable Media:** CAUTION: Use of water spray when fighting fire may be inefficient.

### **Specific Hazards Arising from the Chemical:**

Keep product and empty container away from heat and sources of ignition as product will burn. Contact with strong oxidizers may cause fire. In the event of fire, cool tanks with water spray. Fire residues and contaminated fire extinguishing water must be contained, prevented from being discharged to any waterway, sewer or drain and disposed of in accordance with local regulations.

**Hazardous Combustion Products:** Combustion products may include the following: Carbon dioxide (CO<sub>2</sub>) Carbon monoxide (CO), and Nitrogen oxides.

**Protection of Fire Fighters:** Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## Section 6. Accidental Release Measures

### Personal precautions, protective equipment and emergency procedures

**For non-emergency personnel:** No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Do not touch or walk through spilled material. Put on appropriate personal protective equipment. Floors may be slippery; use care to avoid falling.

**For emergency responders:** If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Pay attention to flashback. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. See also the information in "For non-emergency personnel".

**Environmental precautions:** Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). See Section 12 for ecological information.

### Methods and materials for containment and cleaning up

**Small Spills:** Stop leak if without risk. Move containers from spill area. Absorb with an inert material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

**Large Spills:** Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor.

NOTE: If RQ (Reportable Quantity) is exceeded or if spills enter a body of water, report immediately to the USEPA's National Response Center at (800) 424-8802. Check with your local and state regulators regarding their reporting requirements.

## Section 7. Handling and Storage

### Precautions for safe handling

**Protective measures:** Eye protection and face shield should be used if material is used under conditions that increase the chances of splattering. Put on appropriate personal protective equipment (see Section 8). Keep out of reach of children.

NOTE: Product diluted with gasoline must be handled with the same precautions used for gasoline. Before mixing, the Safety Data Sheet for gasoline should be consulted for any precautionary measures necessary.

### Advice on general occupational hygiene:

Do not get in eyes, on skin or on clothing. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Wash thoroughly after handling. Remove contaminated clothing and protective equipment before entering eating areas.  
See also Section 8 for additional information on hygiene measures.

### Conditions for safe storage, including any incompatibilities:

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials, strong oxidizing agents (see Section 10) and food and drink. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Use appropriate containment to avoid environmental contamination. Avoid contaminating soil or releases into sewage or drainage systems and bodies of water.

## Section 8. Exposure Controls/Personal Protection

### Control parameters

#### Occupational Exposure Limits

Chemical name	ACGIH		OSHA		NIOSH	
	TLV	STEL	PEL	STEL	TWA	Ceiling
Lubricant Base Oil (Petroleum) Highly refined mineral oils (C15-C50)	5 mg/m <sup>3</sup> (mist)	10 mg/m <sup>3</sup> (mist)	5 mg/m <sup>3</sup> (mist)	–	–	–

**Appropriate engineering controls:** Good general ventilation should be sufficient to control worker exposure to airborne contaminants. Emergency shower and eyewash station.

**Environmental exposure controls:** Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

### Individual protection measures

**Hygiene measures:** Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

**Eye/Face Protection:** Wear safety glasses with side shields. A face shield may be necessary under some conditions.

### Skin and Body Protection

**Hand protection:** Wear protective gloves if prolonged or repeated contact is likely. Wear chemical resistant gloves. Recommended: Nitrile gloves. Consult your supervisor or Standard Operating Procedure (SOP) for special handling instructions.

**Body protection:** No protective equipment is needed under normal use conditions. For non-routine tasks, personal protection equipment for the body should be selected based on the

task being performed and the risks involved.

**Other skin protection:**

Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved.

**Respiratory protection:**

No respiratory protection is normally required. If user operation generates an oil mist, determine if airborne concentrations are below the occupational exposure limit for mineral oil mist. If not, wear an approved respirator that provides adequate protection from measured concentrations of this material. The correct choice of respiratory protection depends upon the chemicals being handled, the conditions of work and use, and the condition of the respiratory equipment. For air-purifying respirators use a particulate cartridge. Use a positive pressure air-supplying respirator in circumstances where air-purifying respirators may not provide adequate protection.

## Section 9. Physical and Chemical Properties

<u>Appearance</u>	<u>(Typical or Target)</u>
Physical State:	Liquid
Color:	Blue
Odor:	Petroleum distillates
Odor threshold:	Not available
pH:	Not applicable
Boiling Point:	Not available
Flash Point (Closed cup):	222°C (432°F) (Typical or Target)
Pour Point:	-25°C (-13°F) (Typical or Target)
Evaporation rate (Butyl acetate = 1):	Not available
Flammability (solid, gas):	Not applicable. Based on - Physical state
Flammable) Limit in Air	Not available
Vapor pressure:	Not available
Vapor density (Air = 1):	>1
Relative density:	0.8820 - 0.8990 g/l at 15°C (Typical or Target)
Solubility:	In soluble in water
Partition coefficient (n-Octanol/water):	Not available
Auto-ignition temperature:	Not available
Decomposition temperature:	Not available
Viscosity – Kinematic (cSt (mm <sup>2</sup> /s) @ 40°C):	85 to 100
Viscosity – Kinematic (cSt (mm <sup>2</sup> /s) @ 100°C):	10.3 to 12
VOC %:	<0.026%

## Section 10. Stability and Reactivity

Reactivity:	Not reactive under normal storage conditions
Chemical stability:	Stable under normal storage conditions
Possibility of hazardous reactions:	None under normal processing.
Hazardous polymerization:	Hazardous polymerization does not occur.
Conditions to avoid:	Heat, flames and sparks.
Incompatible materials:	Oxidizing agents, Halogens, Halogenated compounds
Hazardous decomposition products:	May include: Fumes, Oil vapors, Smoke, Carbon Oxides (including carbon monoxide and carbon dioxide), Aldehydes, Nitrogen oxides, and incomplete combustion products.

## Section 11. Toxicological Information

Information on toxicological effects

**Basis for Assessment:** Information given is based on product data, a knowledge of the components and the toxicity of similar products.

**Likely Routs of Exposure:** Exposure may occur via skin absorption, skin or eye contact, inhalation, ingestion.

Substance/Mixture

Acute Toxicity	Oral LD50	Dermal LD50	Inhalation LC50
Lubricant Base Oil (Petroleum) Highly refined mineral oils (C15- C50) Mixture - Typical	>2000 mg/Kg (rat)	>2000 mg/Kg (rabbit)	>2.18 mg/L (rat) 4h (mist)

<b>Aspiration hazard:</b>	Not expected to be an aspiration hazard.
<b>Skin Corrosion/Irritation:</b>	No known significant effects or critical hazards.
<b>Serious Eye Damage/Irritation:</b>	No known significant effects or critical hazards.
<b>Skin Sensitization:</b>	No known significant effects or critical hazards.
<b>Respiratory Sensitization:</b>	No known significant effects or critical hazards.
<b>Specific Target Organ Toxicity (Single Exposure) - STOT-SE:</b>	No known significant effects or critical hazards.
<b>Specific Target Organ Toxicity (Repeated Exposure) – STOT-RE:</b>	No known significant effects or critical hazards.
<b>Carcinogenicity:</b>	No known significant effects or critical hazards.
<b>Germ Cell Mutagenicity:</b>	No known significant effects or critical hazards.
<b>Reproductive Toxicity</b>	No known significant effects or critical hazards.

#### Information on Toxicity Effects of Compounds

##### Lubricant Base Mineral Oil (Petroleum)

Mineral oils are known to cause cancer because of carcinogenic components (e.g. Benzene). The lubricant base mineral oils in this product have been highly refined by a variety of processes including severe solvent extraction, severe hydro cracking or severe hydro treating to reduce aromatics and improve performance characteristics. The oils in the is product meets the IP-346 criteria of less than 3 percent PHA's and are not considered to be a carcinogen by the International Agency for Research on Cancer.

None of the oils in this product requires a cancer warning under the OSHA Hazard Communication Standard (29 CFR 1910.1200). These oils have not been listed in the National Toxicology Program (NTP) Annual Report nor have they been classified by the International Agency for Research on Cancer (IRAC) as: carcinogenic to humans (Group 1), probably carcinogenic to humans (Group 2A), or possibly carcinogenic to humans (Group 2B). These oils have not been classified by the American Conference of Governmental Industrial Hygienists (ACGIH) as: confirmed human carcinogen (A1), suspected human carcinogen (A2), or confirmed animal carcinogen with unknown relevance to humans (A3).

##### 2-Cycle engine oils mix with gasoline:

2-cycle engine oils diluted with gasoline must be handled with the same precautions used for gasoline. Before mixing, the Safety Data Sheet for gasoline should be consulted for any precautionary measures necessary.

## **Section 12. Ecological Information**

The information is based on data available for the material, the components of the material, and similar materials.

**Ecotoxicity:** No testing has been performed by the manufacturer. Ecotoxicity hazard is based on an evaluation of data for the components or a similar material. Not expected to be harmful to aquatic organisms.

**Mobility:** Base oil component – Low solubility and floats and is expected to migrate from water to land. Expected to partition to sediment and wastewater solids.

**Soil/water partition coefficient (K<sub>oc</sub>):** Not available.

##### Persistence and degradation

**Biodegradation:** The material is not expected to be readily biodegradable. The biodegradability of this material is based on an evaluation of data for the components or a similar material.

##### Bioaccumulative potential

**Bioaccumulation:** This product is not expected to bioaccumulate through food chain in the environment.

**Other adverse effects:** No known significant effects or critical hazards.

**Other ecological information:** Spills may form a film on water surfaces causing physical damage to organisms. Oxygen transfer could also be impaired.

## Section 13. Disposal Considerations

**Disposal recommendations based on material supplied.**

**Waste treatment methods:** This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). Consult the appropriate state, regional, or local regulations for additional requirements. The generation of waste should be avoided or minimized wherever possible.

**Product waste:** Significant quantities of waste product residues should not be disposed of via the sanitary sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Incineration or landfill should only be considered when recycling is not feasible. Oil collection services are available for used oil recycling.

**Contaminated packaging:** Empty containers or liners may retain some product residues and could pose a potential fire and explosion hazard. Do not cut, puncture, or weld containers.

**Other information:** Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

## Section 14. Transport Information

**General information:** Petroleum Lubricating oil - Not regulated.

	DOT Classification	IMDG	IATA
Stihl HP 2-Cycle	Not Regulated	Not Regulated	Not Regulated

**Special precautions for user:** Transport within user's premises: Always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

## Section 15. Regulatory Information

### United States Regulations

**United States Inventory (TSCA 8b):** All components are listed or exempted.  
**SARA 302/304:** No products were found.

**SARA 311/312:**

Immediate (Acute) Health Effects:	No
Delayed (Chronic) Health Effects:	No
Fire Hazard:	No
Sudden Release of Pressure Hazard:	No
Reactivity Hazard:	No

**SARA 313:**

The following components of this material are found on the EPCRA 313 list:

None

**Supplier notification:** This product does not contain any hazardous ingredients at or above regulated thresholds.

**CWA (Clean Water Act):** This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

**CERCLA:** This material, as supplied, does not contain any substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302).

**State Regulations**

<b>Massachusetts:</b>	None of the components are at or above regulated thresholds.
<b>New Jersey:</b>	None of the components are at or above regulated thresholds.
<b>Pennsylvania:</b>	None of the components are at or above regulated thresholds.
<b>California Proposition 65:</b>	WARNING: This product contains a chemical known to the State of California to cause cancer. Ethylbenzene - <0.1

**Canada**

**WHMIS Hazard Class:** Not classified.

**International Chemical Inventories:**

All components comply with the following chemical inventory requirements: DSL (Canada)

## Section 16. Other Information

<b>NFPA Rating:</b>	<b>Health Hazard – 1</b>	<b>Flammability – 1</b>	<b>Instability/Reactivity – 0</b>
<b>HMIS Rating:</b>	<b>Health Hazard – 1</b>	<b>Flammability – 1</b>	<b>Physical Hazards – 0</b>

(NFPA & HMIS Hazard Rating Key: 0 - Minimum Hazard; 1 - Slight Hazard; 2 - Moderate Hazard; 3 - High Hazard; 4 - Extreme Hazard; \* - Chronic Hazard Indicator, & PPE - Personal Protective Equipment Index A to L. These values are obtained using the guidelines or published evaluations prepared by the National Fire Protection Association (NFPA) or the National Paint and Coating Association (for HMIS or Hazardous Material Identification System).

**Key to abbreviations:**

OSHA = Occupational Safety and Health Administration  
 ACGIH= American Conference of Industrial Hygienists  
 ATE = Acute Toxicity Estimate  
 BCF = Bioconcentration Factor  
 CAS = Chemical Abstracts Service Registry Number  
 cSt = Centistroke (mm<sup>2</sup>/s)  
 GHS = Global Harmonized System of Classification and Labeling Of Chemicals.  
 IATA = International Air Transport Association  
 IBC = Intermediate Bulk Container  
 IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient  
 OEL = Occupational Exposure Limit  
 SDS = Safety Data Sheet  
 STEL = Short term exposure Limit  
 UN = United Nations  
 UN Number = United Nations Number, a four digit number assigned by the United Nations Committee of Experts on the Transportation of Dangerous Goods

**Prepared By:** OMNI Specialty Packaging EH&S Department

**Revision Date:** June 2, 2015

**Status:** Final

**Revision Note:** Revision 001 of OSHA GHS SDS format.

**Consumer Product Improvement Act of 2008, General Conformity Certification**

**For Consumer Product Packages:** This product has been evaluated and is certified to be labeled and packaged in compliance with the applicable provisions of the Federal Hazardous Substance Act as stated in 16 CFR 1500 and enforced by the Consumer Product Safety Commission. Where applicable the products that require Child Resistant Closures are packaged in accordance with the Poison Prevention Packaging Act as stated in 16 CFR 1700 and enforced by the Consumer Product Safety Commission. All closures have been tested in accordance with the latest protocols. No testing is required to certify compliance with the provisions. The date of the manufacturing is stamped on the product container.

**Disclaimer**

All reasonably practicable steps have been taken to ensure the information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. This information is furnished upon condition that the person receiving it shall make their own determination of the suitability of the material for their particular purpose.



# Safety Data Sheet

**RUST-OLEUM**  
AUSTRALIA

www.rustoleum.com.au

## 1. Identification

**Product Name:** STRUST QT 2PK GLOSS SMOKE GRAY **Revision Date:** 3/30/2020  
**Name on Label:** Protective Enamel **Supersedes Date:** 7/26/2018  
**Product Identifier:** 7786502  
**Product Use/Class:** Topcoat/Alkyd  
**Supplier:** Rust-Oleum Australia & New Zealand Pty. Ltd.  
 8 Lakeview Drive  
 Scoresby, Melbourne, Victoria 3179  
 Australia  
 Ph 1 300 784 476 **Manufacturer:** Rust-Oleum Corporation  
 11 Hawthorn Parkway  
 Vernon Hills, IL 60061  
 USA  
**Preparer:** Regulatory Department  
**Emergency Telephone:** 24 Hour Hotline: 1-300-366-961

## 2. Hazard Identification

This product is not classified as a Dangerous Good per the Australian Code for the Transport of Dangerous Goods by Road and Rail. This product was assessed per Safe Work Australia criteria.

### Classification

#### Symbol(s) of Product



#### Signal Word

Danger

#### Possible Hazards

4% of the mixture consists of ingredient(s) of unknown acute toxicity.

#### GHS HAZARD STATEMENTS

Carcinogenicity, category 1A	H350	May cause cancer.
Flammable Liquid, category 3	H226	Flammable liquid and vapor.
Germ Cell Mutagenicity, category 1B	H340	May cause genetic defects.

#### GHS LABEL PRECAUTIONARY STATEMENTS

P201	Obtain special instructions before use.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. NO SMOKING.
P233	Keep container tightly closed.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P308+P313	IF exposed or concerned: Get medical advice/attention.
P370+P378	In case of fire: Use alcohol film forming foam, carbon dioxide, dry chemical, dry sand to extinguish.
P403+P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.

P501

Dispose of contents/container in accordance with local, regional and national regulations.

**GHS SDS PRECAUTIONARY STATEMENTS**

P240

Ground/bond container and receiving equipment.

P241

Use explosion-proof electrical/ventilating/lighting/equipment.

P242

Use only non-sparking tools.

P243

Take precautionary measures against static discharge.

**3. Composition/Information On Ingredients****HAZARDOUS SUBSTANCES**

<b><u>Chemical Name</u></b>	<b><u>CAS-No.</u></b>	<b><u>Wt.% Range</u></b>	<b><u>GHS Symbols</u></b>	<b><u>GHS Statements</u></b>
Hydrotreated Light Distillate	64742-47-8	50-75	GHS08	H304
Titanium Dioxide	13463-67-7	2.5-10	Not Available	Not Available
Methyl Ethyl Ketoxime	96-29-7	0.1-1.0	GHS05-GHS06- GHS08	H302-312-317-318-331-351
Carbon Black	1333-86-4	0.1-1.0	GHS08	H373
Naphtha, Hydrotreated Heavy	64742-48-9	0.1-1.0	GHS08	H304-340-350
Ethylbenzene	100-41-4	0.1-1.0	GHS02-GHS07	H225-315-319-332
Cobalt 2-Ethylhexanoate	136-52-7	0.1-1.0	GHS08	H317-319-334-350-372

The balance of the product is Nonhazardous.

**4. First-Aid Measures**

**FIRST AID - EYE CONTACT:** Immediately flush eyes with plenty of water for at least 15 minutes holding eyelids open. Get medical attention. Do NOT allow rubbing of eyes or keeping eyes closed.

**FIRST AID - SKIN CONTACT:** Wash skin with soap and water. Remove contaminated clothing. Get medical attention if irritation develops or persists.

**FIRST AID - INHALATION:** Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get immediate medical attention. Do NOT use mouth-to-mouth resuscitation. If you experience difficulty in breathing, leave the area to obtain fresh air. If continued difficulty is experienced, get medical assistance immediately.

**FIRST AID - INGESTION:** If swallowed, get medical attention.

**5. Fire-fighting Measures**

**ADG HAZCHEM CODE:** N.A.

**EXTINGUISHING MEDIA:** Alcohol Film Forming Foam, Carbon Dioxide, Dry Chemical, Dry Sand, Water Fog

**UNUSUAL FIRE AND EXPLOSION HAZARDS:** Closed containers may explode when exposed to extreme heat due to buildup of steam. Keep containers tightly closed. Combustible liquid and vapor. No unusual fire or explosion hazards noted.

**SPECIAL FIREFIGHTING PROCEDURES:** Evacuate area and fight fire from a safe distance. Use water spray to keep fire-exposed containers cool. Containers may explode when heated.

**6. Accidental Release Measures**

**STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:** Remove all sources of ignition, ventilate area and remove with inert absorbent and non-sparking tools. Dispose of according to local, state (provincial) and federal regulations. Do not incinerate closed containers.

**7. Handling and Storage**

**HANDLING:** Wash thoroughly after handling. Wash hands before eating. Remove contaminated clothing and launder before reuse. Use only with adequate ventilation. Follow all SDS and label precautions even after container is emptied because it may retain product residues. Avoid breathing fumes, vapors, or mist. Avoid contact with eyes, skin and clothing.

**STORAGE:** Store in a dry, well ventilated place. Keep container tightly closed when not in use. Keep containers tightly closed. Isolate from heat, electrical equipment, sparks and open flame. Avoid excess heat.

**Advice on Safe Handling of Combustible Dust:** No Information

## 8. Exposure Controls / Personal Protection

Chemical Name	CAS-No.	Weight % Less Than	WHS WES TLV-TWA	WHS WES TLV-STEL
Hydrotreated Light Distillate	64742-47-8	55.0	N.E.	N.E.
Titanium Dioxide	13463-67-7	5.0	10 mg/m3	N.E.
Methyl Ethyl Ketoxime	96-29-7	1.0	10 ppm	N.E.
Carbon Black	1333-86-4	1.0	3 mg/m3	N.E.
Naphtha, Hydrotreated Heavy	64742-48-9	1.0	N.E.	N.E.
Ethylbenzene	100-41-4	1.0	20 ppm	N.E.
Cobalt 2-Ethylhexanoate	136-52-7	1.0	N.E.	N.E.

### PERSONAL PROTECTION

**ENGINEERING CONTROLS:** Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Prevent build-up of vapors by opening all doors and windows to achieve cross-ventilation.

**RESPIRATORY PROTECTION:** A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.

**SKIN PROTECTION:** Use gloves to prevent prolonged skin contact. Nitrile or Neoprene gloves may afford adequate skin protection.

**EYE PROTECTION:** Use safety eyewear designed to protect against splash of liquids.

**OTHER PROTECTIVE EQUIPMENT:** Refer to safety supervisor or industrial hygienist for further guidance regarding types of personal protective equipment and their applications.

**HYGIENIC PRACTICES:** Wash thoroughly with soap and water before eating, drinking or smoking. Remove contaminated clothing immediately and launder before reuse.

**Engineering Measures for Combustible Dust:** No Information

## 9. Physical and Chemical Properties

<b>Appearance:</b>	Liquid	<b>Physical State:</b>	Liquid
<b>Odor:</b>	Solvent Like	<b>Odor Threshold:</b>	N.E.
<b>Specific Gravity:</b>	0.918	<b>pH:</b>	N.A.
<b>Freeze Point, °C:</b>	N.D.	<b>Viscosity:</b>	N.D.
<b>Solubility in Water:</b>	Negligible	<b>Partition Coefficient, n-octanol/water:</b>	N.D.
<b>Decomposition Temp., °C:</b>	N.D.	<b>Explosive Limits, vol%:</b>	0.5 - 6.6
<b>Boiling Range, °C:</b>	136 - 537	<b>Flash Point, °C:</b>	41
<b>Flammability:</b>	Supports Combustion	<b>Auto-ignition Temp., °C:</b>	N.D.
<b>Evaporation Rate:</b>	Slower than Ether	<b>Vapor Pressure:</b>	N.D.
<b>Vapor Density:</b>	Heavier than Air		

(See "Other information" Section for abbreviation legend)

## 10. Stability and Reactivity

**CONDITIONS TO AVOID:** No Information

**INCOMPATIBILITY:** Incompatible with strong oxidizing agents, strong acids and strong alkalis.

**HAZARDOUS DECOMPOSITION:** When heated to decomposition, it emits acrid smoke and irritating fumes. Contains solvents which may form carbon monoxide, carbon dioxide, and formaldehyde.

**HAZARDOUS POLYMERIZATION:** Will not occur under normal conditions.

**STABILITY:** This product is stable under normal storage conditions.

## 11. Toxicological Information

**EFFECTS OF OVEREXPOSURE - EYE CONTACT:** Substance causes moderate eye irritation.

**EFFECTS OF OVEREXPOSURE - SKIN CONTACT:** Substance may cause slight skin irritation.

**EFFECTS OF OVEREXPOSURE - INHALATION:** High gas, vapor, mist or dust concentrations may be harmful if inhaled. Avoid breathing fumes, spray, vapors, or mist. High vapor concentrations are irritating to the eyes, nose, throat and lungs. Prolonged or excessive inhalation may cause respiratory tract irritation.

**EFFECTS OF OVEREXPOSURE - INGESTION:** Irritating to the nose, throat and respiratory tract. Harmful if swallowed.

**EFFECTS OF OVEREXPOSURE - CHRONIC HAZARDS:** Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Contains carbon black. Chronic inflammation, lung fibrosis, and lung tumors have been observed in some rats experimentally exposed for long periods of time to excessive concentrations of carbon black and several insoluble fine dust particles. Tumors have not been observed in other animal species (i.e., mouse and hamster) under similar circumstances and study conditions. Epidemiological studies of North American workers show no evidence of clinically significant adverse health effects due to occupational exposure to carbon black.

Carbon black is listed as a Group 2B-"Possibly carcinogenic to humans" by IARC and is proposed to be listed as A4- "not classified as a human carcinogen" by the American Conference of Governmental Industrial Hygienists. Significant exposure is not anticipated during brush application or drying. Risk of overexposure depends on duration and level of exposure to dust from repeated sanding of surfaces or spray mist and the actual concentration of carbon black in the formula. IARC lists Ethylbenzene as a possible human carcinogen (group 2B). Contains Titanium Dioxide. Titanium Dioxide is listed as a Group 2B-"Possibly carcinogenic to humans" by IARC. No significant exposure to Titanium Dioxide is thought to occur during the use of products in which Titanium Dioxide is bound to other materials, such as in paints during brush application or drying. Risk of overexposure depends on duration and level of exposure to dust from repeated sanding of surfaces or spray mist and the actual concentration of Titanium Dioxide in the formula. (Ref: IARC Monograph, Vol. 93, 2010)

**PRIMARY ROUTE(S) OF ENTRY:** Eye Contact, Ingestion, Inhalation, Skin Absorption, Skin Contact

### ACUTE TOXICITY VALUES

The acute effects of this product have not been tested. Data on individual components are tabulated below:

CAS-No.	Chemical Name	Oral LD50	Dermal LD50	Vapor LC50
64742-47-8	Hydrotreated Light Distillate	>5000 mg/kg Rat	>2000 mg/kg Rabbit	>5000 mg/L Rat
13463-67-7	Titanium Dioxide	>10000 mg/kg Rat	2500 mg/kg	N.E.
96-29-7	Methyl Ethyl Ketoxime	930 mg/kg Rat	1100 mg/kg Rabbit	>4.83 mg/L Rat
1333-86-4	Carbon Black	>15400 mg/kg Rat	N.E.	N.E.
64742-48-9	Naphtha, Hydrotreated Heavy	>6000 mg/kg Rat	>3160 mg/kg Rabbit	N.E.
100-41-4	Ethylbenzene	3500 mg/kg Rat	15400 mg/kg Rabbit	17.4 mg/L Rat
136-52-7	Cobalt 2-Ethylhexanoate	N.E.	>5000 mg/kg Rabbit	N.E.

N.E. - Not Established

## 12. Ecological Information

**ECOLOGICAL INFORMATION:** Product is a mixture of listed components.

## 13. Disposal Information

**DISPOSAL INFORMATION:** Do not incinerate closed containers. Dispose of material in accordance to local, state, and federal regulations and ordinances.

## 14. Transport Information

	<u>Domestic (USDOT)</u>	<u>International (IMDG)</u>	<u>Air (IATA)</u>	<u>ADG</u>
UN Number:	N.A.	1263	1263	N.A.
Proper Shipping Name:	Not Regulated	Paint	Paint	Not Regulated
Hazard Class:	N.A.	3	3	N.A.
Packing Group:	N.A.	III	III	N.A.
Limited Quantity:	No	Yes	Yes	No
ADG Hazchem Code:	N.A.			

## 15. Regulatory Information

### Montreal Protocol

No Montreal Protocol components exist in this product.

### Stockholm Convention

No Stockholm Convention components exist in this product.

### Rotterdam Convention

No Rotterdam Convention components exist in this product.

### MARPOL

This product contains the following substances listed under the MARPOL regulations:

<u>Chemical Name</u>	<u>CAS-No.</u>
n-Nonane	111-84-2
1,3,5-Trimethylbenzene	108-67-8
Naphthalene	91-20-3

### SUSMP

This product contains the following substances classified as poisons as regulated by the Poisons Standard (SUSMP):

<u>Chemical Name</u>	<u>Schedule Number(s)</u>
Liquid Hydrocarbons	Schedule 5

### Capital Territories Environmental Regulations

This product contains the following substances listed under the Australian Capital Territories Environmental Protection Regulation:

<u>Chemical Name</u>	<u>Schedule</u>	<u>Schedule Name</u>
Ethylbenzene	3	Non-pesticide Anthropogenic Organics
Xylenes (o-, m-, p- Isomers)	3	DOM - Organic Chemicals

**16. Other Information**

**SDS REVISION DATE:** 3/30/2020

**REASON FOR REVISION:** Substance Chemical Name Changed  
Product Composition Changed  
Substance Hazard Threshold % Changed  
Substance and/or Product Properties Changed in Section(s):  
01 - Identification  
02 - Hazard Identification  
03 - Composition/Information on Ingredients  
05 - Fire-fighting Measures  
08 - Exposure Controls/Personal Protection  
09 - Physical & Chemical Properties  
11 - Toxicological Information  
Substance Hazardous Flag Changed  
Revision Statement(s) Changed

**Legend:**

N.A. - Not Applicable N.D. - Not Determined N.E. - Not Established

S.T.E.L. - Short Term Exposure Limit

T.W.A. - Time Weighted Average

W.E.S. - Workplace Exposure Standard

W.H.S. - Work Health and Safety regulation

Rust-Oleum Corporation believes, to the best of its knowledge, information and belief, the information contained herein to be accurate and reliable as of the date of this safety data sheet. However, because the conditions of handling, use, and storage of these materials are beyond our control, we assume no responsibility or liability for personal injury or property damage incurred by the use of these materials. Rust-Oleum Corporation makes no warranty, expressed or implied, regarding the accuracy or reliability of the data or results obtained from their use. All materials may present unknown hazards and should be used with caution. The information and recommendations in this material safety data sheet are offered for the users' consideration and examination. It is the responsibility of the user to determine the final suitability of this information and to comply with all applicable international, federal, state, and local laws and regulations.

# MATERIAL SAFETY DATA SHEET

U.S. DEPARTMENT OF LABOR, OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION, HAZARD COMMUNICATION STANDARD, 29 CFR 1910.1200

The Steco Corporation  
2330 Cantrell Road  
P.O. Box 2238  
Little Rock, AR 72203

Emergency Response: (800) 255-3924  
Information: (800) 643-8026  
Fax: (501) 374-4278  
Date Reviewed: **August 15, 2011**

TRADE NAME	<b>TAP MAGIC PROTAP Cutting Fluid</b>
CHEMICAL NAME & SYNONYMS	Hydrocarbon Mixture
DOT SHIPPING NAME	Not a Regulated Material
IATA SHIPPING NAME	No hazard label required, no limit on quantity
HMIS/NFPA CODE	Health 0; Fire 1; Reactivity 0
MANUFACTURING CODE NO.:	8358
COMMODITY CODE NO.:	332-9150

## I. HAZARDOUS INGREDIENTS

This product contains no toxic or hazardous ingredients by OSHA criteria; however, as with any chemical product, exposure to liquids, vapors, mists and fumes should be minimized.

## II. INGREDIENTS

Aliphatic Organic Acid	:	CAS# 112-80-1	>75% mixture
Aliphatic Organic Ester	:	CAS# 112-62-9	<15% mixture
Organic Polyol	:	CAS# None Assigned	<10% mixture

## III. PHYSICAL DATA

BOILING RANGE, (760 mm Mercury)	:	680 to 1000° F
SPECIFIC GRAVITY (Water = 1) (lbs/gal)	:	(0.894) 7.46 lbs/gal
VAPOR PRESSURE (mm of Mercury) @ 75° F	:	Less Than 1
VAPOR DENSITY (Air = 1)	:	Greater Than 5
SOLUBILITY IN WATER, % by weight	:	Less Than 1 (Insoluble)
EVAPORATION RATE (Butyl Acetate = 1)	:	Less Than 0.01
% VOLATILE BY VOLUME @ 75° F	:	Less Than 1
APPEARANCE	:	Yellow Liquid
ODOR	:	Pleasant
pH	:	Nonaqueous

## IV. FIRE & EXPLOSION DATA

LOWER FLAMMABLE LIMIT IN AIR (% by Volume)	:	1.0
UPPER FLAMMABLE LIMIT IN AIR (% by Volume)	:	15
FLASH POINT, PMCC	:	370° F
AUTOIGNITION TEMPERATURE	:	685° F
EXTINGUISHING MEDIA	:	Foam, Carbon Dioxide, Dry Chemical

## V. HEALTH HAZARD INFORMATION

ROUTES OF ENTRY	:	Ingestion is the primary method of possible entry.
EFFECTS OF ACUTE OVEREXPOSURE:		<b>INHALATION:</b> (Unlikely due to low vapor pressure). Mist may cause headache, nasal, respiratory and eye irritation. <b>INGESTION:</b> Headache, drowsiness, nausea, fatigue. <b>EYES:</b> May cause pain and irritation.

EFFECTS OF CHRONIC OVEREXPOSURE: **SKIN CONTACT:** Prolonged or repeated exposure may cause irritation.

CARCINOGENICITY : Not a carcinogen or suspect carcinogen.

EMERGENCY AND FIRST AID PROCEDURES:**EYE:** Flush eyes gently with water for at least 15 minutes. Supportive treatment is recommended.

**SKIN:** Wash with mild soap and water. Remove wetted clothing.

**INHALATION:** Remove to fresh air.

**INGESTION:** Do not induce vomiting. Call a physician and/or transport to emergency medical facility.

## VI. REACTIVITY DATA

Materials such as sawdust or cloth rags which have been wetted with lubricant may be subject to spontaneous combustion during storage.

## VII. DISPOSAL, SPILL OR LEAK PROCEDURES

AQUATIC TOXICITY : Aquatic toxicity is low: Product is not soluble in water. Biodegradable.

SPILL OR LEAK PROCEDURES: Absorb with inert materials. Remove to out of doors and incinerate.

WASTE DISPOSAL METHOD : PROTAP contains no environmentally hazardous substances. Small amounts may be incinerated in compliance with local, state and federal regulations. The recommended method of disposal for large quantities is recycling by a reclaimer or incineration. "If inert absorbents are employed in spill containment or cleanup, these absorbents must be non-biodegradable materials if destined for landfill disposal. Suitable absorbents include natural minerals (clay), activated charcoal, man-made polymers (HD polyethylene)."

## VIII. SPECIAL PROTECTION INFORMATION

**EYE PROTECTION:** Standard eye protection should be worn when using this product.

**SKIN PROTECTION:** No special protection is needed. However, good personal hygiene practices should be followed.

**RESPIRATORY:** If application to which this product is being applied generates excessive mist or fumes, then appropriate respiratory protective equipment should be used. No special requirements under ordinary condition and use and proper ventilation of work area.

**VENTILATION:** No special requirements under ordinary conditions of use and with adequate ventilation.

## IX. SPECIAL PRECAUTIONS

Product is ignitable, keep away from open flames. Do not expose to ignition sources. Do not store with strong oxidizers such as nitrates or perchlorates or oxygen under pressure. May cause swelling of some plastics and synthetic rubbers.

## X. ADDITIONAL INFORMATION

**Tap Magic PROTAP DOES NOT CONTAIN 1,1,1-trichloroethane** or any ozone depleting substances. PROTAP does not contain chlorine, phosphorous, active sulfur, nitrates, nitrite derivatives, amines, polynuclear aromatic compounds either as ingredients or trace contaminants. Shelf life is indefinite at ambient temperatures and left in original containers.

**Tap Magic PROTAP** does not contain any chemical compound listed on the SARA list of 'Extremely Hazardous Chemicals', and is in compliance with all of the requirements of the TSCA at the time of shipment.

**Caution:** Any cutting fluid can be "overworked" or "overheated", causing it to break down. This overuse is identified by the sight of or strong odor of vapors or fumes not normally present. The effects of these vapors or fumes on human health have not been fully determined. After use of this product, clean and lubricate



metal surfaces to avoid staining and/or corrosion.

