Safety Data Sheets

All

ΑII

NRG - Romeoville

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IRWIN Chalk – Blue

December 23, 2016

Revision 2

1. PRODUCT and COMPANY IDENTIFICATION

Commercial Product Name: IRWIN Chalk - Blue

Company: IRWIN Tools
Use of product: Snap line, mark

Emergency contact: 1-800-464-7946 8:00am-5:00pm Monday-Friday

2. HAZARDS IDENTIFICATION

Hazards Identification: GHS Classification and Hazard Statement Carcinogenicity – May cause cancer (lung) Category 1A, H350

Signal Word: DANGER Precautionary Statements

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P280 Wear protective gloves and eye protection.

P308 and P313 If exposed or concerned, get medical advice/attention.

P405 Store locked up.

Hazards Not Otherwise Classified or Not Covered by GHS:

Eye: May cause irritation. Chalk dust is discomforting and abrasive to the eyes.

Skin: Prolonged skin contact may cause irritation. When the product is used as intended, it is unlikely to cause discomfort.

Ingestion: Ingestion of large amounts may cause gastrointestinal irritation. Ingestion is considered an unlikely route of entry in commercial or industrial environments.

Inhalation: May cause respiratory tract irritation. When the product is used as intended, it is unlikely to cause discomfort.

Chronic: Repeated and prolonged inhalation exposure to crystalline silica dust above exposure limits may cause delayed, chronic lung injury (silicosis). When the project is used as intended, dust levels should not exceed exposure limits. See Sections 8 and 11.



Hazard Ratings:

Hazardous Material Identification System (HMIS):

Health 2*, Flammability 0, Reactivity 0 *chronic effects

National Fire Protection Association (NFPA):

Health 2, Flammability 0, Reactivity 0

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance name	Value (%)	CAS No.	EC No.
Calcium carbonate ¹	80-85	471-34-1	207-439-9
Ultramarine blue	15-20	57455-37-5	none
Silica (crystalline quartz)1	0.1 - 1	14808-60-7	238-878-4

¹ Calcium carbonate may contain crystalline silica at levels between 0.1 and 1.0 % and varies naturally.

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IRWIN Chalk - Blue

4. FIRST AID MEASURES

Inhalation: Remove from exposure and move to fresh air immediately. Encourage the patient to blow nose to ensure clear breathing passages. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid if cough or other symptoms appear.

Skin contact: Wet clothing first to minimize dust generation, then; remove contaminated clothing and shoes. Launder contaminated clothing before wearing again. Wash affected area with water (and soap if available)

Get medical aid in the event of irritation.

Eye contact: Do not rub eyes, rubbing may cause abrasions. Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

Ingestion: Wash mouth out with plenty of water. Do not induce vomiting unless directed to do so by medical personnel. Get immediate medical aid.

Additional advice: Show this safety data sheet to the doctor in attendance

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media: Substance is noncombustible.

Explosion: No information found.

Specific hazards: Not considered to be a significant fire risk, however; the containers may burn, releasing carbon monoxide, and carbon dioxide.

Special protective equipment for Firefighters: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Wear appropriate personal protective equipment as specified in Section 8.

Environmental precautions: Do not allow this material to be released to the environment without proper governmental permits.

Methods for cleaning up: Recover the product whenever possible. Avoid generating dust when sweeping/shoveling up. If required, wet the material with water to prevent creating dust. Pick up and place in a suitable container for reclamation or disposal. Follow applicable OSHA regulations (29 CFR 1910.120)

7. HANDLING AND STORAGE

Storage: Store this product in a tightly-closed container in a dry, well-ventilated area away from incompatible substances.

Handling: Avoid creating, or breathing dust. Practice good personal hygiene, (hand washing, etc.) after using this product. Avoid contact with skin and eyes.

Packaging material: No information found.

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IRWIN Chalk - Blue

8. EXPOSURE CONTROLS / PERSONAL PROTECTION Exposure Guidelines

Exposure Limit 8-Hour TWA¹ (mg/m³)

Component	CAS No.	% by weight	OSHA PEL	ACGIH TLV	NIOSH REL
Calcium Carbonate ⁴ (Limestone)	471-34-1; (1317-65-3)	80-85	15 ² 5 ³	10 ²	10 ² 5 ³
Ultramarine blue	57455-37-5	15-20	Not Est.	Not Est.	Not Est.
Silica-Crystalline	14808-60-7	0.1-1.0	0.05^{3}	0.025^{3}	0.05^{3}
Quartz ⁴					

¹ TWA = Time-weighted average

Exposure and Engineering Controls: Facilities storing or utilizing this material should have potable water available for washing eyes and skin. Use sufficient general area (or outdoor) ventilation. Local exhaust ventilation should be used if airborne concentrations of dust exceed limits cited in Section 8.

Personal protective equipment:

Hand protection: Wear protective gloves

Eye protection: Wear safety glasses, or chemical goggles in windy conditions or where eye

contact is possible.

Respiratory protection: When engineering controls are not sufficient to reduce exposure, seek professional advice prior to respirator selection and use. Follow the OSHA respirator regulations found in 29CFR 1910.134 or European Standard EN 149. Always use a NIOSH or European Standard EN 149 approved respirator when necessary.

Hygiene measures: Wash contaminated clothing before reuse. **Environmental exposure controls:** No information found.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Powder
Color: Blue
Odor: Odorless.
pH (at 10% solids): 8.5-9.5

Boiling point/range: No data available. Melting point/range: **Decomposes** Flash point: No data available. Evaporation rate: No data available. Vapor density: No data available. Solubility in water: <0.0002 (Trace) Explosive properties: No data available. Oxidizing properties: No data available. Vapor pressure: No data available.

Relative density (H₂O=1): 2.60-2.65 Viscosity: No data available.

Partition coefficient (n-octanol/water): No data available.

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² Total dust.

³ Respirable dust.

Calcium carbonate may contain crystalline silica at levels between 0.1 and 1.0 % and varies naturally.

IRWIN Chalk - Blue

10. STABILITY AND REACTIVITY

Stability: Stable under normal temperatures and pressures.

Hazardous decomposition products: Carbon monoxide, carbon dioxide, calcium oxide.

Materials to avoid: Strong oxidizing agents, acids, aluminum, fluorine, magnesium

Conditions to avoid: Incompatible materials, moisture.

Hazardous Polymerization: Does not occur.

11. TOXICOLOGICAL INFORMATION

Note: Toxicological effects described in this section are those that would be expected based on data from the components of this product.

Acute toxicity: Calcium carbonate (CAS# 471-34-1): Draize test, rabbit, eye: 750 ug/24H Severe; Draize test, rabbit, skin: 500 mg/24H Moderate; Oral, rat: LD50 = 6,450mg/kg.

Inhalation: (Silica, crystalline quartz) Human: LC_{Lo}: 300 μg/m³/ intermittent exposure over a 10-year period produced pulmonary system effects.

Skin contact: (Calcium carbonate) Rabbit: 500mg administered for 24 hours produces moderate skin irritation.

Eye contact: (Calcium carbonate) Rabbit: 0.750 mg administered for 24 hours produced severe irritation.

Ingestion: (Calcium carbonate) Rat: LD₅₀: 6,450 mg/kg. (Ultramarine blue) Rat: LD₅₀: 5,000 mg/kg.

Chronic toxicity/Carcinogenicity: Repeated and prolonged inhalation exposure to crystalline silica dust above exposure limits may cause delayed, chronic lung injury (silicosis). When the product is used as intended, dust levels should not exceed exposure limits.

Quartz – crystalline silica:

The International Agency for Research on Cancer (IARC) has designated this substance Group 1, "carcinogenic to humans".

The National Toxicology Program (NTP) has designated this substance: Group K "known to be a human carcinogen"

American Conference of Governmental Industrial Hygienists (ACGIH) has designated this substance A2; suspected human carcinogen. The agent is carcinogenic in experimental animals at dose levels, by route of administration, at sites of histologic type(s) or by mechanism(s) considered relevant to worker exposure. Available epidemiologic studies are conflicting or insufficient to confirm an increased risk of cancer in exposed humans.

12. ECOLOGICAL INFORMATION

Bioaccumulation: No information found. Ecotoxicity effects: No information found.

Limestone (which is primarily composed of calcium carbonate) is <u>not</u> classified as a "Toxic pollutant" or a "hazardous substance under Section 307 and 311 of the United States Clean Water Act.