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By: Asa L. Morton, Chief Chemist, American Interplex Corporation, Little Rock, AR 72204, (501) 224-5060

# Safety Data Sheet

acc. to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 regulations

Printing date: June 01, 2017

Revision: June 01, 2017

## 1 Identification

- **Product identifier**
- **Trade name:** Tap Magic PROTAP Liquid
- **Other means of identification:** No other identifiers
- **Recommended use and restriction on use**
- **Recommended use:** Machining, Cutting, Tapping, and Metal Processing.
- **Restrictions on use:** No relevant information available.
- **Details of the supplier of the Safety Data Sheet**
- **Manufacturer/Supplier:**  
The Steco Corporation  
2330 Cantrell Road  
Little Rock, AR 72203 USA  
(501) 375-5644
- **Emergency telephone number:**  
ChemTel Inc.  
(800)255-3924 (North America)  
+1 (813)248-0585 (International)

## 2 Hazard(s) identification

- **Classification of the substance or mixture**  
Eye Irrit. 2B H320 Causes eye irritation.

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- **Label elements**
- **GHS label elements**  
This product is a consumer product and is labeled in accordance with the US Consumer Product Safety Commission. GHS labeling is not required per 29CFR1910.1200(b)(5)(v). The labeling below applies to industrial/professional products.  
The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms:** None.
- **Signal word:** Warning
- **Hazard statements:**  
H320 Causes eye irritation.
- **Precautionary statements:**  
Not regulated.  
P264 Wash thoroughly after handling.  
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P337+P313 If eye irritation persists: Get medical advice/attention.

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- **Other hazards** There are no other hazards not otherwise classified that have been identified.

## 3 Composition/information on ingredients

- **Chemical characterization:** Mixtures

- **Components:**

112-80-1	oleic acid, pure	Eye Irrit. 2B, H320	50-60%
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(Cont'd. on page 2)

# Safety Data Sheet

acc. to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 regulations

Printing date: June 01, 2017

Revision: June 01, 2017

**Trade name: Tap Magic PROTAP Liquid**

(Cont'd. of page 1)

373-49-9 (Z)-hexadec-9-enoic acid

Flam. Liq. 4, H227; Eye Irrit. 2B, H320

<10%

· **Additional information:**

For the listed ingredient(s), the identity and/or exact percentage(s) are being withheld as a trade secret.

## 4 First-aid measures

· **Description of first aid measures**

· **After inhalation:** Supply fresh air; consult doctor in case of complaints.

· **After skin contact:**

Immediately wash with water and soap and rinse thoroughly.

If skin irritation continues, consult a doctor.

· **After eye contact:**

Remove contact lenses if worn.

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· **After swallowing:**

Rinse out mouth and then drink plenty of water.

Do not induce vomiting; immediately call for medical help.

· **Most important symptoms and effects, both acute and delayed:**

Causes eye irritation.

Causes mild skin irritation.

Gastric or intestinal disorders when ingested.

· **Indication of any immediate medical attention and special treatment needed:**

No relevant information available.

## 5 Fire-fighting measures

· **Extinguishing media**

· **Suitable extinguishing agents:**

The product is not flammable.

Use fire fighting measures that suit the environment.

· **For safety reasons unsuitable extinguishing agents:** Water stream.

· **Special hazards arising from the substance or mixture**

Formation of toxic gases is possible during heating or in case of fire.

· **Advice for firefighters**

· **Protective equipment:**

Wear self-contained respiratory protective device.

Wear fully protective suit.

· **Additional information:** Cool endangered containers with water fog.

## 6 Accidental release measures

· **Personal precautions, protective equipment and emergency procedures**

Use personal protective equipment as required.

Ensure adequate ventilation.

Particular danger of slipping on leaked/spilled product.

(Cont'd. on page 3)

# Safety Data Sheet

acc. to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 regulations

Printing date: June 01, 2017

Revision: June 01, 2017

**Trade name: Tap Magic PROTAP Liquid**

(Cont'd. of page 2)

- **Environmental precautions**

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

- **Methods and material for containment and cleaning up**

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
Send for recovery or disposal in suitable receptacles.

- **Reference to other sections**

See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

## 7 Handling and storage

- **Handling**

- **Precautions for safe handling:**

Prevent formation of aerosols.  
Avoid splashes or spray in enclosed areas.  
Use only in well ventilated areas.  
Keep out of reach of children.

- **Information about protection against explosions and fires:** No special measures required.

- **Conditions for safe storage, including any incompatibilities**

- **Storage**

- **Requirements to be met by storerooms and receptacles:**

Store in cool, dry conditions in well sealed receptacles.

- **Information about storage in one common storage facility:**

Store away from foodstuffs.  
Store away from oxidizing agents.

- **Specific end use(s)** No relevant information available.

## 8 Exposure controls/personal protection

- **Control parameters**

- **Components with limit values that require monitoring at the workplace:**

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

- **Exposure controls**

- **Personal protective equipment:**

- **General protective and hygienic measures:**

The usual precautionary measures for handling chemicals should be followed.  
Keep away from foodstuffs, beverages and feed.  
Immediately remove all soiled and contaminated clothing.  
Wash hands before breaks and at the end of work.  
Avoid contact with the eyes and skin.

- **Engineering controls:** Provide adequate ventilation.

- **Breathing equipment:**

Not required under normal conditions of use.

(Cont'd. on page 4)

# Safety Data Sheet

acc. to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 regulations

Printing date: June 01, 2017

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Use suitable respiratory protective device when high concentrations are present.

· **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

· **Eye protection:**



Safety glasses

Follow OSHA or EU guidelines concerning the use of protective eyewear.

· **Body protection:**

Not required under normal conditions of use.

Protection may be required for spills.

· **Limitation and supervision of exposure into the environment**

No relevant information available.

## 9 Physical and chemical properties

· **Information on basic physical and chemical properties**

· **Appearance:**

· **Form:** Liquid

· **Color:** Yellow

· **Odor:** Pleasant

· **Odor threshold:** Not determined.

· **pH-value:** Not determined.

· **Melting point/Melting range:** Not determined.

· **Boiling point/Boiling range:** Not determined.

· **Flash point:** 190 °C (374 °F)

· **Flammability (solid, gaseous):** Not applicable.

· **Auto-ignition temperature:** >260 °C (>500 °F) (Estimation)

· **Decomposition temperature:** Not determined.

· **Danger of explosion:** Product does not present an explosion hazard.

· **Explosion limits**

· **Lower:** Not determined.

· **Upper:** Not determined.

· **Oxidizing properties:** Not determined.

· **Vapor pressure:** Not determined.

· **Density:**

· **Relative density:** 0.89

· **Vapor density:** Not determined.

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**Evaporation rate:** Not determined.

· **Solubility in / Miscibility with Water:** Partly miscible.

· **Partition coefficient (n-octanol/water):** Not determined.

· **Viscosity**

**Dynamic:** Not determined.

**Kinematic at 40 °C (104 °F):** 39 mm<sup>2</sup>/s

· **Other information** No relevant information available.

## 10 Stability and reactivity

- **Reactivity:** No relevant information available.
- **Chemical stability:** Stable under normal temperatures and pressures.
- **Thermal decomposition / conditions to be avoided:**  
No decomposition if used and stored according to specifications.
- **Possibility of hazardous reactions**  
Reacts with strong alkali.  
Reacts with strong oxidizing agents.  
Toxic fumes may be released if heated above the decomposition point.
- **Conditions to avoid** Excessive heat.
- **Incompatible materials** Oxidizing agents
- **Hazardous decomposition products**

Under fire conditions only:

Carbon monoxide and carbon dioxide

Hydrocarbons

## 11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**
- **LD/LC50 values that are relevant for classification:** None.
- **Primary irritant effect:**
- **On the skin:**  
Causes mild skin irritation.  
Based on available data, the classification criteria are not met.
- **On the eye:** Irritating effect.
- **Sensitization:** Based on available data, the classification criteria are not met.

· **IARC (International Agency for Research on Cancer):**

None of the ingredients are listed.

· **NTP (National Toxicology Program):**

None of the ingredients are listed.

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· **OSHA-Ca (Occupational Safety & Health Administration):**

None of the ingredients are listed.

· **Probable route(s) of exposure:**

Ingestion.  
Inhalation.  
Eye contact.  
Skin contact.

- **Germ cell mutagenicity:** Based on available data, the classification criteria are not met.
- **Carcinogenicity:** Based on available data, the classification criteria are not met.
- **Reproductive toxicity:** Based on available data, the classification criteria are not met.
- **STOT-single exposure:** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure:** Based on available data, the classification criteria are not met.
- **Aspiration hazard:** Based on available data, the classification criteria are not met.

## 12 Ecological information

· **Toxicity**

- **Aquatic toxicity** No relevant information available.
- **Persistence and degradability** No relevant information available.
- **Bioaccumulative potential:** No relevant information available.
- **Mobility in soil:** No relevant information available.

· **Additional ecological information**

· **General notes:**

Due to available data on eliminability/decomposition and bioaccumulation potential, a prolonged damage of the environment is unlikely.

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

· **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No relevant information available.

## 13 Disposal considerations

· **Waste treatment methods**

· **Recommendation:**

The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes.

· **Uncleaned packagings**

- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

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## 14 Transport information

- |  |                 |
|--|-----------------|
| · <b>UN-Number</b><br>· DOT, ADR, IMDG, IATA                                     | Not regulated.  |
| · <b>UN proper shipping name</b><br>· DOT, ADR, IMDG, IATA                       | Not regulated.  |
| · <b>Transport hazard class(es)</b><br>· DOT, ADR, IMDG, IATA<br>· Class         | Not regulated.  |
| · <b>Packing group</b><br>· DOT, ADR, IMDG, IATA                                 | Not regulated.  |
| · <b>Environmental hazards</b><br>· Marine pollutant:                            | No              |
| · <b>Special precautions for user</b>  | Not applicable. |
| · <b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b> | Not applicable. |

## 15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
  - **United States (USA)**
  - **SARA**
- |  |                                     |
|--|-------------------------------------|
| · <b>Section 302 (extremely hazardous substances):</b>               | None of the ingredients are listed. |
| · <b>Section 355 (extremely hazardous substances):</b>               | None of the ingredients are listed. |
| · <b>Section 313 (Specific toxic chemical listings):</b>             | None of the ingredients are listed. |
| · <b>TSCA (Toxic Substances Control Act)</b>                         | All ingredients are listed.         |
| · <b>Proposition 65 (California)</b>                                 |                                     |
| · <b>Chemicals known to cause cancer:</b>                            | None of the ingredients are listed. |
| · <b>Chemicals known to cause reproductive toxicity for females:</b> | None of the ingredients are listed. |
| · <b>Chemicals known to cause reproductive toxicity for males:</b>   | None of the ingredients are listed. |

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· **Chemicals known to cause developmental toxicity:**

None of the ingredients are listed.

· **Carcinogenic categories**

· **EPA (Environmental Protection Agency):**

None of the ingredients are listed.

· **IARC (International Agency for Research on Cancer):**

None of the ingredients are listed.

· **NIOSH-Ca (National Institute for Occupational Safety and Health):**

None of the ingredients are listed.

· **Canadian Domestic Substances List (DSL):**

All ingredients are listed.

## 16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Date of preparation / last revision** June 01, 2017 / -

· **Abbreviations and acronyms:**

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

CAS: Chemical Abstracts Service (division of the American Chemical Society)

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bio-accumulable, Toxique

vPvB: very Persistent and very Bioaccumulative

NIOSH: l'Institut national de recherche sur la sécurité et la santé au travail / National Institute for Occupational Safety (États-Unis)

OSHA: Occupational Safety & Health Administration

Fam. Liq. 4: Flammable liquids – Category 4

Eye Irrit. 2B: Serious eye damage/eye irritation – Category 2B

· **Sources**

Website, European Chemicals Agency (echa.europa.eu)

Website, US EPA Substance Registry Services (ofmpub.epa.gov/sor internet/registry/substreg/home/overview/home.do)

Website, Chemical Abstracts Registry, American Chemical Society (www.cas.org)

Patty's Industrial Hygiene, 6th ed., Rose, Vernon, ed. ISBN: 978-0-470-07488-6

Casarett and Doull's Toxicology: The Basic Science of Poisons, 8th Ed., Klaasen, Curtis D., ed., ISBN: 978-0-07-176923-5.

Safety Data Sheets, Individual Manufacturers

SDS Prepared by:

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Website: www.chemtelinc.com



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## SAFETY DATA SHEET

### SECTION 1. IDENTIFICATION

**Product identifier used on the label**

: **Thurmalox 70C**

**Product Code(s)** : 70C

**Recommended use of the chemical and restrictions on use**

: Stainless Steel High Temperature Coating  
Use pattern: Professional Use Only  
Recommended restrictions: None Known.

**Chemical family** : Mixture.

**Name, address, and telephone number of the supplier:**

**Dampney Company, Inc.**

85 Paris Street  
Everett, Massachusetts, U.S.A.  
02149

Email: sales@dampney.com

Supplier's Telephone # : (617) 389-2805

**24 Hr. Emergency Tel #** : Chemtrec 1-800-424-9300 (Within Continental U.S.); Chemtrec 703-527-3887 (Outside U.S.).

**Name, address, and telephone number of the manufacturer:**

Refer to supplier

### SECTION 2. HAZARDS IDENTIFICATION

**Classification of the chemical**

Black liquid. Solvent odor.

This material is classified as hazardous under U.S. OSHA regulations (29CFR 1910.1200) (Hazcom 2012) and Canadian WHMIS regulations (Hazardous Products Regulations) (WHMIS 2015).

Classification:

Flammable Liquids - Category 2

Specific Target Organ Toxicity, Single Exposure -Category 3 (respiratory)

Specific Target Organ Toxicity, Single Exposure - Category 3 narcotic effects

Specific Target Organ Toxicity, Repeated Exposure - Category 2 (CNS)

Skin Irritation - Category 2

Carcinogen - Category 2

Reproductive Toxicity - Category 2

**Label elements**

*Hazard pictogram(s)*



*Signal Word*

DANGER!



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*Hazard statement(s)*

Highly flammable liquid and vapor.  
May cause respiratory irritation.  
May cause drowsiness and dizziness.  
May cause damage to organs through prolonged or repeated exposure.  
Causes skin irritation.  
Suspected of causing cancer.  
Suspected of damaging the unborn child.

*Precautionary statement(s)*

Obtain special instructions before use.  
Do not handle until all safety precautions have been read and understood.  
Keep away from heat/sparks/open flames/hot surfaces. - No smoking.  
Keep container tightly closed.  
Ground and bond container and receiving equipment.  
Use explosion-proof electrical/ventilating/lighting/equipment.  
Use only non-sparking tools.  
Take precautionary measures against static discharge.  
Do not breathe vapours or spray mist.  
Use only outdoors or in a well-ventilated area.  
Wash thoroughly after handling.  
Wear protective gloves/clothing and eye/face protection.

If exposed or concerned: Get medical attention/advice.  
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.  
If skin irritation occurs: Get medical advice/attention.  
Take off contaminated clothing and wash it before reuse.  
IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
Call a POISON CENTRE or doctor/physician if you feel unwell.  
In case of fire: Use alcohol-resistant foam, carbon dioxide or dry chemical to extinguish.

Store in a well-ventilated place. Keep container tightly closed. Keep cool. Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

**Other hazards**

No OSHA defined hazard classes.  
Other hazards which do not result in classification: May be sensitive to static discharge. Burning produces obnoxious and toxic fumes. Direct eye contact may cause slight or mild, transient irritation. Ingestion can cause gastrointestinal irritation, nausea, and diarrhea. Prolonged or repeated contact may cause drying, cracking and defatting of the skin.  
Environmental precautions: Avoid release to the environment. See ECOLOGICAL INFORMATION, Section 12.

### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixture

<u>Chemical name</u>	<u>Common name and synonyms</u>	<u>CAS #</u>	<u>Concentration (% by weight)</u>
<b>tert-Butyl acetate</b>	t-butyl acetate	540-88-5	<b>30.0 - 40.0</b>
<b>p-Chlorobenzotrifluoride</b>	Para-chlorobenzenetrifluoride	98-56-6	<b>20.0 - 30.0</b>
<b>Xylenes</b>	Dimethylbenzene Methyltoluene Xylol	1330-20-7	<b>5.0 - 10.0</b>
<b>Toluene</b>	Methylbenzene Phenylmethane	108-88-3	<b>3.0 - 7.0</b>
<b>n-Butyl alcohol</b>	n-Butanol 1-Hydroxybutane	71-36-3	<b>1.0 - 5.0</b>



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Ethylbenzene	Ethylbenzol Phenylethane	100-41-4	1.0 - 5.0
Iron manganese oxide ((Fe,Mn)2O3)	Manganese compounds	75864-23-2	1.0 - 5.0
Acetone	2-Propanone Methyl ketone	67-64-1	1.0 - 5.0

The exact concentrations of the above listed chemicals are being withheld as a trade secret.

### SECTION 4. FIRST-AID MEASURES

#### Description of first aid measures

- Ingestion* : IF SWALLOWED: Immediately call a POISON CENTRE or doctor/physician. Do NOT induce vomiting. Material is an aspiration hazard. Guard against aspiration into lungs by having the individual turn on their left side. If vomiting occurs spontaneously, keep victim's head lowered (forward) to reduce the risk of aspiration.
- Inhalation* : IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTRE or doctor/physician if you feel unwell.
- Skin contact* : IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
- Eye contact* : In case of eye contact, remove contact lens and rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention if irritation develops and persists.

#### Most important symptoms and effects, both acute and delayed

- : May cause respiratory irritation. Symptoms may include upper respiratory irritation, coughing and breathing difficulties. May cause drowsiness and dizziness. Symptoms may include pain, headache, nausea, vomiting, dizziness, drowsiness and other central nervous system effects. Causes skin irritation. Symptoms may include redness, itching and swelling. Direct eye contact may cause slight or mild, transient irritation. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Suspected of causing cancer.

#### Indication of any immediate medical attention and special treatment needed

- : Treat symptomatically. This product is a CNS depressant.

### SECTION 5. FIRE-FIGHTING MEASURES

#### Extinguishing media

##### *Suitable extinguishing media*

- : Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

##### *Unsuitable extinguishing media*

- : Do not use water jet, as this may spread burning material.

#### Special hazards arising from the substance or mixture / Conditions of flammability

- : Highly flammable liquid and vapor. Keep away from heat and flame. This product will accumulate static charge by flow, splashing or agitation. Vapors may travel considerable distance to a source of ignition and flash back. Vapours are heavier than air and collect in confined and low-lying areas. Product may float, and be re-ignited at the water's surface. Closed containers may rupture if exposed to excess heat or flame due to a build-up of internal pressure.

#### Flammability classification (OSHA 29 CFR 1910.106)

- : Flammable Liquids - Category 2

#### Hazardous combustion products

- : Carbon oxides ; Other unidentified organic compounds.

#### Special protective equipment and precautions for firefighters

##### *Protective equipment for fire-fighters*

- : Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA. Firefighters should wear proper protective equipment and self-contained breathing apparatus with full face piece operated in positive pressure mode.



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### Special fire-fighting procedures

- : Move containers from fire area if safe to do so. Use water spray to cool unopened containers. Avoid spreading burning liquid with water spray used for cooling purposes. Do not allow run-off from fire fighting to enter drains or water courses. Prevent fire extinguishing water from contaminating surface water or the ground water system. Dike for water control.

## SECTION 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions, protective equipment and emergency procedures

- : Immediately evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Avoid breathing vapour or mist. Restrict access to area until completion of clean-up. Remove all sources of ignition. All persons dealing with the clean-up should wear the appropriate personal protective equipment. For personal protection see section 8.

**Environmental precautions** : Avoid release to the environment. Avoid discharge into drains, water courses or onto the ground. For large spills, dike the area to prevent spreading.

### Methods and material for containment and cleaning up

- : Ventilate the area. Remove all sources of ignition. Prevent further leakage or spillage if safe to do so. Use only non-sparking tools. For spilled liquids: absorb spill with inert, non-combustible material such as sand, then place into suitable containers. Do not use combustible absorbents, such as sawdust. Bond and ground transfer containers and equipment to avoid static accumulation. Contaminated absorbent material may pose the same hazards as the spilled product. Pick up and transfer to properly labeled containers. Contact the proper local authorities.

### Special spill response procedures

- : In case of a transportation accident, in the United States contact CHEMTREC at 1-800-424-9300 or International at 1-703-527-3887.

EPA/CERCLA Reportable quantity (RQ):  
Xylene (100 lbs / 45.4 kg)  
Ethylbenzene (1000 lbs / 454 kg)  
Toluene (1000 lbs / 454 kg)  
Acetone and tert-butyl acetate (5000 lbs / 2270 kg)

## SECTION 7. HANDLING AND STORAGE

### Precautions for safe handling

- : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat and flame. Use only outdoors or in a well-ventilated area. Keep container tightly closed. Bond and ground transfer containers and equipment. Use explosion-proof electrical and ventilating equipment. Use non-sparking tools. Take precautionary measures against static discharge. Wear protective gloves and eye/face protection. Avoid breathing vapour or mist. Do not ingest. Avoid contact with skin, eyes and clothing. Avoid contact with incompatible materials. Encourage good housekeeping and personal hygiene.

**Conditions for safe storage** : Store in well-ventilated place. Keep cool. Store locked up. Keep container tightly closed. Store away from incompatibles and out of direct sunlight. Take measures to prevent the build up of electrostatic charge. Storage area should be clearly identified, clear of obstruction and accessible only to trained and authorized personnel. Inspect periodically for damage or leaks. No smoking in the area.

**Incompatible materials** : Strong oxidizers, acids and bases.



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**SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

<b>Exposure Limits:</b>				
<u>Chemical Name</u>	<u>ACGIH TLV</u>		<u>OSHA PEL</u>	
	<u>TWA</u>	<u>STEL</u>	<u>PEL</u>	<u>STEL</u>
tert-Butyl acetate	200 ppm	N/Av	200 ppm ; 950 mg/m <sup>3</sup>	N/Av
p-Chlorobenzotrifluoride	N/Av	N/Av	N/Av	N/Av
Xylenes	100 ppm	150 ppm	100 ppm (435 mg/m <sup>3</sup> )	N/Av
Toluene	20 ppm	N/Av	200 ppm	300 ppm (Ceiling)
n-Butyl alcohol	20 ppm	N/Av	100 ppm (300 mg/m <sup>3</sup> )	N/Av
Ethylbenzene	20 ppm	N/Av	100 ppm (435 mg/m <sup>3</sup> )	N/Av
Iron manganese oxide ((Fe,Mn)2O3)	N/Av	N/Av	N/Av	N/Av
Acetone	250 ppm	500 ppm	1000 ppm (2400 mg/m <sup>3</sup> )	N/Av

**Exposure controls**

**Ventilation and engineering measures**

: Use only outdoors or in a well-ventilated area. Apply technical measures to comply with the occupational exposure limits. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. Use explosion-proof equipment. In case of insufficient ventilation wear suitable respiratory equipment.

**Respiratory protection**

: If engineering controls and work practices are not effective in controlling exposure to this material, then wear suitable approved respiratory protection. If the TLV is exceeded, a NIOSH/MSHA-approved respirator is advised. Respirators should be selected based on the form and concentration of contaminants in air, and in accordance with OSHA (29 CFR 1910.134) or CSA Z94.4-02.

**Skin protection**

: Wear protective gloves. Where extensive exposure to product is possible, use resistant coveralls, apron and boots to prevent contact. The suitability for a specific workplace should be discussed with the producers of the protective gloves.

**Eye / face protection**

: Chemical splash goggles are recommended.

**Other protective equipment**

: Ensure that eyewash stations and safety showers are close to the workstation location. Other equipment may be required depending on workplace standards.

**General hygiene considerations**

: Avoid breathing vapour or mist. Avoid contact with skin, eyes and clothing. Do not eat, drink, smoke or use cosmetics while working with this product. Upon completion of work, wash hands before eating, drinking, smoking or use of toilet facilities. Remove and wash contaminated clothing before re-use. Do not take contaminated clothing home. Handle in accordance with good industrial hygiene and safety practice.

**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

- Appearance** : Black liquid.
- Odour** : Solvent odor.
- Odour threshold** : N/Av
- pH** : N/Av
- Melting/Freezing point** : N/Av
- Initial boiling point and boiling range** : 55-155°C (131-145°F)



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**Flash point** : -20 - 42.77°C (-4 - 109°F)  
**Flashpoint (Method)** : Closed cup  
**Evaporation rate (BuAe = 1)** : 0.887 times slower than n-Butyl acetate  
**Flammability (solid, gas)** : N/Ap  
**Lower flammable limit (% by vol.)**  
: N/Av  
**Upper flammable limit (% by vol.)**  
: N/Av  
**Oxidizing properties** : None known.  
**Explosive properties** : Not explosive  
**Vapour pressure** : N/Av  
**Vapour density** : >1  
**Relative density / Specific gravity**  
: 1.12832  
**Solubility in water** : N/Ap  
**Other solubility(ies)** : N/Av  
**Partition coefficient: n-octanol/water or Coefficient of water/oil distribution**  
: N/Av  
**Auto-ignition temperature** : N/Av  
**Decomposition temperature** : N/Av  
**Viscosity** : 300 cSt at 40°C  
**Volatiles (% by weight)** : 71.8%  
**Volatile organic Compounds (VOC's)**  
: 3.46lbs/gal  
**Absolute pressure of container**  
: N/Ap  
**Flame projection length** : N/Av  
**Other physical/chemical comments**  
: None reported by the manufacturer.

### SECTION 10. STABILITY AND REACTIVITY

**Reactivity** : Not normally reactive.  
**Chemical stability** : Stable under normal conditions.  
**Possibility of hazardous reactions**  
: Hazardous polymerization does not occur. May be sensitive to static discharge.  
**Conditions to avoid** : Keep away from heat, sparks and flame. Take precautionary measures against static discharge. Keep away from direct sunlight. Ensure adequate ventilation, especially in confined areas. Avoid contact with incompatible materials.  
**Incompatible materials** : Strong oxidizers, acids and bases.  
**Hazardous decomposition products**  
: See Section 5 (Fire Fighting Measures).

### SECTION 11. TOXICOLOGICAL INFORMATION

#### Information on likely routes of exposure:

**Routes of entry inhalation** : YES  
**Routes of entry skin & eye** : YES  
**Routes of entry Ingestion** : YES



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### Routes of exposure skin absorption

: NO

### Potential Health Effects:

#### Signs and symptoms of short-term (acute) exposure

##### *Sign and symptoms Inhalation*

: May cause respiratory irritation. Symptoms may include sore throat, running nose and shortness of breath. Inhalation may cause headache, nausea and central nervous effects such as dizziness, coordination difficulties and unconsciousness.

##### *Sign and symptoms ingestion*

: Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Causes symptoms similar to those listed for inhalation.

##### *Sign and symptoms skin*

: This material is classified as hazardous under U.S. OSHA regulations (29CFR 1910.1200) (Hazcom 2012) and Canadian WHMIS regulations (Hazardous Products Regulations) (WHMIS 2015). Classification: Skin Irritation - Category 2 Causes skin irritation. Symptoms may include mild redness and swelling.

##### *Sign and symptoms eyes*

: Direct eye contact may cause slight or mild, transient irritation.

#### Potential Chronic Health Effects

: Prolonged or repeated contact may cause drying, cracking and defatting of the skin.

#### Mutagenicity

: Not expected to be mutagenic in humans.

#### Carcinogenicity

: This material is classified as hazardous under U.S. OSHA regulations (29CFR 1910.1200) (Hazcom 2012) and Canadian WHMIS regulations (Hazardous Products Regulations) (WHMIS 2015). Classification: Carcinogenicity - Category 2 Suspected of causing cancer. Contains Ethylbenzene. Ethylbenzene is classified as carcinogenic by IARC (Group 2B) and ACGIH (Category A3).

#### Reproductive effects & Teratogenicity

: This material is classified as hazardous under U.S. OSHA regulations (29CFR 1910.1200) (Hazcom 2012) and Canadian WHMIS regulations (Hazardous Products Regulations) (WHMIS 2015). Classification: Reproductive Toxicity - Category 2 Suspected of damaging the unborn child.

#### Sensitization to material

: Not expected to be a skin or respiratory sensitizer.

#### Specific target organ effects

: Eyes, skin, respiratory system, digestive system, central nervous system.

This material is classified as hazardous under U.S. OSHA regulations (29CFR 1910.1200) (Hazcom 2012) and Canadian WHMIS regulations (Hazardous Products Regulations) (WHMIS 2015).

Classification:

Specific Target Organ Toxicity, Single Exposure -Category 3 (respiratory) May cause respiratory irritation.

Specific Target Organ Toxicity, Single Exposure - Category 3 narcotic effects May cause drowsiness and dizziness.

Specific Target Organ Toxicity, Repeated Exposure - Category 2 May cause damage to organs through prolonged or repeated exposure. Contains Toluene.

Toluene may cause damage to the brain and nervous system through prolonged or repeated exposure, if inhaled.

#### Medical conditions aggravated by overexposure

: Pre-existing skin, eye, respiratory and central nervous system disorders.

#### Synergistic materials

: None reported by the manufacturer.

#### Toxicological data

: There is no available data for the product itself, only for the ingredients. See below for individual ingredient acute toxicity data. See below for individual ingredient acute toxicity data.



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<u>Chemical name</u>	<u>LC<sub>50</sub>(4hr)</u> <u>inh, rat</u>	<u>LD<sub>50</sub></u>	
		<u>(Oral, rat)</u>	<u>(Rabbit, dermal)</u>
tert-Butyl acetate	>2230 mg/m <sup>3</sup>	4100 mg/kg	>2000 mg/kg
p-Chlorobenzotrifluoride	33 mg/L 4 h	13 g/kg	>2000 mg/kg
Xylenes	6350 ppm (27.6 mg/L) (vapours)	3253 mg/kg	12 180 mg/kg
Toluene	7585 ppm (28.1 mg/L) (vapour)	5580 mg/kg	12 125 mg/kg
n-Butyl alcohol	8000 ppm (24.3 mg/L) (vapour)	790 - 4360 mg/kg	3402 mg/kg
Ethylbenzene	4000 ppm (17.4 mg/L) (vapour)	3500 mg/kg	15 380 mg/kg
Iron manganese oxide ((Fe,Mn)2O3)	N/Av	N/Av	N/Av
Acetone	30 000 ppm (71 mg/L) (vapour)	5800 mg/kg	> 15 800 mg/kg

**Other important toxicological hazards**

: None known or reported by the manufacturer.

**SECTION 12. ECOLOGICAL INFORMATION**

**Ecotoxicity** : Contains material that may be harmful in the environment. Should not be released into the environment. See the following tables for the substance's ecotoxicity data.

**Ecotoxicity data:**

<u>Ingredients</u>	<u>CAS No</u>	<u>Toxicity to Fish</u>		
		<u>LC50 / 96h</u>	<u>NOEC / 21 day</u>	<u>M Factor</u>
tert-Butyl acetate	540-88-5	240 mg/L (Rainbow trout)	N/Av	N/Av
p-Chlorobenzotrifluoride	98-56-6	3 mg/L (Danio rerio)	N/Av	None.
Xylenes	1330-20-7	8.2 mg/L (Rainbow trout)	N/Av	None.
Toluene	108-88-3	5.4 mg/L (pink salmon)	1.4 - 4.0 mg/L	None.
n-Butyl alcohol	71-36-3	1376 mg/L (Fathead minnow)	N/Av	None.
Ethylbenzene	100-41-4	4.2 mg/L (Rainbow trout)	1.13 mg/L/30 days	None.
Iron manganese oxide ((Fe,Mn)2O3)	75864-23-2	N/Av	N/Av	None.
Acetone	67-64-1	6210 mg/L (Fathead minnow)	N/Av	None.



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<u>Ingredients</u>	CAS No	Toxicity to Daphnia		
		EC50 / 48h	NOEC / 21 day	M Factor
tert-Butyl acetate	540-88-5	340 mg/L (Daphnia magna)	N/Av	None.
p-Chlorobenzotrifluoride	98-56-6	2mg/L (Daphnia magna)	N/Av	None.
Xylenes	1330-20-7	3.2 - 9.56 mg/L (Daphnia magna)	N/Av	None.
Toluene	108-88-3	3.78 mg/L Ceriodaphnia (water flea)	0.53 - 1 mg/L	None.
n-Butyl alcohol	71-36-3	1328 mg/L (Daphnia magna)	4.1 mg/L	None.
Ethylbenzene	100-41-4	1.81 mg/L (Daphnia magna)	N/Av	None.
Iron manganese oxide ((Fe,Mn)2O3)	75864-23-2	N/Av	N/Av	None.
Acetone	67-64-1	15 800 mg/L (Daphnia magna)	1660 mg/L	None.

<u>Ingredients</u>	CAS No	Toxicity to Algae		
		EC50 / 96h or 72h	NOEC / 96h or 72h	M Factor
tert-Butyl acetate	540-88-5	16 mg/L (Green algae)	2.3 mg/L (Green algae)	None.
p-Chlorobenzotrifluoride	98-56-6	>0.41mg/L (Green algae)	0.41 mg/L (Green algae)	None.
Xylenes	1330-20-7	3.2 - 4.9 mg/L/72hr (Green algae)	N/Av	None.
Toluene	108-88-3	N/Av	10 mg/L/72hr (Green algae)	None.
n-Butyl alcohol	71-36-3	225 mg/L/96hr (Green algae)	129 mg/L/96hr	None.
Ethylbenzene	100-41-4	3.6 mg/L/96hr (Green algae)	3.4 mg/L/96hr	None.
Iron manganese oxide ((Fe,Mn)2O3)	75864-23-2	N/Av	N/Av	None.
Acetone	67-64-1	7000 mg/L/96hr (Green algae)	N/Av	None.

**Persistence and degradability**

: No data is available on the product itself.

**Bioaccumulation potential**

: No data is available on the product itself.



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Components	Partition coefficient n-octanol/water (log Kow)	Bioconcentration factor (BCF)
tert-Butyl acetate (CAS 540-88-5)	1.38	7
p-Chlorobenzotrifluoride (CAS 98-56-6)	3.7 at 25 °C	121-202
Xylenes (CAS 1330-20-7)	3.12 - 3.2	0.6 - 15
Toluene (CAS 108-88-3)	2.65	90
n-Butyl alcohol (CAS 71-36-3)	0.88	0.64 species: freshwater fish
Ethylbenzene (CAS 100-41-4)	3.15	15 species: fish
Iron manganese oxide ((Fe,Mn)2O3) (CAS 75864-23-2)	N/Ap	N/Ap
Acetone (CAS 67-64-1)	0.24	0.69 species: fish

**Mobility in soil** : No data is available on the product itself.

**Other Adverse Environmental effects**

: None known or reported by the manufacturer.




#### SECTION 13. DISPOSAL CONSIDERATIONS

**Handling for Disposal** : Handle in accordance with good industrial hygiene and safety practice. Refer to protective measures listed in sections 7 and 8.

**Methods of Disposal** : Dispose in accordance with all applicable regulations.

**RCRA** : If this product, as supplied, becomes a waste in the United States, it may meet the criteria of a hazardous waste as defined under RCRA, Title 40 CFR 261. It is the responsibility of the waste generator to determine the proper waste identification and disposal method. For disposal of unused or waste material, check with local, state and federal environmental agencies.

#### SECTION 14. TRANSPORTATION INFORMATION

Regulatory Information	UN Number	UN proper shipping name	Transport hazard class(es)	Packing Group	Label
49CFR/DOT	UN1263	Paint	3	II	
<b>49CFR/DOT Additional information</b>	When transported as a limited quantity the maximum net capacity specified in 173.150(b)(2) of the subchapter 49CFR for inner packagings may be increased to 5L (1.3 gallons) 172.102(C)(1)(149) special provision 149.				
TDG	UN1263	Paint	3	II	
<b>TDG Additional information</b>	May be shipped as a Limited Quantity when transported in containers no larger than 5 L (1.3 gallons); in packages not exceeding 30 kg (66 pounds) gross mass.				
IMDG	UN1263	PAINT	3	II	
<b>IMDG Additional information</b>	May be shipped as a Limited Quantity when transported in containers no larger than 5 L (1.3 gallons); in packages not exceeding 30 kg (66 pounds) gross mass.				



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ICAO/IATA	UN1263	Paint	3	II	
<b>ICAO/IATA Additional information</b>	Refer to ICAO/IATA Packing Instruction.				

**Special precautions for user** : Keep away from heat, sparks and open flame. - No smoking.

**Environmental hazards** : See ECOLOGICAL INFORMATION, Section 12.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

: Not available.

### SECTION 15 - REGULATORY INFORMATION

**US Federal Information:**

Components listed below are present on the following U.S. Federal chemical lists:

<u>Ingredients</u>	<u>CAS #</u>	<u>TSCA Inventory</u>	<u>CERCLA Reportable Quantity(RQ) (40 CFR 117.302):</u>	<u>SARA TITLE III: Sec. 302, Extremely Hazardous Substance, 40 CFR 355:</u>	<u>SARA TITLE III: Sec. 313, 40 CFR 372, Specific Toxic Chemical</u>	
					<u>Toxic Chemical</u>	<u>de minimus Concentration</u>
tert-Butyl acetate	540-88-5	Yes	5000 lb final RQ (listed under Butyl acetate); 2270 kg final RQ (listed under Butyl acetate)	N/Av	No	N/Ap
p-Chlorobenzotrifluoride	98-56-6	Yes	N/Ap	N/Av	No	N/Ap
Xylenes	1330-20-7	Yes	100 lb/ 45.4 kg	None.	Yes	1%
Toluene	108-88-3	Yes	1000 lb/ 454 kg	None.	Yes	1%
n-Butyl alcohol	71-36-3	Yes	5000 lb/ 2270 kg	None.	Yes	1%
Ethylbenzene	100-41-4	Yes	1000 lb/ 454 kg	None.	Yes	0.1%
Iron manganese oxide ((Fe,Mn)2O3)	75864-23-2	Yes	N/Ap	N/Av	No	N/Ap
Acetone	67-64-1	Yes	5000 lb/ 2270 kg	None.	No	N/Ap

SARA TITLE III: Sec. 311 and 312, SDS Requirements, 40 CFR 370 Hazard Classes: Fire Hazard; Acute Health Hazard; Chronic Health Hazard. Under SARA Sections 311 and 312, the EPA has established threshold quantities for the reporting of hazardous chemicals. The current thresholds are 500 pounds for the threshold planning quantity (TPQ), whichever is lower, for extremely hazardous substances and 10,000 pounds for all other hazardous chemicals.

**US State Right to Know Laws:**

The following chemicals are specifically listed by individual States:



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<u>Ingredients</u>	CAS #	California Proposition 65		State "Right to Know" Lists					
		Listed	Type of Toxicity	CA	MA	MN	NJ	PA	RI
tert-Butyl acetate	540-88-5	No	N/Ap	Yes	Yes	Yes	Yes	Yes	Yes
p-Chlorobenzotrifluoride	98-56-6	No	N/Ap	No	No	No	No	No	No
Xylenes	1330-20-7	No	N/Ap	Yes	Yes	Yes	Yes	Yes	Yes
Toluene	108-88-3	No	Developmental	Yes	Yes	Yes	Yes	Yes	Yes
n-Butyl alcohol	71-36-3	No	N/Ap	Yes	Yes	Yes	Yes	Yes	Yes
Ethylbenzene	100-41-4	Yes	Cancer	Yes	Yes	Yes	Yes	Yes	Yes
Iron manganese oxide ((Fe,Mn)2O3)	75864-23-2	No	N/Ap	No	No	No	No	No	No
Acetone	67-64-1	No	N/Ap	Yes	Yes	Yes	Yes	Yes	Yes

**Canadian Information:**

Canadian Environmental Protection Act (CEPA) information: All ingredients listed appear on the Domestic Substances List (DSL).

WHMIS Classification: See Section 2.

**International Information:**

Components listed below are present on the following International Inventory list:

<u>Ingredients</u>	CAS #	European EINECS	Australia AICS	Philippines PICCS	Japan ENCS	Korea KECI/KECL	China IECSC	NewZealand IOC
tert-Butyl acetate	540-88-5	208-760-7	Present	Present	(2)-735; (2)-731	KE-04180	Present	HSR001094
p-Chlorobenzotrifluoride	98-56-6	202-681-1	Present	Present	(3)-53	KE-05928	Present	HSR005269 (dilution)
Xylenes	1330-20-7	215-535-7	Present	Present	(3)-60; (3)-3	KE-35427	Present	HSR000983
Toluene	108-88-3	203-625-9	Present	Present	(3)-2	KE-33936	Present	HSR001227
n-Butyl alcohol	71-36-3	200-751-6	Present	Present	(2)-3049	KE-03867	Present	HSR001096
Ethylbenzene	100-41-4	202-849-4	Present	Present	(3)-60; (3)-28	KE-13532	Present	HSR001151
Iron manganese oxide ((Fe,Mn)2O3)	75864-23-2	No data available.	No data available.	No data available.	No data available.	No data available.	No data available.	No data available.
Acetone	67-64-1	200-662-2	Present	Present	(2)-542	KE-29367	Present	HSR001070

**SECTION 16. OTHER INFORMATION**

**Legend**

- : ACGIH: American Conference of Governmental Industrial Hygienists
- AICS: Australian Inventory of Chemical Substances
- CA: California
- CAS: Chemical Abstract Services
- CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act of 1980
- CFR: Code of Federal Regulations
- CSA: Canadian Standards Association
- DOT: Department of Transportation
- EC50: Effective Concentration 50%.
- EINECS: European Inventory of Existing Commercial chemical Substances
- ENCS: Existing and New Chemical Substances



Dampney Company, Inc.  
 85 Paris Street  
 Everett, Massachusetts, U.S.A.02149  
 Email: sales@dampney.com  
 Telephone: (617) 389 2805

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EPA: Environmental Protection Agency  
 HMIS: Hazardous Materials Identification System  
 HSDB: Hazardous Substances Data Bank  
 IARC: International Agency for Research on Cancer  
 IECSC: Inventory of Existing Chemical Substances  
 IMDG: International Maritime Dangerous Goods  
 Inh: Inhalation  
 KECI: Korean Existing Chemicals Inventory  
 KECL: Korean Existing Chemicals List  
 LC: Lethal Concentration  
 LD: Lethal Dose  
 N/Ap: Not Applicable  
 N/Av: Not Available  
 NFPA: National Fire Protection Association  
 NJ: New Jersey  
 NIOSH: National Institute of Occupational Safety and Health  
 NOEC: No observable effect concentration  
 NTP: National Toxicology Program  
 OECD: Organisation for Economic Co-operation and Development  
 OSHA: Occupational Safety and Health Administration  
 PA: Pennsylvania  
 PEL: Permissible exposure limit  
 PICCS: Philippine Inventory of Chemicals and Chemical Substances  
 RCRA: Resource Conservation and Recovery Act  
 RTECS: Registry of Toxic Effects of Chemical Substances  
 SARA: Superfund Amendments and Reauthorization Act  
 STEL: Short Term Exposure Limit  
 TDG: Canadian Transportation of Dangerous Goods Act & Regulations  
 TLV: Threshold Limit Values  
 TPQ: Threshold Planning Quantity  
 TSCA: Toxic Substance Control Act  
 TWA: Time Weighted Average  
 WHMIS: Workplace Hazardous Materials Identification System

**References** : Canadian Centre for Occupational Health and Safety, CCHInfoWeb databases, 2015 (Chempendium, RTECs, HSDB, INCHEM).  
 OECD- The Global Portal to Information on Chemical Substances - eChemPortal, 2015  
 European Chemicals Agency, Classification Legislation, 2015  
 Material Safety Data Sheet from manufacturer.

**Preparation Date (mm/dd/yyyy)**

: 02/15/2016

**Other special considerations for handling**

: Provide adequate information, instruction and training for operators.

<p><b>Prepared for:</b>          Dampney Company, Inc.          85 Paris Street          Everett MA 02149 U.S.A          Telephone: (617) 389-2805          Please direct all inquiries to Dampney Company.</p>	
<p><b>Prepared by:</b>          ICC The Compliance Center Inc.          Telephone: (888) 442-9628 (U.S.): (888) 977-4834 (Canada)  <a href="http://www.thecompliancecenter.com">http://www.thecompliancecenter.com</a></p>	



Dampney Company, Inc.  
85 Paris Street  
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## **SAFETY DATA SHEET**

### **DISCLAIMER**

This Safety Data Sheet was prepared by ICC The Compliance Center Inc using information provided by / obtained from Dampney Company, Inc and CCOHS' Web Information Service. The information in the Safety Data Sheet is offered for your consideration and guidance when exposed to this product. ICC The Compliance Center Inc and Dampney Company, Inc expressly disclaim all expressed or implied warranties and assume no responsibilities for the accuracy or completeness of the data contained herein. The data in this SDS does not apply to use with any other product or in any other process.

This Safety Data Sheet may not be changed, or altered in any way without the expressed knowledge and permission of ICC The Compliance Center Inc and Dampney Company, Inc.

**END OF DOCUMENT**



# Material Safety Data Sheet

## 1 - Chemical Product and Company Identification

<b>Manufacturer:</b> Shanghai Wu Di Trading Co., Ltd. (WD-40 Company China) <b>Address:</b> Level 4&5 Building 5, 1199 Jidi Rd, Minhang Shanghai <b>Post code:</b> 201107 <b>Telephone:</b> 021-62964040 <b>Fax:</b> 021-52960140	<b>Chemical Name:</b> Organic Mixture <b>Trade Name:</b> WD-40 Bulk Liquid <b>Product Use:</b> Lubricant, Penetrant, Drives Out Moisture, Removes and Protects Surfaces From Corrosion <b>MSDS Date Of Preparation:</b> 01/06/12
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## 2 – Hazards Identification

<b>Emergency Overview:</b> <b>DANGER!</b> Harmful or fatal if swallowed. Flammable Liquid. If swallowed, may be aspirated and cause lung damage. May cause eye irritation. Avoid eye contact. Use with adequate ventilation. Keep away from heat, sparks and all other sources of ignition.  <b>Symptoms of Overexposure:</b> <b>Inhalation:</b> High concentrations may cause nasal and respiratory irritation and central nervous system effects such as headache, dizziness and nausea. Intentional abuse may be harmful or fatal. <b>Skin Contact:</b> Prolonged and/or repeated contact may produce mild irritation and defatting with possible dermatitis. <b>Eye Contact:</b> Contact may be irritating to eyes. May cause redness and tearing. <b>Ingestion:</b> This product has low oral toxicity. Swallowing may cause gastrointestinal irritation, nausea, vomiting and diarrhea. This product is an aspiration hazard. If swallowed, can enter the lungs and may cause chemical pneumonitis, severe lung damage and death. <b>Chronic Effects:</b> None expected. <b>Medical Conditions Aggravated by Exposure:</b> Preexisting eye, skin and respiratory conditions may be aggravated by exposure.  <b>Suspected Cancer Agent:</b> Yes    No X
--

## 3 - Composition/Information on Ingredients

Ingredient	CAS #	Weight Percent
Aliphatic Hydrocarbon	64742-47-8	<70
Petroleum Base Oil	64742-53-6 64742-56-9 64742-65-0	<25
Non-Hazardous Rust Inhibitors	Mixture	<10
Non-Hazardous Lubricants	Mixture	<10
Fragrance	Mixture	<1

See Section 8 for Exposure Limits

## 4 – First Aid Measures

<b>Ingestion (Swallowed):</b> Aspiration Hazard. DO NOT induce vomiting. Call physician, poison control center or the WD-40 Safety Hotline at 1-888-324-7596 immediately. <b>Eye Contact:</b> Flush thoroughly with water. Remove contact lenses if present after the first 5 minutes and continue flushing for several more minutes. Get medical attention if irritation persists.
--



**Skin Contact:** Wash with soap and water. If irritation develops and persists, get medical attention.  
**Inhalation (Breathing):** If irritation is experienced, move to fresh air. Get medical attention if irritation or other symptoms develop and persist.

### 5 – Fire Fighting Measures

**Extinguishing Media:** Use water fog, dry chemical, carbon dioxide or foam. Do not use water jet or flooding amounts of water. Burning product will float on the surface and spread fire.  
**Special Fire Fighting Procedures:** Firefighters should always wear positive pressure self-contained breathing apparatus and full protective clothing. Cool fire-exposed containers with water.  
**Unusual Fire and Explosion Hazards:** Flammable liquid and vapor. Vapors are heavier than air and may travel along surfaces to remote ignition sources and flash back.

### 6 – Accidental Release Measures

Wear appropriate protective clothing (see Section 8). Eliminate all sources of ignition and ventilate area. Contain and collect liquid with an inert absorbent and place in a container for disposal. Clean spill area thoroughly. Report spills to authorities as required.

### 7 – Handling and Storage

**Handling:** Avoid contact with eyes. Avoid prolonged contact with skin. Avoid breathing vapors or aerosols. Use with adequate ventilation. Keep away from heat, sparks, hot surfaces and open flames. Wash thoroughly with soap and water after handling. Keep containers closed when not in use. Keep out of the reach of children.  
**Storage:** Store in a cool, well-ventilated area, away from incompatible materials. NFPA 30 Class II Liquid.

### 8 – Exposure Controls/Personal Protection

Chemical	Occupational Exposure Limits
Aliphatic Hydrocarbon	1200 mg/m <sup>3</sup> TWA (manufacturer recommended)
Petroleum Base Oil	5 mg/m <sup>3</sup> (inhalable) TWA ACGIH TLV 5 mg/m <sup>3</sup> TWA OSHA PEL
Non-Hazardous Rust Inhibitors	None Established
Non-Hazardous Lubricant	None Established
Fragrance	None Established

#### The Following Controls are Recommended for Normal Consumer Use of this Product

**Engineering Controls:** Use in a well-ventilated area.

**Personal Protection:**

**Eye Protection:** Avoid eye contact. Safety glasses or goggles recommended.

**Skin Protection:** Avoid prolonged skin contact. Chemical resistant gloves recommended for operations where skin contact is likely.

**Respiratory Protection:** None needed for normal use with adequate ventilation.

#### For Bulk Processing or Workplace Use the Following Controls are Recommended

**Engineering Controls:** Use adequate general and local exhaust ventilation to maintain exposure levels below that occupational exposure limits.

**Personal Protection:**

**Eye Protection:** Safety goggles recommended where eye contact is possible.

**Skin Protection:** Wear chemical resistant gloves.

**Respiratory Protection:** None required if ventilation is adequate. If the occupational exposure limits are exceeded, wear a NIOSH approved respirator. Respirator selection and use should be based on contaminant type, form and concentration. Follow OSHA 1910.134, ANSI Z88.2 and good Industrial Hygiene practice.

**Work/Hygiene Practices:** Wash with soap and water after handling.

## 9 – Physical and Chemical Properties

Boiling Point:	300°F (150°C)	Specific Gravity:	0.79 – 0.82 @ 25°C
Solubility in Water:	Insoluble	pH:	Not Applicable
Vapor Pressure:	0.27kPa @20°C (68°F)	Vapor Density:	Greater than 1
Percent Volatile:	67%	VOC:	67%
Coefficient of Water/Oil Distribution:	Not Determined	Appearance/Odor	Light amber liquid/mild odor
Flash Point:	113°F (45°C) Closed cup	Flammable Limits: (Solvent Portion)	LEL: 0.6% UEL: 8.0%

## 10 – Stability and Reactivity

**Stability:** Stable

**Hazardous Polymerization:** Will not occur.

**Conditions to Avoid:** Avoid heat, sparks, flames and other sources of ignition.

**Incompatibilities:** Strong oxidizing agents.

**Hazardous Decomposition Products:** Carbon monoxide and carbon dioxide.

## 11 – Toxicological Information

The oral toxicity of this product is estimated to be greater than 5,000 mg/kg based on an assessment of the ingredients. This product is not classified as toxic by established criteria. It is an aspiration hazard.

None of the components of this product is listed as a carcinogen or suspected carcinogen or is considered a reproductive hazard.

## 12 – Ecological Information

No data is currently available.

## 13 - Disposal Considerations

If this product becomes a waste, it would be expected to meet the criteria of a RCRA ignitable hazardous waste (D001). However, it is the responsibility of the generator to determine at the time of disposal the proper classification and method of disposal. Dispose in accordance with federal, state, and local regulations.

## 14 – Transportation Information

DOT Surface Shipping Description: Excepted from Hazmat (49CFR 173.150 (F)) in non-bulk packagings. Bulk Packagings: NA1993, Combustible Liquid, n.o.s. (contains Petroleum Distillates), PG III  
IMDG Shipping Description: UN1268, Petroleum Distillates, n.o.s. 3, PG III

## 15 – Regulatory Information

**China Regulations on the Control over Safety of Dangerous Chemicals:** This product matches this regulation. All ingredients in this product has listed in IECSC( Inventory of Existing Chemical Substances in China 2010)

## 16 – Other Information:

**HMIS Hazard Rating:**

**Health – 1 (slight hazard), Fire Hazard – 2 (moderate hazard), Reactivity – 0 (minimal hazard)**

SIGNATURE:  TITLE: Director of Global Consumer Relations and Regulatory Affairs

REVISION DATE: January 2012

SUPERSEDES: June 2010




# Safety Data Sheet

## 1 - Chemical Product and Company Identification

<b>Manufacturer:</b> WD-40 Company <b>Address:</b> 9715 Businesspark Ave San Diego, CA , USA <b>Post code:</b> 92131 <b>Telephone:</b> +1-800-448-9340 +1-858-251-5600  <b>24 Hour Emergency Phone Number:</b> 1-888-324-7596 (PROSAR) <b>Chemical Spills:</b> 1-800-424-9300 (Chemtrec) 1-703-527-3887 (International Calls)	<b>Chemical Name:</b> Organic Mixture  <b>Trade Name:</b> WD-40 Bulk Liquid  <b>Product Use:</b> Lubricant, Penetrant, Drives Out Moisture, Removes and Protects Surfaces From Corrosion  <b>SDS Date Of Preparation:</b> April 12, 2018
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## 2 – Hazards Identification

<b>GHS Classification:</b> Flammable Liquid Category 4 Aspiration Toxicity Category 1    <b>DANGER!</b> H227 Combustible liquid H304 May be fatal if swallowed and enters airways. <b>Prevention</b> P210 Keep away from flames and hot surfaces. No smoking. P280 Wear protective gloves. <b>Response</b> P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor. P331 Do NOT induce vomiting. P370+P378 In case of fire: Use water fog, dry chemical, carbon dioxide or foam to extinguish. <b>Storage</b> P403+P235 Store in a well-ventilated place. Keep cool. P405 Store locked up. <b>Disposal</b> P501 Dispose of contents and container in accordance with local and national regulations.
---

## 3 - Composition/Information on Ingredients

Ingredient	CAS #	Weight Percent	GHS Classification
Distillates (petroleum), hydrotreated light	64742-47-8	50-70	Flammable Liquid Category 4 Aspiration Toxicity Category 1
Non-Hazardous Ingredients	Mixture	30-50	Not Hazardous

#### 4 – First Aid Measures

**Ingestion (Swallowed):** Aspiration Hazard. DO NOT induce vomiting. Call physician, poison control center or the WD-40 Safety Hotline at 1-888-324-7596 immediately. 24 hours Hotline of Emergency Service for Chemical Incident in China: 0532-83889090.

**Eye Contact:** Flush thoroughly with water. Remove contact lenses if present after the first 5 minutes and continue flushing for several more minutes. Get medical attention if irritation persists.

**Skin Contact:** Wash with soap and water. If irritation develops and persists, get medical attention.

**Inhalation (Breathing):** If irritation is experienced, move to fresh air. Get medical attention if irritation or other symptoms develop and persist.

**Most Important Symptoms (acute and delayed):** May cause eye irritation. Skin contact may cause drying of the skin. Inhalation of mists may cause coughing, headache and dizziness. Harmful or fatal if swallowed. If swallowed, may be aspirated and cause lung damage.

**Indication of Immediate Medical Attention or Special Treatment:** Immediate medical attention is required for ingestion.

#### 5 – Fire Fighting Measures

**Extinguishing Media:** Use water fog, dry chemical, carbon dioxide or foam. Do not use water jet or flooding amounts of water. Burning product will float on the surface and spread fire.

**Special Fire Fighting Procedures:** Firefighters should always wear positive pressure self-contained breathing apparatus and full protective clothing. Cool fire-exposed containers with water.

**Unusual Fire and Explosion Hazards:** Combustible liquid. Vapors are heavier than air and may travel along surfaces to remote ignition sources and flash back. A vapor and air mixture can create an explosion hazard in confined spaces.

#### 6 – Accidental Release Measures

**Personal Precautions, Protective Equipment and Emergency Procedures:** Eliminate all sources of ignition and ventilate area. Wear appropriate protective clothing (see Section 8).

**Environmental Precautions:** Report spills to authorities as required.

**Methods and Materials for Containment/Cleanup:** Contain and collect liquid with an inert absorbent and place in a container for disposal. Clean spill area thoroughly. Report spills to authorities as required.

#### 7 – Handling and Storage

**Precautions for Safe Handling:** Avoid contact with eyes. Avoid prolonged contact with skin. Avoid breathing vapors or mists. Use with adequate ventilation. Keep away from heat, sparks, hot surfaces and open flames. Wash thoroughly with soap and water after handling. Keep containers closed when not in use. Keep out of the reach of children.

**Conditions for Safe Storage, including any incompatibilities:** Store in a cool, well-ventilated area, away from incompatible materials. NFPA 30 Class IIIA Liquid.

#### 8 – Exposure Controls/Personal Protection

Chemical	Occupational Exposure Limits
Distillates (petroleum), hydrotreated light	1200 mg/m <sup>3</sup> TWA (manufacturer recommended)
Non-Hazardous Ingredients	None Established

#### The Following Controls are Recommended for Normal Consumer Use of this Product

**Engineering Controls:** Use in a well-ventilated area.

**Personal Protection:**

**Eye Protection:** Avoid eye contact. Safety glasses or goggles recommended.

**Skin Protection:** Avoid prolonged skin contact. Chemical resistant gloves recommended for operations where skin contact is likely.

**Respiratory Protection:** None needed for normal use with adequate ventilation.

#### For Bulk Processing or Workplace Use the Following Controls are Recommended

**Engineering Controls:** Use adequate general and local exhaust ventilation to maintain exposure levels below that occupational exposure limits.

**Personal Protection:****Eye Protection:** Safety goggles recommended where eye contact is possible.**Skin Protection:** Wear chemical resistant gloves.**Respiratory Protection:** None required if ventilation is adequate. If the occupational exposure limits are exceeded, wear a NIOSH approved respirator. Respirator selection and use should be based on contaminant type, form and concentration. Follow OSHA 1910.134, ANSI Z88.2 and good Industrial Hygiene practice.**Work/Hygiene Practices:** Wash with soap and water after handling.**9 – Physical and Chemical Properties**

Appearance:	Light amber liquid	Flammable Limits:	LEL: 0.6% UEL: 5.0% (Distillates (petroleum), hydrotreated light)
Odor:	Mild petroleum odor	Vapor Pressure:	0.023 kPa @ 20°C
Odor Threshold:	Not established	Vapor Density:	6.2
pH:	Not established	Relative Density:	Not established
Melting/Freezing Point:	Not established	Solubility(ies):	Insoluble in water
Boiling Point/Range:	147-663°C	Partition Coefficient; n-octanol/water:	Not established
Flash Point:	175°F (79.5°C)	Auto ignition Temperature:	239°C
Evaporation Rate:	Not established	Decomposition Temperature:	Not established
Flammability (solid, gas):	Not applicable	Viscosity:	3.72 mm <sup>2</sup> /sec@40°C
VOC:	65%	Pour Point:	-42°C

**10 – Stability and Reactivity****Reactivity:** Not reactive under normal conditions**Chemical Stability:** Stable**Possibility of Hazardous Reactions:** Hazardous polymerization will not occur.**Conditions to Avoid:** Avoid heat, sparks, flames and other sources of ignition.**Incompatible Materials:** Strong oxidizing agents.**Hazardous Decomposition Products:** Carbon monoxide and carbon dioxide.**11 – Toxicological Information****Symptoms of Overexposure:****Inhalation:** High concentrations may cause nasal and respiratory irritation and central nervous system effects such as headache, dizziness and nausea. Intentional abuse may be harmful or fatal.**Skin Contact:** Prolonged and/or repeated contact may produce mild irritation and defatting with possible dermatitis.**Eye Contact:** Contact may be irritating to eyes. May cause redness and tearing.**Ingestion:** This product has low oral toxicity. Swallowing may cause gastrointestinal irritation, nausea, vomiting and diarrhea. This product is an aspiration hazard. If swallowed, can enter the lungs and may cause chemical pneumonitis, severe lung damage and death.**Chronic Effects:** None expected.**Carcinogen Status:** None of the components are listed as a carcinogen or suspect carcinogen by IARC, NTP, ACGIH or OSHA.**Reproductive Toxicity:** None of the components is considered a reproductive hazard.**Numerical Measures of Toxicity:**

Acute Toxicity Estimates: Oral &gt; 5,000 mg/kg; Dermal &gt;2,000 mg/kg based on an assessment of the ingredients. This product is not classified as toxic by established criteria. It is an aspiration hazard.

**12 – Ecological Information****Ecotoxicity:** No specific aquatic toxicity data is currently available; however components of this product are not expected to be harmful to aquatic organisms. If applied to leaves may kill grasses and small plants by

interfering with respiration and transpiration. This product is not toxic to fish but may coat gill structures resulting in suffocation.

**Persistence and Degradability:** Components are expected to be biodegradable.

**Bioaccumulative Potential:** Bioaccumulation is not expected based on an assessment of the ingredients.

**Mobility in Soil:** No data available.

**Other Adverse Effects:** None Known

### 13 - Disposal Considerations

It is the responsibility of the generator to determine at the time of disposal the proper classification and method of disposal. Dispose in accordance with federal, state, and local regulations.

### 14 – Transportation Information

IMDG Shipping Description: Not Regulated

ICAO Shipping Description: Not Regulated

NOTE: WD-40 Company does not test containers to assure that they can withstand the pressure change without leakage when transported by air. We do not recommend that our products be transported by air unless a specific review is conducted.

### 15 – Regulatory Information

**China Regulations on the Control over Safety of Dangerous Chemicals:** All ingredients in this product are listed in IECSC (Inventory of Existing Chemical Substances in China 2010).

### 16 – Other Information

**Indication of changes;** version 1.0

**Training instructions:** Not applicable

**Further information:** The information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.

**Notice to Reader:** Employers should use this information only as a supplement to other information gathered by them, and should make independent judgment of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.

Revision Date: April 12, 2018

Supersedes: December 27, 2017

Prepared by: Industrial Health & Safety Consultants, Inc. Shelton, CT, USA



# GHS SAFETY DATA SHEET

WELD-ON® 714™ Low VOC Cement for CPVC Plastic Pipe

Date Revised: NOV 2018  
Supersedes: OCT 2018

## SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** WELD-ON® 714™ Low VOC Cement for CPVC Plastic Pipe  
**PRODUCT USE:** Low VOC Solvent Cement for CPVC Plastic Pipe  
**SUPPLIER:**  
**MANUFACTURER:** IPS Corporation  
 17109 South Main Street, Gardena, CA 90248-3127  
 P.O. Box 379, Gardena, CA 90247-0379  
 Tel. 1-310-898-3300

**EMERGENCY:** Transportation: CHEMTEL Tel. 800.255-3924, +1 813-248-0585 (International) **Medical:** CHEMTEL Tel. 800.255-3924, +1 813-248-0585 (International)

## SECTION 2 - HAZARDS IDENTIFICATION

### GHS CLASSIFICATION:

Health		Environmental		Physical	
Acute Toxicity:	Category 4	Acute Toxicity:	None Known	Flammable Liquid	Category 2
Skin Irritation:	Category 3	Chronic Toxicity:	None Known		
Skin Sensitization:	NO				
Eye:	Category 2				

### GHS LABEL:



**Signal Word:**  
Danger

**WHMIS CLASSIFICATION:** CLASS B, DIVISION 2  
CLASS D, DIVISION 2B

Hazard Statements	Precautionary Statements
H225: Highly flammable liquid and vapor H319: Causes serious eye irritation H332: Harmful if inhaled H335: May cause respiratory irritation H336: May cause drowsiness or dizziness H351: Suspected of causing cancer EUH019: May form explosive peroxides EUH066: Repeated exposure may cause skin dryness or cracking	P210: Keep away from heat/sparks/open flames/hot surfaces – No smoking P261: Avoid breathing dust/fume/gas/mist/vapors/spray P280: Wear protective gloves/protective clothing/eye protection/face protection P337+P313: Get medical advice/attention P403+P233: Store in a well ventilated place. Keep container tightly closed P501: Dispose of contents/container in accordance with local regulation

## SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

	CAS	EINECS	REACH Registration Number	CONCENTRATION % by Weight
Tetrahydrofuran (THF)	109-99-9	203-726-8	01-2119444314-46-0000	30 - 60
Methyl Ethyl Ketone (MEK)	78-93-3	201-159-0	01-2119457290-43-0000	5 - 25
Cyclohexanone	108-94-1	203-631-1	01-2119453616-35-0000	5 - 20

All of the constituents of this adhesive product are listed on the TSCA inventory of chemical substances maintained by the US EPA, or are exempt from that listing.  
 \* Indicates this chemical is subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 (40CFR372).  
 # indicates that this chemical is found on Proposition 65's List of chemicals known to the State of California to cause cancer or reproductive toxicity.

## SECTION 4 - FIRST AID MEASURES

**Contact with eyes:** Flush eyes immediately with plenty of water for 15 minutes and seek medical advice immediately.  
**Skin contact:** Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water. If irritation develops, seek medical advice.  
**Inhalation:** Remove to fresh air. If breathing is stopped, give artificial respiration. If breathing is difficult, give oxygen. Seek medical advice.  
**Ingestion:** Rinse mouth with water. Give 1 or 2 glasses of water or milk to dilute. Do not induce vomiting. Seek medical advice immediately.

**Likely Routes of Exposure:** Inhalation, Eye and Skin Contact

**Acute symptoms and effects:**

**Inhalation:** Severe overexposure may result in nausea, dizziness, headache. Can cause drowsiness, irritation of eyes and nasal passages.  
**Eye Contact:** Vapors slightly uncomfortable. Overexposure may result in severe eye injury with corneal or conjunctival inflammation on contact with the liquid.  
**Skin Contact:** Liquid contact may remove natural skin oils resulting in skin irritation. Dermatitis may occur with prolonged contact.  
**Ingestion:** May cause nausea, vomiting, diarrhea and mental sluggishness.

**Chronic (long-term) effects:** Category 2 Carcinogen

## SECTION 5 - FIREFIGHTING MEASURES

**Suitable Extinguishing Media:** Dry chemical powder, carbon dioxide gas, foam, Halon, water fog.

**Unsuitable Extinguishing Media:** Water spray or stream.

**Exposure Hazards:** Inhalation and dermal contact

**Combustion Products:** Oxides of carbon, hydrogen chloride and smoke

**Protection for Firefighters:** Self-contained breathing apparatus or full-face positive pressure airline masks.

	HMIS	NFPA	
Health	2	2	1-Slight
Flammability	3	3	2-Moderate
Reactivity	0	0	3-Serious
PPE	B		4-Severe

## SECTION 6 - ACCIDENTAL RELEASE MEASURES

**Personal precautions:** Keep away from heat, sparks and open flame.  
Provide sufficient ventilation, use explosion-proof exhaust ventilation equipment or wear suitable respiratory protective equipment.  
Prevent contact with skin or eyes (see section 8).  
Do not eat, drink or smoke while handling.

**Environmental Precautions:** Prevent product or liquids contaminated with product from entering sewers, drains, soil or open water course.

**Methods for Cleaning up:** Clean up with sand or other inert absorbent material. Transfer to a closable steel vessel.

**Materials not to be used for clean up:** Aluminum or plastic containers

## SECTION 7 - HANDLING AND STORAGE

**Handling:** Avoid breathing of vapor, avoid contact with eyes, skin and clothing.  
Keep away from ignition sources, use only electrically grounded handling equipment and ensure adequate ventilation/fume exhaust hoods.  
Do not eat, drink or smoke while handling.

**Storage:** Store in ventilated room or shade below 33°C (90°F) and away from direct sunlight.  
Keep away from ignition sources and incompatible materials: caustics, ammonia, inorganic acids, chlorinated compounds, strong oxidizers and isocyanates.  
Follow all precautionary information on container label, product bulletins and solvent cementing literature.

## SECTION 8 - PRECAUTIONS TO CONTROL EXPOSURE / PERSONAL PROTECTION

EXPOSURE LIMITS:	Component	ACGIH 8-hr TLV	ACGIH 15-min STEL	OSHA 8-hr PEL	OSHA 15 min STEL	OSHA PEL-Ceiling	CAL/OSHA 8-hr PEL	CAL/OSHA Ceiling	CAL/OSHA 15-min STEL
	Tetrahydrofuran (THF)	50 ppm	100 ppm	200 ppm	N/E	N/E	200 ppm	N/E	250 ppm
	Methyl Ethyl Ketone (MEK)	200 ppm	300 ppm	200 ppm	N/E	N/E	200 ppm	N/E	300 ppm
	Cyclohexanone	20 ppm	50 ppm	50 ppm	N/E	N/E	25 ppm	N/E	N/E

**Engineering Controls:** Use local exhaust as needed.  
**Monitoring:** Maintain breathing zone airborne concentrations below exposure limits.  
**Personal Protective Equipment (PPE):**  
**Eye Protection:** Avoid contact with eyes, wear splash-proof chemical goggles, face shield, safety glasses (spectacles) with brow guards and side shields, etc. as may be appropriate for the exposure.  
**Skin Protection:** Prevent contact with the skin as much as possible. Butyl rubber gloves should be used for frequent immersion.  
Use of solvent-resistant gloves or solvent-resistant barrier cream should provide adequate protection when normal adhesive application practices and procedures are used for making structural bonds.  
**Respiratory Protection:** Prevent inhalation of the solvents. Use in a well-ventilated room. Open doors and/or windows to ensure airflow and air changes. Use local exhaust ventilation to remove airborne contaminants from employee breathing zone and to keep contaminants below levels listed above.  
With normal use, the Exposure Limit Value will not usually be reached. When limits approached, use respiratory protection equipment.



# GHS SAFETY DATA SHEET

WELD-ON® 714™ Low VOC Cement for CPVC Plastic Pipe

Date Revised: NOV 2018  
Supersedes: OCT 2018

## SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance:</b>	Orange or gray, heavy syrupy liquid	<b>Odor Threshold:</b>	0.88 ppm (Cyclohexanone)
<b>Odor:</b>	Ketone	<b>Boiling Range:</b>	66°C (151°F) to 156°C (313°F)
<b>pH:</b>	Not Applicable	<b>Evaporation Rate:</b>	> 1.0 (BUAC = 1)
<b>Melting/Freezing Point:</b>	-108.5°C (-163.3°F) Based on first melting component: THF	<b>Flammability:</b>	Category 2
<b>Boiling Point:</b>	66°C (151°F) Based on first boiling component: THF	<b>Flammability Limits:</b>	<b>LEL:</b> 1.1% based on Cyclohexanone
<b>Flash Point:</b>	-20°C (-4°F) TCC based on THF	<b>UEL:</b> 11.8% based on THF	
<b>Specific Gravity:</b>	0.995 @23°C ( 73°F)	<b>Vapor Pressure:</b>	129 mm Hg @ 20°C (68°F) based on THF
<b>Solubility:</b>	Solvent portion soluble in water. Resin portion separates out.	<b>Vapor Density:</b>	>2 (Air = 1)
<b>Partition Coefficient n-octanol/water:</b>	Not Available	<b>Other Data: Viscosity:</b>	Heavy bodied
<b>Auto-ignition Temperature:</b>	321°C (610°F) based on THF		
<b>Decomposition Temperature:</b>	Not Applicable		
<b>VOC Content:</b>	When applied as directed, per SCAQMD Rule 1168, Test Method 316A, VOC content is: ≤ 490 g/l.		