13. DISPOSAL CONSIDERATIONS

Waste from residues of this product is <u>not</u> a hazardous waste according to U.S. Environmental Protection Agency (EPA) regulations. Disposal by landfill may be acceptable. Consult an expert on the disposal of recovered material for compliance with state, provincial, and/or local regulations.

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14. TRANSPORT INFORMATION

U.S. DOT: Not regulated

ADR/RID: Not regulated

IMDG: Not regulated

ICAO/IATA: Not regulated

15. REGULATORY INFORMATION

U.S. Federal Regulations

OSHA: Ingredients are listed as air contaminants (29 CFR 1910.1000).

Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).

TSCA (Toxic Substance Control Act): All components of this product are listed on the TSCA inventory.

CERCLA: Hazardous Substance, (40 CFR 302.4): Not Listed.

Extremely Hazardous Substance (40 CFR 355): Not Listed.

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 category:

"An immediate (acute) and chronic health hazard."

Chemicals subject to the reporting requirements of Section 313 or Title III of SARA and 40 CFR Part 372: None.

STATE REGULATIONS:

California's "Safe Drinking Water and Toxic Enforcement Act of 1986" (Proposition 65)

This product contains the following Proposition 65 regulated materials known to the State of California to cause cancer or reproductive harm. The listed typical amounts are a result of their natural presence in the raw materials from which this product is produced.

Silica-crystalline quartz equal to, or less than 1.0 percent

CANADA WHIMS: This product has been classified in accordance with the hazard criteria of the Controlled Products Regulation (CPR), and the SDS contains all of the information required by the CPR.

16. OTHER INFORMATION

The contents and format of this SDS are in accordance with the U.S. Hazard Communication Standard 29 CFR 1910.1200; the Canadian CPR, and Workplace Hazardous Materials Information System (WHMIS); and EEC Commission Directive 1999/45/EC, and EEC Commission Regulation 1907/2006/EC (REACH) Annex II.

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DISCLAIMER OF LIABILITY The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we 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. This SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable.

End of document

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Fiamm Sports Marine Big Horn

Safety Data Sheet

According to Federal Register Rules and Regulations

Revision date:01/15/2015 :

SECTION 1: Identification of the Substance/Mixture and CompanyIdentificatioon 1.1. Product identifier Product form : Substance Trade name : Fiamm Sports Marine Big Horn 8 oz. CAS No : 811-97-2 Formula : C2H2F4

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

Use of the substance/mixture : Follow Label Directions

Use of the substance/mixture : Aerosol Horn

1.3. Details of the supplier of the safety data sheet

MAX PRO P.O. BOX 9962 FTLAUDERDALE FL, 33310 T 954-972-3338

1.4. Emergency telephone number

Emergency number : CHEMTREC 24 Hour 1-800-424-9300

SECTION 2: Hazards Identification

2.1. Classification of the substance or mixture

Classification (GHS-US)

Compressed gas H280

2.2. Label elements

GHS-US labeling

Hazard pictograms (GHS-US)



GHS04

Signal word (GHS-US) : Warning

Hazard statements (GHS-US) : H280 - Contains gas under pressure; may explode if heated

Precautionary statements (GHS-US) : P410+P403 - Protect from sunlight. Store in a well-ventilated place
P251 - Pressurized container: Do not pierce or burn, even after use

P412 - Do not expose to temperatures exceeding 50°C/ 122°F

2.3. Other hazards

Other hazards not contributing to the classification: Contains gas under pressure; may explode if heated. Intentional misuse and inhalation abuse may cause cardiac or central nervous systems effects. Warning. May cause frostbite in contact with skin.

2.4. Unknown acute toxicity (GHS-US)

No data available

01/15/2015 1/9

SECTION 3: Composition/Information on Ingredients

3.1. Substances

Name	Product identifier	%	Classification (GHS-US)
1,1,1,2-tetrafluoroethane	(CAS No)811-97-2	> 99	Compressed gas, H280

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

labored 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 : Rinse with water. Take victim to a doctor if irritation persists. In case of frostbites: Wash

immediately with lots of water (15 minutes)/shower. Do not apply (chemical) neutralizing agents. Remove clothing while washing. Do not remove clothing if it sticks to the skin. Cover wounds with sterile bandage. Consult a doctor/medical service. If burned surface > 10%: take victim to

hospital.

First-aid measures after eye contact : Rinse immediately with plenty of water for 15 minutes. Do not apply neutralizing agents. Take

victim to an ophthalmologist.

First-aid measures after ingestion : Not applicable.

4.2. Most important symptoms and effects, both acute and

delayed

Symptoms/injuries : Not expected to present a significant hazard under anticipated conditions of normal use.

Symptoms/injuries after inhalation : EXPOSURE TO HIGH CONCENTRATIONS: Accelerated heart action. Disturbances of heart rate. Coordination disorders. Feeling of weakness. Respiratory difficulties. Vomiting. Nausea.

Disturbances of consciousness. Risk of lung edema. Respiratory collapse.

Symptoms/injuries after skin contact : Red skin. Blisters. Frostbites.

Symptoms/injuries after eye contact : Not applicable.
Symptoms/injuries after ingestion : Not applicable.
Chronic symptoms : No effects known.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Fire Fighting Measures

5.1. Extinguishing media

suitable extinguishing media : EXTINGUISHING MEDIA FOR SURROUNDING FIRES: Adapt extinguishing media to the

environment.

Unsuitable extinguishing media : No unsuitable extinguishing media known.

5.2. Special hazards arising from the substance or mixture

Fire hazard : DIRECT FIRE HAZARD. Non combustible.

Explosion hazard : INDIRECT EXPLOSION HAZARD. Heat may cause pressure rise in tanks/drums: explosion risk.

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Reactivity : On burning: release of toxic and corrosive gases/vapors (hydrofluoric acid, carbon monoxide -

carbon dioxide, carbonylfluoride). Reacts with (some) acids.

5.3. Advice for firefighters

Precautionary measures fire : Exposure to fire/heat: consider evacuation.

Firefighting instructions : Cool tanks/drums with water spray/remove them into safety. Physical explosion risk: cool from

behind cover. Do not move the load if exposed to heat. After cooling: persistent risk of physical

explosion. Dilute toxic gases with water spray.

Protection during firefighting : Heat/fire exposure: compressed air/oxygen apparatus.

Other information : NFPA Aerosol Level 1.

SECTION 6: Accidental Release Measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Protective equipment : Insulating gloves. Protective clothing. Large spills/in enclosed spaces: compressed air

apparatus.

Emergency procedures : Keep upwind. Mark the danger area. Seal off low-lying areas. Close doors and windows of

adjacent premises. No naked flames. Carry out specific temperature controls. Wash contaminated clothes. Large spills/in confined spaces: consider evacuation.

6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.

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 : Contain released substance, pump into suitable containers. Plug the leak, cut off the supply. Tip

the container on one side to stop the leakage. Do not spray water on unheated tank walls.

Methods for cleaning up : Damaged/cooled tanks must be emptied.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and Storage

7.1. Precautions for safe handling

Additional hazards when processed : Pressurized container: Do not pierce or burn, even after use.

Precautions for safe handling : Comply with the legal requirements. Handle and open the container with care. Thoroughly clean/dry the installation before use. Keep away from naked flames/heat. Observe normal

hygiene standards. Carry operations in the open/under local exhaust/ventilation or with

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respiratory protection. Measure the oxygen concentration in the air.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep only in the original container in a cool, well ventilated place away from : Keep container

closed when not in use.

Incompatible products : Strong bases. Strong acids.

Incompatible materials : Sources of ignition. Direct sunlight.

Storage temperature : < 50 °C

Heat-ignition : KEEP SUBSTANCE AWAY FROM: heat sources.

Prohibitions on mixed storage : KEEP SUBSTANCE AWAY FROM: (strong) acids.

Storage area : Store in a cool area. Keep out of direct sunlight. Ventilation at floor level. Aboveground. Meet the

legal requirements.

Special rules on packaging : SPECIAL REQUIREMENTS: with pressure relief valve. clean. correctly labeled. meet the legal

requirements.

Packaging materials : SUITABLE MATERIAL: No data available. MATERIAL TO AVOID: No data available.

7.3. Specific end use(s)

Follow Label Directions.

SECTION 8: Exposure Controls/Personal Protection

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8.1. Control parameters

8.2. Exposure controls

Personal protective equipment : Gloves. Safety glasses. Avoid all unnecessary exposure.





Materials for protective clothing : GIVE GOOD RESISTANCE: neoprene. nitrile rubber. butyl rubber.

Hand protection : Insulated gloves.

Eye protection : Safety glasses.

Skin and body protection : Protective clothing.

Respiratory protection : High vapor/gas concentration: self-contained respirator.

Other information : Do not eat, drink or smoke during use.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Physical state : Gas

Appearance : Gas.

Molecular mass : 102.03 g/mol Color : Colorless.

Odor : Ether-like odor.

Odor threshold : No data available

pH : No data available

Relative evaporation rate (butyl acetate=1) : No data available

Melting point : -101 °C

Freezing point : No data available

Boiling point : -26 °C

Flash point : Not applicable

 $\begin{array}{ll} \mbox{Critical temperature} & : 101 \ ^{\circ}\mbox{C} \\ \mbox{Self ignition temperature} & : > 743 \ ^{\circ}\mbox{C} \\ \end{array}$

Decomposition temperature : 368 °C

Flammability (solid, gas) : No data available

Vapor pressure : 5720 hPa

Critical pressure : 40560 hPa Relative vapor density at 20 °C : 3.52 (20 °C)

Relative density : 1.2 (-27 °C)

Density : 1206 kg/m³ (-27 $^{\circ}$ C)

Solubility : Poorly soluble in water. Soluble in ethanol. Soluble in ether. Soluble in hexane.

Water: 0.15 g/100ml (25 °C)

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Log Pow : 1.06 (OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method)

Log Kow : No data available

Viscosity, kinematic : No data available

Viscosity, dynamic : No data available

Explosive properties : No data available

Oxidizing properties : No data available

Explosive limits : No data available

9.2. Other information

VOC content : 0 %

Gas group : Compressed gas

Other properties : Gas/vapor heavier than air at 20°C. Substance has neutral reaction. May generate electrostatic

charges.

SECTION 10: Stability and Reactivity

10.1. Reactivity

On burning: release of toxic and corrosive gases/vapours (hydrofluoric acid, carbon monoxide - carbon dioxide, carbonylfluoride). Reacts with (some) acids.

10.2.

Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5.

Incompatible materialsStrong acids. Strong bases.

10.6. Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide.

SECTION 11: Toxicological Information

11.1. Information on toxicological effects

Acute toxicity : Not classified

134a (811-97-2)

 $LC50 \ inhalation \ rat \ (mg/l) \\ LC50 \ inhalation \ rat \ (ppm) \\ > 359300 \ ppm/4h \ (Rat)$

Skin corrosion/irritation : Not classified
Serious eye damage/irritation : Not classified
Respiratory or skin sensitization : Not classified

Germ cell mutagenicity : Not classified based on available data, the classification criteria are not met

Carcinogenicity : Not classified

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Reproductive toxicity: Not classified based on available data, the classification criteria are not met Specific target organ toxicity (single exposure): Not classified

Specific target organ toxicity (repeated : Not classified based on available data, the classification criteria are not met exposure)

Aspiration hazard : Not classified based on available data, the classification criteria are not met : Based on available data, the classification criteria are not met.

Potential Adverse human health effects and Symptoms/injuries after inhalation

symptoms

: EXPOSURE TO HIGH CONCENTRATIONS: Accelerated heart action. Disturbances of heart rate.

Coordination disorders. Feeling of weakness. Respiratory difficulties. Vomiting. Nausea.

Disturbances of consciousness. Risk of lung oedema. Respiratory collapse.

Symptoms/injuries after skin contact : Red skin. Blisters. Frostbites.

Symptoms/injuries after eye contact : Not applicable. Symptoms/injuries after ingestion : Not applicable. Chronic symptoms : No effects known.

SECTION 12: Ecological information

12.1. **Toxicity**

Ecology - general : No environmental hazard. Ecology - air : TA-LuftKlasse 5.2.5.

Ecology - water : Mild water pollutant (surface water). Maximum concentration in drinking water: 1.5 mg/l (fluoride) (Directive 98/83/EC). Slightly harmful to fishes (LC50(96h) 100-1000 mg/l). Slightly harmful to

invertebrates (Daphnia) (EC50 (48h): 100 - 1000 mg/l).

134a (811-97-2)

LC50 fish 1 450 mg/l 96 h; Salmogairdneri (Oncorhynchusmykiss)

EC50 Daphnia 1 980 mg/l (48 h; Daphnia magna)

Persistence and degradability 12.2.

134a (811-97-2)

Not readily biodegradable in water. Persistence and degradability

12.3. Bioaccumulative potential

134a (811-97-2)

BCF other aquatic organisms 1 5 - 58 (Estimated value)

Log Pow 1.06 (OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method)

Bioaccumulative potential Low potential for bioaccumulation (BCF < 500).

Mobility in soil

No additional information available

Other adverse effects

Other information : Avoid release to the environment.

SECTION 13: Disposal considerations

Waste treatment methods

Waste 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. Refer to manufacturer/supplier for information on recovery/ recycling.

01/15/2015 6/9 : Avoid release to the environment.

SECTION 14: Transport information

In accordance with ADR / RID / ADNR / IMDG / ICAO / IATA

UN3159, 1,1,1,2-Tetrafluoroethane, 2.2, Limited Quantity

US DOT (ground):

ICAO/IATA (air): UN3159, 1,1,1,2-Tetrafluoroethane, 2.2, Limited Quantity IMO/IMDG (water): UN3159, 1,1,1,2-Tetrafluoroethane, 2, Limited Quantity

Special Provisions: DOT-SP 10232: In accordance with this special permit, the product container is marked with DOT-SP10232 instead of 2Q.

This packaging is approved for shipping as a Consumer Commodity.

DOT-SP 15146: In accordance with this special permit, the product container is marked with DOT-SP15146 instead of 2Q.

This packaging is approved for shipping as a Consumer Commodity.

14.2. UN proper shipping name

DOT Proper Shipping Name : 1,1,1,2-Tetrafluoroethane

Department of Transportation (DOT) Hazard

: 2.2 - Class 2.2 - Non-flammable compressed gas 49 CFR 173.115

Classes Hazard labels (DOT)

: 2.2 - Non-flammable gas, ORM-D



DOT Special Provisions (49 CFR 172.102)

: DOT-SP 10232: In accordance with this special permit, the product container is marked with DOT-SP10232 instead of 2Q. This packaging is approved for shipping as a Consumer

Commodity.

: DOT-SP 15146: In accordance with this special permit, the product container is marked with DOT-SP15146 instead of 2Q. This packaging is approved for shipping as a Consumer

Commodity.

Transportation Canada : TC-SU 11282

DOT Packaging Exceptions (49 CFR 173.xxx) : 306

DOT Packaging Non Bulk (49 CFR 173.xxx) : 304

DOT Packaging Bulk (49 CFR 173.xxx) : 314;315

14.3. Additional information

Other information : No supplementary information available.

State during transport (ADR-RID) : as liquefied gas, under pressure.

Overland transport

Class (ADR) : 2 - Gases
Hazard identification number (Kemler No.) : 20
Classification code (ADR) : 2A



Danger labels (ADR)
Orange plates

: 2.2 - Non-flammable compressed gas

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Tunnel restriction code : C/E

Transport by sea

DOT Vessel Stowage Location : A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a

passenger vessel.

EmS-No. (1) : F-C EmS-No. (2) : S-V

Air transport

DOT Quantity Limitations Passenger aircraft/rail: 75 kg

(49 CFR 173.27)

DOT Quantity Limitations Cargo aircraft only (49: 150 kg CFR

175.75)

SECTION 15: Regulatory information

15.1. US Federal regulations

134a (811-97-2)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

SARA Section 311/312 Hazard Classes Sudden release of pressure hazard

15.2. International regulations

CANADA

134a (811-97-2)

WHMIS Classification Class A - Compressed Gas

EU-Regulations

No additional information available

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Press. Gas

Full text of H-phrases: see section 16

Classification according to Directive 67/548/EEC or 1999/45/EC Not

classified

15.2.2. National regulations

No additional information available

15.3. US State regulations

No additional information available

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SECTION 16: Other information

Indication of changes : Revision - See : *.

Other information : None.

Full text of H-phrases: see section 16:

Compressed gas Gases under pressure Compressed gas

H280 Contains gas under pressure; may explode if heated

NFPA health hazard : 1 - Exposure could cause irritation but only minor residual

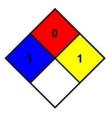
injury even if no treatment is given.

NFPA fire hazard : 0 - Materials that will not burn.

NFPA reactivity : 1 - Normally stable, but can become unstable at elevated

temperatures and pressures or may react with water with

some release of energy, but not violently.