## SECTION 10 - STABILITY AND REACTIVITY

<b>Stability:</b>	Stable
<b>Hazardous decomposition products:</b>	None in normal use. When forced to burn, this product gives off oxides of carbon, hydrogen chloride and smoke.
<b>Conditions to avoid:</b>	Keep away from heat, sparks, open flame and other ignition sources.
<b>Incompatible Materials:</b>	Oxidizers, strong acids and bases, amines, ammonia

## SECTION 11 - TOXICOLOGICAL INFORMATION

<b>Toxicity:</b>	LD <sub>50</sub>	LC <sub>50</sub>	<b>Target Organs</b>
Tetrahydrofuran (THF)	Oral: 2842 mg/kg (rat)	Inhalation 3 hrs. 21,000 mg/m <sup>3</sup> (rat)	STOT SE3
Methyl Ethyl Ketone (MEK)	Oral: 2737 mg/kg (rat), Dermal: 6480 mg/kg (rabbit)	Inhalation 8 hrs. 23,500 mg/m <sup>3</sup> (rat)	STOT SE3
Cyclohexanone	Oral: 1535 mg/kg (rat), Dermal: 948 mg/kg (rabbit)	Inhalation 4 hrs. 8,000 PPM (rat)	Not Established

Reproductive Effects	Teratogenicity	Mutagenicity	Embryotoxicity	Sensitization to Product	Synergistic Products
Not Established	Not Established	Not Established	Not Established	Not Established	Not Established

## SECTION 12 - ECOLOGICAL INFORMATION

<b>Ecotoxicity:</b>	None Known
<b>Mobility:</b>	In normal use, emission of volatile organic compounds (VOC's) to the air takes place, typically at a rate of ≤ 490 g/l.
<b>Degradability:</b>	Not readily biodegradable
<b>Bioaccumulation:</b>	Minimal to none.

## SECTION 13 - WASTE DISPOSAL CONSIDERATIONS

Follow local and national regulations. Consult disposal expert.

## SECTION 14 - TRANSPORT INFORMATION

<b>Proper Shipping Name:</b>	Adhesives
<b>Hazard Class:</b>	3
<b>Secondary Risk:</b>	None
<b>Identification Number:</b>	UN 1133
<b>Packing Group:</b>	PG II
<b>Label Required:</b>	Class 3 Flammable Liquid
<b>Marine Pollutant:</b>	NO

EXCEPTION for Ground Shipping
<b>DOT Limited Quantity:</b> Up to 5L per inner packaging, 30 kg gross weight per package.
<b>Consumer Commodity:</b> Depending on packaging, these quantities may qualify under DOT as "ORM-D" .

TDG INFORMATION	
<b>TDG CLASS:</b>	FLAMMABLE LIQUID 3
<b>SHIPPING NAME:</b>	ADHESIVES
<b>UN NUMBER/PACKING GROUP:</b>	UN 1133, PG II

## SECTION 15 - REGULATORY INFORMATION

<b>Precautionary Label Information:</b>	Highly Flammable, Irritant, Carc. Cat. 2	<b>Ingredient Listings:</b>	USA TSCA, Europe EINECS, Canada DSL, Australia AICS, Korea ECL/TCCL, Japan MITI (ENCS)
<b>Symbols:</b>	F, Xi	<b>R66:</b>	Repeated exposure may cause skin dryness or cracking
<b>Risk Phrases:</b>	R11: Highly flammable. R36/37: Irritating to eyes and respiratory system.	<b>R67:</b>	Vapors may cause drowsiness and dizziness
<b>Safety Phrases:</b>	S2: Keep out of the reach of children S9: Keep container in a well-ventilated place. S16: Keep away from sources of ignition - No smoking.	<b>S25:</b>	Avoid contact with eyes.
		<b>S26:</b>	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
		<b>S33:</b>	Take precautionary measures against static discharges.

## SECTION 16 - OTHER INFORMATION

<b>Specification Information:</b>		
<b>Department issuing data sheet:</b>	IPS, Safety Health & Environmental Affairs	All ingredients are compliant with the requirements of the European Directive on RoHS (Restriction of Hazardous Substances).
<b>E-mail address:</b>	<EHSinfo@ipscorp.com>	
<b>Training necessary:</b>	Yes, training in practices and procedures contained in product literature.	
<b>Reissue date / reason for reissue:</b>	11/27/2018 / Updated GHS Standard Format	
<b>Intended Use of Product:</b>	Solvent Cement for CPVC Plastic Pipe	

This product is intended for use by skilled individuals at their own risk. The information contained herein is based on data considered accurate based on current state of knowledge and experience. However, no warranty is expressed or implied regarding the accuracy of this data or the results to be obtained from the use thereof.





# GHS SAFETY DATA SHEET

## WELD-ON® 714™ Low VOC Cement for CPVC Plastic Pipe

Date Revised: OCT 2013

Supersedes: DEC 2011

### SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** WELD-ON® 714™ Low VOC Cement for CPVC Plastic Pipe  
**PRODUCT USE:** Low VOC Solvent Cement for CPVC Plastic Pipe  
**SUPPLIER:** **MANUFACTURER:** IPS Corporation  
 17109 South Main Street, Gardena, CA 90248-3127  
 P.O. Box 379, Gardena, CA 90247-0379  
 Tel. 1-310-898-3300  
**EMERGENCY:** Transportation: CHEMTEL Tel. 800.255-3924, +1 813-248-0585 (International) **Medical:** CHEMTEL Tel. 800.255-3924, +1 813-248-0585 (International)

### SECTION 2 - HAZARDS IDENTIFICATION

**GHS CLASSIFICATION:**

Health	Environmental	Physical
Acute Toxicity: Category 4 Skin Irritation: Category 3 Skin Sensitization: NO Eye: Category 2B	Acute Toxicity: None Known Chronic Toxicity: None Known	Flammable Liquid Category 2

**GHS LABEL:** OR **Signal Word:** Danger **WHMIS CLASSIFICATION:** CLASS B, DIVISION 2

Hazard Statements	Precautionary Statements
H225: Highly flammable liquid and vapor H319: Causes serious eye irritation H332: Harmful if inhaled H335: May cause respiratory irritation H336: May cause drowsiness or dizziness EUH019: May form explosive peroxides	P210: Keep away from heat/sparks/open flames/hot surfaces – No smoking P261: Avoid breathing dust/fume/gas/mist/vapors/spray P280: Wear protective gloves/protective clothing/eye protection/face protection P337+P313: Get medical advice/attention P403+P233: Store in a well ventilated place. Keep container tightly closed P501: Dispose of contents/container in accordance with local regulation

### SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

	CAS#	EINECS #	REACH Pre-registration Number	CONCENTRATION % by Weight
Tetrahydrofuran (THF)	109-99-9	203-726-8	05-2116297729-22-0000	30 - 60
Methyl Ethyl Ketone (MEK)	78-93-3	201-159-0	05-2116297728-24-0000	5 - 25
Cyclohexanone	108-94-1	203-631-1	05-2116297718-25-0000	5 - 20

All of the constituents of this adhesive product are listed on the TSCA inventory of chemical substances maintained by the US EPA, or are exempt from that listing.  
 \* Indicates this chemical is subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 (40CFR372).  
 # indicates that this chemical is found on Proposition 65's List of chemicals known to the State of California to cause cancer or reproductive toxicity.

### SECTION 4 - FIRST AID MEASURES

**Contact with eyes:** Flush eyes immediately with plenty of water for 15 minutes and seek medical advice immediately.  
**Skin contact:** Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water. If irritation develops, seek medical advice.  
**Inhalation:** Remove to fresh air. If breathing is stopped, give artificial respiration. If breathing is difficult, give oxygen. Seek medical advice.  
**Ingestion:** Rinse mouth with water. Give 1 or 2 glasses of water or milk to dilute. Do not induce vomiting. Seek medical advice immediately.

### SECTION 5 - FIREFIGHTING MEASURES

<b>Suitable Extinguishing Media:</b>	Dry chemical powder, carbon dioxide gas, foam, Halon, water fog.	HMIS	NFPA	0-Minimal
<b>Unsuitable Extinguishing Media:</b>	Water spray or stream.	Health	2	1-Slight
<b>Exposure Hazards:</b>	Inhalation and dermal contact	Flammability	3	2-Moderate
<b>Combustion Products:</b>	Oxides of carbon, hydrogen chloride and smoke	Reactivity	0	3-Serious
		PPE	B	4-Severe

**Protection for Firefighters:** Self-contained breathing apparatus or full-face positive pressure airline masks.

### SECTION 6 - ACCIDENTAL RELEASE MEASURES

**Personal precautions:** Keep away from heat, sparks and open flame.  
 Provide sufficient ventilation, use explosion-proof exhaust ventilation equipment or wear suitable respiratory protective equipment.  
 Prevent contact with skin or eyes (see section 8).  
**Environmental Precautions:** Prevent product or liquids contaminated with product from entering sewers, drains, soil or open water course.  
**Methods for Cleaning up:** Clean up with sand or other inert absorbent material. Transfer to a closable steel vessel.  
**Materials not to be used for clean up:** Aluminum or plastic containers

### SECTION 7 - HANDLING AND STORAGE

**Handling:** Avoid breathing of vapor, avoid contact with eyes, skin and clothing.  
 Keep away from ignition sources, use only electrically grounded handling equipment and ensure adequate ventilation/fume exhaust hoods.  
 Do not eat, drink or smoke while handling.  
**Storage:** Store in ventilated room or shade below 33°C (90°F) and away from direct sunlight.  
 Keep away from ignition sources and incompatible materials: caustics, ammonia, inorganic acids, chlorinated compounds, strong oxidizers and isocyanates.  
 Follow all precautionary information on container label, product bulletins and solvent cementing literature.

### SECTION 8 - PRECAUTIONS TO CONTROL EXPOSURE / PERSONAL PROTECTION

EXPOSURE LIMITS:	Component	ACGIH TLV	ACGIH STEL	OSHA PEL	OSHA STEL:	OSHA PEL-Ceiling	CAL/OSHA PEL	CAL/OSHA Ceiling	CAL/OSHA STEL
	Tetrahydrofuran (THF)	50 ppm	100 ppm	200 ppm	N/E	N/E	200 ppm	N/E	250 ppm
	Methyl Ethyl Ketone (MEK)	200 ppm	300 ppm	200 ppm	N/E	N/E	200 ppm	N/E	300 ppm
	Cyclohexanone	20 ppm	50 ppm	50 ppm	N/E	N/E	25 ppm	N/E	N/E

**Engineering Controls:** Use local exhaust as needed.  
**Monitoring:** Maintain breathing zone airborne concentrations below exposure limits.  
**Personal Protective Equipment (PPE):**  
**Eye Protection:** Avoid contact with eyes, wear splash-proof chemical goggles, face shield, safety glasses (spectacles) with brow guards and side shields, etc. as may be appropriate for the exposure.  
**Skin Protection:** Prevent contact with the skin as much as possible. Butyl rubber gloves should be used for frequent immersion.  
 Use of solvent-resistant gloves or solvent-resistant barrier cream should provide adequate protection when normal adhesive application practices and procedures are used for making structural bonds.  
**Respiratory Protection:** Prevent inhalation of the solvents. Use in a well-ventilated room. Open doors and/or windows to ensure airflow and air changes. Use local exhaust ventilation to remove airborne contaminants from employee breathing zone and to keep contaminants below levels listed above.  
 With normal use, the Exposure Limit Value will not usually be reached. When limits approached, use respiratory protection equipment.



# GHS SAFETY DATA SHEET

## WELD-ON® 714™ Low VOC Cement for CPVC Plastic Pipe

Date Revised: **OCT 2013**Supersedes: **DEC 2011**

### SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance:</b>	Orange or gray, heavy syrupy liquid	<b>Odor Threshold:</b>	0.88 ppm (Cyclohexanone)
<b>Odor:</b>	Ketone	<b>Boiling Range:</b>	66°C (151°F) to 156°C (313°F)
<b>pH:</b>	Not Applicable	<b>Evaporation Rate:</b>	> 1.0 (BUAC = 1)
<b>Melting/Freezing Point:</b>	-108.5°C (-163.3°F) Based on first melting component: THF	<b>Flammability:</b>	Category 2
<b>Boiling Point:</b>	66°C (151°F) Based on first boiling component: THF	<b>Flammability Limits:</b>	<b>LEL:</b> 1.1% based on Cyclohexanone <b>UEL:</b> 11.8% based on THF
<b>Flash Point:</b>	-20°C (-4°F) TCC based on THF	<b>Vapor Pressure:</b>	129 mm Hg @ 20°C (68°F) based on THF
<b>Specific Gravity:</b>	0.995 @23°C ( 73°F)	<b>Vapor Density:</b>	>2 (Air = 1)
<b>Solubility:</b>	Solvent portion soluble in water. Resin portion separates out.	<b>Other Data: Viscosity:</b>	Heavy bodied
<b>Partition Coefficient n-octanol/water:</b>	Not Available		
<b>Auto-ignition Temperature:</b>	321°C (610°F) based on THF		
<b>Decomposition Temperature:</b>	Not Applicable		
<b>VOC Content:</b>	When applied as directed, per SCAQMD Rule 1168, Test Method 316A, VOC content is: ≤ 490 g/l.		

### SECTION 10 - STABILITY AND REACTIVITY

<b>Stability:</b>	Stable
<b>Hazardous decomposition products:</b>	None in normal use. When forced to burn, this product gives off oxides of carbon, hydrogen chloride and smoke.
<b>Conditions to avoid:</b>	Keep away from heat, sparks, open flame and other ignition sources.
<b>Incompatible Materials:</b>	Oxidizers, strong acids and bases, amines, ammonia

### SECTION 11 - TOXICOLOGICAL INFORMATION

**Likely Routes of Exposure:** Inhalation, Eye and Skin Contact**Acute symptoms and effects:**

- Inhalation:** Severe overexposure may result in nausea, dizziness, headache. Can cause drowsiness, irritation of eyes and nasal passages.
- Eye Contact:** Vapors slightly uncomfortable. Overexposure may result in severe eye injury with corneal or conjunctival inflammation on contact with the liquid.
- Skin Contact:** Liquid contact may remove natural skin oils resulting in skin irritation. Dermatitis may occur with prolonged contact.
- Ingestion:** May cause nausea, vomiting, diarrhea and mental sluggishness.

**Chronic (long-term) effects:**

None known to humans

**Toxicity:**LD<sub>50</sub>LC<sub>50</sub>

Tetrahydrofuran (THF)	Oral: 2842 mg/kg (rat)	Inhalation 3 hrs. 21,000 mg/m <sup>3</sup> (rat)
Methyl Ethyl Ketone (MEK)	Oral: 2737 mg/kg (rat), Dermal: 6480 mg/kg (rabbit)	Inhalation 8 hrs. 23,500 mg/m <sup>3</sup> (rat)
Cyclohexanone	Oral: 1535 mg/kg (rat), Dermal: 948 mg/kg (rabbit)	Inhalation 4 hrs. 8,000 PPM (rat)

Reproductive Effects	Teratogenicity	Mutagenicity	Embryotoxicity	Sensitization to Product	Synergistic Products
Not Established	Not Established	Not Established	Not Established	Not Established	Not Established

### SECTION 12 - ECOLOGICAL INFORMATION

<b>Ecotoxicity:</b>	None Known
<b>Mobility:</b>	In normal use, emission of volatile organic compounds (VOC's) to the air takes place, typically at a rate of ≤ 490 g/l.
<b>Degradability:</b>	Biodegradable
<b>Bioaccumulation:</b>	Minimal to none.

### SECTION 13 - WASTE DISPOSAL CONSIDERATIONS

Follow local and national regulations. Consult disposal expert.

### SECTION 14 - TRANSPORT INFORMATION

<b>Proper Shipping Name:</b>	Adhesives
<b>Hazard Class:</b>	3
<b>Secondary Risk:</b>	None
<b>Identification Number:</b>	UN 1133
<b>Packing Group:</b>	PG II
<b>Label Required:</b>	Class 3 Flammable Liquid
<b>Marine Pollutant:</b>	NO

**EXCEPTION for Ground Shipping**

**DOT Limited Quantity:** Up to 5L per inner packaging, 30 kg gross weight per package.  
**Consumer Commodity:** Depending on packaging, these quantities may qualify under DOT as "ORM-D".

**TDG INFORMATION**

TDG CLASS:	FLAMMABLE LIQUID 3
SHIPPING NAME:	ADHESIVES
UN NUMBER/PACKING GROUP:	UN 1133, PG II

### SECTION 15 - REGULATORY INFORMATION

<b>Precautionary Label Information:</b>	Highly Flammable, Irritant	<b>Ingredient Listings:</b>	USA TSCA, Europe EINECS, Canada DSL, Australia
<b>Symbols:</b>	F, Xi		AICS, Korea ECL/TCCL, Japan MITI (ENCS)
<b>Risk Phrases:</b>	R11: Highly flammable. R36/37: Irritating to eyes and respiratory system.	R66: Repeated exposure may cause skin dryness or cracking R67: Vapors may cause drowsiness and dizziness	
<b>Safety Phrases:</b>	S2: Keep out of the reach of children S9: Keep container in a well-ventilated place. S16: Keep away from sources of ignition - No smoking.	S25: Avoid contact with eyes. S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S33: Take precautionary measures against static discharges.	

### SECTION 16 - OTHER INFORMATION

<b>Specification Information:</b>		
<b>Department issuing data sheet:</b>	IPS, Safety Health & Environmental Affairs	All ingredients are compliant with the requirements of the European Directive on RoHS (Restriction of Hazardous Substances).
<b>E-mail address:</b>	<EHSinfo@ipscorp.com>	
<b>Training necessary:</b>	Yes, training in practices and procedures contained in product literature.	
<b>Reissue date / reason for reissue:</b>	10/15/2013 / Updated GHS Standard Format	
<b>Intended Use of Product:</b>	Solvent Cement for CPVC Plastic Pipe	

This product is intended for use by skilled individuals at their own risk. The information contained herein is based on data considered accurate based on current state of knowledge and experience. However, no warranty is expressed or implied regarding the accuracy of this data or the results to be obtained from the use thereof.



# GHS SAFETY DATA SHEET

## WELD-ON® 714™ Low VOC Cement for CPVC Plastic Pipe

Date Revised: **NOV 2018**  
Supersedes: **OCT 2018**

### SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** WELD-ON® 714™ Low VOC Cement for CPVC Plastic Pipe  
**PRODUCT USE:** Low VOC Solvent Cement for CPVC Plastic Pipe  
**SUPPLIER:** **MANUFACTURER:** IPS Corporation  
 17109 South Main Street, Gardena, CA 90248-3127  
 P.O. Box 379, Gardena, CA 90247-0379  
 Tel. 1-310-898-3300

**EMERGENCY:** Transportation: CHEMTEL Tel. 800.255-3924, +1 813-248-0585 (International) **Medical:** CHEMTEL Tel. 800.255-3924, +1 813-248-0585 (International)

### SECTION 2 - HAZARDS IDENTIFICATION

#### GHS CLASSIFICATION:

Health		Environmental		Physical	
Acute Toxicity:	Category 4	Acute Toxicity:	None Known	Flammable Liquid	Category 2
Skin Irritation:	Category 3	Chronic Toxicity:	None Known		
Skin Sensitization:	NO				
Eye:	Category 2				

#### GHS LABEL:



**Signal Word:**  
Danger

**WHMIS CLASSIFICATION:** CLASS B, DIVISION 2  
CLASS D, DIVISION 2B

Hazard Statements	Precautionary Statements
H225: Highly flammable liquid and vapor H319: Causes serious eye irritation H332: Harmful if inhaled H335: May cause respiratory irritation H336: May cause drowsiness or dizziness H351: Suspected of causing cancer EUH019: May form explosive peroxides EUH066: Repeated exposure may cause skin dryness or cracking	P210: Keep away from heat/sparks/open flames/hot surfaces – No smoking P261: Avoid breathing dust/fume/gas/mist/vapors/spray P280: Wear protective gloves/protective clothing/eye protection/face protection P337+P313: Get medical advice/attention P403+P233: Store in a well ventilated place. Keep container tightly closed P501: Dispose of contents/container in accordance with local regulation

### SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

	CAS	EINECS	REACH Registration Number	CONCENTRATION % by Weight
Tetrahydrofuran (THF)	109-99-9	203-726-8	01-2119444314-46-0000	30 - 60
Methyl Ethyl Ketone (MEK)	78-93-3	201-159-0	01-2119457290-43-0000	5 - 25
Cyclohexanone	108-94-1	203-631-1	01-2119453616-35-0000	5 - 20

All of the constituents of this adhesive product are listed on the TSCA inventory of chemical substances maintained by the US EPA, or are exempt from that listing.  
 \* Indicates this chemical is subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 (40CFR372).  
 # indicates that this chemical is found on Proposition 65's List of chemicals known to the State of California to cause cancer or reproductive toxicity.

### SECTION 4 - FIRST AID MEASURES

**Contact with eyes:** Flush eyes immediately with plenty of water for 15 minutes and seek medical advice immediately.  
**Skin contact:** Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water. If irritation develops, seek medical advice.  
**Inhalation:** Remove to fresh air. If breathing is stopped, give artificial respiration. If breathing is difficult, give oxygen. Seek medical advice.  
**Ingestion:** Rinse mouth with water. Give 1 or 2 glasses of water or milk to dilute. Do not induce vomiting. Seek medical advice immediately.

**Likely Routes of Exposure:** Inhalation, Eye and Skin Contact

**Acute symptoms and effects:**  
**Inhalation:** Severe overexposure may result in nausea, dizziness, headache. Can cause drowsiness, irritation of eyes and nasal passages.  
**Eye Contact:** Vapors slightly uncomfortable. Overexposure may result in severe eye injury with corneal or conjunctival inflammation on contact with the liquid.  
**Skin Contact:** Liquid contact may remove natural skin oils resulting in skin irritation. Dermatitis may occur with prolonged contact.  
**Ingestion:** May cause nausea, vomiting, diarrhea and mental sluggishness.

**Chronic (long-term) effects:** Category 2 Carcinogen

### SECTION 5 - FIREFIGHTING MEASURES

**Suitable Extinguishing Media:** Dry chemical powder, carbon dioxide gas, foam, Halon, water fog.  
**Unsuitable Extinguishing Media:** Water spray or stream.  
**Exposure Hazards:** Inhalation and dermal contact  
**Combustion Products:** Oxides of carbon, hydrogen chloride and smoke

	HMS	NFPA	
Health	2	2	1-Slight
Flammability	3	3	2-Moderate
Reactivity	0	0	3-Serious
PPE	B		4-Severe

**Protection for Firefighters:** Self-contained breathing apparatus or full-face positive pressure airline masks.

### SECTION 6 - ACCIDENTAL RELEASE MEASURES

**Personal precautions:** Keep away from heat, sparks and open flame.  
 Provide sufficient ventilation, use explosion-proof exhaust ventilation equipment or wear suitable respiratory protective equipment.  
 Prevent contact with skin or eyes (see section 8).  
 Do not eat, drink or smoke while handling.

**Environmental Precautions:** Prevent product or liquids contaminated with product from entering sewers, drains, soil or open water course.

**Methods for Cleaning up:** Clean up with sand or other inert absorbent material. Transfer to a closable steel vessel.

**Materials not to be used for clean up:** Aluminum or plastic containers

### SECTION 7 - HANDLING AND STORAGE

**Handling:** Avoid breathing of vapor, avoid contact with eyes, skin and clothing.  
 Keep away from ignition sources, use only electrically grounded handling equipment and ensure adequate ventilation/fume exhaust hoods.  
 Do not eat, drink or smoke while handling.

**Storage:** Store in ventilated room or shade below 33°C (90°F) and away from direct sunlight.  
 Keep away from ignition sources and incompatible materials: caustics, ammonia, inorganic acids, chlorinated compounds, strong oxidizers and isocyanates.  
 Follow all precautionary information on container label, product bulletins and solvent cementing literature.

### SECTION 8 - PRECAUTIONS TO CONTROL EXPOSURE / PERSONAL PROTECTION

EXPOSURE LIMITS:	Component	ACGIH 8-hr TLV	ACGIH 15-min STEL	OSHA 8-hr PEL	OSHA 15 min STEL	OSHA PEL-Ceiling	CAL/OSHA 8-hr PEL	CAL/OSHA Ceiling	CAL/OSHA 15-min STEL
	Tetrahydrofuran (THF)	50 ppm	100 ppm	200 ppm	N/E	N/E	200 ppm	N/E	250 ppm
	Methyl Ethyl Ketone (MEK)	200 ppm	300 ppm	200 ppm	N/E	N/E	200 ppm	N/E	300 ppm
	Cyclohexanone	20 ppm	50 ppm	50 ppm	N/E	N/E	25 ppm	N/E	N/E

**Engineering Controls:** Use local exhaust as needed.  
**Monitoring:** Maintain breathing zone airborne concentrations below exposure limits.  
**Personal Protective Equipment (PPE):**  
**Eye Protection:** Avoid contact with eyes, wear splash-proof chemical goggles, face shield, safety glasses (spectacles) with brow guards and side shields, etc. as may be appropriate for the exposure.  
**Skin Protection:** Prevent contact with the skin as much as possible. Butyl rubber gloves should be used for frequent immersion.  
 Use of solvent-resistant gloves or solvent-resistant barrier cream should provide adequate protection when normal adhesive application practices and procedures are used for making structural bonds.  
**Respiratory Protection:** Prevent inhalation of the solvents. Use in a well-ventilated room. Open doors and/or windows to ensure airflow and air changes. Use local exhaust ventilation to remove airborne contaminants from employee breathing zone and to keep contaminants below levels listed above.  
 With normal use, the Exposure Limit Value will not usually be reached. When limits approached, use respiratory protection equipment.



# GHS SAFETY DATA SHEET

WELD-ON® 714™ Low VOC Cement for CPVC Plastic Pipe

Date Revised: **NOV 2018**  
Supersedes: **OCT 2018**

## SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance:</b>	Orange or gray, heavy syrupy liquid	<b>Odor Threshold:</b>	0.88 ppm (Cyclohexanone)
<b>Odor:</b>	Ketone	<b>Boiling Range:</b>	66°C (151°F) to 156°C (313°F)
<b>pH:</b>	Not Applicable	<b>Evaporation Rate:</b>	> 1.0 (BUAC = 1)
<b>Melting/Freezing Point:</b>	-108.5°C (-163.3°F) Based on first melting component: THF	<b>Flammability:</b>	Category 2
<b>Boiling Point:</b>	66°C (151°F) Based on first boiling component: THF	<b>Flammability Limits:</b>	<b>LEL:</b> 1.1% based on Cyclohexanone
<b>Flash Point:</b>	-20°C (-4°F) TCC based on THF	<b>UEL:</b> 11.8% based on THF	
<b>Specific Gravity:</b>	0.995 @23°C ( 73°F)	<b>Vapor Pressure:</b>	129 mm Hg @ 20°C (68°F) based on THF
<b>Solubility:</b>	Solvent portion soluble in water. Resin portion separates out.	<b>Vapor Density:</b>	>2 (Air = 1)
<b>Partition Coefficient n-octanol/water:</b>	Not Available	<b>Other Data: Viscosity:</b>	Heavy bodied
<b>Auto-ignition Temperature:</b>	321°C (610°F) based on THF		
<b>Decomposition Temperature:</b>	Not Applicable		
<b>VOC Content:</b>	When applied as directed, per SCAQMD Rule 1168, Test Method 316A, VOC content is: ≤ 490 g/l.		

## SECTION 10 - STABILITY AND REACTIVITY

**Stability:** Stable

**Hazardous decomposition products:** None in normal use. When forced to burn, this product gives off oxides of carbon, hydrogen chloride and smoke.

**Conditions to avoid:** Keep away from heat, sparks, open flame and other ignition sources.

**Incompatible Materials:** Oxidizers, strong acids and bases, amines, ammonia

## SECTION 11 - TOXICOLOGICAL INFORMATION

<b>Toxicity:</b>	LD <sub>50</sub>	LC <sub>50</sub>	<b>Target Organs</b>
Tetrahydrofuran (THF)	Oral: 2842 mg/kg (rat)	Inhalation 3 hrs. 21,000 mg/m <sup>3</sup> (rat)	STOT SE3
Methyl Ethyl Ketone (MEK)	Oral: 2737 mg/kg (rat), Dermal: 6480 mg/kg (rabbit)	Inhalation 8 hrs. 23,500 mg/m <sup>3</sup> (rat)	STOT SE3
Cyclohexanone	Oral: 1535 mg/kg (rat), Dermal: 948 mg/kg (rabbit)	Inhalation 4 hrs. 8,000 PPM (rat)	Not Established

Reproductive Effects	Teratogenicity	Mutagenicity	Embryotoxicity	Sensitization to Product	Synergistic Products
Not Established	Not Established	Not Established	Not Established	Not Established	Not Established

## SECTION 12 - ECOLOGICAL INFORMATION

**Ecotoxicity:** None Known

**Mobility:** In normal use, emission of volatile organic compounds (VOC's) to the air takes place, typically at a rate of ≤ 490 g/l.

**Degradability:** Not readily biodegradable

**Bioaccumulation:** Minimal to none.

## SECTION 13 - WASTE DISPOSAL CONSIDERATIONS

Follow local and national regulations. Consult disposal expert.

## SECTION 14 - TRANSPORT INFORMATION

**Proper Shipping Name:** Adhesives

**Hazard Class:** 3

**Secondary Risk:** None

**Identification Number:** UN 1133

**Packing Group:** PG II

**Label Required:** Class 3 Flammable Liquid

**Marine Pollutant:** NO

**EXCEPTION for Ground Shipping**

**DOT Limited Quantity:** Up to 5L per inner packaging, 30 kg gross weight per package.

**Consumer Commodity:** Depending on packaging, these quantities may qualify under DOT as "ORM-D" .

TDG INFORMATION	
TDG CLASS:	FLAMMABLE LIQUID 3
SHIPPING NAME:	ADHESIVES
UN NUMBER/PACKING GROUP:	UN 1133, PG II

## SECTION 15 - REGULATORY INFORMATION

**Precautionary Label Information:** Highly Flammable, Irritant, Carc. Cat. 2

**Symbols:** F, Xi

**Risk Phrases:** R11: Highly flammable.  
R36/37: Irritating to eyes and respiratory system.

**Safety Phrases:** S2: Keep out of the reach of children  
S9: Keep container in a well-ventilated place.  
S16: Keep away from sources of ignition - No smoking.

**Ingredient Listings:** USA TSCA, Europe EINECS, Canada DSL, Australia AICS, Korea ECL/TCCL, Japan MITI (ENCS)

R66: Repeated exposure may cause skin dryness or cracking  
R67: Vapors may cause drowsiness and dizziness

S25: Avoid contact with eyes.  
S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
S33: Take precautionary measures against static discharges.

## SECTION 16 - OTHER INFORMATION

**Specification Information:**

**Department issuing data sheet:** IPS, Safety Health & Environmental Affairs

**E-mail address:** <EHSinfo@ipscorp.com>

**Training necessary:** Yes, training in practices and procedures contained in product literature.

**Reissue date / reason for reissue:** 11/27/2018 / Updated GHS Standard Format

**Intended Use of Product:** Solvent Cement for CPVC Plastic Pipe

All ingredients are compliant with the requirements of the European Directive on RoHS (Restriction of Hazardous Substances).

This product is intended for use by skilled individuals at their own risk. The information contained herein is based on data considered accurate based on current state of knowledge and experience. However, no warranty is expressed or implied regarding the accuracy of this data or the results to be obtained from the use thereof.



# GHS SAFETY DATA SHEET

## WELD-ON® 717™ Low VOC Cements for PVC Plastic Pipe

Date Revised: JUN 2018

Supersedes: NOV 2017

### SECTION I - PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** WELD-ON® 717™ Low VOC Cements for PVC Plastic Pipe**PRODUCT USE:** Low VOC Solvent Cement for PVC Plastic Pipe**SUPPLIER:****MANUFACTURER:** IPS Corporation

17109 South Main Street, Gardena, CA 90248-3127

P.O. Box 379, Gardena, CA 90247-0379

Tel. 1-310-898-3300

**EMERGENCY:** Transportation: CHEMTEL Tel. 800.255-3924, +1 813-248-0585 (International)**Medical:** CHEMTEL Tel. 800.255-3924, +1 813-248-0585 (International)

### SECTION 2 - HAZARDS IDENTIFICATION

**GHS CLASSIFICATION:**

Health	Environmental	Physical
Acute Toxicity: Category 4	Acute Toxicity: None Known	Flammable Liquid Category 2
Skin Irritation: Category 3	Chronic Toxicity: None Known	
Skin Sensitization: NO		
Eye: Category 2		

**GHS LABEL:****Signal Word:**

Danger

**WHMIS CLASSIFICATION:** CLASS B, DIVISION 2

CLASS D, DIVISION 1B

#### Hazard Statements

H225: Highly flammable liquid and vapor  
 H319: Causes serious eye irritation  
 H332: Harmful if inhaled  
 H335: May cause respiratory irritation  
 H336: May cause drowsiness or dizziness  
 H351: Suspected of causing cancer  
 EUH019: May form explosive peroxides

#### Precautionary Statements

P210: Keep away from heat/sparks/open flames/hot surfaces – No smoking  
 P261: Avoid breathing dust/fume/gas/mist/vapors/spray  
 P280: Wear protective gloves/protective clothing/eye protection/face protection  
 P304+P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing  
 P403+P233: Store in a well ventilated place. Keep container tightly closed  
 P501: Dispose of contents/container in accordance with local regulation

### SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

	CAS#	EINECS #	REACH Pre-registration Number	CONCENTRATION
				% by Weight
Tetrahydrofuran (THF)	109-99-9	203-726-8	05-2116297729-22-0000	25 - 70
Methyl Ethyl Ketone (MEK)	78-93-3	201-159-0	05-2116297728-24-0000	5 - 36
Cyclohexanone	108-94-1	203-631-1	05-2116297718-25-0000	10 - 25

All of the constituents of this adhesive product are listed on the TSCA inventory of chemical substances maintained by the US EPA, or are exempt from that listing.

\* Indicates this chemical is subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 (40CFR372).

# Indicates that this chemical is found on Proposition 65's List of chemicals known to the State of California to cause cancer or reproductive toxicity.