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HMIS III Rating

Health : 1 Slight Hazard - Irritation or minor reversible injury possible

Flammability : 0 Minimal Hazard
Physical : 1 Slight Hazard

Personal Protection : B

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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 : CHEMTREC 1-800-424-9300

number 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

T.

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
Chloroxylenol	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 contact, immediately flush eyes with plenty of water In case of eye contact

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 (CO2)

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/m3	OSHA Z-1
		TWA	200 mg/m3 (as total hydrocarbon vapor)	ACGIH
		TWA (Mist)	5 mg/m3	NIOSH REL
		ST (Mist)	10 mg/m3	NIOSH REL
Mineral Oil (Paraffinum Liquidum)	8042-47-5	TWA (Mist)	5 mg/m3	OSHA Z-1
		TWA (Inhalable fraction)	5 mg/m3	ACGIH
		TWA (Mist)	5 mg/m3	NIOSH REL
		ST (Mist)	10 mg/m3	NIOSH REL
		TWA (Mist)	5 mg/m3	OSHA P0
Propylene Glycol	57-55-6	TWA	10 mg/m3	US WEEL
Petrolatum	8009-03-8	TWA (Mist)	5 mg/m3	OSHA Z-1
		TWA (Inhalable fraction)	5 mg/m3	ACGIH
		TWA (Mist)	5 mg/m3	NIOSH REL
		ST (Mist)	10 mg/m3	NIOSH REL
		TWA (Mist)	5 mg/m3	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/cm3

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 mm2/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 regulati

on 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

Chloroxylenol:

Result: Skin irritation

Remarks: Based on harmonised classification in EU regulati on 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

Chloroxylenol:



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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 regulati on 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

mammali an 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.

OSHANo 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 : Test Type: Embryo-foetal development

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 : Test Type: Embryo-foetal development

development Species: Rat

Application Route: Ingestion

Result: negative

Propylene Glycol:

Effects on fertility : Species: Mouse

Application Route: Ingestion

Result: negative

Effects on foetal : Test Type: Embryo-foetal development

development Species: Mouse

Application Route: Ingestion

Result: negative

Petrolatum:

Effects on fertility : Test Type: Reproduction/Developmental toxicity screening tes

t

Species: Rat

Application Route: Ingestion

Result: negative

Remarks: Based on data from similar materials

Effects on foetal : Test Type: Embryo-foetal development

development Species: Rat

Application Route: Skin contact

Result: negative

Remarks: Based on data from similar materials

Sodium Hydroxymethylglycinate:

Effects on foetal : Species: Rat

development 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: >= 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.

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

: NOEC (Daphnia magna (Water flea)): 1,000 mg/l

Exposure time: 28 d

Toxicity to daphnia and other

aquatic invertebrates (Chronic toxicity)

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

Chloroxylenol:

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)

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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- : log Pow: -1.07

octanol/water

Sodium Hydroxymethylglycinate:

Partition coefficient: n- : log Pow: < 3

octanol/water

Chloroxylenol:

Partition coefficient: n- : log Pow: 3.27

octanol/water

Mobility in soil

No data available

Other adverse effects

No data available

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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).

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.

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

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 SOCMI Intermediate or Final VOC's (40 CFR 60.489):

Propylene Glycol 57-55-6 1.769

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



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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

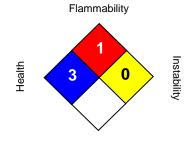
Inventories

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:



Special hazard.

HMIS III:

HEALTH	3
FLAMMABILITY	1
PHYSICAL HAZARD	0

0 = not significant, 1 = Slight,

2 = Moderate, 3 = High

4 = Extreme, * = Chronic

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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.



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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 : CHEMTREC 1-800-424-9300

number 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
Chloroxylenol	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 contact, immediately flush eyes with plenty of water In case of eye contact

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

: Causes serious eye damage.

delayed

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 (CO2)

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/m3	OSHA Z-1
		TWA	200 mg/m3 (as total hydrocarbon vapor)	ACGIH
		TWA (Mist)	5 mg/m3	NIOSH REL
		ST (Mist)	10 mg/m3	NIOSH REL
Mineral Oil (Paraffinum Liquidum)	8042-47-5	TWA (Mist)	5 mg/m3	OSHA Z-1
		TWA (Inhalable fraction)	5 mg/m3	ACGIH
		TWA (Mist)	5 mg/m3	NIOSH REL
		ST (Mist)	10 mg/m3	NIOSH REL
		TWA (Mist)	5 mg/m3	OSHA P0
Propylene Glycol	57-55-6	TWA	10 mg/m3	US WEEL
Petrolatum	8009-03-8	TWA (Mist)	5 mg/m3	OSHA Z-1
		TWA (Inhalable fraction)	5 mg/m3	ACGIH
		TWA (Mist)	5 mg/m3	NIOSH REL
		ST (Mist)	10 mg/m3	NIOSH REL
		TWA (Mist)	5 mg/m3	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/cm3

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 mm2/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 regulati

on 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

Chloroxylenol:

Result: Skin irritation

Remarks: Based on harmonised classification in EU regulati on 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

Chloroxylenol:



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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 regulati on 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

mammali an 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.

OSHANo 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 : Test Type: Embryo-foetal development

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 : Test Type: Embryo-foetal development

development Species: Rat

Application Route: Ingestion

Result: negative

Propylene Glycol:

Effects on fertility : Species: Mouse

Application Route: Ingestion

Result: negative

Effects on foetal : Test Type: Embryo-foetal development

development Species: Mouse

Application Route: Ingestion

Result: negative

Petrolatum:

Effects on fertility : Test Type: Reproduction/Developmental toxicity screening tes

t

Species: Rat

Application Route: Ingestion

Result: negative

Remarks: Based on data from similar materials

Effects on foetal : Test Type: Embryo-foetal development

development Species: Rat

Application Route: Skin contact

Result: negative

Remarks: Based on data from similar materials

Sodium Hydroxymethylglycinate:

Effects on foetal : Species: Rat

development 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: >= 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.

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

Chloroxylenol:

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- : log Pow: -1.07

octanol/water

Sodium Hydroxymethylglycinate:

Partition coefficient: n- : log Pow: < 3

octanol/water

Chloroxylenol:

Partition coefficient: n- : log Pow: 3.27

octanol/water

Mobility in soil

No data available

Other adverse effects

No data available

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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).

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.

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

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 SOCMI 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

64742-47-8	30 - 50 %
7732-18-5	30 - 50 %
8042-47-5	10 - 20 %
112-80-1	5 - 10 %
24938-91-8	1 - 5 %
57-55-6	1 - 5 %
8009-03-8	1 - 5 %
1310-73-2	0.1 - 1 %
70161-44-3	0.1 - 1 %
	7732-18-5 8042-47-5 112-80-1 24938-91-8 57-55-6 8009-03-8 1310-73-2

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

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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

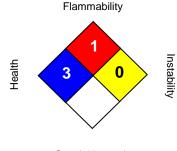
Inventories

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:



Special hazard.

HMIS III:

HEALTH	3
FLAMMABILITY	1
PHYSICAL HAZARD	0

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.

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Safety Data Sheet



* Trusted Quality Since 1921 * www.rustoleum.com

1. Identification

Product Name: IC SSPR 6PK FLAT ZINC GALVANIZING

COMPND

Product Identifier: 1685830

Recommended Use: Cold Galvanizing/Aerosol

Supplier: 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

Preparer: Regulatory Department

Emergency Telephone: 24 Hour Hotline: 847-367-7700

Revision Date: 1/29/2020

Supercedes Date: 9/12/2019

Manufacturer: Rust-Oleum Corporation

11 Hawthorn Parkway Vernon Hills, IL 60061

USA

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

Acute Toxicity, Oral, category 4 H302 Harmful if swallowed.

Carcinogenicity, category 2 H351 Suspected of causing cancer.

Compressed Gas H280 Contains gas under pressure; may explode if heated.

Flammable Aerosol, category 1 H222 Extremely flammable aerosol.

STOT, repeated exposure, category 1 H372 Causes damage to organs through prolonged or repeated exposure.

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.

P260 Do not breathe dust/fume/gas/mist/vapors/spray.

P264 Wash hands thoroughly after handling.

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P280 Wear protective gloves/protective clothing/eye protection/face protection.

P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

P308+P313 IF exposed or concerned: Get medical advice/attention.

P314 Get medical advice/attention if you feel unwell.

P330 Rinse mouth.
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

P270 Do not eat, drink or smoke when using this product.

3. Composition / Information On Ingredients

HAZARDOUS SUBSTANCES

Chemical Name	CAS-No.	<u>Wt.%</u>	GHS Symbols	GHS Statements
Zinc	7440-66-6	48	GHS02-GHS07	H250-260-302
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	8.0	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.

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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 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. 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
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/m3	10 mg/m3	5 mg/m3	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 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 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

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9. Physical and Chemical Properties

Appearance:	Aerosolized Mist	Physical State:	Liquid
Odor:	Solvent Like	Odor Threshold:	N.E.
Specific Gravity:	1.323	pH:	N.A.
Freeze Point, °C:	ND	Viscosity:	N.D.
Solubility in Water:	Slight	Partition Coefficient, n-octanol/	N.D.
Decompostion Temp., °C:	N.D.	water:	N.D.
Boiling Range, °C:	-37 - 537	Explosive Limits, vol%:	0.8 - 9.5
Flammability:	Supports Combustion	Flash Point, °C:	-96
Evaporation Rate:	Faster than Ether	Auto-ignition Temp., °C:	N.D.
Vapor Density:	Heavier than Air	Vapor Pressure:	N.D.

(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: No Information

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. 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).

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
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.É.	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

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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

	Domestic (USDOT)	International (IMDG)	<u>Air (IATA)</u>	TDG (Canada)
UN Number:	N.A.	1950	1950	N.A.
Proper Shipping Name:	Paint and Related Spray Products in Ltd Qty	Aerosols	Aerosols, flammable	Aerosols
Hazard Class:	N.A.	2	2.1	N.A.
Packing Group:	N.A.	N.A.	N.A.	N.A.
Limited Quantity:	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.

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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: 1/29/2020

REASON FOR REVISION: Substance and/or Product Properties Changed in Section(s):

01 - Identification

03 - Composition/Information on Ingredients 09 - Physical & Chemical Properties Substance Hazardous Flag Changed

Substance Hazardous Flag Changed Substance Hazard Threshold % Changed

Revision Statement(s) Changed

Legend: N.A. - Not Applicable, N.D. - Not Determined, N.E. - Not Established

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.



IRWIN Chalk - Blue, Standard

November 3, 2016

Revision 1

1. PRODUCT and COMPANY IDENTIFICATION

Commercial Product Name: IRWIN Chalk - Blue

Company: IRWIN Tools
Use of product: Snap line, mark

Emergency contact: 1-800-464-7946 8:00am-5:00pm Monday-Friday

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: Non-combustible blue solid powder with no odor. Irritating to eyes, skin, and respiratory system. Exposure to large quantities of this material may cause acute irritation of eyes and difficulty breathing.

OSHA GHS Hazard Statements (Warning Label)

DANGER - May cause cancer (lung) (Category 1A)

Hazard Ratings:

Hazardous Material Identification System (HMIS):

Health 2*, Flammability 0, Reactivity 0 *chronic effects

National Fire Protection Association (NFPA):

Health 2, Flammability 0, Reactivity 0

Eye: May cause irritation. Chalk dust is discomforting and abrasive to the eyes.

Skin: Prolonged skin contact may cause irritation. May cause an allergic reaction in certain individuals. When the product is used as intended, it is unlikely to cause discomfort.

Ingestion: Ingestion of large amounts may cause gastrointestinal irritation. Ingestion is considered an unlikely route of entry in commercial or industrial environments.

Inhalation: May cause respiratory tract irritation. When the product is used as intended, it is unlikely to cause discomfort.

Chronic: Repeated and prolonged inhalation exposure to crystalline silica dust above exposure limits may cause delayed, chronic lung injury (silicosis). When the project is used as intended, dust levels should not exceed exposure limits. See Sections 8 and 11.



Obtain special instructions before use. May cause cancer by inhalation. Avoid breathing dust or fume. Causes serious eye irritation. Causes mild skin irritation. Do not handle until all safety precautions have been read and understood. Wear protective gloves and eye protection.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance name CAS No. EC No. Value (%) Calcium carbonate¹ 80-85 471-34-1 207-439-9 Ultramarine blue 15-20 57455-37-5 none Silica (crystalline quartz)¹ 0.1 - 1 14808-60-7 238-878-4

Page 1 of 6 Revision: 1

¹ Calcium carbonate may contain crystalline silica at levels between 0.1 and 1.0 % and varies naturally.

IRWIN Chalk - Blue

4. FIRST AID MEASURES

Inhalation: Remove from exposure and move to fresh air immediately. Encourage the patient to blow nose to ensure clear breathing passages. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid if cough or other symptoms appear.

Skin contact: Wet clothing first to minimize dust generation, then; remove contaminated clothing and shoes. Launder contaminated clothing before wearing again. Wash affected area with water (and soap if available)

Get medical aid in the event of irritation.

Eye contact: Do not rub eyes, rubbing may cause abrasions. Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

Ingestion: Wash mouth out with plenty of water. Do not induce vomiting unless directed to do so by medical personnel. Get immediate medical aid.

Additional advice: Show this safety data sheet to the doctor in attendance

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media: Substance is noncombustible.

Explosion: No information found.

Specific hazards: Not considered to be a significant fire risk, however; the containers may burn, releasing carbon monoxide, and carbon dioxide.

Special protective equipment for Firefighters: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Wear appropriate personal protective equipment as specified in Section 8.

Environmental precautions: Do not allow this material to be released to the environment without proper governmental permits.

Methods for cleaning up: Recover the product whenever possible. Avoid generating dust when sweeping/shoveling up. If required, wet the material with water to prevent creating dust. Pick up and place in a suitable container for reclamation or disposal. Follow applicable OSHA regulations (29 CFR 1910.120)

7. HANDLING AND STORAGE

Storage: Store this product in a tightly-closed container in a dry, well-ventilated area away from incompatible substances.

Handling: Avoid creating, or breathing dust. Practice good personal hygiene, (hand washing, etc.) after using this product. Avoid contact with skin and eyes.

Packaging material: No information found.

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IRWIN Chalk - Blue

8. EXPOSURE CONTROLS / PERSONAL PROTECTION Exposure Guidelines

Exposure Limit 8-Hour TWA¹ (mg/m³)

Component	CAS No.	% by weight	OSHA PEL	ACGIH TLV	NIOSH REL
Calcium Carbonate ⁴ (Limestone)	471-34-1; (1317-65-3)	80-85	15 ² 5 ³	10 ²	10 ² 5 ³
Ultramarine blue Silica-Crystalline	57455-37-5 14808-60-7	15-20 0.1-1.0	Not Est. 10 ^{2,5} .3.3 ^{3,5}	Not Est. 0.05 ³	Not Est. 0.05 ³
Quartz ⁴		011 110	, , , , , ,	0.00	0.00

¹ TWA = Time-weighted average

Exposure and Engineering Controls: Facilities storing or utilizing this material should have potable water available for washing eyes and skin. Use sufficient general area (or outdoor) ventilation. Local exhaust ventilation should be used if airborne concentrations of dust exceed limits cited in Section 8.

Personal protective equipment:

Hand protection: Wear protective gloves

Eye protection: Wear safety glasses, or chemical goggles in windy conditions or where eye

contact is possible.

Respiratory protection: When engineering controls are not sufficient to reduce exposure, seek professional advice prior to respirator selection and use. Follow the OSHA respirator regulations found in 29CFR 1910.134 or European Standard EN 149. Always use a NIOSH or European Standard EN 149 approved respirator when necessary.

Hygiene measures: Wash contaminated clothing before reuse. **Environmental exposure controls:** No information found.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Powder Color: Blue Odor: Odorless. pH (at 10% solids): 8.5-9.5.

Boiling point/range: No data available. Melting point/range: Decomposes Flash point: No data available. Evaporation rate: No data available. Vapor density: No data available. Solubility in water: <0.0002 (Trace) Explosive properties: No data available. Oxidizing properties: No data available. Vapor pressure: No data available. Relative density (H₂O=1): 2.60-2.65.

Viscosity:

No data available.

Partition coefficient (n-octanol/water): No data available.

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² Total dust.

³ Respirable dust.

Calcium carbonate may contain crystalline silica at levels between 0.1 and 1.0 % and varies naturally.

⁵ Using the OSHA quartz formula, this PEL was calculated assuming crystalline silica content of 1.0% in this ingredient.

IRWIN Chalk - Blue

10. STABILITY AND REACTIVITY

Stability: Stable under normal temperatures and pressures.

Hazardous decomposition products: Carbon monoxide, carbon dioxide, calcium oxide.