### SECTION 4 - FIRST AID MEASURES

**Contact with eyes:** Flush eyes immediately with plenty of water for 15 minutes and seek medical advice immediately.**Skin contact:** Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water. If irritation develops, seek medical advice.**Inhalation:** Remove to fresh air. If breathing is stopped, give artificial respiration. If breathing is difficult, give oxygen. Seek medical advice.**Ingestion:** Rinse mouth with water. Give 1 or 2 glasses of water or milk to dilute. Do not induce vomiting. Seek medical advice immediately.**Likely Routes of Exposure:** Inhalation, Eye and Skin Contact**Acute symptoms and effects:****Inhalation:** Severe overexposure may result in nausea, dizziness, headache. Can cause drowsiness, irritation of eyes and nasal passages.**Eye Contact:** Vapors slightly uncomfortable. Overexposure may result in severe eye injury with corneal or conjunctival inflammation on contact with the liquid.**Skin Contact:** Liquid contact may remove natural skin oils resulting in skin irritation. Dermatitis may occur with prolonged contact.**Ingestion:** May cause nausea, vomiting, diarrhea and mental sluggishness.**Chronic (long-term) effects:** Category 2 Carcinogen

### SECTION 5 - FIREFIGHTING MEASURES

<b>Suitable Extinguishing Media:</b>	Dry chemical powder, carbon dioxide gas, foam, Halon, water fog.	HMIS	NFPA	0-Minimal
<b>Unsuitable Extinguishing Media:</b>	Water spray or stream.	Health	2	2 1-Slight
<b>Exposure Hazards:</b>	Inhalation and dermal contact	Flammability	3	3 2-Moderate
<b>Combustion Products:</b>	Oxides of carbon, hydrogen chloride and smoke	Reactivity	0	0 3-Serious
		PPE	B	4-Severe

**Protection for Firefighters:** Self-contained breathing apparatus or full-face positive pressure airline masks.

### SECTION 6 - ACCIDENTAL RELEASE MEASURES

**Personal precautions:** Keep away from heat, sparks and open flame. Provide sufficient ventilation, use explosion-proof exhaust ventilation equipment or wear suitable respiratory protective equipment. Prevent contact with skin or eyes (see section 8).**Environmental Precautions:** Prevent product or liquids contaminated with product from entering sewers, drains, soil or open water course.**Methods for Cleaning up:** Clean up with sand or other inert absorbent material. Transfer to a closable steel vessel.**Materials not to be used for clean up:** Aluminum or plastic containers

### SECTION 7 - HANDLING AND STORAGE

**Handling:** Avoid breathing of vapor, avoid contact with eyes, skin and clothing.

Keep away from ignition sources, use only electrically grounded handling equipment and ensure adequate ventilation/fume exhaust hoods.

Do not eat, drink or smoke while handling.

**Storage:** Store in ventilated room or shade below 44°C (110°F) and away from direct sunlight.

Keep away from ignition sources and incompatible materials: caustics, ammonia, inorganic acids, chlorinated compounds, strong oxidizers and isocyanates.

Follow all precautionary information on container label, product bulletins and solvent cementing literature.

### SECTION 8 - PRECAUTIONS TO CONTROL EXPOSURE / PERSONAL PROTECTION

EXPOSURE LIMITS:	Component	ACGIH TLV	ACGIH STEL	OSHA PEL	OSHA STEL	OSHA PEL-Ceiling	CAL/OSHA PEL	CAL/OSHA Ceiling	CAL/OSHA STEL
		Tetrahydrofuran (THF)	50 ppm	100 ppm	200 ppm	N/E	N/E	200 ppm	N/E
	Methyl Ethyl Ketone (MEK)	200 ppm	300 ppm	200 ppm	N/E	N/E	200 ppm	N/E	300 ppm
	Cyclohexanone	20 ppm	50 ppm	50 ppm	N/E	N/E	25 ppm	N/E	N/E

**Engineering Controls:** Use local exhaust as needed.**Monitoring:** Maintain breathing zone airborne concentrations below exposure limits.**Personal Protective Equipment (PPE):****Eye Protection:** Avoid contact with eyes, wear splash-proof chemical goggles, face shield, safety glasses (spectacles) with brow guards and side shields, etc. as may be appropriate for the exposure.**Skin Protection:** Prevent contact with the skin as much as possible. Butyl rubber gloves should be used for frequent immersion. Use of solvent-resistant gloves or solvent-resistant barrier cream should provide adequate protection when normal adhesive application practices and procedures are used for making structural bonds.**Respiratory Protection:** Prevent inhalation of the solvents. Use in a well-ventilated room. Open doors and/or windows to ensure airflow and air changes. Use local exhaust ventilation to remove airborne contaminants from employee breathing zone and to keep contaminants below levels listed above. With normal use, the Exposure Limit Value will not usually be reached. When limits approached, use respiratory protection equipment.



# GHS SAFETY DATA SHEET

## WELD-ON® 717™ Low VOC Cements for PVC Plastic Pipe

Date Revised: JUN 2018

Supersedes: NOV 2017

### SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance:</b>	Gray or clear, heavy syrupy liquid	<b>Odor Threshold:</b>	0.88 ppm (Cyclohexanone)
<b>Odor:</b>	Ketone	<b>Boiling Range:</b>	66°C (151°F) to 156°C (313°F)
<b>pH:</b>	Not Applicable	<b>Evaporation Rate:</b>	> 1.0 (BUAC = 1)
<b>Melting/Freezing Point:</b>	-108.5°C (-163.3°F) Based on first melting component: THF	<b>Flammability:</b>	Category 2
<b>Boiling Point:</b>	66°C (151°F) Based on first boiling component: THF	<b>Flammability Limits:</b>	<b>LEL:</b> 1.1% based on Cyclohexanone <b>UEL:</b> 11.8% based on THF
<b>Flash Point:</b>	-20°C (-4°F) TCC based on THF	<b>Vapor Pressure:</b>	129 mm Hg @ 20°C (68°F) based on THF
<b>Specific Gravity:</b>	0.963 @23°C ( 73°F)	<b>Vapor Density:</b>	>2 (Air = 1)
<b>Solubility:</b>	Solvent portion soluble in water. Resin portion separates out.	<b>Other Data: Viscosity:</b>	Heavy bodied
<b>Partition Coefficient n-octanol/water:</b>	Not Available		
<b>Auto-ignition Temperature:</b>	321°C (610°F) based on THF		
<b>Decomposition Temperature:</b>	Not Applicable		
<b>VOC Content:</b>	When applied as directed, per SCAQMD Rule 1168, Test Method 316A, VOC content is: ≤ 510 g/l.		

### SECTION 10 - STABILITY AND REACTIVITY

<b>Stability:</b>	Stable
<b>Hazardous decomposition products:</b>	None in normal use. When forced to burn, this product gives off oxides of carbon, hydrogen chloride and smoke.
<b>Conditions to avoid:</b>	Keep away from heat, sparks, open flame and other ignition sources.
<b>Incompatible Materials:</b>	Oxidizers, strong acids and bases, amines, ammonia

### SECTION 11 - TOXICOLOGICAL INFORMATION

Toxicity:	LD50	LC50	Target Organs
Tetrahydrofuran (THF)	Oral: 2842 mg/kg (rat)	Inhalation 3 hrs. 21,000 mg/m <sup>3</sup> (rat)	STOT SE3
Methyl Ethyl Ketone (MEK)	Oral: 2737 mg/kg (rat), Dermal: 6480 mg/kg (rabbit)	Inhalation 8 hrs. 23,500 mg/m <sup>3</sup> (rat)	STOT SE3
Cyclohexanone	Oral: 1535 mg/kg (rat), Dermal: 948 mg/kg (rabbit)	Inhalation 4 hrs. 8,000 PPM (rat)	

Reproductive Effects	Teratogenicity	Mutagenicity	Embryotoxicity	Sensitization to Product	Synergistic Products
Not Established	Not Established	Not Established	Not Established	Not Established	Not Established

### SECTION 12 - ECOLOGICAL INFORMATION

<b>Ecotoxicity:</b>	None Known
<b>Mobility:</b>	In normal use, emission of volatile organic compounds (VOC's) to the air takes place, typically at a rate of ≤ 510 g/l.
<b>Degradability:</b>	Not readily biodegradable
<b>Bioaccumulation:</b>	Minimal to none.

### SECTION 13 - WASTE DISPOSAL CONSIDERATIONS

Follow local and national regulations. Consult disposal expert.

### SECTION 14 - TRANSPORT INFORMATION

<b>Proper Shipping Name:</b>	Adhesives
<b>Hazard Class:</b>	3
<b>Secondary Risk:</b>	None
<b>Identification Number:</b>	UN 1133
<b>Packing Group:</b>	PG II
<b>Label Required:</b>	Class 3 Flammable Liquid
<b>Marine Pollutant:</b>	NO

EXCEPTION for Ground Shipping
<b>DOT Limited Quantity:</b> Up to 5L per inner packaging, 30 kg gross weight per package.
<b>Consumer Commodity:</b> Depending on packaging, these quantities may qualify under DOT as "ORM-D".

TDG INFORMATION	
<b>TDG CLASS:</b>	FLAMMABLE LIQUID 3
<b>SHIPPING NAME:</b>	ADHESIVES
<b>UN NUMBER/PACKING GROUP:</b>	UN 1133, PG II

### SECTION 15 - REGULATORY INFORMATION

<b>Precautionary Label Information:</b>	Highly Flammable, Irritant, Carc. Cat. 2	<b>Ingredient Listings:</b>	USA TSCA, Europe EINECS, Canada DSL, Australia AICS, Korea ECL/TCCL, Japan MITI (ENCS)
<b>Symbols:</b>	F, Xi		
<b>Risk Phrases:</b>	R11: Highly flammable. R20: Harmful by inhalation. R36/37: Irritating to eyes and respiratory system.		R66: Repeated exposure may cause skin dryness or cracking R67: Vapors may cause drowsiness and dizziness
<b>Safety Phrases:</b>	S9: Keep container in a well-ventilated place. S16: Keep away from sources of ignition - No smoking. S25: Avoid contact with eyes.		S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S33: Take precautionary measures against static discharges. S46: If swallowed, seek medical advise immediately and show this container or label.

### SECTION 16 - OTHER INFORMATION

<b>Specification Information:</b>		
<b>Department issuing data sheet:</b>	IPS, Safety Health & Environmental Affairs	All ingredients are compliant with the requirements of the European Directive on RoHS (Restriction of Hazardous Substances).
<b>E-mail address:</b>	<EHSinfo@ipscorp.com>	
<b>Training necessary:</b>	Yes, training in practices and procedures contained in product literature.	
<b>Reissue date / reason for reissue:</b>	6/21/2018 / Updated GHS Standard Format	
<b>Intended Use of Product:</b>	Solvent Cement for PVC Plastic Pipe	

This product is intended for use by skilled individuals at their own risk. The information contained herein is based on data considered accurate based on current state of knowledge and experience. However, no warranty is expressed or implied regarding the accuracy of this data or the results to be obtained from the use thereof.

### SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** WELD-ON® 717™ Low VOC Cements for PVC Plastic Pipe  
**PRODUCT USE:** Low VOC Solvent Cement for PVC Plastic Pipe  
**SUPPLIER:** **MANUFACTURER:** IPS Corporation  
 17109 South Main Street, Gardena, CA 90248-3127  
 P.O. Box 379, Gardena, CA 90247-0379  
 Tel. 1-310-898-3300  
**EMERGENCY:** Transportation: CHEMTEL Tel. 800.255-3924, +1 813-248-0585 (International) **Medical:** CHEMTEL Tel. 800.255-3924, +1 813-248-0585 (International)

### SECTION 2 - HAZARDS IDENTIFICATION

**GHS CLASSIFICATION:**

Health	Environmental	Physical
Acute Toxicity: Category 4 Skin Irritation: Category 3 Skin Sensitization: NO Eye: Category 2	Acute Toxicity: None Known Chronic Toxicity: None Known	Flammable Liquid Category 2

**GHS LABEL:**



**Signal Word:**  
Danger

**WHMIS CLASSIFICATION:** CLASS B, DIVISION 2  
CLASS D, DIVISION 1B

Hazard Statements	Precautionary Statements
H225: Highly flammable liquid and vapor H319: Causes serious eye irritation H332: Harmful if inhaled H335: May cause respiratory irritation H336: May cause drowsiness or dizziness H351: Suspected of causing cancer EUH019: May form explosive peroxides	P210: Keep away from heat/sparks/open flames/hot surfaces – No smoking P261: Avoid breathing dust/fume/gas/mist/vapors/spray P280: Wear protective gloves/protective clothing/eye protection/face protection P304+P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing P403+P233: Store in a well ventilated place. Keep container tightly closed P501: Dispose of contents/container in accordance with local regulation

### SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

	CAS#	EINECS #	REACH	CONCENTRATION
			Pre-registration Number	% by Weight
Tetrahydrofuran (THF)	109-99-9	203-726-8	05-2116297729-22-0000	25 - 70
Methyl Ethyl Ketone (MEK)	78-93-3	201-159-0	05-2116297728-24-0000	5 - 36
Cyclohexanone	108-94-1	203-631-1	05-2116297718-25-0000	10 - 25

All of the constituents of this adhesive product are listed on the TSCA inventory of chemical substances maintained by the US EPA, or are exempt from that listing.  
 \* Indicates this chemical is subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 (40CFR372).  
 # indicates that this chemical is found on Proposition 65's List of chemicals known to the State of California to cause cancer or reproductive toxicity.

### SECTION 4 - FIRST AID MEASURES

**Contact with eyes:** Flush eyes immediately with plenty of water for 15 minutes and seek medical advice immediately.  
**Skin contact:** Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water. If irritation develops, seek medical advice.  
**Inhalation:** Remove to fresh air. If breathing is stopped, give artificial respiration. If breathing is difficult, give oxygen. Seek medical advice.  
**Ingestion:** Rinse mouth with water. Give 1 or 2 glasses of water or milk to dilute. Do not induce vomiting. Seek medical advice immediately.  
**Likely Routes of Exposure:** Inhalation, Eye and Skin Contact  
**Acute symptoms and effects:**  
**Inhalation:** Severe overexposure may result in nausea, dizziness, headache. Can cause drowsiness, irritation of eyes and nasal passages.  
**Eye Contact:** Vapors slightly uncomfortable. Overexposure may result in severe eye injury with corneal or conjunctival inflammation on contact with the liquid.  
**Skin Contact:** Liquid contact may remove natural skin oils resulting in skin irritation. Dermatitis may occur with prolonged contact.  
**Ingestion:** May cause nausea, vomiting, diarrhea and mental sluggishness.  
**Chronic (long-term) effects:** Category 2 Carcinogen

### SECTION 5 - FIREFIGHTING MEASURES

**Suitable Extinguishing Media:** Dry chemical powder, carbon dioxide gas, foam, Halon, water fog.  
**Unsuitable Extinguishing Media:** Water spray or stream.  
**Exposure Hazards:** Inhalation and dermal contact  
**Combustion Products:** Oxides of carbon, hydrogen chloride and smoke  
**Protection for Firefighters:** Self-contained breathing apparatus or full-face positive pressure airline masks.

	HMIS	NFPA	
Health	2	2	1-Slight
Flammability	3	3	2-Moderate
Reactivity	0	0	3-Serious
PPE	B		4-Severe

### SECTION 6 - ACCIDENTAL RELEASE MEASURES

**Personal precautions:** Keep away from heat, sparks and open flame.  
 Provide sufficient ventilation, use explosion-proof exhaust ventilation equipment or wear suitable respiratory protective equipment.  
 Prevent contact with skin or eyes (see section 8).  
**Environmental Precautions:** Prevent product or liquids contaminated with product from entering sewers, drains, soil or open water course.  
**Methods for Cleaning up:** Clean up with sand or other inert absorbent material. Transfer to a closable steel vessel.  
**Materials not to be used for clean up:** Aluminum or plastic containers

### SECTION 7 - HANDLING AND STORAGE

**Handling:** Avoid breathing of vapor, avoid contact with eyes, skin and clothing.  
 Keep away from ignition sources, use only electrically grounded handling equipment and ensure adequate ventilation/fume exhaust hoods.  
 Do not eat, drink or smoke while handling.  
**Storage:** Store in ventilated room or shade below 44°C (110°F) and away from direct sunlight.  
 Keep away from ignition sources and incompatible materials: caustics, ammonia, inorganic acids, chlorinated compounds, strong oxidizers and isocyanates.  
 Follow all precautionary information on container label, product bulletins and solvent cementing literature.

### SECTION 8 - PRECAUTIONS TO CONTROL EXPOSURE / PERSONAL PROTECTION

EXPOSURE LIMITS:	Component	ACGIH TLV	ACGIH STEL	OSHA PEL	OSHA STEL	OSHA	CAL/OSHA	CAL/OSHA	CAL/OSHA
						PEL-Ceiling	PEL	Ceiling	STEL
	Tetrahydrofuran (THF)	50 ppm	100 ppm	200 ppm	N/E	N/E	200 ppm	N/E	250 ppm
	Methyl Ethyl Ketone (MEK)	200 ppm	300 ppm	200 ppm	N/E	N/E	200 ppm	N/E	300 ppm
	Cyclohexanone	20 ppm	50 ppm	50 ppm	N/E	N/E	25 ppm	N/E	N/E

**Engineering Controls:** Use local exhaust as needed.  
**Monitoring:** Maintain breathing zone airborne concentrations below exposure limits.  
**Personal Protective Equipment (PPE):**  
**Eye Protection:** Avoid contact with eyes, wear splash-proof chemical goggles, face shield, safety glasses (spectacles) with brow guards and side shields, etc. as may be appropriate for the exposure.  
**Skin Protection:** Prevent contact with the skin as much as possible. Butyl rubber gloves should be used for frequent immersion.  
 Use of solvent-resistant gloves or solvent-resistant barrier cream should provide adequate protection when normal adhesive application practices and procedures are used for making structural bonds.  
**Respiratory Protection:** Prevent inhalation of the solvents. Use in a well-ventilated room. Open doors and/or windows to ensure airflow and air changes. Use local exhaust ventilation to remove airborne contaminants from employee breathing zone and to keep contaminants below levels listed above. With normal use, the Exposure Limit Value will not usually be reached. When limits approached, use respiratory protection equipment.

### SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance:</b> Gray or clear, heavy syrupy liquid		<b>Odor Threshold:</b> 0.88 ppm (Cyclohexanone)
<b>Odor:</b> Ketone		
<b>pH:</b> Not Applicable		<b>Boiling Range:</b> 66°C (151°F) to 156°C (313°F)
<b>Melting/Freezing Point:</b> -108.5°C (-163.3°F) Based on first melting component: THF		<b>Evaporation Rate:</b> > 1.0 (BUAC = 1)
<b>Boiling Point:</b> 66°C (151°F) Based on first boiling component: THF		<b>Flammability:</b> Category 2
<b>Flash Point:</b> -20°C (-4°F) TCC based on THF		<b>Flammability Limits:</b> <b>LEL:</b> 1.1% based on Cyclohexanone
<b>Specific Gravity:</b> 0.963 @23°C ( 73°F)		<b>UEL:</b> 11.8% based on THF
<b>Solubility:</b> Solvent portion soluble in water. Resin portion separates out.		<b>Vapor Pressure:</b> 129 mm Hg @ 20°C (68°F) based on THF
<b>Partition Coefficient n-octanol/water:</b> Not Available		<b>Vapor Density:</b> >2 (Air = 1)
<b>Auto-ignition Temperature:</b> 321°C (610°F) based on THF		<b>Other Data: Viscosity:</b> Heavy bodied
<b>Decomposition Temperature:</b> Not Applicable		
<b>VOC Content:</b> When applied as directed, per SCAQMD Rule 1168, Test Method 316A, VOC content is: ≤ 510 g/l.		

### SECTION 10 - STABILITY AND REACTIVITY

<b>Stability:</b> Stable	
<b>Hazardous decomposition products:</b> None in normal use. When forced to burn, this product gives off oxides of carbon, hydrogen chloride and smoke.	
<b>Conditions to avoid:</b> Keep away from heat, sparks, open flame and other ignition sources.	
<b>Incompatible Materials:</b> Oxidizers, strong acids and bases, amines, ammonia	

### SECTION 11 - TOXICOLOGICAL INFORMATION

Toxicity:	LD <sub>50</sub>	LC <sub>50</sub>	Target Organs
Tetrahydrofuran (THF)	Oral: 2842 mg/kg (rat)	Inhalation 3 hrs. 21,000 mg/m <sup>3</sup> (rat)	STOT SE3
Methyl Ethyl Ketone (MEK)	Oral: 2737 mg/kg (rat), Dermal: 6480 mg/kg (rabbit)	Inhalation 8 hrs. 23,500 mg/m <sup>3</sup> (rat)	STOT SE3
Cyclohexanone	Oral: 1535 mg/kg (rat), Dermal: 948 mg/kg (rabbit)	Inhalation 4 hrs. 8,000 PPM (rat)	

Reproductive Effects	Teratogenicity	Mutagenicity	Embryotoxicity	Sensitization to Product	Synergistic Products
Not Established	Not Established	Not Established	Not Established	Not Established	Not Established

### SECTION 12 - ECOLOGICAL INFORMATION

<b>Ecotoxicity:</b> None Known	
<b>Mobility:</b> In normal use, emission of volatile organic compounds (VOC's) to the air takes place, typically at a rate of ≤ 510 g/l.	
<b>Degradability:</b> Not readily biodegradable	
<b>Bioaccumulation:</b> Minimal to none.	

### SECTION 13 - WASTE DISPOSAL CONSIDERATIONS

Follow local and national regulations. Consult disposal expert.

### SECTION 14 - TRANSPORT INFORMATION

<b>Proper Shipping Name:</b> Adhesives	
<b>Hazard Class:</b> 3	
<b>Secondary Risk:</b> None	
<b>Identification Number:</b> UN 1133	
<b>Packing Group:</b> PG II	
<b>Label Required:</b> Class 3 Flammable Liquid	
<b>Marine Pollutant:</b> NO	

EXCEPTION for Ground Shipping
<b>DOT Limited Quantity:</b> Up to 5L per inner packaging, 30 kg gross weight per package.
<b>Consumer Commodity:</b> Depending on packaging, these quantities may qualify under DOT as "ORM-D".

TDG INFORMATION	
TDG CLASS:	FLAMMABLE LIQUID 3
SHIPPING NAME:	ADHESIVES
UN NUMBER/PACKING GROUP:	UN 1133, PG II

### SECTION 15 - REGULATORY INFORMATION

<b>Precautionary Label Information:</b> Highly Flammable, Irritant, Carc. Cat. 2	Ingredient Listings: USA TSCA, Europe EINECS, Canada DSL, Australia
<b>Symbols:</b> F, Xi	AICS, Korea ECL/TCCL, Japan MITI (ENCS)
<b>Risk Phrases:</b> R11: Highly flammable. R20: Harmful by inhalation. R36/37: Irritating to eyes and respiratory system.	R66: Repeated exposure may cause skin dryness or cracking R67: Vapors may cause drowsiness and dizziness
<b>Safety Phrases:</b> S9: Keep container in a well-ventilated place. S16: Keep away from sources of ignition - No smoking. S25: Avoid contact with eyes.	S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S33: Take precautionary measures against static discharges. S46: If swallowed, seek medical advice immediately and show this container or label.

### SECTION 16 - OTHER INFORMATION

<b>Specification Information:</b>		
<b>Department issuing data sheet:</b>	IPS, Safety Health & Environmental Affairs	All ingredients are compliant with the requirements of the European
<b>E-mail address:</b>	<EHSinfo@ipscorp.com>	Directive on RoHS (Restriction of Hazardous Substances).
<b>Training necessary:</b>	Yes, training in practices and procedures contained in product literature.	
<b>Reissue date / reason for reissue:</b>	6/21/2018 / Updated GHS Standard Format	
<b>Intended Use of Product:</b>	Solvent Cement for PVC Plastic Pipe	

This product is intended for use by skilled individuals at their own risk. The information contained herein is based on data considered accurate based on current state of knowledge and experience. However, no warranty is expressed or implied regarding the accuracy of this data or the results to be obtained from the use thereof.



### SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** WELD-ON® P-70™ Low VOC Primer for PVC and CPVC Plastic Pipe  
**PRODUCT USE:** Low VOC Primer for PVC and CPVC Plastic Pipe  
**SUPPLIER:**

**MANUFACTURER:** IPS Corporation  
 17109 South Main Street, Gardena, CA 90248-3127  
 P.O. Box 379, Gardena, CA 90247-0379  
 Tel. 1-310-898-3300

**EMERGENCY:** Transportation: CHEMTEL Tel. 800.255-3924, +1 813-248-0585 (International) **Medical:** CHEMTEL Tel. 800.255-3924, +1 813-248-0585 (International)

### SECTION 2 - HAZARDS IDENTIFICATION

**GHS CLASSIFICATION:**

Health	Environmental	Physical
Acute Oral Toxicity: Category 4 Skin Irritation: Category 3 Skin Sensitization: NO Carcinogenicity: Category 2 Eye: Category 2	Acute Toxicity: None Known Chronic Toxicity: None Known	Flammable Liquid Category 2

**GHS LABEL:**



**Signal Word:**  
Danger

**WHMIS CLASSIFICATION:** CLASS B, DIVISION 2  
CLASS D, DIVISION 2B

Hazard Statements	Precautionary Statements
H225: Highly flammable liquid and vapor H319: Causes serious eye irritation H332: Harmful if inhaled H335: May cause respiratory irritation H336: May cause drowsiness or dizziness H351: Suspected of causing cancer EUH019: May form explosive peroxides	P210: Keep away from heat/sparks/open flames/hot surfaces – No smoking P261: Avoid breathing dust/fume/gas/mist/vapors/spray P280: Wear protective gloves/protective clothing/eye protection/face protection P304+P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing P403+P233: Store in a well ventilated place. Keep container tightly closed P501: Dispose of contents/container in accordance with local regulation

### SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

	CAS	EINECS	REACH Registration Number	CONCENTRATION % by Weight
Tetrahydrofuran (THF)	109-99-9	203-726-8	01-2119444314-46-0000	45 - 59
Methyl Ethyl Ketone (MEK)	78-93-3	201-159-0	01-2119457290-43-0000	19 - 29
Cyclohexanone	108-94-1	203-631-1	01-2119453616-35-0000	5 - 15
Acetone	67-64-1	200-662-2	01-2119471330-49-0000	5 - 20

All of the constituents of this adhesive product are listed on the TSCA inventory of chemical substances maintained by the US EPA, or are exempt from that listing.  
 \* Indicates this chemical is subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 (40CFR372).  
 # indicates that this chemical is found on Proposition 65's List of chemicals known to the State of California to cause cancer or reproductive toxicity.

### SECTION 4 - FIRST AID MEASURES

**Contact with eyes:** Flush eyes immediately with plenty of water for 15 minutes and seek medical advice immediately.  
**Skin contact:** Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water. If irritation develops, seek medical advice.  
**Inhalation:** Remove to fresh air. If breathing is stopped, give artificial respiration. If breathing is difficult, give oxygen. Seek medical advice.  
**Ingestion:** Rinse mouth with water. Give 1 or 2 glasses of water or milk to dilute. Do not induce vomiting. Seek medical advice immediately.  
**Likely Routes of Exposure:** Inhalation, Eye and Skin Contact  
**Acute symptoms and effects:**  
**Inhalation:** Severe overexposure may result in nausea, dizziness, headache. Can cause drowsiness, irritation of eyes and nasal passages.  
**Eye Contact:** Vapors slightly uncomfortable. Overexposure may result in severe eye injury with corneal or conjunctival inflammation on contact with the liquid.  
**Skin Contact:** Liquid contact may remove natural skin oils resulting in skin irritation. Dermatitis may occur with prolonged contact.  
**Ingestion:** May cause nausea, vomiting, diarrhea and mental sluggishness.  
**Chronic (long-term) effects:** Category 2 Carcinogen

### SECTION 5 - FIREFIGHTING MEASURES

**Suitable Extinguishing Media:** Dry chemical powder, carbon dioxide gas, foam, Halon, water fog.  
**Unsuitable Extinguishing Media:** Water spray or stream.  
**Exposure Hazards:** Inhalation and dermal contact  
**Combustion Products:** Oxides of carbon and smoke  
**Protection for Firefighters:** Self-contained breathing apparatus or full-face positive pressure airline masks.

	HMIS	NFPA	
Health	2	2	0-Minimal
Flammability	3	3	1-Slight
Reactivity	0	0	2-Moderate
PPE	B		3-Serious
			4-Severe

### SECTION 6 - ACCIDENTAL RELEASE MEASURES

**Personal precautions:** Keep away from heat, sparks and open flame.  
 Provide sufficient ventilation, use explosion-proof exhaust ventilation equipment or wear suitable respiratory protective equipment.  
 Prevent contact with skin or eyes (see section 8).  
**Environmental Precautions:** Prevent product or liquids contaminated with product from entering sewers, drains, soil or open water course.  
**Methods for Cleaning up:** Clean up with sand or other inert absorbent material. Transfer to a closable steel vessel.  
**Materials not to be used for clean up:** Aluminum or plastic containers

### SECTION 7 - HANDLING AND STORAGE

**Handling:** Avoid breathing of vapor, avoid contact with eyes, skin and clothing.  
 Keep away from ignition sources, use only electrically grounded handling equipment and ensure adequate ventilation/fume exhaust hoods.  
 Do not eat, drink or smoke while handling.  
**Storage:** Store in ventilated room or shade below 44°C (110°F) and away from direct sunlight.  
 Keep away from ignition sources and incompatible materials: caustics, ammonia, inorganic acids, chlorinated compounds, strong oxidizers and isocyanates.  
 Follow all precautionary information on container label, product bulletins and solvent cementing literature.

### SECTION 8 - PRECAUTIONS TO CONTROL EXPOSURE / PERSONAL PROTECTION

EXPOSURE LIMITS:	Component	ACGIH 8 hour TLV	ACGIH 15 min STEL	OSHA 8 hour PEL	OSHA 15 min STEL	OSHA PEL-Ceiling	CAL/OSHA 8 hour PEL	CAL/OSHA Ceiling	CAL/OSHA 15 min STEL
	Tetrahydrofuran (THF)	50 ppm	100 ppm	200 ppm	N/E	N/E	200 ppm	N/E	250 ppm
	Methyl Ethyl Ketone (MEK)	200 ppm	300 ppm	200 ppm	N/E	N/E	200 ppm	N/E	300 ppm
	Cyclohexanone	20 ppm	50 ppm	50 ppm	N/E	N/E	25 ppm	N/E	N/E
	Acetone	250 ppm	500 ppm	1000 ppm	N/E	N/E	500 ppm	3000 ppm	750 ppm

**Engineering Controls:** Use local exhaust as needed.  
**Monitoring:** Maintain breathing zone airborne concentrations below exposure limits.  
**Personal Protective Equipment (PPE):**  
**Eye Protection:** Avoid contact with eyes, wear splash-proof chemical goggles, face shield, safety glasses (spectacles) with brow guards and side shields, etc. as may be appropriate for the exposure.  
**Skin Protection:** Prevent contact with the skin as much as possible. Butyl rubber gloves should be used for frequent immersion.  
 Use of solvent-resistant gloves or solvent-resistant barrier cream should provide adequate protection when normal adhesive application practices and procedures are used for making structural bonds.  
**Respiratory Protection:** Prevent inhalation of the solvents. Use in a well-ventilated room. Open doors and/or windows to ensure airflow and air changes. Use local exhaust ventilation to remove airborne contaminants from employee breathing zone and to keep contaminants below levels listed above.  
 With normal use, the Exposure Limit Value will not usually be reached. When limits approached, use respiratory protection equipment.



# GHS SAFETY DATA SHEET

WELD-ON® P-70™ Low VOC Primer for PVC and CPVC Plastic Pipe

Date Revised: JAN 2019  
Supersedes: DEC 2018

## SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance:</b>	Clear or purple, thin liquid	<b>Odor Threshold:</b>	0.88 ppm (Cyclohexanone)
<b>Odor:</b>	Ethereal	<b>Boiling Range:</b>	56°C (133°F) to 156°C (313°F)
<b>pH:</b>	Not Applicable	<b>Evaporation Rate:</b>	> 1.0 (BUAC = 1)
<b>Melting/Freezing Point:</b>	-108.5°C (-163.3°F) Based on first melting component: THF	<b>Flammability:</b>	Category 2
<b>Boiling Point:</b>	56°C (133°F) Based on first boiling component: Acetone	<b>Flammability Limits:</b>	LEL: 1.1% based on Cyclohexanone UEL: 12.8% based on Acetone
<b>Flash Point:</b>	-20°C (-4°F) TCC based on Acetone	<b>Vapor Pressure:</b>	190 mm Hg @ 20°C (68°F) Acetone
<b>Specific Gravity:</b>	0.858 @ 23°C ( 73°F)	<b>Vapor Density:</b>	>2.0 (Air = 1)
<b>Solubility:</b>	Solvent portion soluble in water.	<b>Other Data: Viscosity:</b>	Water-thin
<b>Partition Coefficient n-octanol/water:</b>	Not Available		
<b>Auto-ignition Temperature:</b>	321°C (610°F) based on THF		
<b>Decomposition Temperature:</b>	Not Applicable		
<b>VOC Content:</b>	When applied as directed, per SCAQMD Rule 1168, Test Method 316A, VOC content is: ≤ 550 g/l.		

## SECTION 10 - STABILITY AND REACTIVITY

<b>Stability:</b>	Stable
<b>Hazardous decomposition products:</b>	None in normal use. When forced to burn, this product gives off oxides of carbon and smoke.
<b>Conditions to avoid:</b>	Keep away from heat, sparks, open flame and other ignition sources.
<b>Incompatible Materials:</b>	Oxidizers, strong acids and bases, amines, ammonia

## SECTION 11 - TOXICOLOGICAL INFORMATION

<b>Toxicity:</b>		<b>LD50</b>	<b>LC50</b>	<b>Target Organs</b>
Tetrahydrofuran (THF)	Oral: 2842 mg/kg (rat)	Inhalation 3 hrs. 21,000 mg/m <sup>3</sup> (rat)		STOT SE3
Methyl Ethyl Ketone (MEK)	Oral: 2737 mg/kg (rat), Dermal: 6480 mg/kg (rabbit)	Inhalation 8 hrs. 23,500 mg/m <sup>3</sup> (rat)		STOT SE3
Cyclohexanone	Oral: 1535 mg/kg (rat), Dermal: 948 mg/kg (rabbit)	Inhalation 4 hrs. 8,000 PPM (rat)		
Acetone	Oral: 5800 mg/kg (rat)	Inhalation 50,100 mg/m <sup>3</sup> (rat)		STOT SE3

Reproductive Effects	Teratogenicity	Mutagenicity	Embryotoxicity	Sensitization to Product	Synergistic Products
Not Established	Not Established	Not Established	Not Established	Not Established	Not Established

## SECTION 12 - ECOLOGICAL INFORMATION

<b>Ecotoxicity:</b>	None Known
<b>Mobility in Soil:</b>	If released into the environment, this product can move rapidly through the soil.
<b>Degradability:</b>	Not available
<b>Bioaccumulation:</b>	Minimal to none.

## SECTION 13 - WASTE DISPOSAL CONSIDERATIONS

Follow local and national regulations. Consult disposal expert.

## SECTION 14 - TRANSPORT INFORMATION

<b>Proper Shipping Name:</b>	Flammable Liquid, n.o.s. (Acetone, Tetrahydrofuran)
<b>Hazard Class:</b>	3
<b>Secondary Risk:</b>	None
<b>Identification Number:</b>	UN 1993
<b>Packing Group:</b>	PG II
<b>Label Required:</b>	Class 3 Flammable Liquid
<b>Marine Pollutant:</b>	NO

EXCEPTION for Ground Shipping	
<b>DOT Limited Quantity:</b> Up to 1L per inner packaging, 30 kg gross weight per package.	
<b>Consumer Commodity:</b> Depending on packaging, these quantities may qualify under DOT as "ORM-D".	