Materials to avoid: Strong oxidizing agents, acids, aluminum, fluorine, magnesium

Conditions to avoid: Incompatible materials, moisture.

Hazardous Polymerization: Does not occur.

11. TOXICOLOGICAL INFORMATION

Note: Toxicological effects described in this section are those that would be expected based on data from the components of this product.

Acute toxicity: Calcium carbonate (CAS# 471-34-1): Draize test, rabbit, eye: 750 ug/24H Severe; Draize test, rabbit, skin: 500 mg/24H Moderate; Oral, rat: LD50 = 6,450mg/kg.

Inhalation: (Silica, crystalline quartz) Human: LC_{Lo}: 300 μg/m³/ intermittent exposure over a 10-year period produced pulmonary system effects.

Skin contact: (Calcium carbonate) Rabbit: 500mg administered for 24 hours produces moderate skin irritation.

Eye contact: (Calcium carbonate) Rabbit: 0.750 mg administered for 24 hours produced severe irritation.

Ingestion: (Calcium carbonate) Rat: LD₅₀: 6,450 mg/kg. (Ultramarine blue) Rat: LD₅₀: 5,000 mg/kg.

Chronic toxicity/Carcinogenicity: Repeated and prolonged inhalation exposure to crystalline silica dust above exposure limits may cause delayed, chronic lung injury (silicosis). When the product is used as intended, dust levels should not exceed exposure limits.

Quartz - crystalline silica:

The International Agency for Research on Cancer (IARC) has designated this substance Group 1, "carcinogenic to humans".

The National Toxicology Program (NTP) has designated this substance: Group K "known to be a human carcinogen"

American Conference of Governmental Industrial Hygienists (ACGIH) has designated this substance A2; suspected human carcinogen. The agent is carcinogenic in experimental animals at dose levels, by route of administration, at sites of histologic type(s) or by mechanism(s) considered relevant to worker exposure. Available epidemiologic studies are conflicting or insufficient to confirm an increased risk of cancer in exposed humans.

12. ECOLOGICAL INFORMATION

Bioaccumulation: No information found. Ecotoxicity effects: No information found.

Limestone (which is primarily composed of calcium carbonate) is <u>not</u> classified as a "Toxic pollutant" or a "hazardous substance under Section 307 and 311 of the United States Clean Water Act.

13. DISPOSAL CONSIDERATIONS

Waste from residues of this product is <u>not</u> a hazardous waste according to U.S. Environmental Protection Agency (EPA) regulations. Disposal by landfill may be acceptable. Consult an expert on the disposal of recovered material for compliance with state, provincial, and/or local regulations.

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14. TRANSPORT INFORMATION

U.S. DOT: Not regulated

ADR/RID: Not regulated

IMDG: Not regulated

ICAO/IATA: Not regulated

15. REGULATORY INFORMATION

U.S. Federal Regulations

OSHA: Ingredients are listed as air contaminants (29 CFR 1910.1000).

Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).

TSCA (Toxic Substance Control Act): All components of this product are listed on the TSCA inventory.

CERCLA: Hazardous Substance, (40 CFR 302.4): Not Listed.

Extremely Hazardous Substance (40 CFR 355): Not Listed.

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 category:

"An immediate (acute) and chronic health hazard."

Chemicals subject to the reporting requirements of Section 313 or Title III of SARA and 40 CFR Part 372: None.

STATE REGULATIONS:

California's "Safe Drinking Water and Toxic Enforcement Act of 1986" (Proposition 65)

This product contains the following Proposition 65 regulated materials known to the State of California to cause cancer or reproductive harm. The listed typical amounts are a result of their natural presence in the raw materials from which this product is produced.

Silica-crystalline quartz equal to, or less than 1.0 percent

CANADA WHIMS: This product has been classified in accordance with the hazard criteria of the Controlled Products Regulation (CPR), and the SDS contains all of the information required by the CPR.

WHIMS Classification: D2A

16. OTHER INFORMATION

The contents and format of this SDS are in accordance with the U.S. Hazard Communication Standard 29 CFR 1910.1200; the Canadian CPR, and Workplace Hazardous Materials Information System (WHMIS); and EEC Commission Directive 1999/45/EC, and EEC

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Commission Regulation 1907/2006/EC (REACH) Annex II.

DISCLAIMER OF LIABILITY The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we 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. This SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable.

End of document

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Standard (CFR 29 1910.1200)

Safety Data Sheet

Revision Number:2



Issuing Date: 4/15/15 Revision Date: 5/28/15

1.) Identification

Product Identifier – Mighty Marker All Colors

Other Means of Identification -

	Blue	Brown	Green	Light	Lime	Orange	Purple	Pink	Red	White	Yellow
				Blue							
PM-09	09002	09003	09005	09006	09007	09008	09009	09010	09011	09013	09014
PM-15	00215	00315	00515	00615	00715	00815	00915	01014	01115	01315	01415
PM-45	04502	04503	04505	04506	04507	04508	04509	04510	04511	04513	04514
PM-13	00213	00313	00513	00613	03007	03008	00309	03010	03011	03013	03014
PM-47	00247	00347	00547	00647	00747	00847	00947	01047	01147	01347	01447
PM-49	00249	00349	00549	00649	00749	00849	00949	01049	01149	01349	01449

Chemical Code

Blue (XV-11979), Brown (XV-12443), Green (XV-11914), Light Blue (XV-11224), Light Green (XV-11516), Orange (XV-12517), Purple (XV-11845), Pink (XV-11940), Red (XV-11951), White (XV-11812), Yellow (XV-11820)

Recommended Use of Chemicals and Restrictions – Marking Pens

Supplier Information

Arro-Mark LLC. 158 West Forest Ave Englewood, New Jersey, 07631 USA <u>Emergency Telephone Number</u>

Chem Trec: US 800-424-9300

2.) Hazard(s) Identification

<u>OSHA/HCS status:</u> This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200) Classification

Physical Hazards	Flammable Liquids	Category 2
Health Hazards	Skin Corrosion/Irritation	Category 1B
	Target Organ Systemic Toxicity – Single	Category 3
	Exposure (Respiratory Tract irritation)	
	Target Organ Systemic Toxicity – Single	Category 3
	Exposure (Central Nervous System)	

GHS Label Elements









THIS PRODUCT IS NOT CORROSIVE TO METAL

Signal Word

Danger

Hazard Statements



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H225: Highly flammable liquid and vapour

• H314: Causes severe skin burns and eye damage

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H317: May cause an allergic skin reaction

H318: Causes serious eye damage

H335: May cause respiratory irritation

H336: May cause drowsiness or dizziness

H351: Suspected of causing cancer

H373: May cause damage to organs through prolonged or repeated exposure

Precautionary Statements

P201: Obtain special instructions before use.

P202: Do not handle until all safety precautions have been read and understood.

P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

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P233: Keep container tightly closed.

P235: Keep cool.

P240: Ground/bond container and receiving equipment.

P241: Use explosion-proof electrical/ventilating/light/equipment.

P242: Use only non-sparking tools.

P243: Take precautionary measures against static discharge.

P261: Avoid breathing vapors.

P271: Use only outdoors or in a well-ventilated area.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P281: Use personal protective equipment as required.

P313: Get medical advice/attention.

P314: Get Medical advice/attention if you feel unwell.

P340: Remove person to fresh air and keep comfortable for breathing.

P301+330+331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P304+312: IF INHALED: Call a POISON CENTER or doctor/physician if you feel unwell.

P304+340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.

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

P370+378: In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.

P370+380: In case of fire: Evacuate area.

Hazard not otherwise specified

3.) Composition/Information on Ingredients

Substance/mixture: Mixture

Other means of identification: Not Available

CAS No.: Not Applicable

Chemical Name	CAS-No	Weight %	Trade Secret
n-propanol	71-23-8	15-25%	Yes
Titanium Dioxide	13463-67-7	20-40%	Yes
Silicon Dioxide	7631-86-9	1-5%	Yes
Aluminum Hydroxide	21645-51-2	.1-5%	Yes
Zirconium Dioxide	1314-23-4	.1-5%	Yes
Synthetic Amorphous Silica, precipitated	112926-00-8	1-5%	Yes
Stoddard solvent; low boiling point naphtha – unspecified	8052-41-3	1-5%	Yes



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2-butoxyethanol 111-76-2 5-15% Yes

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4.) First Aid Measures

Description of Necessa General Advice	
General Advice	Move out of dangerous area. Consult a physician. Show this safety data sheet to the doctor in
	attendance.Do not leave the victim unattended.
Eye Contact	Get medical attention immediately. Call a poison center or physician. 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. Chemical burns must be treated promptly by a
	physician.
Skin Contact	Get medical attention immediately. Call a poison center or physician. Wash skin thoroughly with
	soap and water or use recognized skin cleanser. Remove contaminated clothing and shoes. Wash
	contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse
	for at least 10 minutes. Chemical burns must be treated promptly by a physician. In the event of
	any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes
Labatan	thoroughly before reuse.
Inhalation	Get medical attention immediately. Call a poison center or physician. 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 of
	oxygen by trained personnel. 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
L	waistband.
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.
	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. Chemical burns must be treated
	promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious,
	place in recovery position and get medical attention immediately. Maintain an open airway.
Anat lasa natant Comont	Loosen tight clothing such as a collar, tie, belt or waistband.
Nost Important Sympt	
Eye Contact	Causes serious eye damage.
Inhalation	Can cause central nervous system (CNS) depression. May cause drowsiness and dizziness.
Skin Contact	Defatting to the skin. May cause skin dryness and irritation.
Ingestion	May cause burns to mouth, throat and stomach. Gastrointestinal discomfort, abdominal pain,
	vomiting
Over-exposure signs/sy	
Eye Contact	Adverse symptoms may include the following: pain, watering, redness
Inhalation	Adverse symptoms may include the following: respiratory tract irritation, coughing
Skin Contact	Adverse symptoms may include the following: pain or irritation, redness, dryness, cracking,
	blistering may occur
Ingestion	Adverse symptoms may include the following: stomach pains
	e medical attention and special treatment needed, if necessary
Notes to physician	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have
riotes to physician	in each symptometrically. Contact poison a catalient specialist infinediately in large qualitates have

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

been ingested or inhaled

No specific treatment.

Specific Treatments

Protection of first-

aiders

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resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves

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5.) Fire-fighting Measures

Suitable Extinguishing Media

Use dry chemical, CO₂, water spray (fog) or foam.

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Unsuitable Extinguishing Media

Do not use water jet.

Specific Hazards for Chemical

Flammable liquid and vapor. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Runoff to sewer may create fire or explosion hazard. This material is harmful to aquatic life. 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 dioxide, Carbon monoxide, (dense) black smoke, Aldehydes, Organic acids

Protective Equipment and Precautions for Firefighters

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. 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

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. Shut off all ignition sources. No flares, smoking or flames in hazard area. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

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. Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. See also the information in "For nonemergency 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 Clean 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. Use spark-proof tools and explosion-proof equipment. 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 noncombustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Use spark proof tools and explosion-proof equipment. 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

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Precautions for Safe Handling

Put on appropriate personal protective equipment (see Section 8). 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. Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. 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. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.

Conditions for Safe Storage Incompatible Products

Do not store above the following temperature: 30°C (86°F). Store in accordance with local regulations. Store in a segregated and approved area. Store in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10). Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. 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. Store in original container, protected from direct sunlight.

8.) Exposure Controls / Personal Protection

Chemical Name	Exposure Limits
n-Propanol	ACGIH
	TWA: 100 ppm
	NIOSH REL
	TWA: 200 ppm
	TWA: 500 mg/m ³
	ST: 250 ppm
	ST: 625 mg/m ³
	OSHA
	TWA: 200 ppm
	TWA: 500 mg/m ³
	STEL: 250 ppm
	STEL: 625 mg/m ³
	TWA: 200 ppm
	500mg/m ³
Ethylene Glycol Monobutyl Ether	ACGIH
	TWA: 20 ppm, 8 hours
	NIOSH
	TWA: 5 ppm for 10 hour workday during a 40 hour work
	week
	TWA: 24 mg/m ³ for 10 hour workday during a 40 hour work
	week
	OSHA
	TWA: 50 ppm, 8 hours
	TWA: 240 mg/m ³ 8 hours
	TWA: 25 ppm, 8 hours
	TWA: 120 mg/m ³ 8 hours
Stoddard solvent	ACGIH
	TWA: 100 ppm
	OSHA
	TWA: 500 ppm

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	TWA: 2900 mg/m ³
Aluminum hydroxide	ACGIH
	TWA: 10 mg/m³ (inhalable particulate.)
	TWA: 3 mg/m³ (Resiprable)
	TWA: 1mg/m ³ (Respirable fraction)
Synthetic Amorphous Silica	OSHA (Z1)
	5 mg/m³ (Respirable fraction)
	15 mg/m³ (Total dust)
	TWA: 20 million particles per cubic foot of air
	TWA: 0.8 mg/m ³
2-Butoxyethanol	ACGIH
	TLV: 20 ppm
	OSHA
	PFI · 50 nnm

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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.

PEL: 240 mg/m³

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.

Personal 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 and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead.

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. 1 - 4 hours (breakthrough time): Butyl rubber (0.70 mm)

< 1 hour (breakthrough time): nitrile rubber (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, we ar anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.

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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
Appearance	Varies
Flammability Limits	No data
Odor	Alcohol
Vapor Pressure	No data
Odor threshold	No data
Vapor Density	No data
рН	No data
Relative Density	No data
Melting Point	No data
Boiling Point	282°F
Solubility	Insoluble in water
Flash Point	No data
Evaporation Rate	Less than one (1)
Flammability	No data
Auto-Ignition Temperature	No data
Decomposition Temperature	No data
Viscosity	No data

Volatile Organic Compounds:

Blue (XV-11979) – 72%, 5.77 PPG, 691.9 g/L Brown (XV-12443) – 57.75%, 5.16 PPG, 619.6 g/L Green (XV-11914) – 70.57%, 5.79 PPG, 693.4 g/L Light Blue (XV-11224) – 68.05%. 7.11 PPG, 852.1 g/L Light Green (XV-11516) – 71.82%, 5.70 PPG, 683.3 g/L Orange (XV-12517) – 70.63%, 5.975 PPG, 715.9 g/L Purple (XV-11845) – 77.48%, 6.48 PPG, 776.1 g/L Pink (XV-11940) – 72.91%, 5.79 PPG, 125.5 g/L Red (XV-11951) – 66.01%, 5.23 PPG, 626.9 g/L White (XV-11812) – 67.66%, 7.42 PPG, 888.6 g/L

Yellow (XV-11820) - 67.50%, 5.63 PPG, 674.5 g/L

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.

<u>Possibility of Hazardous Reactions</u> – Under normal conditions of storage and use, hazardous reactions will not occur. Vapors may form explosive mixture with air.

<u>Hazardous Polymerization</u> – No specific data

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<u>Conditions to Avoid</u> – Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.

<u>Incompatible Materials</u> – Reactive or incompatible with the following materials: oxidizing materials, Strong acids, Aldehydes, halogens

<u>Hazardous Decomposition of Product</u> – No specific Data

11.) Toxicological Information

Acute Toxicity

Chemical	Result	Species	Dose	Exposure
n-Propanol	LD50 Oral	Rat	5,400 mg/kg	4 hours
	LC50 Inhalation Vapor	Rat	33.8 mg/l	
	LD50 Dermal	Rabbit	4,032 mg/kg	
Titanium Dioxide	LD50 Oral	Rat	>24000 mg/kg	
	LC50 Inhalation	Rat	6820 mg/m ³	4 hours
	LD50 Dermal	Rabbit	>10000 mg/kg	
2-methoxy-1-methylethyl	LD50 Oral	Rat	8532 mg/mg	
acetate	LC50 Inhalation Vapor	Rat	4345 ppm	6 hours
	LD50 Dermal	Rabbit	>19000 mg/kg	
Synthetic amorphous silica	LD50 Oral	Rat	>31600 mg/kg	
	LD50 Dermal	Rabbit	>2000 mg/kg	
Stoddard solvent	LD50 Oral	Rat	>5000 mg/kg	
	LC50 Inhalation	Rat	>5500 mg/m ³	4hours
	LD50 Dermal	Rabbit	>3000 mg/kg	
2-butoxyethanol	LD50 Oral	Rat	1,300 mg/kg	-
	LD50 Oral	Guinea Pig	1,400 mg/kg	-
	LD50 Dermal	Rat	2,000 mg/kg	-
	LD50 Dermal	Guinea Pig	>2,000 mg/kg	-
	LC50 Inhalation	Rat	4.9 mg/l	3 hours
	LC50 Inhalation	Guinea Pig	3.4 mg/l	1 hour