TDG INFORMATION	
TDG CLASS:	FLAMMABLE LIQUID 3
SHIPPING NAME:	Flammable Liquid, n.o.s. (Acetone, Tetrahydrofuran)
UN NUMBER/PACKING GROUP:	UN 1993, PG II

## SECTION 15 - REGULATORY INFORMATION

<b>Precautionary Label Information:</b>	Highly Flammable, Irritant, (Carc.-THF) Cat. 2	Ingredient Listings: USA TSCA, Europe EINECS, Canada DSL, Australia AICS, Korea ECL/TCCL, Japan MITI (ENCS)
<b>Symbols:</b>	F, Xi	
<b>Risk Phrases:</b>	R11: Highly flammable. R20: Harmful by inhalation. R36/37: Irritating to eyes and respiratory system.	R66: Repeated exposure may cause skin dryness or cracking R67: Vapors may cause drowsiness and dizziness
<b>Safety Phrases:</b>	S9: Keep container in a well-ventilated place. S16: Keep away from sources of ignition - No smoking. S25: Avoid contact with eyes.	S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S33: Take precautionary measures against static discharges. S46: If swallowed, seek medical advice immediately and show this container or label.
<b>Compliance Statement:</b>	This SDS was prepared to be in accordance with: US OSHA Hazard Communication Standard 29 CFR 1910.1200 (Rev 2012) European Regulation (EC) No (EU) 2015/830 on classification, labelling and packaging of substances and mixtures	

## SECTION 16 - OTHER INFORMATION

<b>Specification information:</b>	
<b>Department issuing data sheet:</b>	IPS, Safety Health & Environmental Affairs
<b>E-mail address:</b>	<EHSinfo@ipscorp.com>
<b>Training necessary:</b>	Yes, training in practices and procedures contained in product literature.
<b>Reissue date / reason for reissue:</b>	1/11/2019 / Updated GHS Standard Format
<b>Intended Use of Product:</b>	Primer for PVC and CPVC Plastic Pipe

This product is intended for use by skilled individuals at their own risk. The information contained herein is based on data considered accurate based on current state of knowledge and experience. However, no warranty is expressed or implied regarding the accuracy of this data or the results to be obtained from the use thereof.



# GHS SAFETY DATA SHEET

## WELD-ON® 705™ Low VOC Cements for PVC Plastic Pipe

Date Revised: JUN 2018  
Supersedes: NOV 2017

### SECTION I - PRODUCT AND COMPANY IDENTIFICATION


**PRODUCT NAME:** WELD-ON® 705™ Low VOC Cements for PVC Plastic Pipe  
**PRODUCT USE:** Low VOC Solvent Cement for PVC Plastic Pipe  
**SUPPLIER:** **MANUFACTURER:** IPS Corporation  
 17109 South Main Street, Gardena, CA 90248-3127  
 P.O. Box 379, Gardena, CA 90247-0379  
 Tel. 1-310-898-3300

**EMERGENCY:** Transportation: CHEMTEL Tel. 800.255-3924, +1 813-248-0585 (International) **Medical:** CHEMTEL Tel. 800.255-3924, +1 813-248-0585 (International)

### SECTION 2 - HAZARDS IDENTIFICATION

**GHS CLASSIFICATION:**

Health		Environmental		Physical	
Acute Toxicity:	Category 4	Acute Toxicity:	None Known	Flammable Liquid	Category 2
Skin Irritation:	Category 3	Chronic Toxicity:	None Known		
Skin Sensitization:	NO				
Eye:	Category 2				

**GHS LABEL:**    **Signal Word:** Danger **WHMIS CLASSIFICATION:** CLASS B, DIVISION 2  
CLASS D, DIVISION 1B

Hazard Statements	Precautionary Statements
H225: Highly flammable liquid and vapor H319: Causes serious eye irritation H332: Harmful if inhaled H335: May cause respiratory irritation H336: May cause drowsiness or dizziness H351: Suspected of causing cancer EUH019: May form explosive peroxides	P210: Keep away from heat/sparks/open flames/hot surfaces – No smoking P261: Avoid breathing dust/fume/gas/mist/vapors/spray P280: Wear protective gloves/protective clothing/eye protection/face protection P304+P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing P403+P233: Store in a well ventilated place. Keep container tightly closed P501: Dispose of contents/container in accordance with local regulation

### SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

	CAS#	EINECS #	REACH	CONCENTRATION
			Pre-registration Number	% by Weight
Tetrahydrofuran (THF)	109-99-9	203-726-8	05-2116297729-22-0000	25 - 50
Methyl Ethyl Ketone (MEK)	78-93-3	201-159-0	05-2116297728-24-0000	5 - 36
Cyclohexanone	108-94-1	203-631-1	05-2116297718-25-0000	15 - 30

All of the constituents of this adhesive product are listed on the TSCA inventory of chemical substances maintained by the US EPA, or are exempt from that listing.  
 \* Indicates this chemical is subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 (40CFR372).  
 # indicates that this chemical is found on Proposition 65's List of chemicals known to the State of California to cause cancer or reproductive toxicity.

### SECTION 4 - FIRST AID MEASURES

**Contact with eyes:** Flush eyes immediately with plenty of water for 15 minutes and seek medical advice immediately.  
**Skin Contact:** Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water. If irritation develops, seek medical advice.  
**Inhalation:** Remove to fresh air. If breathing is stopped, give artificial respiration. If breathing is difficult, give oxygen. Seek medical advice.  
**Ingestion:** Rinse mouth with water. Give 1 or 2 glasses of water or milk to dilute. Do not induce vomiting. Seek medical advice immediately.

**Likely Routes of Exposure:** Inhalation, Eye and Skin Contact

**Acute symptoms and effects:**  
**Inhalation:** Severe overexposure may result in nausea, dizziness, headache. Can cause drowsiness, irritation of eyes and nasal passages.  
**Eye Contact:** Vapors slightly uncomfortable. Overexposure may result in severe eye injury with corneal or conjunctival inflammation on contact with the liquid.  
**Skin Contact:** Liquid contact may remove natural skin oils resulting in skin irritation. Dermatitis may occur with prolonged contact.  
**Ingestion:** May cause nausea, vomiting, diarrhea and mental sluggishness.

**Chronic (long-term) effects:** Category 2 Carcinogen

### SECTION 5 - FIREFIGHTING MEASURES

<b>Suitable Extinguishing Media:</b> Dry chemical powder, carbon dioxide gas, foam, Halon, water fog.	HMIS	NFPA	0-Minimal
<b>Unsuitable Extinguishing Media:</b> Water spray or stream.	Health	2	1-Slight
<b>Exposure Hazards:</b> Inhalation and dermal contact	Flammability	3	2-Moderate
<b>Combustion Products:</b> Oxides of carbon, hydrogen chloride and smoke	Reactivity	0	3-Serious
	PPE	B	4-Severe

**Protection for Firefighters:** Self-contained breathing apparatus or full-face positive pressure airline masks.

### SECTION 6 - ACCIDENTAL RELEASE MEASURES

**Personal precautions:** Keep away from heat, sparks and open flame.  
 Provide sufficient ventilation, use explosion-proof exhaust ventilation equipment or wear suitable respiratory protective equipment.  
 Prevent contact with skin or eyes (see section 8).

**Environmental Precautions:** Prevent product or liquids contaminated with product from entering sewers, drains, soil or open water course.

**Methods for Cleaning up:** Clean up with sand or other inert absorbent material. Transfer to a closable steel vessel.

**Materials not to be used for clean up:** Aluminum or plastic containers

### SECTION 7 - HANDLING AND STORAGE

**Handling:** Avoid breathing of vapor, avoid contact with eyes, skin and clothing.  
 Keep away from ignition sources, use only electrically grounded handling equipment and ensure adequate ventilation/fume exhaust hoods.  
 Do not eat, drink or smoke while handling.

**Storage:** Store in ventilated room or shade below 44°C (110°F) and away from direct sunlight.  
 Keep away from ignition sources and incompatible materials: caustics, ammonia, inorganic acids, chlorinated compounds, strong oxidizers and isocyanates.  
 Follow all precautionary information on container label, product bulletins and solvent cementing literature.

### SECTION 8 - PRECAUTIONS TO CONTROL EXPOSURE / PERSONAL PROTECTION

EXPOSURE LIMITS:	Component	ACGIH TLV	ACGIH STEL	OSHA PEL	OSHA STEL	OSHA PEL-Ceiling	CAL/OSHA PEL	CAL/OSHA Ceiling	CAL/OSHA STEL
	Tetrahydrofuran (THF)	50 ppm	100 ppm	200 ppm	N/E	N/E	200 ppm	N/E	250 ppm
	Methyl Ethyl Ketone (MEK)	200 ppm	300 ppm	200 ppm	N/E	N/E	200 ppm	N/E	300 ppm
	Cyclohexanone	20 ppm	50 ppm	50 ppm	N/E	N/E	25 ppm	N/E	N/E

**Engineering Controls:** Use local exhaust as needed.  
**Monitoring:** Maintain breathing zone airborne concentrations below exposure limits.  
**Personal Protective Equipment (PPE):**  
**Eye Protection:** Avoid contact with eyes, wear splash-proof chemical goggles, face shield, safety glasses (spectacles) with brow guards and side shields, etc. as may be appropriate for the exposure.  
**Skin Protection:** Prevent contact with the skin as much as possible. Butyl rubber gloves should be used for frequent immersion.  
 Use of solvent-resistant gloves or solvent-resistant barrier cream should provide adequate protection when normal adhesive application practices and procedures are used for making structural bonds.  
**Respiratory Protection:** Prevent inhalation of the solvents. Use in a well-ventilated room. Open doors and/or windows to ensure airflow and air changes. Use local exhaust ventilation to remove airborne contaminants from employee breathing zone and to keep contaminants below levels listed above.  
 With normal use, the Exposure Limit Value will not usually be reached. When limits approached, use respiratory protection equipment.



# GHS SAFETY DATA SHEET

## WELD-ON® 705™ Low VOC Cements for PVC Plastic Pipe

Date Revised: JUN 2018

Supersedes: NOV 2017

### SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance:</b>	Clear or gray, medium syrupy liquid	<b>Odor Threshold:</b>	0.88 ppm (Cyclohexanone)
<b>Odor:</b>	Ketone	<b>Boiling Range:</b>	66°C (151°F) to 156°C (313°F)
<b>pH:</b>	Not Applicable	<b>Evaporation Rate:</b>	> 1.0 (BUAC = 1)
<b>Melting/Freezing Point:</b>	-108.5°C (-163.3°F) Based on first melting component: THF	<b>Flammability:</b>	Category 2
<b>Boiling Point:</b>	66°C (151°F) Based on first boiling component: THF	<b>Flammability Limits:</b>	LEL: 1.1% based on Cyclohexanone UEL: 11.8% based on THF
<b>Flash Point:</b>	-20°C (-4°F) TCC based on THF	<b>Vapor Pressure:</b>	129 mm Hg @ 20°C (68°F) based on THF
<b>Specific Gravity:</b>	0.9611 @ 23°C ( 73°F)	<b>Vapor Density:</b>	>2 (Air = 1)
<b>Solubility:</b>	Solvent portion soluble in water. Resin portion separates out.	<b>Other Data: Viscosity:</b>	Medium bodied
<b>Partition Coefficient n-octanol/water:</b>	Not Available		
<b>Auto-ignition Temperature:</b>	321°C (610°F) based on THF		
<b>Decomposition Temperature:</b>	Not Applicable		
<b>VOC Content:</b>	When applied as directed, per SCAQMD Rule 1168, Test Method 316A, VOC content is: ≤ 500 g/l.		

### SECTION 10 - STABILITY AND REACTIVITY

<b>Stability:</b>	Stable
<b>Hazardous decomposition products:</b>	None in normal use. When forced to burn, this product gives off oxides of carbon, hydrogen chloride and smoke.
<b>Conditions to avoid:</b>	Keep away from heat, sparks, open flame and other ignition sources.
<b>Incompatible Materials:</b>	Oxidizers, strong acids and bases, amines, ammonia

### SECTION 11 - TOXICOLOGICAL INFORMATION

<b>Toxicity:</b>	LD <sub>50</sub>	LC <sub>50</sub>	<b>Target Organs</b>
Tetrahydrofuran (THF)	Oral: 2842 mg/kg (rat)	Inhalation 3 hrs. 21,000 mg/m <sup>3</sup> (rat)	STOT SE3
Methyl Ethyl Ketone (MEK)	Oral: 2737 mg/kg (rat), Dermal: 6480 mg/kg (rabbit)	Inhalation 8 hrs. 23,500 mg/m <sup>3</sup> (rat)	STOT SE3
Cyclohexanone	Oral: 1535 mg/kg (rat), Dermal: 948 mg/kg (rabbit)	Inhalation 4 hrs. 8,000 PPM (rat)	

Reproductive Effects	Teratogenicity	Mutagenicity	Embryotoxicity	Sensitization to Product	Synergistic Products
Not Established	Not Established	Not Established	Not Established	Not Established	Not Established

### SECTION 12 - ECOLOGICAL INFORMATION

<b>Ecotoxicity:</b>	None Known
<b>Mobility:</b>	In normal use, emission of volatile organic compounds (VOC's) to the air takes place, typically at a rate of ≤ 500 g/l.
<b>Degradability:</b>	Not readily biodegradable
<b>Bioaccumulation:</b>	Minimal to none.

### SECTION 13 - WASTE DISPOSAL CONSIDERATIONS

Follow local and national regulations. Consult disposal expert.

### SECTION 14 - TRANSPORT INFORMATION

<b>Proper Shipping Name:</b>	Adhesives
<b>Hazard Class:</b>	3
<b>Secondary Risk:</b>	None
<b>Identification Number:</b>	UN 1133
<b>Packing Group:</b>	PG II
<b>Label Required:</b>	Class 3 Flammable Liquid
<b>Marine Pollutant:</b>	NO

**EXCEPTION for Ground Shipping**

**DOT Limited Quantity:** Up to 5L per inner packaging, 30 kg gross weight per package.  
**Consumer Commodity:** Depending on packaging, these quantities may qualify under DOT as "ORM-D".

TDG INFORMATION	
TDG CLASS:	FLAMMABLE LIQUID 3
SHIPPING NAME:	ADHESIVES
UN NUMBER/PACKING GROUP:	UN 1133, PG II

### SECTION 15 - REGULATORY INFORMATION

<b>Precautionary Label Information:</b>	Highly Flammable, Irritant, Carc. Cat. 2	<b>Ingredient Listings:</b>	USA TSCA, Europe EINECS, Canada DSL, Australia AICS, Korea ECL/TCCL, Japan MITI (ENCS)
<b>Symbols:</b>	F, Xi		
<b>Risk Phrases:</b>	R11: Highly flammable. R20: Harmful by inhalation. R36/37: Irritating to eyes and respiratory system.	R66: Repeated exposure may cause skin dryness or cracking R67: Vapors may cause drowsiness and dizziness	
<b>Safety Phrases:</b>	S9: Keep container in a well-ventilated place. S16: Keep away from sources of ignition - No smoking. S25: Avoid contact with eyes.	S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S33: Take precautionary measures against static discharges. S46: If swallowed, seek medical advise immediately and show this container or label.	

### SECTION 16 - OTHER INFORMATION

<b>Specification Information:</b>		
<b>Department issuing data sheet:</b>	IPS, Safety Health & Environmental Affairs	All ingredients are compliant with the requirements of the European Directive on RoHS (Restriction of Hazardous Substances).
<b>E-mail address:</b>	<EHSinfo@ipscorp.com>	
<b>Training necessary:</b>	Yes, training in practices and procedures contained in product literature.	
<b>Reissue date / reason for reissue:</b>	6/21/2018 / Updated GHS Standard Format	
<b>Intended Use of Product:</b>	Solvent Cement for PVC Plastic Pipe	

This product is intended for use by skilled individuals at their own risk. The information contained herein is based on data considered accurate based on current state of knowledge and experience. However, no warranty is expressed or implied regarding the accuracy of this data or the results to be obtained from the use thereof.



# GHS SAFETY DATA SHEET

## WELD-ON® 705™ Low VOC Cements for PVC Plastic Pipe

Date Revised: JUN 2018  
Supersedes: NOV 2017




### SECTION I - PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** WELD-ON® 705™ Low VOC Cements for PVC Plastic Pipe  
**PRODUCT USE:** Low VOC Solvent Cement for PVC Plastic Pipe  
**SUPPLIER:** **MANUFACTURER:** IPS Corporation  
 17109 South Main Street, Gardena, CA 90248-3127  
 P.O. Box 379, Gardena, CA 90247-0379  
 Tel. 1-310-898-3300

**EMERGENCY:** Transportation: CHEMTEL Tel. 800.255-3924, +1 813-248-0585 (International) **Medical:** CHEMTEL Tel. 800.255-3924, +1 813-248-0585 (International)

### SECTION 2 - HAZARDS IDENTIFICATION

GHS CLASSIFICATION:		Environmental		Physical	
Health	Acute Toxicity: Category 4	Acute Toxicity: None Known	Chronic Toxicity: None Known	Flammable Liquid	Category 2
Acute Toxicity:	Category 4	Acute Toxicity:	None Known	Flammable Liquid	Category 2
Skin Irritation:	Category 3	Chronic Toxicity:	None Known		
Skin Sensitization:	NO				
Eye:	Category 2				

**GHS LABEL:**    **Signal Word:** Danger **WHMIS CLASSIFICATION:** CLASS B, DIVISION 2  
CLASS D, DIVISION 1B

Hazard Statements	Precautionary Statements
H225: Highly flammable liquid and vapor H319: Causes serious eye irritation H332: Harmful if inhaled H335: May cause respiratory irritation H336: May cause drowsiness or dizziness H351: Suspected of causing cancer EUH019: May form explosive peroxides	P210: Keep away from heat/sparks/open flames/hot surfaces – No smoking P261: Avoid breathing dust/fume/gas/mist/vapors/spray P280: Wear protective gloves/protective clothing/eye protection/face protection P304+P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing P403+P233: Store in a well ventilated place. Keep container tightly closed P501: Dispose of contents/container in accordance with local regulation

### SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

	CAS#	EINECS #	REACH	CONCENTRATION
			Pre-registration Number	% by Weight
Tetrahydrofuran (THF)	109-99-9	203-726-8	05-2116297729-22-0000	25 - 50
Methyl Ethyl Ketone (MEK)	78-93-3	201-159-0	05-2116297728-24-0000	5 - 36
Cyclohexanone	108-94-1	203-631-1	05-2116297718-25-0000	15 - 30

All of the constituents of this adhesive product are listed on the TSCA inventory of chemical substances maintained by the US EPA, or are exempt from that listing.  
 \* Indicates this chemical is subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 (40CFR372).  
 # indicates that this chemical is found on Proposition 65's List of chemicals known to the State of California to cause cancer or reproductive toxicity.

### SECTION 4 - FIRST AID MEASURES

**Contact with eyes:** Flush eyes immediately with plenty of water for 15 minutes and seek medical advice immediately.  
**Skin Contact:** Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water. If irritation develops, seek medical advice.  
**Inhalation:** Remove to fresh air. If breathing is stopped, give artificial respiration. If breathing is difficult, give oxygen. Seek medical advice.  
**Ingestion:** Rinse mouth with water. Give 1 or 2 glasses of water or milk to dilute. Do not induce vomiting. Seek medical advice immediately.

**Likely Routes of Exposure:** Inhalation, Eye and Skin Contact

**Acute symptoms and effects:**  
**Inhalation:** Severe overexposure may result in nausea, dizziness, headache. Can cause drowsiness, irritation of eyes and nasal passages.  
**Eye Contact:** Vapors slightly uncomfortable. Overexposure may result in severe eye injury with corneal or conjunctival inflammation on contact with the liquid.  
**Skin Contact:** Liquid contact may remove natural skin oils resulting in skin irritation. Dermatitis may occur with prolonged contact.  
**Ingestion:** May cause nausea, vomiting, diarrhea and mental sluggishness.

**Chronic (long-term) effects:** Category 2 Carcinogen

### SECTION 5 - FIREFIGHTING MEASURES

<b>Suitable Extinguishing Media:</b> Dry chemical powder, carbon dioxide gas, foam, Halon, water fog.	Health	2	NFPA	0-Minimal
<b>Unsuitable Extinguishing Media:</b> Water spray or stream.	Flammability	3		1-Slight
<b>Exposure Hazards:</b> Inhalation and dermal contact	Reactivity	0		2-Moderate
<b>Combustion Products:</b> Oxides of carbon, hydrogen chloride and smoke	PPE	B		3-Serious
				4-Severe

**Protection for Firefighters:** Self-contained breathing apparatus or full-face positive pressure airline masks.

### SECTION 6 - ACCIDENTAL RELEASE MEASURES

**Personal precautions:** Keep away from heat, sparks and open flame.  
Provide sufficient ventilation, use explosion-proof exhaust ventilation equipment or wear suitable respiratory protective equipment.  
Prevent contact with skin or eyes (see section 8).

**Environmental Precautions:** Prevent product or liquids contaminated with product from entering sewers, drains, soil or open water course.

**Methods for Cleaning up:** Clean up with sand or other inert absorbent material. Transfer to a closable steel vessel.

**Materials not to be used for clean up:** Aluminum or plastic containers

### SECTION 7 - HANDLING AND STORAGE

**Handling:** Avoid breathing of vapor, avoid contact with eyes, skin and clothing.  
Keep away from ignition sources, use only electrically grounded handling equipment and ensure adequate ventilation/fume exhaust hoods.  
Do not eat, drink or smoke while handling.

**Storage:** Store in ventilated room or shade below 44°C (110°F) and away from direct sunlight.  
Keep away from ignition sources and incompatible materials: caustics, ammonia, inorganic acids, chlorinated compounds, strong oxidizers and isocyanates.  
Follow all precautionary information on container label, product bulletins and solvent cementing literature.

### SECTION 8 - PRECAUTIONS TO CONTROL EXPOSURE / PERSONAL PROTECTION

EXPOSURE LIMITS:	Component	ACGIH TLV	ACGIH STEL	OSHA PEL	OSHA STEL	OSHA PEL-Ceiling	CAL/OSHA PEL	CAL/OSHA Ceiling	CAL/OSHA STEL
	Tetrahydrofuran (THF)	50 ppm	100 ppm	200 ppm	N/E	N/E	200 ppm	N/E	250 ppm
	Methyl Ethyl Ketone (MEK)	200 ppm	300 ppm	200 ppm	N/E	N/E	200 ppm	N/E	300 ppm
	Cyclohexanone	20 ppm	50 ppm	50 ppm	N/E	N/E	25 ppm	N/E	N/E

**Engineering Controls:** Use local exhaust as needed.  
**Monitoring:** Maintain breathing zone airborne concentrations below exposure limits.  
**Personal Protective Equipment (PPE):**  
**Eye Protection:** Avoid contact with eyes, wear splash-proof chemical goggles, face shield, safety glasses (spectacles) with brow guards and side shields, etc. as may be appropriate for the exposure.  
**Skin Protection:** Prevent contact with the skin as much as possible. Butyl rubber gloves should be used for frequent immersion.  
Use of solvent-resistant gloves or solvent-resistant barrier cream should provide adequate protection when normal adhesive application practices and procedures are used for making structural bonds.  
**Respiratory Protection:** Prevent inhalation of the solvents. Use in a well-ventilated room. Open doors and/or windows to ensure airflow and air changes. Use local exhaust ventilation to remove airborne contaminants from employee breathing zone and to keep contaminants below levels listed above.  
With normal use, the Exposure Limit Value will not usually be reached. When limits approached, use respiratory protection equipment.



# GHS SAFETY DATA SHEET

WELD-ON® 705™ Low VOC Cements for PVC Plastic Pipe

Date Revised: JUN 2018  
Supersedes: NOV 2017

## SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance:</b>	Clear or gray, medium syrupy liquid	<b>Odor Threshold:</b>	0.88 ppm (Cyclohexanone)
<b>Odor:</b>	Ketone	<b>Boiling Range:</b>	66°C (151°F) to 156°C (313°F)
<b>pH:</b>	Not Applicable	<b>Evaporation Rate:</b>	> 1.0 (BUAC = 1)
<b>Melting/Freezing Point:</b>	-108.5°C (-163.3°F) Based on first melting component: THF	<b>Flammability:</b>	Category 2
<b>Boiling Point:</b>	66°C (151°F) Based on first boiling component: THF	<b>Flammability Limits:</b>	LEL: 1.1% based on Cyclohexanone UEL: 11.8% based on THF
<b>Flash Point:</b>	-20°C (-4°F) TCC based on THF	<b>Vapor Pressure:</b>	129 mm Hg @ 20°C (68°F) based on THF
<b>Specific Gravity:</b>	0.9611 @ 23°C ( 73°F)	<b>Vapor Density:</b>	>2 (Air = 1)
<b>Solubility:</b>	Solvent portion soluble in water. Resin portion separates out.	<b>Other Data: Viscosity:</b>	Medium bodied
<b>Partition Coefficient n-octanol/water:</b>	Not Available		
<b>Auto-ignition Temperature:</b>	321°C (610°F) based on THF		
<b>Decomposition Temperature:</b>	Not Applicable		
<b>VOC Content:</b>	When applied as directed, per SCAQMD Rule 1168, Test Method 316A, VOC content is: ≤ 500 g/l.		

## SECTION 10 - STABILITY AND REACTIVITY

<b>Stability:</b>	Stable
<b>Hazardous decomposition products:</b>	None in normal use. When forced to burn, this product gives off oxides of carbon, hydrogen chloride and smoke.
<b>Conditions to avoid:</b>	Keep away from heat, sparks, open flame and other ignition sources.
<b>Incompatible Materials:</b>	Oxidizers, strong acids and bases, amines, ammonia

## SECTION 11 - TOXICOLOGICAL INFORMATION

<b>Toxicity:</b>	LD <sub>50</sub>	LC <sub>50</sub>	<b>Target Organs</b>
Tetrahydrofuran (THF)	Oral: 2842 mg/kg (rat)	Inhalation 3 hrs. 21,000 mg/m <sup>3</sup> (rat)	STOT SE3
Methyl Ethyl Ketone (MEK)	Oral: 2737 mg/kg (rat), Dermal: 6480 mg/kg (rabbit)	Inhalation 8 hrs. 23,500 mg/m <sup>3</sup> (rat)	STOT SE3
Cyclohexanone	Oral: 1535 mg/kg (rat), Dermal: 948 mg/kg (rabbit)	Inhalation 4 hrs. 8,000 PPM (rat)	

Reproductive Effects	Teratogenicity	Mutagenicity	Embryotoxicity	Sensitization to Product	Synergistic Products
Not Established	Not Established	Not Established	Not Established	Not Established	Not Established

## SECTION 12 - ECOLOGICAL INFORMATION

<b>Ecotoxicity:</b>	None Known
<b>Mobility:</b>	In normal use, emission of volatile organic compounds (VOC's) to the air takes place, typically at a rate of ≤ 500 g/l.
<b>Degradability:</b>	Not readily biodegradable
<b>Bioaccumulation:</b>	Minimal to none.

## SECTION 13 - WASTE DISPOSAL CONSIDERATIONS

Follow local and national regulations. Consult disposal expert.

## SECTION 14 - TRANSPORT INFORMATION

<b>Proper Shipping Name:</b>	Adhesives	<b>EXCEPTION for Ground Shipping</b> DOT Limited Quantity: Up to 5L per inner packaging, 30 kg gross weight per package. Consumer Commodity: Depending on packaging, these quantities may qualify under DOT as "ORM-D".
<b>Hazard Class:</b>	3	
<b>Secondary Risk:</b>	None	<b>TDG INFORMATION</b> TDG CLASS: FLAMMABLE LIQUID 3 SHIPPING NAME: ADHESIVES UN NUMBER/PACKING GROUP: UN 1133, PG II
<b>Identification Number:</b>	UN 1133	
<b>Packing Group:</b>	PG II	
<b>Label Required:</b>	Class 3 Flammable Liquid	
<b>Marine Pollutant:</b>	NO	

## SECTION 15 - REGULATORY INFORMATION

<b>Precautionary Label Information:</b>	Highly Flammable, Irritant, Carc. Cat. 2	<b>Ingredient Listings:</b>	USA TSCA, Europe EINECS, Canada DSL, Australia AICS, Korea ECL/TCCL, Japan MITI (ENCS)
<b>Symbols:</b>	F, Xi		
<b>Risk Phrases:</b>	R11: Highly flammable. R20: Harmful by inhalation. R36/37: Irritating to eyes and respiratory system.	R66: Repeated exposure may cause skin dryness or cracking R67: Vapors may cause drowsiness and dizziness	
<b>Safety Phrases:</b>	S9: Keep container in a well-ventilated place. S16: Keep away from sources of ignition - No smoking. S25: Avoid contact with eyes.	S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S33: Take precautionary measures against static discharges. S46: If swallowed, seek medical advise immediately and show this container or label.	

## SECTION 16 - OTHER INFORMATION

<b>Specification Information:</b>		
<b>Department issuing data sheet:</b>	IPS, Safety Health & Environmental Affairs	All ingredients are compliant with the requirements of the European Directive on RoHS (Restriction of Hazardous Substances).
<b>E-mail address:</b>	<EHSinfo@ipscorp.com>	
<b>Training necessary:</b>	Yes, training in practices and procedures contained in product literature.	
<b>Reissue date / reason for reissue:</b>	6/21/2018 / Updated GHS Standard Format	
<b>Intended Use of Product:</b>	Solvent Cement for PVC Plastic Pipe	

This product is intended for use by skilled individuals at their own risk. The information contained herein is based on data considered accurate based on current state of knowledge and experience. However, no warranty is expressed or implied regarding the accuracy of this data or the results to be obtained from the use thereof.

# SAFETY DATA SHEET

WL1111100

## Section 1. Identification

**Product name** : WHITE LIGHTNING® STOP GAP!™ Minimal Expanding Insulating Foam  
**Product code** : WL1111100  
**Other means of identification** : Not available.  
**Product type** : Spray  
**Relevant identified uses of the substance or mixture and uses advised against**  
Paint or paint related material.

**Manufacturer** : White Lightning Products  
101 W. Prospect Avenue  
Cleveland, OH 44115

**Emergency telephone number of the company** : (216) 566-2917

**Product Information Telephone Number** : (800) 241-5295

**Regulatory Information Telephone Number** : (216) 566-2902

**Transportation Emergency Telephone Number** : (800) 424-9300

## Section 2. Hazards identification

**OSHA/HCS status** : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

**Classification of the substance or mixture** : FLAMMABLE AEROSOLS - Category 1  
GASES UNDER PRESSURE - Compressed gas  
ACUTE TOXICITY (inhalation) - Category 4  
SKIN CORROSION/IRRITATION - Category 2  
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A  
RESPIRATORY SENSITIZATION - Category 1  
SKIN SENSITIZATION - Category 1  
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3  
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3  
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2  
Percentage of the mixture consisting of ingredient(s) of unknown acute oral toxicity: 24%  
Percentage of the mixture consisting of ingredient(s) of unknown acute dermal toxicity: 24%  
Percentage of the mixture consisting of ingredient(s) of unknown acute inhalation toxicity: 10%

### GHS label elements

**Hazard pictograms** :



**Date of issue/Date of revision** : 11/28/2019 **Date of previous issue** : 9/6/2017

**Version** : 5

1/14

WL1111100 WHITE LIGHTNING® STOP GAP!™ Minimal Expanding Insulating Foam

SHW-85-NA-GHS-US

## Section 2. Hazards identification

- Signal word** : Danger
- Hazard statements** : Extremely flammable aerosol.  
Contains gas under pressure; may explode if heated.  
Harmful if inhaled.  
Causes serious eye irritation.  
Causes skin irritation.  
May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
May cause an allergic skin reaction.  
May cause respiratory irritation.  
May cause drowsiness or dizziness.  
May cause damage to organs through prolonged or repeated exposure.
- Precautionary statements**
- General** : Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand.
- Prevention** : Wear protective gloves. Wear eye or face protection. Wear respiratory protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not spray on an open flame or other ignition source. Use only outdoors or in a well-ventilated area. Do not breathe vapor. Wash hands thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace. Pressurized container: Do not pierce or burn, even after use.
- Response** : Get medical attention if you feel unwell. IF INHALED: If breathing is difficult, remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or physician if you feel unwell. If experiencing respiratory symptoms: Call a POISON CENTER or physician. IF ON SKIN: Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.
- Storage** : Store locked up. Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F. Store in a well-ventilated place.
- Disposal** : Dispose of contents and container in accordance with all local, regional, national and international regulations.
- Supplemental label elements** DELAYED EFFECTS FROM LONG TERM OVEREXPOSURE. Contains solvents which can cause permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal. VAPOR AND SPRAY MIST HARMFUL. Gives off harmful vapor of solvents and isocyanates. DO NOT USE IF YOU HAVE CHRONIC (LONG-TERM) LUNG OR BREATHING PROBLEMS, OR IF YOU HAVE EVER HAD A REACTION TO ISOCYANATES. USE ONLY WITH ADEQUATE VENTILATION. WHERE OVERSPRAY IS PRESENT, A POSITIVE PRESSURE AIR SUPPLIED RESPIRATOR (NIOSH approved) SHOULD BE WORN TO PREVENT EXPOSURE. IF UNAVAILABLE, AN APPROPRIATE PROPERLY FITTED APPROVED NIOSH VAPOR/PARTICULATE RESPIRATOR MAY BE EFFECTIVE. Follow directions for respirator use. Wear the respirator for the whole time of spraying and until all vapors and mists are gone. If you have any breathing problems during use, LEAVE THE AREA and get fresh air. If problems remain or happen later, IMMEDIATELY call a doctor - If not available get emergency medical treatment. Have this label with you. Reacts with water in closed container to produce pressure which may cause container to burst.
- Please refer to the SDS for additional information. Keep out of reach of children. Keep upright in a cool, dry place. Do not discard empty can in trash compactor.
- Hazards not otherwise classified** : None known.



## Section 3. Composition/information on ingredients

**Substance/mixture** : Mixture  
**Other means of identification** : Not available.

### CAS number/other identifiers

Ingredient name	% by weight	CAS number
Diphenylmethane Diisocyanate Polymer	≥25 - ≤50	9016-87-9
4, 4'-Diphenylmethane Diisocyanate	≥10 - ≤25	101-68-8
Propane	≥10 - ≤25	74-98-6
2-Methylpropane	≥10 - ≤25	75-28-5
Dimethyl Ether	≤5	115-10-6

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

**There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health and hence require reporting in this section.**

Occupational exposure limits, if available, are listed in Section 8.

## Section 4. First aid measures

### Description of necessary first aid measures

- Eye contact** : Get medical attention.
- Inhalation** : If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours. In the event of any complaints or symptoms, avoid further exposure.
- Skin contact** : Wash with plenty of soap and water. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure.
- Ingestion** : Get medical attention. If necessary, call a poison center or physician.

### Most important symptoms/effects, acute and delayed

#### Potential acute health effects

- Eye contact** : Causes serious eye irritation.
- Inhalation** : Harmful if inhaled. Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness. May cause respiratory irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled.
- Skin contact** : Causes skin irritation. May cause an allergic skin reaction.
- Ingestion** : Can cause central nervous system (CNS) depression.

#### Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:  
pain or irritation  
watering  
redness

## Section 4. First aid measures

- Inhalation** : Adverse symptoms may include the following:  
respiratory tract irritation  
coughing  
wheezing and breathing difficulties  
asthma  
nausea or vomiting  
headache  
drowsiness/fatigue  
dizziness/vertigo  
unconsciousness
- Skin contact** : Adverse symptoms may include the following:  
irritation  
redness
- Ingestion** : No specific data.

### Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

## Section 5. Fire-fighting measures

### Extinguishing media

- Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.
- Unsuitable extinguishing media** : None known.

- Specific hazards arising from the chemical** : Extremely flammable aerosol. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Gas may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back, causing fire or explosion. Bursting aerosol containers may be propelled from a fire at high speed.

- Hazardous thermal decomposition products** : Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide  
nitrogen oxides

- Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

- Special protective equipment for fire-fighters** :

## Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : In the case of aerosols being ruptured, care should be taken due to the rapid escape of the pressurized contents and propellant. If a large number of containers are ruptured, treat as a bulk material spillage according to the instructions in the clean-up section. Shut off all ignition sources. No flares, smoking or flames in hazard area.
- For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

**Environmental precautions** : No specific hazard.

### Methods and materials for containment and cleaning up

- Small spill** : Use spark-proof tools and explosion-proof equipment.
- Large spill** : Use spark-proof tools and explosion-proof equipment. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

## Section 7. Handling and storage

### Precautions for safe handling

- Protective measures** : Persons with a history of skin sensitization problems or asthma, allergies or chronic or recurrent respiratory disease should not be employed in any process in which this product is used. Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use. Do not get in eyes or on skin or clothing. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools.
- Advice on general occupational hygiene** : Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

**Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations. Protect from sunlight. Store locked up. Eliminate all ignition sources. See Section 10 for incompatible materials before handling or use.

## Section 8. Exposure controls/personal protection

### Control parameters

#### Occupational exposure limits (OSHA United States)

Ingredient name	CAS #	Exposure limits
Diphenylmethane Diisocyanate Polymer 4, 4'-Diphenylmethane Diisocyanate	9016-87-9 101-68-8	None. <b>ACGIH TLV (United States, 3/2019).</b> TWA: 0.005 ppm 8 hours. <b>NIOSH REL (United States, 10/2016).</b> TWA: 0.05 mg/m <sup>3</sup> 10 hours. TWA: 0.005 ppm 10 hours. CEIL: 0.2 mg/m <sup>3</sup> 10 minutes. CEIL: 0.02 ppm 10 minutes. <b>OSHA PEL (United States, 5/2018).</b> CEIL: 0.02 ppm CEIL: 0.2 mg/m <sup>3</sup>
Propane	74-98-6	<b>NIOSH REL (United States, 10/2016).</b> TWA: 1000 ppm 10 hours. TWA: 1800 mg/m <sup>3</sup> 10 hours.

## Section 8. Exposure controls/personal protection

2-Methylpropane	75-28-5	<p><b>OSHA PEL (United States, 5/2018).</b> TWA: 1000 ppm 8 hours. TWA: 1800 mg/m<sup>3</sup> 8 hours.</p> <p><b>ACGIH TLV (United States, 3/2019). Oxygen Depletion [Asphyxiant]. Explosive potential.</b></p>
Dimethyl Ether	115-10-6	<p><b>NIOSH REL (United States, 10/2016).</b> TWA: 800 ppm 10 hours. TWA: 1900 mg/m<sup>3</sup> 10 hours.</p> <p><b>ACGIH TLV (United States, 3/2019). Explosive potential.</b> STEL: 1000 ppm 15 minutes.</p> <p><b>AIHA WEEL (United States, 7/2018).</b> TWA: 1000 ppm 8 hours.</p>

**Occupational exposure limits (Canada)**

Ingredient name	CAS #	Exposure limits
Isocyanuric acid polymethylene polyphenyl isocyanate	9016-87-9	<p><b>CA Alberta Provincial (Canada, 6/2018).</b> 8 hrs OEL: 0.07 mg/m<sup>3</sup> 8 hours. 8 hrs OEL: 0.005 ppm 8 hours.</p> <p><b>CA British Columbia Provincial (Canada, 5/2019).</b> TWA: 0.005 ppm 8 hours. C: 0.01 ppm</p> <p><b>CA Ontario Provincial (Canada, 1/2018).</b> C: 0.02 ppm TWA: 0.005 ppm 8 hours.</p>
Diphenylmethane-4,4'-diisocyanate	101-68-8	<p><b>CA Alberta Provincial (Canada, 6/2018).</b> 8 hrs OEL: 0.005 ppm 8 hours. 8 hrs OEL: 0.05 mg/m<sup>3</sup> 8 hours.</p> <p><b>CA British Columbia Provincial (Canada, 5/2019). Inhalation sensitizer.</b> TWA: 0.005 ppm 8 hours. C: 0.01 ppm</p> <p><b>CA Quebec Provincial (Canada, 1/2014). Skin sensitizer.</b> TWA<sub>EV</sub>: 0.005 ppm 8 hours. TWA<sub>EV</sub>: 0.051 mg/m<sup>3</sup> 8 hours.</p> <p><b>CA Ontario Provincial (Canada, 1/2018).</b> TWA: 0.005 ppm 8 hours.</p> <p><b>CA Saskatchewan Provincial (Canada, 7/2013).</b> STEL: 0.015 ppm 15 minutes. TWA: 0.005 ppm 8 hours.</p>
Normal propane	74-98-6	<p><b>CA Alberta Provincial (Canada, 6/2018).</b> 8 hrs OEL: 1000 ppm 8 hours.</p> <p><b>CA Quebec Provincial (Canada, 1/2014).</b> TWA<sub>EV</sub>: 1000 ppm 8 hours. TWA<sub>EV</sub>: 1800 mg/m<sup>3</sup> 8 hours.</p> <p><b>CA Ontario Provincial (Canada, 1/2018).</b> TWA: 1000 ppm 8 hours.</p> <p><b>CA Saskatchewan Provincial (Canada, 7/2013).</b> STEL: 1250 ppm 15 minutes. TWA: 1000 ppm 8 hours.</p> <p><b>CA British Columbia Provincial (Canada,</b></p>

## Section 8. Exposure controls/personal protection

Methyl-2 propane	75-28-5	<b>5/2019). Oxygen Depletion [Asphyxiant]. Explosive potential.</b> <b>CA Alberta Provincial (Canada, 6/2018).</b> 8 hrs OEL: 1000 ppm 8 hours. <b>CA Ontario Provincial (Canada, 1/2018).</b> TWA: 800 ppm 8 hours. <b>CA Saskatchewan Provincial (Canada, 7/2013).</b> STEL: 1250 ppm 15 minutes. TWA: 1000 ppm 8 hours. <b>CA British Columbia Provincial (Canada, 5/2019). Explosive potential.</b> STEL: 1000 ppm 15 minutes.
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**Occupational exposure limits (Mexico)**

	<b>CAS #</b>	<b>Exposure limits</b>
4, 4'-Diphenylmethane Diisocyanate	101-68-8	<b>NOM-010-STPS-2014 (Mexico, 4/2016).</b> TWA: 0.005 ppm 8 hours.
Propane	74-98-6	<b>NOM-010-STPS-2014 (Mexico, 4/2016).</b> TWA: 1000 ppm 8 hours.
2-Methylpropane	75-28-5	<b>NOM-010-STPS-2014 (Mexico, 4/2016).</b> TWA: 1000 ppm 8 hours.

**Appropriate engineering controls** : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

**Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

**Individual protection measures**

**Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

**Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

**Skin protection**

**Hand protection** :

**Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.

**Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Respiratory protection** :

## Section 9. Physical and chemical properties

### Appearance

Physical state	: Liquid.
Color	: Not available.
Odor	: Not available.
Odor threshold	: Not available.
pH	: Not available.
Melting point/freezing point	: Not available.
Boiling point/boiling range	: Not available.
Flash point	: Closed cup: -29°C (-20.2°F) [Pensky-Martens Closed Cup]
Evaporation rate	: Not available.
Flammability (solid, gas)	: Not available.
Lower and upper explosive (flammable) limits	: Lower: 1.8% Upper: 27%
Vapor pressure	: 13.5 kPa (101 mm Hg) [at 20°C]
Vapor density	: 1.55 [Air = 1]
Relative density	: 0.93
Solubility	: Not available.
Partition coefficient: n-octanol/water	: Not available.
Auto-ignition temperature	: Not available.
Decomposition temperature	: Not available.
Viscosity	: Kinematic (40°C (104°F)): >0.205 cm <sup>2</sup> /s (>20.5 cSt)
Molecular weight	: Not applicable.
<b>Aerosol product</b>	
Type of aerosol	: Spray
Heat of combustion	: 26.565 kJ/g

## Section 10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: Avoid all possible sources of ignition (spark or flame).
Incompatible materials	: No specific data.
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

# Section 11. Toxicological information

## Information on toxicological effects

### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Diphenylmethane Diisocyanate Polymer	LC50 Inhalation Vapor	Rat	490 mg/m <sup>3</sup>	4 hours
	LD50 Dermal	Rabbit	>9400 mg/kg	-
4, 4'-Diphenylmethane Diisocyanate	LD50 Oral	Rat	49 g/kg	-
	LD50 Oral	Rat	9200 mg/kg	-
2-Methylpropane Dimethyl Ether	LC50 Inhalation Vapor	Rat	658000 mg/m <sup>3</sup>	4 hours
	LC50 Inhalation Gas.	Rat	164000 ppm	4 hours
	LC50 Inhalation Vapor	Rat	309 g/m <sup>3</sup>	4 hours

### Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Diphenylmethane Diisocyanate Polymer	Eyes - Mild irritant	Rabbit	-	100 mg	-
4, 4'-Diphenylmethane Diisocyanate	Eyes - Moderate irritant	Rabbit	-	100 mg	-

### Sensitization

Not available.

### Mutagenicity

Not available.

### Carcinogenicity

Not available.

### Classification

Product/ingredient name	OSHA	IARC	NTP
Diphenylmethane Diisocyanate Polymer	-	3	-
4, 4'-Diphenylmethane Diisocyanate	-	3	-

### Reproductive toxicity

Not available.

### Teratogenicity

Not available.

### Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
Diphenylmethane Diisocyanate Polymer	Category 3	Not applicable.	Respiratory tract irritation
4, 4'-Diphenylmethane Diisocyanate	Category 3	Not applicable.	Respiratory tract irritation
Propane	Category 3	Not applicable.	Narcotic effects
	Category 3	Not applicable.	Respiratory tract irritation
2-Methylpropane	Category 3	Not applicable.	Narcotic effects
	Category 3	Not applicable.	Respiratory tract irritation

# Section 11. Toxicological information

## Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
Diphenylmethane Diisocyanate Polymer	Category 2	Not determined	Not determined
4, 4'-Diphenylmethane Diisocyanate	Category 2	Not determined	Not determined
Propane	Category 2	Not determined	Not determined
2-Methylpropane	Category 2	Not determined	Not determined

## Aspiration hazard

Name	Result
Propane	ASPIRATION HAZARD - Category 1
2-Methylpropane	ASPIRATION HAZARD - Category 1

**Information on the likely routes of exposure** : Not available.

## Potential acute health effects

- Eye contact** : Causes serious eye irritation.
- Inhalation** : Harmful if inhaled. Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness. May cause respiratory irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled.
- Skin contact** : Causes skin irritation. May cause an allergic skin reaction.
- Ingestion** : Can cause central nervous system (CNS) depression.

## Symptoms related to the physical, chemical and toxicological characteristics

- Eye contact** : Adverse symptoms may include the following:  
pain or irritation  
watering  
redness
- Inhalation** : Adverse symptoms may include the following:  
respiratory tract irritation  
coughing  
wheezing and breathing difficulties  
asthma  
nausea or vomiting  
headache  
drowsiness/fatigue  
dizziness/vertigo  
unconsciousness
- Skin contact** : Adverse symptoms may include the following:  
irritation  
redness
- Ingestion** : No specific data.

## Delayed and immediate effects and also chronic effects from short and long term exposure

### Short term exposure

- Potential immediate effects** : Not available.
- Potential delayed effects** : Not available.

### Long term exposure

- Potential immediate effects** : Not available.



## Section 11. Toxicological information

**Potential delayed effects** : Not available.

### Potential chronic health effects

Not available.

**General** : May cause damage to organs through prolonged or repeated exposure. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

**Carcinogenicity** : No known significant effects or critical hazards.

**Mutagenicity** : No known significant effects or critical hazards.

**Teratogenicity** : No known significant effects or critical hazards.

**Developmental effects** : No known significant effects or critical hazards.

**Fertility effects** : No known significant effects or critical hazards.

### Numerical measures of toxicity

#### Acute toxicity estimates

Route	ATE value
Inhalation (gases)	12000 ppm
Inhalation (vapors)	29.33 mg/l
Inhalation (dusts and mists)	2.94 mg/l

## Section 12. Ecological information

### Toxicity

Not available.

### Persistence and degradability

Not available.

### Bioaccumulative potential

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
4, 4'-Diphenylmethane Diisocyanate	-	200	low

### Mobility in soil

**Soil/water partition coefficient (K<sub>oc</sub>)** : Not available.

**Other adverse effects** : No known significant effects or critical hazards.






## Section 13. Disposal considerations

**Disposal methods** : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered

## Section 13. Disposal considerations

when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues.

## Section 14. Transport information

	DOT Classification	TDG Classification	Mexico Classification	IATA	IMDG
<b>UN number</b>	UN1950	UN1950	UN1950	UN1950	UN1950
<b>UN proper shipping name</b>	AEROSOLS	AEROSOLS	AEROSOLS	AEROSOLS, flammable	AEROSOLS
<b>Transport hazard class(es)</b>	2.1 	2.1 	2.1 	2.1 	2.1 
<b>Packing group</b>	-	-	-	-	-
<b>Environmental hazards</b>	No.	No.	No.	No.	No.
<b>Additional information</b>	-  <b>ERG No.</b> 126	Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.13-2.17 (Class 2). <b>ERG No.</b> 126	-  <b>ERG No.</b> 126	-	<b>Emergency schedules</b> F-D, S-U

**Special precautions for user :** Multi-modal shipping descriptions are provided for informational purposes and do not consider container sizes. The presence of a shipping description for a particular mode of transport (sea, air, etc.), does not indicate that the product is packaged suitably for that mode of transport. All packaging must be reviewed for suitability prior to shipment, and compliance with the applicable regulations is the sole responsibility of the person offering the product for transport. People loading and unloading dangerous goods must be trained on all of the risks deriving from the substances and on all actions in case of emergency situations.

**Transport in bulk according to Annex II of MARPOL and the IBC Code :** Not available.

**Proper shipping name :** Not available.  
**Ship type :** Not available.  
**Pollution category :** Not available.

## Section 15. Regulatory information

### SARA 313

SARA 313 (40 CFR 372.45) supplier notification can be found on the Environmental Data Sheet.

### California Prop. 65

Not applicable.

### International regulations

#### International lists

- : **Australia inventory (AICS):** Not determined.
- : **China inventory (IECSC):** Not determined.
- : **Japan inventory (ENCS):** Not determined.
- : **Japan inventory (ISHL):** Not determined.
- : **Korea inventory (KECI):** Not determined.
- : **New Zealand Inventory of Chemicals (NZIoC):** Not determined.
- : **Philippines inventory (PICCS):** Not determined.
- : **Taiwan Chemical Substances Inventory (TCSI):** Not determined.
- : **Thailand inventory:** Not determined.
- : **Turkey inventory:** Not determined.
- : **Vietnam inventory:** Not determined.

## Section 16. Other information

### Hazardous Material Information System (U.S.A.)

Health	2
Flammability	3
Physical hazards	3

The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.

**Caution:** HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings and the associated label are not required on SDSs or products leaving a facility under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc.

#### Procedure used to derive the classification

Classification	Justification
FLAMMABLE AEROSOLS - Category 1	On basis of test data
GASES UNDER PRESSURE - Compressed gas	Calculation method
ACUTE TOXICITY (inhalation) - Category 4	Calculation method
SKIN CORROSION/IRRITATION - Category 2	Calculation method
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A	Calculation method
RESPIRATORY SENSITIZATION - Category 1	Calculation method
SKIN SENSITIZATION - Category 1	Calculation method
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3	Calculation method
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3	Calculation method
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2	Calculation method

### History

- Date of printing** : 11/28/2019
- Date of issue/Date of revision** : 11/28/2019
- Date of previous issue** : 9/6/2017

## Section 16. Other information

- Version** : 5
- Key to abbreviations** :
- ATE = Acute Toxicity Estimate
  - BCF = Bioconcentration Factor
  - GHS = Globally Harmonized System of Classification and Labelling of Chemicals
  - IATA = International Air Transport Association
  - IBC = Intermediate Bulk Container
  - IMDG = International Maritime Dangerous Goods
  - LogPow = logarithm of the octanol/water partition coefficient
  - MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
  - N/A = Not available
  - SGG = Segregation Group
  - UN = United Nations

✔ Indicates information that has changed from previously issued version.

### Notice to reader

It is recommended that each customer or recipient of this Safety Data Sheet (SDS) study it carefully and consult resources, as necessary or appropriate, to become aware of and understand the data contained in this SDS and any hazards associated with the product. This information is provided in good faith and believed to be accurate as of the effective date herein. However, no warranty, express or implied, is given. The information presented here applies only to the product as shipped. The addition of any material can change the composition, hazards and risks of the product. Products shall not be repackaged, modified, or tinted except as specifically instructed by the manufacturer, including but not limited to the incorporation of products not specified by the manufacturer, or the use or addition of products in proportions not specified by the manufacturer. Regulatory requirements are subject to change and may differ between various locations and jurisdictions. The customer/buyer/user is responsible to ensure that his activities comply with all country, federal, state, provincial or local laws. The conditions for use of the product are not under the control of the manufacturer; the customer/buyer/user is responsible to determine the conditions necessary for the safe use of this product. The customer/buyer/user should not use the product for any purpose other than the purpose shown in the applicable section of this SDS without first referring to the supplier and obtaining written handling instructions. Due to the proliferation of sources for information such as manufacturer-specific SDS, the manufacturer cannot be responsible for SDSs obtained from any other source.

# SAFETY DATA SHEET

## ZEP NEUTRAL PH FLOOR CLEANER CONCENTRATE

Version 1.3

Revision Date 06/10/2020

Print Date 12/15/2020

### SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Material name : ZEP NEUTRAL PH FLOOR CLEANER CONCENTRATE

Material number : ZUNEUT128

#### Manufacturer or supplier's details

Company : Zep Inc.

Address : 350 Joe Frank Harris Parkway, SE  
Emerson, GA 30137

Telephone : 404-352-1680

#### Emergency telephone numbers

**For SDS Information** : Compliance Services 1-877-428-9937

**For a Medical Emergency** : 877-541-2016 Toll Free - All Calls Recorded

**For a Transportation  
Emergency** : CHEMTREC: 800-424-9300 - All Calls Recorded.  
In the District of Columbia 202-483-7616

#### Recommended use of the chemical and restrictions on use

Note: This product is labeled as a consumer product in accordance with the United States Consumer Product Safety Commission regulations. The warnings presented below in this Safety Data Sheet (SDS) comply with the 2012 OSHA Hazard Communication Standard (GHS - Globally Harmonized System of Classification and Labeling). The requirements for the labeling and warnings of consumer products may differ from those required for GHS based hazard communication.

### SECTION 2. HAZARDS IDENTIFICATION

#### Emergency Overview

Appearance	liquid
Colour	green
Odour	pleasant

#### GHS Classification

Eye irritation : Category 2A

#### GHS label elements

Hazard pictograms :



Exclamation  
mark

Signal word : Warning

Hazard statements : H319 Causes serious eye irritation.

Precautionary statements : **Prevention:**  
P264 Wash skin thoroughly after handling.

# SAFETY DATA SHEET

## ZEP NEUTRAL PH FLOOR CLEANER CONCENTRATE

Version 1.3

Revision Date 06/10/2020

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P280 Wear eye protection/ face protection.

**Response:**

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337 + P313 If eye irritation persists: Get medical advice/ attention.

---

### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

#### Hazardous components

Chemical name	CAS-No.	Concentration [%]
Alcohols, C9-11, ethoxylated	68439-46-3	>= 1 - < 3
1-(1-methyl-2-propoxyethoxy)propan-2-ol	29911-27-1	>= 1 - < 3

The exact percentages of disclosed substances are withheld as trade secrets.

---

### SECTION 4. FIRST AID MEASURES

- General advice : Do not leave the victim unattended.  
Move out of dangerous area.  
Show this safety data sheet to the doctor in attendance.
- If inhaled : If unconscious, place in recovery position and seek medical advice.  
If symptoms persist, call a physician.
- In case of skin contact : If skin irritation persists, call a physician.  
Wash off immediately with plenty of water for at least 15 minutes.  
Remove contaminated clothing and shoes.  
Wash contaminated clothing before reuse.
- In case of eye contact : Remove contact lenses.  
Protect unharmed eye.  
If eye irritation persists, consult a specialist.  
Rinse immediately with plenty of water for at least 15 minutes.  
Keep eye wide open while rinsing.
- If swallowed : Keep respiratory tract clear.  
Never give anything by mouth to an unconscious person.  
If symptoms persist, call a physician.  
DO NOT induce vomiting unless directed to do so by a physician or poison control center.  
Take victim immediately to hospital.
- Most important symptoms and effects, both acute and delayed : Effects may be delayed, symptoms may include minor eye or skin irritation.  
Overexposure may cause mild eye or skin irritation.

# SAFETY DATA SHEET

## ZEP NEUTRAL PH FLOOR CLEANER CONCENTRATE

Version 1.3

Revision Date 06/10/2020

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Notes to physician : Treat symptomatically. Symptoms may be delayed.

---

### SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Dry chemical  
Carbon dioxide (CO<sub>2</sub>)  
Alcohol-resistant foam  
Water spray jet
- Unsuitable extinguishing media : High volume water jet
- Specific hazards during firefighting : Do not allow run-off from fire fighting to enter drains or water courses.
- Hazardous combustion products : Carbon dioxide (CO<sub>2</sub>)  
Carbon monoxide  
Smoke
- Specific extinguishing methods : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- Further information : Standard procedure for chemical fires.
- Special protective equipment for firefighters : Wear self-contained breathing apparatus for firefighting if necessary.

---

### SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Use personal protective equipment.
- Environmental precautions : Prevent further leakage or spillage if safe to do so.
- Methods and materials for containment and cleaning up : Wipe up with absorbent material (e.g. cloth, fleece).  
Keep in suitable, closed containers for disposal.

---

### SECTION 7. HANDLING AND STORAGE

- Advice on safe handling : Avoid contact with skin and eyes.  
For personal protection see section 8.  
Smoking, eating and drinking should be prohibited in the application area.  
Dispose of rinse water in accordance with local and national regulations.  
Avoid exposure - obtain special instructions before use.  
Do not breathe vapours or spray mist.  
Take precautionary measures against static discharges.  
Provide sufficient air exchange and/or exhaust in work rooms.

# SAFETY DATA SHEET

## ZEP NEUTRAL PH FLOOR CLEANER CONCENTRATE

Version 1.3

Revision Date 06/10/2020

Print Date 12/15/2020

- Conditions for safe storage : Keep container tightly closed in a dry and well-ventilated place.  
Electrical installations / working materials must comply with the technological safety standards.
- Materials to avoid : Keep away from oxidizing agents and strongly acid or alkaline materials.

---

### SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Components with workplace control parameters

Contains no substances with occupational exposure limit values.

**Engineering measures** : effective ventilation in all processing areas

#### Personal protective equipment

Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment.

Hand protection

Material : Protective gloves

Remarks : The suitability for a specific workplace should be discussed with the producers of the protective gloves.

Eye protection : Safety glasses

Skin and body protection : Impervious clothing  
Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Hygiene measures : When using do not eat or drink.  
When using do not smoke.  
Wash hands before breaks and at the end of workday.

---

### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

- Appearance : liquid
- Colour : green
- Odour : pleasant
- Odour Threshold : No data available
- pH : 7.5 - 8.5
- Melting point/freezing point : No data available
- Boiling point : 100 °C
- Flash point :



# SAFETY DATA SHEET

## ZEP NEUTRAL PH FLOOR CLEANER CONCENTRATE

Version 1.3

Revision Date 06/10/2020

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	does not flash
Evaporation rate	: 1
Upper explosion limit	: No data available
Lower explosion limit	: No data available
Vapour pressure	: not determined
Relative vapour density	: No data available
Density	: 1.03 g/cm <sup>3</sup>
Solubility(ies)	
Water solubility	: soluble
Partition coefficient: n-octanol/water	: No data available
Auto-ignition temperature	: not determined
Thermal decomposition	: No data available
Viscosity	
Viscosity, kinematic	: No data available

---

### SECTION 10. STABILITY AND REACTIVITY

Reactivity	: Stable
Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: No decomposition if stored and applied as directed.
Conditions to avoid	: No data available
Incompatible materials	: Acids and bases Oxidizing agents
Hazardous decomposition products	: No decomposition if stored and applied as directed.

---

### SECTION 11. TOXICOLOGICAL INFORMATION

#### Potential Health Effects

Aggravated Medical Condition	: None known.
Symptoms of Overexposure	: Effects may be delayed, symptoms may include minor eye or skin irritation. Overexposure may cause mild eye or skin irritation. Treat symptomatically. Symptoms may be delayed.

# SAFETY DATA SHEET

## ZEP NEUTRAL PH FLOOR CLEANER CONCENTRATE

Version 1.3

Revision Date 06/10/2020

Print Date 12/15/2020

### Carcinogenicity:

#### IARC

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

#### ACGIH

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

#### OSHA

No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

#### NTP

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

### Acute toxicity

#### Product:

Acute oral toxicity : Acute toxicity estimate : > 5,000 mg/kg  
Method: Calculation method

#### Components:

##### **Alcohols, C9-11, ethoxylated:**

Acute oral toxicity : LD50 Oral Rat: 1,400 mg/kg

### Skin corrosion/irritation

#### Product:

Remarks: May irritate skin.

### Serious eye damage/eye irritation

#### Product:

Remarks: Contact with eyes may cause irritation.

### Respiratory or skin sensitisation

No data available

### Germ cell mutagenicity

No data available

### Carcinogenicity

No data available

### Reproductive toxicity

No data available

### STOT - single exposure

No data available

### STOT - repeated exposure

# SAFETY DATA SHEET

## ZEP NEUTRAL PH FLOOR CLEANER CONCENTRATE

Version 1.3

Revision Date 06/10/2020

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No data available

### Aspiration toxicity

No data available

### Further information

#### Product:

Remarks: No data available

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## SECTION 12. ECOLOGICAL INFORMATION

### Ecotoxicity

No data available

### Persistence and degradability

No data available

### Bioaccumulative potential

#### Product:

Partition coefficient: n-octanol/water : Remarks: No data available

#### Components:

**1-(1-methyl-2-propoxyethoxy)propan-2-ol :**

Partition coefficient: n-octanol/water : Pow: 7.7

### Mobility in soil

No data available

### Other adverse effects

No data available

#### Product:

Regulation 40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone - CAA Section 602 Class I Substances

Remarks This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

Additional ecological information : No data available

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## SECTION 13. DISPOSAL CONSIDERATIONS

# SAFETY DATA SHEET

## ZEP NEUTRAL PH FLOOR CLEANER CONCENTRATE

Version 1.3

Revision Date 06/10/2020

Print Date 12/15/2020

### Disposal methods

- Waste from residues : Do not dispose of waste into sewer.  
Do not contaminate ponds, waterways or ditches with chemical or used container.  
Dispose of in accordance with local regulations.
- Contaminated packaging : Empty remaining contents.  
Dispose of as unused product.  
Do not re-use empty containers.

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### SECTION 14. TRANSPORT INFORMATION

Transportation Regulation: 49 CFR (USA):  
NOT REGULATED AS DANGEROUS GOODS OR HAZARDOUS MATERIAL

Transportation Regulation: IMDG (Vessel):  
NOT REGULATED AS DANGEROUS GOODS OR HAZARDOUS MATERIAL

Transportation Regulation: IATA (Cargo Air):  
NOT REGULATED AS DANGEROUS GOODS OR HAZARDOUS MATERIAL

Transportation Regulation: IATA (Passenger Air):  
NOT REGULATED AS DANGEROUS GOODS OR HAZARDOUS MATERIAL

Transportation Regulation: TDG (Canada):  
NOT REGULATED AS DANGEROUS GOODS OR HAZARDOUS MATERIAL

The product as delivered to the customer conforms to packaging requirements for shipment by road under US Department of Transportation (DOT) regulations. Additional transportation classifications noted above are for reference only, and not a certification or warranty of the suitability of the packaging for shipment under these alternative transport regulations.

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### SECTION 15. REGULATORY INFORMATION

- TSCA list** : No substances are subject to a Significant New Use Rule.  
No substances are subject to TSCA 12(b) export notification requirements.

**EPCRA - Emergency Planning and Community Right-to-Know Act**

**CERCLA Reportable Quantity**

# SAFETY DATA SHEET

## ZEP NEUTRAL PH FLOOR CLEANER CONCENTRATE

Version 1.3

Revision Date 06/10/2020

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Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
ethylbenzene	100-41-4	1000	*

\*: Calculated RQ exceeds reasonably attainable upper limit.

### SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

**SARA 311/312 Hazards** : Serious eye damage or eye irritation

**SARA 302** : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313** : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

### California Prop. 65



WARNING: This product can expose you to chemicals including ethylbenzene, which is/are known to the State of California to cause cancer. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

### The components of this product are reported in the following inventories:

**DSL** All components of this product are on the Canadian DSL  
**TSCA** On TSCA Inventory

For information on the country notification status for other regions please contact the manufacturer's regulatory group.

### Inventory Acronym and Validity Area Legend:

TSCA (USA), DSL (Canada), NDSL (Canada)

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## SECTION 16. OTHER INFORMATION

# SAFETY DATA SHEET

## ZEP NEUTRAL PH FLOOR CLEANER CONCENTRATE

Version 1.3

Revision Date 06/10/2020

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### Further information

#### NFPA:

<b>HEALTH</b>	<b>2</b>
<b>FLAMMABILITY</b>	<b>0</b>
<b>INSTABILITY</b>	<b>0</b>
<b>SPECIAL HAZARD.</b>	

0 = not significant, 1 =Slight,  
2 = Moderate, 3 = High  
4 = Extreme

#### HMIS III:

<b>HEALTH</b>	<b>0</b>
<b>FLAMMABILITY</b>	<b>0</b>
<b>PHYSICAL HAZARD</b>	<b>0</b>

0 = not significant, 1 =Slight,  
2 = Moderate, 3 = High  
4 = Extreme, \* = Chronic

### OSHA - GHS Label Information:

Hazard pictograms :



Exclamation  
mark

Signal word :

**Warning:**

Hazard statements :

Causes serious eye irritation.

Precautionary statements :

**Prevention:** Wash skin thoroughly after handling. Wear eye protection/ face protection.  
**Response:** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/ attention.

Version:	1.3
Revision Date:	06/10/2020
Print Date:	12/15/2020

# SAFETY DATA SHEET

## ZEP NEUTRAL PH FLOOR CLEANER CONCENTRATE

Version 1.3

Revision Date 06/10/2020

Print Date 12/15/2020

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We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind. The information in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. Users should make their own investigations to determine the suitability and applicability of the information for their particular purposes. This SDS has been prepared by the Compliance Services organization supporting this manufacturer, supplier or distributor.

# SAFETY DATA SHEET

## ZEP NEUTRAL PH FLOOR CLEANER CONCENTRATE

Version 1.3

Revision Date 06/10/2020

Print Date 08/26/2021

### SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Material name : ZEP NEUTRAL PH FLOOR CLEANER CONCENTRATE

Material number : ZUNEUT128

#### Manufacturer or supplier's details

Company : Zep Inc.

Address : 350 Joe Frank Harris Parkway, SE  
Emerson, GA 30137

Telephone : 404-352-1680

#### Emergency telephone numbers

**For SDS Information** : Compliance Services 1-877-428-9937

**For a Medical Emergency** : 877-541-2016 Toll Free - All Calls Recorded

**For a Transportation  
Emergency** : CHEMTREC: 800-424-9300 - All Calls Recorded.  
In the District of Columbia 202-483-7616

#### Recommended use of the chemical and restrictions on use

Note: This product is labeled as a consumer product in accordance with the United States Consumer Product Safety Commission regulations. The warnings presented below in this Safety Data Sheet (SDS) comply with the 2012 OSHA Hazard Communication Standard (GHS - Globally Harmonized System of Classification and Labeling). The requirements for the labeling and warnings of consumer products may differ from those required for GHS based hazard communication.

### SECTION 2. HAZARDS IDENTIFICATION

#### Emergency Overview

Appearance	liquid
Colour	green
Odour	pleasant

#### GHS Classification

Eye irritation : Category 2A

#### GHS label elements

Hazard pictograms :



Exclamation  
mark

Signal word : Warning

Hazard statements : H319 Causes serious eye irritation.

Precautionary statements : **Prevention:**  
P264 Wash skin thoroughly after handling.



# SAFETY DATA SHEET

## ZEP NEUTRAL PH FLOOR CLEANER CONCENTRATE

Version 1.3

Revision Date 06/10/2020

Print Date 08/26/2021

P280 Wear eye protection/ face protection.

**Response:**

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337 + P313 If eye irritation persists: Get medical advice/ attention.

---

### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

#### Hazardous components

Chemical name	CAS-No.	Concentration [%]
Alcohols, C9-11, ethoxylated	68439-46-3	>= 1 - < 3
1-(1-methyl-2-propoxyethoxy)propan-2-ol	29911-27-1	>= 1 - < 3

The exact percentages of disclosed substances are withheld as trade secrets.

---

### SECTION 4. FIRST AID MEASURES

- General advice : Do not leave the victim unattended.  
Move out of dangerous area.  
Show this safety data sheet to the doctor in attendance.
- If inhaled : If unconscious, place in recovery position and seek medical advice.  
If symptoms persist, call a physician.
- In case of skin contact : If skin irritation persists, call a physician.  
Wash off immediately with plenty of water for at least 15 minutes.  
Remove contaminated clothing and shoes.  
Wash contaminated clothing before reuse.
- In case of eye contact : Remove contact lenses.  
Protect unharmed eye.  
If eye irritation persists, consult a specialist.  
Rinse immediately with plenty of water for at least 15 minutes.  
Keep eye wide open while rinsing.
- If swallowed : Keep respiratory tract clear.  
Never give anything by mouth to an unconscious person.  
If symptoms persist, call a physician.  
DO NOT induce vomiting unless directed to do so by a physician or poison control center.  
Take victim immediately to hospital.
- Most important symptoms and effects, both acute and delayed : Effects may be delayed, symptoms may include minor eye or skin irritation.  
Overexposure may cause mild eye or skin irritation.

# SAFETY DATA SHEET

## ZEP NEUTRAL PH FLOOR CLEANER CONCENTRATE

Version 1.3

Revision Date 06/10/2020

Print Date 08/26/2021

Notes to physician : Treat symptomatically. Symptoms may be delayed.

---

### SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Dry chemical  
Carbon dioxide (CO<sub>2</sub>)  
Alcohol-resistant foam  
Water spray jet
- Unsuitable extinguishing media : High volume water jet
- Specific hazards during firefighting : Do not allow run-off from fire fighting to enter drains or water courses.
- Hazardous combustion products : Carbon dioxide (CO<sub>2</sub>)  
Carbon monoxide  
Smoke
- Specific extinguishing methods : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- Further information : Standard procedure for chemical fires.
- Special protective equipment for firefighters : Wear self-contained breathing apparatus for firefighting if necessary.

---

### SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Use personal protective equipment.
- Environmental precautions : Prevent further leakage or spillage if safe to do so.
- Methods and materials for containment and cleaning up : Wipe up with absorbent material (e.g. cloth, fleece).  
Keep in suitable, closed containers for disposal.

---

### SECTION 7. HANDLING AND STORAGE

- Advice on safe handling : Avoid contact with skin and eyes.  
For personal protection see section 8.  
Smoking, eating and drinking should be prohibited in the application area.  
Dispose of rinse water in accordance with local and national regulations.  
Avoid exposure - obtain special instructions before use.  
Do not breathe vapours or spray mist.  
Take precautionary measures against static discharges.  
Provide sufficient air exchange and/or exhaust in work rooms.

# SAFETY DATA SHEET

## ZEP NEUTRAL PH FLOOR CLEANER CONCENTRATE

Version 1.3

Revision Date 06/10/2020

Print Date 08/26/2021

- Conditions for safe storage : Keep container tightly closed in a dry and well-ventilated place.  
Electrical installations / working materials must comply with the technological safety standards.
- Materials to avoid : Keep away from oxidizing agents and strongly acid or alkaline materials.

---

### SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Components with workplace control parameters

Contains no substances with occupational exposure limit values.

**Engineering measures** : effective ventilation in all processing areas

#### Personal protective equipment

Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment.

Hand protection

Material : Protective gloves

Remarks : The suitability for a specific workplace should be discussed with the producers of the protective gloves.

Eye protection : Safety glasses

Skin and body protection : Impervious clothing  
Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Hygiene measures : When using do not eat or drink.  
When using do not smoke.  
Wash hands before breaks and at the end of workday.

---

### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

- Appearance : liquid
- Colour : green
- Odour : pleasant
- Odour Threshold : No data available
- pH : 7.5 - 8.5
- Melting point/freezing point : No data available
- Boiling point : 100 °C
- Flash point :

# SAFETY DATA SHEET

## ZEP NEUTRAL PH FLOOR CLEANER CONCENTRATE

Version 1.3

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	does not flash
Evaporation rate	: 1
Upper explosion limit	: No data available
Lower explosion limit	: No data available
Vapour pressure	: not determined
Relative vapour density	: No data available
Density	: 1.03 g/cm <sup>3</sup>
Solubility(ies)	
Water solubility	: soluble
Partition coefficient: n-octanol/water	: No data available
Auto-ignition temperature	: not determined
Thermal decomposition	: No data available
Viscosity	
Viscosity, kinematic	: No data available

---

### SECTION 10. STABILITY AND REACTIVITY

Reactivity	: Stable
Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: No decomposition if stored and applied as directed.
Conditions to avoid	: No data available
Incompatible materials	: Acids and bases Oxidizing agents
Hazardous decomposition products	: No decomposition if stored and applied as directed.

---

### SECTION 11. TOXICOLOGICAL INFORMATION

#### Potential Health Effects

Aggravated Medical Condition	: None known.
Symptoms of Overexposure	: Effects may be delayed, symptoms may include minor eye or skin irritation. Overexposure may cause mild eye or skin irritation. Treat symptomatically. Symptoms may be delayed.

# SAFETY DATA SHEET

## ZEP NEUTRAL PH FLOOR CLEANER CONCENTRATE

Version 1.3

Revision Date 06/10/2020

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### Carcinogenicity:

#### IARC

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

#### ACGIH

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

#### OSHA

No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

#### NTP

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

### Acute toxicity

#### Product:

Acute oral toxicity : Acute toxicity estimate : > 5,000 mg/kg  
Method: Calculation method

#### Components:

##### **Alcohols, C9-11, ethoxylated:**

Acute oral toxicity : LD50 Oral Rat: 1,400 mg/kg

### Skin corrosion/irritation

#### Product:

Remarks: May irritate skin.

### Serious eye damage/eye irritation

#### Product:

Remarks: Contact with eyes may cause irritation.

### Respiratory or skin sensitisation

No data available

### Germ cell mutagenicity

No data available

### Carcinogenicity

No data available

### Reproductive toxicity

No data available

### STOT - single exposure

No data available

### STOT - repeated exposure

# SAFETY DATA SHEET

## ZEP NEUTRAL PH FLOOR CLEANER CONCENTRATE

Version 1.3

Revision Date 06/10/2020

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No data available

### Aspiration toxicity

No data available

### Further information

#### Product:

Remarks: No data available

---

## SECTION 12. ECOLOGICAL INFORMATION

### Ecotoxicity

No data available

### Persistence and degradability

No data available

### Bioaccumulative potential

#### Product:

Partition coefficient: n- : Remarks: No data available  
octanol/water

#### Components:

**1-(1-methyl-2-propoxyethoxy)propan-2-ol** :  
Partition coefficient: n- : Pow: 7.7  
octanol/water

### Mobility in soil

No data available

### Other adverse effects

No data available

#### Product:

Regulation 40 CFR Protection of Environment; Part 82 Protection of  
Stratospheric Ozone - CAA Section 602 Class I  
Substances

Remarks This product neither contains, nor was manufactured  
with a Class I or Class II ODS as defined by the U.S.  
Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A  
+ B).

Additional ecological : No data available  
information

---

## SECTION 13. DISPOSAL CONSIDERATIONS

# SAFETY DATA SHEET

## ZEP NEUTRAL PH FLOOR CLEANER CONCENTRATE

Version 1.3

Revision Date 06/10/2020

Print Date 08/26/2021

### Disposal methods

- Waste from residues : Do not dispose of waste into sewer.  
Do not contaminate ponds, waterways or ditches with chemical or used container.  
Dispose of in accordance with local regulations.
- Contaminated packaging : Empty remaining contents.  
Dispose of as unused product.  
Do not re-use empty containers.

---

### SECTION 14. TRANSPORT INFORMATION

Transportation Regulation: 49 CFR (USA):  
NOT REGULATED AS DANGEROUS GOODS OR HAZARDOUS MATERIAL

Transportation Regulation: IMDG (Vessel):  
NOT REGULATED AS DANGEROUS GOODS OR HAZARDOUS MATERIAL

Transportation Regulation: IATA (Cargo Air):  
NOT REGULATED AS DANGEROUS GOODS OR HAZARDOUS MATERIAL

Transportation Regulation: IATA (Passenger Air):  
NOT REGULATED AS DANGEROUS GOODS OR HAZARDOUS MATERIAL

Transportation Regulation: TDG (Canada):  
NOT REGULATED AS DANGEROUS GOODS OR HAZARDOUS MATERIAL

The product as delivered to the customer conforms to packaging requirements for shipment by road under US Department of Transportation (DOT) regulations. Additional transportation classifications noted above are for reference only, and not a certification or warranty of the suitability of the packaging for shipment under these alternative transport regulations.

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### SECTION 15. REGULATORY INFORMATION

- TSCA list** : No substances are subject to a Significant New Use Rule.  
No substances are subject to TSCA 12(b) export notification requirements.

**EPCRA - Emergency Planning and Community Right-to-Know Act**

**CERCLA Reportable Quantity**

# SAFETY DATA SHEET

## ZEP NEUTRAL PH FLOOR CLEANER CONCENTRATE

Version 1.3

Revision Date 06/10/2020

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Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
ethylbenzene	100-41-4	1000	*

\*: Calculated RQ exceeds reasonably attainable upper limit.

### SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

**SARA 311/312 Hazards** : Serious eye damage or eye irritation

**SARA 302** : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313** : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

### California Prop. 65



WARNING: This product can expose you to chemicals including ethylbenzene, which is/are known to the State of California to cause cancer. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

### The components of this product are reported in the following inventories:

**DSL** All components of this product are on the Canadian DSL  
**TSCA** On TSCA Inventory

For information on the country notification status for other regions please contact the manufacturer's regulatory group.

### Inventory Acronym and Validity Area Legend:

TSCA (USA), DSL (Canada), NDSL (Canada)

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## SECTION 16. OTHER INFORMATION



# SAFETY DATA SHEET

## ZEP NEUTRAL PH FLOOR CLEANER CONCENTRATE

Version 1.3

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### Further information

#### NFPA:

<b>HEALTH</b>	<b>2</b>
<b>FLAMMABILITY</b>	<b>0</b>
<b>INSTABILITY</b>	<b>0</b>
<b>SPECIAL HAZARD.</b>	

0 = not significant, 1 = Slight,  
2 = Moderate, 3 = High  
4 = Extreme

#### HMIS III:

<b>HEALTH</b>	<b>0</b>
<b>FLAMMABILITY</b>	<b>0</b>
<b>PHYSICAL HAZARD</b>	<b>0</b>

0 = not significant, 1 = Slight,  
2 = Moderate, 3 = High  
4 = Extreme, \* = Chronic

### OSHA - GHS Label Information:

Hazard pictograms :



Exclamation mark

Signal word :

**Warning:**

Hazard statements :

Causes serious eye irritation.

Precautionary statements :

**Prevention:** Wash skin thoroughly after handling. Wear eye protection/ face protection.  
**Response:** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/ attention.

Version:	1.3
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Print Date:	08/26/2021

## **SAFETY DATA SHEET**

# **ZEP NEUTRAL PH FLOOR CLEANER CONCENTRATE**

Version 1.3

Revision Date 06/10/2020

Print Date 08/26/2021

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We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind. The information in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. Users should make their own investigations to determine the suitability and applicability of the information for their particular purposes.

This SDS has been prepared by the Compliance Services organization supporting this manufacturer, supplier or distributor.

**ZEP NEUTRAL PH FLOOR CLEANER CONCENTRATE**

Version 1.2

Revision Date 03/18/2019

Print Date 05/30/2019

**SECTION 1. PRODUCT AND COMPANY IDENTIFICATION**

Material name : ZEP NEUTRAL PH FLOOR CLEANER CONCENTRATE

Material number : ZUNEUT128

**Manufacturer or supplier's details**

Company : Zep Inc.

Address : 350 Joe Frank Harris Parkway, SE  
Emerson, GA 30137

Telephone : 404-352-1680

**Emergency telephone numbers****For SDS Information** : Compliance Services 1-877-428-9937**For a Medical Emergency** : 877-541-2016 Toll Free - All Calls Recorded**For a Transportation** : CHEMTREC: 800-424-9300 - All Calls Recorded.**Emergency** : In the District of Columbia 202-483-7616**Recommended use of the chemical and restrictions on use**

Recommended use : Floor Care

Note: This product is labeled as a consumer product in accordance with the United States Consumer Product Safety Commission regulations. The warnings presented below in this Safety Data Sheet (SDS) comply with the 2012 OSHA Hazard Communication Standard (GHS - Globally Harmonized System of Classification and Labeling). The requirements for the labeling and warnings of consumer products may differ from those required for GHS based hazard communication.

**SECTION 2. HAZARDS IDENTIFICATION****Emergency Overview**

Appearance	liquid
Colour	green
Odour	pleasant

**GHS Classification**

Not a hazardous substance or mixture.

**GHS label elements**

Not a hazardous substance or mixture.

**SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Substance / Mixture : Mixture

**Hazardous components**

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Chemical name	CAS-No.	Concentration [%]
Alcohols, C10-14, ethoxylated	66455-15-0	>= 1 - < 5
1-(1-methyl-2-propoxyethoxy)propan-2-ol	29911-27-1	>= 1 - < 5

The exact percentages of disclosed substances are withheld as trade secrets.

**SECTION 4. FIRST AID MEASURES**

- General advice : Do not leave the victim unattended.  
Move out of dangerous area.  
Show this safety data sheet to the doctor in attendance.
- If inhaled : If unconscious, place in recovery position and seek medical advice.  
If symptoms persist, call a physician.
- In case of skin contact : If skin irritation persists, call a physician.  
Wash off immediately with plenty of water for at least 15 minutes.  
Remove contaminated clothing and shoes.  
Wash contaminated clothing before reuse.
- In case of eye contact : Remove contact lenses.  
Protect unharmed eye.  
If eye irritation persists, consult a specialist.  
Rinse immediately with plenty of water for at least 15 minutes.  
Keep eye wide open while rinsing.
- If swallowed : Keep respiratory tract clear.  
Never give anything by mouth to an unconscious person.  
If symptoms persist, call a physician.  
DO NOT induce vomiting unless directed to do so by a physician or poison control center.  
Take victim immediately to hospital.
- Most important symptoms and effects, both acute and delayed : Effects may be delayed, symptoms may include minor eye or skin irritation.  
Overexposure may cause mild eye or skin irritation.
- Notes to physician : Treat symptomatically. Symptoms may be delayed.

**SECTION 5. FIREFIGHTING MEASURES**

- Suitable extinguishing media : Dry chemical  
Carbon dioxide (CO<sub>2</sub>)  
Alcohol-resistant foam  
Water spray jet
- Unsuitable extinguishing media : High volume water jet
- Specific hazards during firefighting : Do not allow run-off from fire fighting to enter drains or water courses.

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Hazardous combustion products	: Carbon dioxide (CO <sub>2</sub> ) Carbon monoxide Smoke
Specific extinguishing methods	: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Further information	: Standard procedure for chemical fires.
Special protective equipment for firefighters	: Wear self-contained breathing apparatus for firefighting if necessary.

---

**SECTION 6. ACCIDENTAL RELEASE MEASURES**

Personal precautions, protective equipment and emergency procedures	: Use personal protective equipment.
Environmental precautions	: Prevent further leakage or spillage if safe to do so.
Methods and materials for containment and cleaning up	: Wipe up with absorbent material (e.g. cloth, fleece). Keep in suitable, closed containers for disposal.

---

**SECTION 7. HANDLING AND STORAGE**

Advice on safe handling	: Avoid contact with skin and eyes. For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. Dispose of rinse water in accordance with local and national regulations. Avoid exposure - obtain special instructions before use. Do not breathe vapours or spray mist. Take precautionary measures against static discharges. Provide sufficient air exchange and/or exhaust in work rooms.
Conditions for safe storage	: Keep container tightly closed in a dry and well-ventilated place. Electrical installations / working materials must comply with the technological safety standards.
Materials to avoid	: Keep away from oxidizing agents and strongly acid or alkaline materials.

---

**SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION****Components with workplace control parameters**

Contains no substances with occupational exposure limit values.

**Engineering measures** : effective ventilation in all processing areas

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**Personal protective equipment**

Respiratory protection	: In case of insufficient ventilation, wear suitable respiratory equipment.
Hand protection	
Material	: Protective gloves
Remarks	: The suitability for a specific workplace should be discussed with the producers of the protective gloves.
Eye protection	: Safety glasses
Skin and body protection	: Impervious clothing Choose body protection according to the amount and concentration of the dangerous substance at the work place.
Hygiene measures	: When using do not eat or drink. When using do not smoke. Wash hands before breaks and at the end of workday.

**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

Appearance	: liquid
Colour	: green
Odour	: pleasant
Odour Threshold	: No data available
pH	: 7.5 - 8.5
Melting point/freezing point	: No data available
Boiling point	: 100 °C
Flash point	: does not flash
Evaporation rate	: 1
Upper explosion limit	: No data available
Lower explosion limit	: No data available
Vapour pressure	: not determined
Relative vapour density	: No data available
Density	: 1.03 g/cm <sup>3</sup>
Solubility(ies)	
Water solubility	: soluble
Partition coefficient: n-octanol/water	: No data available
Auto-ignition temperature	: not determined
Thermal decomposition	: No data available

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Viscosity

Viscosity, kinematic : No data available

**SECTION 10. STABILITY AND REACTIVITY**

Reactivity : Stable

Chemical stability : Stable under normal conditions.

Possibility of hazardous reactions : No decomposition if stored and applied as directed.

Conditions to avoid : No data available

Incompatible materials : Acids and bases  
Oxidizing agents

Hazardous decomposition products : No decomposition if stored and applied as directed.

**SECTION 11. TOXICOLOGICAL INFORMATION****Potential Health Effects**

Aggravated Medical Condition : None known.

Symptoms of Overexposure : Effects may be delayed, symptoms may include minor eye or skin irritation.

**Carcinogenicity:****IARC**

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

**ACGIH**

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

**OSHA**

No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

**NTP**

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

**Acute toxicity**

No data available

**Skin corrosion/irritation****Product:**

Remarks: May irritate skin.

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**Serious eye damage/eye irritation****Product:**

Remarks: Contact with eyes may cause irritation.

**Respiratory or skin sensitisation**

No data available

**Germ cell mutagenicity**

No data available

**Carcinogenicity**

No data available

**Reproductive toxicity**

No data available

**STOT - single exposure**

No data available

**STOT - repeated exposure**

No data available

**Aspiration toxicity**

No data available

**Further information****Product:**

Remarks: No data available

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**SECTION 12. ECOLOGICAL INFORMATION****Ecotoxicity**

No data available

**Persistence and degradability**

No data available

**Bioaccumulative potential****Product:**Partition coefficient: n- : Remarks: No data available  
octanol/water**Components:****1-(1-methyl-2-propoxyethoxy)propan-2-ol :**Partition coefficient: n- : Pow: 7.7  
octanol/water



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**Mobility in soil**

No data available

**Other adverse effects**

No data available

**Product:**

Regulation	40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone - CAA Section 602 Class I Substances
Remarks	This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).
Additional ecological information	: No data available

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**SECTION 13. DISPOSAL CONSIDERATIONS**
**Disposal methods**

Waste from residues	: Do not dispose of waste into sewer. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of in accordance with local regulations.
Contaminated packaging	: Empty remaining contents. Dispose of as unused product. Do not re-use empty containers.

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**SECTION 14. TRANSPORT INFORMATION**

Transportation Regulation: 49 CFR (USA): NOT REGULATED AS DANGEROUS GOODS OR HAZARDOUS MATERIAL
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Transportation Regulation: IMDG (Vessel): NOT REGULATED AS DANGEROUS GOODS OR HAZARDOUS MATERIAL
---

Transportation Regulation: IATA (Cargo Air): NOT REGULATED AS DANGEROUS GOODS OR HAZARDOUS MATERIAL
--

Transportation Regulation: IATA (Passenger Air): NOT REGULATED AS DANGEROUS GOODS OR HAZARDOUS MATERIAL
--

Transportation Regulation: TDG (Canada): NOT REGULATED AS DANGEROUS GOODS OR HAZARDOUS MATERIAL
--

**ZEP NEUTRAL PH FLOOR CLEANER CONCENTRATE**

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The product as delivered to the customer conforms to packaging requirements for shipment by road under US Department of Transportation (DOT) regulations. Additional transportation classifications noted above are for reference only, and not a certification or warranty of the suitability of the packaging for shipment under these alternative transport regulations.

**SECTION 15. REGULATORY INFORMATION**

**TSCA list** : No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

**EPCRA - Emergency Planning and Community Right-to-Know Act****CERCLA Reportable Quantity**

This material does not contain any components with a CERCLA RQ.

**SARA 304 Extremely Hazardous Substances Reportable Quantity**

This material does not contain any components with a section 304 EHS RQ.

**SARA 311/312 Hazards** : No SARA Hazards

**SARA 302** : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313** : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**California Prop. 65**

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

**The components of this product are reported in the following inventories:**

**DSL** All components of this product are on the Canadian DSL  
**TSCA** On TSCA Inventory

For information on the country notification status for other regions please contact the manufacturer's regulatory group.

**Inventory Acronym and Validity Area Legend:**

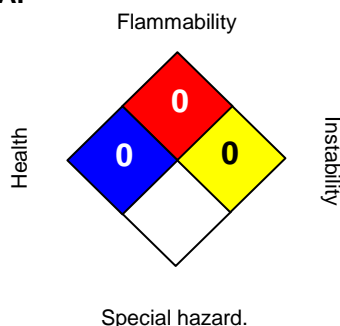
TSCA (USA), DSL (Canada), NDSL (Canada)

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**SECTION 16. OTHER INFORMATION****Further information****NFPA:****HMIS III:**

<b>HEALTH</b>	<b>0</b>
<b>FLAMMABILITY</b>	<b>0</b>
<b>PHYSICAL HAZARD</b>	<b>0</b>

0 = not significant, 1 =Slight,  
2 = Moderate, 3 = High  
4 = Extreme, \* = Chronic

**OSHA - GHS Label Information:**

Not a hazardous substance or mixture.

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Zep Inc. markets products under well recognized and established brand names such as Zep®, Zep Commercial®, Zep Professional®, Enforcer®, National Chemical™, Selig™, Misty®, Next Dimension™, Petro®, i-Chem®, TimeMist®, TimeWick™, MicrobeMax®, Country Vet®, Konk®, Original Bike Spirits®, Blue Coral®, Black Magic®, Rain-X®, Niagara National™, FC Forward Chemicals®, Rexodan®, Mykal™, and a number of private labeled brands.

# Safety Data Sheet

acc. to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Printing date: July 16, 2018

Revision: July 16, 2018

## 1 Identification

- **Product identifier**
- **Trade name:** Zippo Lighter Fluid
- **Recommended use and restriction on use**
- **Recommended use:** Fuel
- **Restrictions on use:** Contact manufacturer/supplier
- **Details of the supplier of the Safety Data Sheet**
- **Manufacturer/Supplier:**  
Zippo Manufacturing Company  
33 Barbour Street  
Bradford, PA 16701  
Phone: 814-368-2700
- **Emergency telephone number:**  
ChemTel Inc.  
(800)255-3924 (North America)  
+1 (813)248-0585 (International)



## 2 Hazard(s) identification

- **Classification of the substance or mixture**  
Flam. Liq. 2 H225 Highly flammable liquid and vapor.  
Skin Irrit. 2 H315 Causes skin irritation.  
STOT SE 3 H336 May cause drowsiness or dizziness.  
Asp. Tox. 1 H304 May be fatal if swallowed and enters airways.
- **Label elements**
- **GHS label elements**  
The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms:**  

GHS02 GHS07 GHS08
- **Signal word:** Danger
- **Hazard statements:**  
H225 Highly flammable liquid and vapor.  
H315 Causes skin irritation.  
H336 May cause drowsiness or dizziness.  
H304 May be fatal if swallowed and enters airways.
- **Precautionary statements:**  
P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.  
P233 Keep container tightly closed.  
P240 Ground/bond container and receiving equipment.  
P241 Use explosion-proof electrical/ventilating/lighting/equipment.  
P242 Use only non-sparking tools.  
P243 Take precautionary measures against static discharge.  
P264 Wash thoroughly after handling.  
P271 Use only outdoors or in a well-ventilated area.

(Cont'd. on page 2)

# Safety Data Sheet

acc. to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Printing date: July 16, 2018

Revision: July 16, 2018

## Trade name: Zippo Lighter Fluid

(Cont'd. of page 1)







P280	Wear protective gloves and eye protection.
P301+P310	If swallowed: Immediately call a poison center/doctor.
P331	Do NOT induce vomiting.
P303+P361+P353	If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P312	Call a poison center/doctor if you feel unwell.
P332+P313	If skin irritation occurs: Get medical advice/attention.
P362+P364	Take off contaminated clothing and wash it before reuse.
P370+P378	In case of fire: Use foam, powder, or carbon dioxide for extinction.
P403+P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Other hazards** There are no other hazards not otherwise classified that have been identified.

## 3 Composition/information on ingredients

· **Chemical characterization: Mixtures**

· **Components:**

68410-97-9	Distillates (petroleum), light distillate hydrotreating process, low-boiling  Flam. Liq. 2, H225  Asp. Tox. 1, H304  Skin Irrit. 2, H315; STOT SE 3, H336	50-100%
64742-49-0	Naphtha (petroleum), hydrotreated light  Flam. Liq. 2, H225  Asp. Tox. 1, H304  STOT SE 3, H336	25-50%

· **Additional information:**

For the wording of the listed Hazard Statements, refer to section 16.

For the listed ingredient(s), the identity and/or exact percentage(s) are being withheld as a trade secret.

## 4 First-aid measures

· **Description of first aid measures**

· **After inhalation:**

Supply fresh air; consult doctor in case of complaints.

Provide oxygen treatment if affected person has difficulty breathing.

In case of unconsciousness place patient stably in side position for transportation.

· **After skin contact:**

Immediately remove any clothing soiled by the product.

Immediately wash with water and soap and rinse thoroughly.

If skin irritation is experienced, consult a doctor.

· **After eye contact:**

Protect unharmed eye.

Remove contact lenses if worn.

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

(Cont'd. on page 3)

## Safety Data Sheet

acc. to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Printing date: July 16, 2018

Revision: July 16, 2018

**Trade name: Zippo Lighter Fluid**

(Cont'd. of page 2)

- **After swallowing:**  
Rinse out mouth and then drink plenty of water.  
Do not induce vomiting; immediately call for medical help.  
A person vomiting while lying on their back should be turned onto their side.
- **Most important symptoms and effects, both acute and delayed:**  
Breathing difficulty  
Coughing  
Dizziness  
Gastric or intestinal disorders when ingested.  
Irritant to skin and mucous membranes.
- **Danger:**  
Vapors have narcotic effect.  
May be fatal if swallowed and enters airways.
- **Indication of any immediate medical attention and special treatment needed:**  
If swallowed, gastric irrigation with added, activated carbon.  
If swallowed or in case of vomiting, danger of entering the lungs.  
Monitor circulation, possible shock treatment.  
If necessary oxygen respiration treatment.  
Later observation for pneumonia and pulmonary edema.  
If medical advice is needed, have product container or label at hand.

### 5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**  
CO<sub>2</sub>, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **For safety reasons unsuitable extinguishing agents:** Water stream.
- **Special hazards arising from the substance or mixture**  
In case of fire, the following can be released:  
Carbon monoxide (CO)  
In certain fire conditions, traces of other toxic gases cannot be excluded.
- **Advice for firefighters**
- **Protective equipment:**  
Wear self-contained respiratory protective device.  
Wear fully protective suit.
- **Additional information:** Cool endangered containers with water fog.

### 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**  
Ensure adequate ventilation.  
Wear protective clothing.  
Particular danger of slipping on leaked/spilled product.  
Keep away from ignition sources.  
Protect from heat.
- **Environmental precautions**  
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

(Cont'd. on page 4)

# Safety Data Sheet

acc. to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Printing date: July 16, 2018

Revision: July 16, 2018

**Trade name: Zippo Lighter Fluid**

(Cont'd. of page 3)

- **Methods and material for containment and cleaning up**

Absorb liquid components with liquid-binding material.  
Send for recovery or disposal in suitable receptacles.

- **Reference to other sections**

See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

## 7 Handling and storage

- **Handling**

- **Precautions for safe handling:**

Use only in well ventilated areas.  
Prevent formation of aerosols.  
Keep receptacles tightly sealed.

- **Information about protection against explosions and fires:**

Protect from heat.  
Protect against electrostatic charges.  
Flammable gas-air mixtures may be formed in empty containers/receptacles.

- **Conditions for safe storage, including any incompatibilities**

- **Requirements to be met by storerooms and receptacles:**

Store in a cool location.  
Use only receptacles specifically permitted for this substance/product.

- **Information about storage in one common storage facility:**

Store away from oxidizing agents.  
Store away from foodstuffs.

- **Further information about storage conditions:**

Store in cool, dry conditions in well sealed receptacles.  
Protect from heat and direct sunlight.

- **Specific end use(s)** No relevant information available.

## 8 Exposure controls/personal protection

- **Control parameters**

- **Components with limit values that require monitoring at the workplace:**

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

- **Exposure controls**

- **Engineering measures** Provide adequate ventilation.

- **General protective and hygienic measures:**

The usual precautionary measures for handling chemicals should be followed.  
Keep away from foodstuffs, beverages and feed.  
Wash hands before breaks and at the end of work.  
Avoid close or long term contact with the skin.  
Keep ignition sources away - Do not smoke.

- **Engineering controls:** Provide adequate ventilation.

- **Breathing equipment:**

(Cont'd. on page 5)

# Safety Data Sheet

acc. to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Printing date: July 16, 2018

Revision: July 16, 2018

**Trade name: Zippo Lighter Fluid**

(Cont'd. of page 4)

Not required under normal conditions of use.  
Use suitable respiratory protective device when aerosol or mist is formed.  
For spills, respiratory protection may be advisable.

· **Protection of hands:**

Not required under normal conditions of use.  
Wear protective gloves to handle contents of damaged or leaking units.  
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

· **Eye protection:**



Safety glasses

Follow relevant national guidelines concerning the use of protective eyewear.

· **Body protection:** Not required under normal conditions of use.

· **Limitation and supervision of exposure into the environment**

No relevant information available.

· **Risk management measures** See Section 7 for additional information.

## 9 Physical and chemical properties

· **Information on basic physical and chemical properties**

· **Appearance:**

**Form:** Liquid  
**Color:** According to product specification  
**Odor:** Petroleum-like  
**Odor threshold:** Not determined.

· **pH-value:** Not determined.  
· **Melting point/Melting range:** Not determined.  
· **Boiling point/Boiling range:** > 35 °C (>95 °F)

· **Flash point:** <-6.5 °C (<20.3 °F)

· **Flammability (solid, gaseous):** Not applicable.

· **Decomposition temperature:** Not determined.

· **Danger of explosion:** Product is not explosive. However, formation of explosive air/vapor mixtures are possible.

· **Explosion limits**

**Lower:** Not determined.  
**Upper:** Not determined.

· **Vapor pressure:** Not determined.

· **Density at 20 °C (68 °F):** 0.7 ± 0.05 g/cm<sup>3</sup> (5.84 lbs/gal)

· **Relative density:** Not determined.

· **Vapor density:** Not determined.

· **Evaporation rate at 20 °C (68 °F):** > 1

· **Solubility in / Miscibility with**

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**Water:** Partly miscible.

· **Partition coefficient (n-octanol/water):** Not determined.

· **Viscosity**

**Dynamic:** Not determined.

**Kinematic:** Not determined.

· **Other information** No relevant information available.

## 10 Stability and reactivity

· **Reactivity:** No relevant information available.

· **Chemical stability:**

· **Thermal decomposition / conditions to be avoided:**

No decomposition if used according to specifications.

· **Possibility of hazardous reactions**

Forms explosive gas mixture with air.

Can react violently with oxygen rich (oxidizing) material. Danger of Explosion.

· **Conditions to avoid**

Keep ignition sources away - Do not smoke.

Store away from oxidizing agents.

· **Incompatible materials** No relevant information available.

· **Hazardous decomposition products** Carbon monoxide and carbon dioxide

## 11 Toxicological information

· **Information on toxicological effects**

· **Acute toxicity:**

· **LD/LC50 values that are relevant for classification:** None.

· **Primary irritant effect:**

· **On the skin:** Irritant to skin and mucous membranes.

· **On the eye:** Based on available data, the classification criteria are not met.

· **Sensitization:** Based on available data, the classification criteria are not met.

· **IARC (International Agency for Research on Cancer):**

None of the ingredients are listed.

· **NTP (National Toxicology Program):**

None of the ingredients are listed.

· **OSHA-Ca (Occupational Safety & Health Administration):**

None of the ingredients are listed.

· **Probable route(s) of exposure:**

Ingestion.

Inhalation.

Eye contact.

Skin contact.

· **Acute effects (acute toxicity, irritation and corrosivity):**

May be fatal if swallowed and enters airways.

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Irritating to skin.

May cause drowsiness or dizziness.

- **Repeated dose toxicity:** No relevant information available.
- **Germ cell mutagenicity:** Based on available data, the classification criteria are not met.
- **Carcinogenicity:** Based on available data, the classification criteria are not met.
- **Reproductive toxicity:** Based on available data, the classification criteria are not met.
- **STOT-single exposure:** May cause drowsiness or dizziness.
- **STOT-repeated exposure:** Based on available data, the classification criteria are not met.
- **Aspiration hazard:** May be fatal if swallowed and enters airways.

### 12 Ecological information

- **Toxicity**

- **Aquatic toxicity** Toxic to aquatic life with long lasting effects.

- **Persistence and degradability** Not easily biodegradable

- **Bioaccumulative potential:** No relevant information available.

- **Mobility in soil:** No relevant information available.

- **Additional ecological information**

- **General notes:**

This statement was deduced from the properties of the single components.

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Due to available data on eliminability/decomposition and bioaccumulation potential prolonged term damage of the environment can not be excluded.

- **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.

- **vPvB:** Not applicable.

- **Other adverse effects** No relevant information available.

### 13 Disposal considerations

- **Waste treatment methods**

- **Recommendation:**

Can be burned with household garbage after consulting with the waste disposal facility operator and the pertinent authorities and adhering to the necessary technical regulations.

The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes. Residual materials should be treated as hazardous.

- **Uncleaned packagings**

- **Recommendation:** Disposal must be made according to official regulations.

- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

### 14 Transport information

- **UN-Number**

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<b>· DOT, ADR, IMDG, IATA</b>	UN1268
<b>· UN proper shipping name</b>	
 Limited Quantity for packages less than 30 kg (66 lb) and inner packagings less than 1 L (0.3 gal).	
<b>· DOT, IATA</b>	Petroleum distillates, n.o.s.
<b>· ADR, IMDG</b>	PETROLEUM DISTILLATES, N.O.S.
<b>· Transport hazard class(es)</b>	
<b>· DOT</b>	
	
<b>· Class</b>	3
<b>· Label</b>	3
<b>· ADR</b>	
	
<b>· Class</b>	3 (F1)
<b>· Label</b>	3
<b>· IMDG, IATA</b>	
	
<b>· Class</b>	3
<b>· Label</b>	3
<b>· Packing group</b>	
<b>· DOT, ADR, IMDG, IATA</b>	II
<b>· Environmental hazards</b>	Product contains environmentally hazardous substances: Distillates (petroleum), light distillate hydrotreating process, low-boiling, Naphtha (petroleum), hydrotreated light
<b>· Special precautions for user</b>	Warning: Flammable liquids
<b>· Danger code (Kemler):</b>	33
<b>· EMS Number:</b>	F-E,S-E
<b>· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b>	Not applicable.

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## 15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **United States (USA)**
- **SARA**

· **Section 302 (extremely hazardous substances):**

None of the ingredients are listed.

· **Section 355 (extremely hazardous substances):**

None of the ingredients are listed.

· **Section 313 (Specific toxic chemical listings):**

None of the ingredients are listed.

· **TSCA (Toxic Substances Control Act)**

All ingredients are listed.

· **Proposition 65 (California)**

· **Chemicals known to cause cancer:**

None of the ingredients are listed.

· **Chemicals known to cause developmental toxicity for females:**

None of the ingredients are listed.

· **Chemicals known to cause developmental toxicity for males:**

None of the ingredients are listed.

· **Chemicals known to cause developmental toxicity:**

None of the ingredients are listed.

· **EPA (Environmental Protection Agency):**

None of the ingredients are listed.

· **IARC (International Agency for Research on Cancer):**

None of the ingredients are listed.

· **Canadian Domestic Substances List (DSL) (Substances not listed.):**

All ingredients are listed.

## 16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Abbreviations and acronyms:**

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bio-accumulable, Toxic

vPvB: very Persistent and very Bioaccumulative

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Flam. Liq. 2: Flammable liquids – Category 2  
Skin Irrit. 2: Skin corrosion/irritation – Category 2  
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3  
Asp. Tox. 1: Aspiration hazard – Category 1

**Sources**

Website, European Chemicals Agency ([echa.europa.eu](http://echa.europa.eu))  
Website, US EPA Substance Registry Services ([ofmpub.epa.gov/sor\\_internet/registry/substreg/home/overview/home.do](http://ofmpub.epa.gov/sor_internet/registry/substreg/home/overview/home.do))  
Website, Chemical Abstracts Registry, American Chemical Society ([www.cas.org](http://www.cas.org))  
Patty's Industrial Hygiene, 6th ed., Rose, Vernon, ed. ISBN: 978-0-470-07488-6  
Casarett and Doull's Toxicology: The Basic Science of Poisons, 8th Ed., Klaasen, Curtis D., ed., ISBN: 978-0-07-176923-5.  
Safety Data Sheets, Individual Manufacturers

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