Irritation/Corrosion

Chemical	Result	Species	Score	Exposure	Observation
n-Propanol	Skin – Irritant				
	Eye – Severe Damage				
2-butoxyethanol	Skin – Moderate	Rabbit		24 hours	
	Eye – Moderate	Rabbit		24 hours	

Sensitization

Chemical Route of exposure	Species	Result
----------------------------	---------	--------

Mutagenicity

Chemical	Test	Exposure	Result

Carcinogenicity

Chemical	OSHA	IARC	NTP
Titanium Dioxide		2B	

Information on the likely routes of exposure

Not Available

Specific Target Organ Toxicity (Single Exposure)



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ISSU	ling Date: 4/15/15	Revision Date:5/	28/15

Chemical	Category	Route of Exposure	Target Organs
n-Propanol	Category 3	Inhalation	Central Nervous System

Specific Target Organ Toxicity (Repeated Exposure)

Chemical	Category	Route of Exposure	Target Organs
Ciletifical	Category	Noute of Exposure	Taiget Oigaiis

Potential Acute Health Effects

Eye Contact	Causes serious eye damage
Inhalation	Can cause central nervous system (CNS) depression. May cause drowsiness and dizziness
Skin Contact	Defatting to the skin. May cause skin dryness and irritation
Ingestion	May cause burns to mouth, throat and stomach

Aspiration Hazard

Chemical	Result
n-Propanol	May be harmful if swallowed and enters airways.

Symptoms related to the physical, chemical and toxicological characteristics

Eye Contact	Adverse symptoms may include the following: Pain, Watering, Redness	
Inhalation	Adverse symptoms may include the following: Respiratory tract irritation, Coughing	
Skin Contact	Adverse symptoms may include the following: Pain or irritation, Redness, Dryness, Cracking, Blisterin	
	my occur	
Ingestion	Adverse symptoms may include the following: Stomach pains	

Description of the delayed, immediate, or 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

Chemical	Result	Species	Dose	Exposure

General: Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels. May cause 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.

Developmental effects: No known significant effects or critical hazards.

Fertility effects:

Species: rat

Application Route: Inhalation Dose: 0, 3500, 7000 ppm

Duration of Single Treatment: 7 h
Frequency of Treatment: 7 days/week

Fertility: NOAEC: 3,500 ppm

Effects on foetal development:

Species: rat

Application Route: Inhalation Dose: 0, 3500, 7000, and 10000 ppm Duration of Single Treatment: 7 h

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Frequency of Treatment: 7 days/week General Toxicity Maternal: NOAEC: 3,500 ppm Developmental Toxicity: NOAEC: 3,500 ppm

Issuing Date: 4/15/15

Symptoms: Skeletal malformations. Method: OECD Test Guideline 414

12.) Ecological Information

Ecotoxicity

Product/ingredient name	Result	Species	Exposure
n-Propanol	LC50 4,555 mg/l Fathead minnow		96 hours
	LC50 3,644 mg/l	Daphnia Magna	48 hours
	EC50 9,170 mg/l Algae		48 hours
	NOEC50 >100 mg/l Daphnia		21 days
	C50 >1000 mg/l Bacteria		3 hours
2-butoxyethanol	LC50 1,474 mg/l	Oncorhynchus Mykiss	96 hours
	EC50 1,550 mg/l	Water Flea	48 hours
	NOEC >100 mg/l	Zebra Fish	21 days
	NOEC 100 mg/l	Daphnid	21 days
	EC50 1,840 mg/l	Algae	72 hours

Revision Date:5/28/15

Persistence and Degradability

Cilettical Test Result Dose Illoculuiii	Chemical	Test	Result	Dose	Inoculum
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Chemical	Aquatic half-life	Photolysis	Biodegradability
n-Propanol			75%

Bioaccumulation

Chemical	LogP _{ow}	BCF	Potential
n-Propanol	0.25-0.35		

Mobility in Soil

Soil/water partition Coefficient (Koc): Not Available

Other Information

13.) Disposal considerations

Disposal Method

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. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers

Disposal Container

Precautions



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United States - RCRA Toxic Hazardous Waste "U" List

Issuing Date: 4/15/15

Chemical	CAS No.	Status	Reference No.

Revision Date:5/28/15

14.) Transportation Information

	DOT	TDG	Mexico	ADR/RID	IMDG	IATA
	Classification	Classification	Classification			
UN number	UN 1866	UN 1866	UN 1866	UN 1866	UN 1866	UN 1866
UN proper	Paint related	Paint related	Paint related	Paint related	Paint related	Paint related
shipping name	material	material	material	material	material	material
Transport Hazard Class(es)	3	3	3	3	3	3
Packing Group	III	III	III	III	Ш	III
Environmental Hazards	No.	No.	No.	No.	No.	No.
Additional Information	Limited quantity Yes. Packaging instruction Passenger aircraft Quantity limitation: 60 L Cargo aircraft Quantity limitation: 220 L Special provisions B1, B52, IB3, T2, TP1	Explosive Limit and Limited Quantity Index 5 Passenger Carrying Road or Rail Index 60	Special provisions 223	Hazard identification number 30 Limited quantity 5 L Special provisions 640E Viscous substance exemption This class 3 material can be considered non hazardous in packagings up to 450 L. Exempted according to 2. 2.3.1.5 (Viscous substance exemption) Tunnel code (D/E)	Emergency schedules (EmS) F-E, _S-E_ Special provisions 223, 955 Viscous substance exemption This class 3 material can be considered non hazardous in packagings up to 30 L. Exempted according to 2. 3.2.5 (Viscous substance exemption)	Passenger and Cargo Aircraft Quantity limitation: 60 L Packaging instructions: 355 Cargo Aircraft Only Quantity limitation: 220 L Packaging instructions: 366 Limited Quantities - Passenger Aircraft Quantity limitation: 10 L Packaging instructions: Y344 Special provisions A3

<u>Special Precautions for User:</u> 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.

15.) Regulatory Information

Regulations

Safety Data Sheet

Revision Number:2

U.S. Federal regulations

Clean Water Act (CWA) 311:

Chemical	CAS no.	%

Revision Date:5/28/15

Clean Air Act Section 602 Class I Substances: Not Listed Clean Air Act Section 602 Class II Substances: Not Listed DEA List I Chemicals (Precursor Chemicals): Not Listed DEA List II Chemicals (Essential Chemicals): Not Listed

Issuing Date: 4/15/15

State Regulations

Massachusetts: The following components are listed: N-PROPANOL, 2-BUTOXY ETHANOL New York: The following components are listed: N-PROPANOL, 2-BUTOXY ETHANOL New Jersey: The following components are listed: N-PROPANOL, 2-BUTOXY ETHANOL Pennsylvania: The following components are listed: N-PROPANOL, 2-BUTOXY ETHANOL

California Prop. 65

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

WARNING: This product contains less than 1% of a chemical known to the State of California to cause birth defects or other reproductive harm.

Chemical	Cancer	Reproductive	No significant risk level	Maximum acceptable dosage level
Toluene	No	Yes	No	
Benzene	Yes	Yes	6.4 μg/day (ingestion) 13 μg/day (inhalation)	24 μg/day (ingestion) 49 μg/day (inhalation)

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 311/312

Hazards: Fire Hazard Acute Health Hazard

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.

The components of this product are reported in the following inventories:

United States TSCA Inventory	Listed
Canadian Domestic Substances List (DNL)	Listed
Australia Inventory of Chemical Substances (AICS)	Listed
European List of Notified Chemical Substances (ELINCS)	Listed

16.) Other Information

Prepared Date: 4/15/15

Revision Date: 5/28/15

Version: 2



Issuing Date: 4/15/15

-Mark
Standard (CFR 29 1910.1200)
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Revision Number:2

HMIS Rating: Health: 2

Flammability: 3 Physical Hazard: 0

NFPA Ratings: Health: 2

Flammability: 3 Instability: 0

<u>Disclaimer:</u> For use as marking pens only.



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

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)





CHS02

GHS04

Signal word (GHS-US)

Hazard statements (GHS-US)

: Danger

: Flammable aerosol. Contains gas under pressure; may explode if heated. May be fatalif

swallowed and enters airways.

Precautionary statements (GHS-US)

: Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Do not spray on anopen 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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Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012

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.	Descrin	tion 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 tractirritation.

Symptoms/injuries after skin contact

: May cause skin irritation. Symptoms may include redness, drying, defatting and cracking of the

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 treatmentneeded

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.

6.1.1. For non-emergency personnel

Emergency procedures

: Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment

: Equip cleanup crew with proper protection.

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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 anyincompatibilities

Technical measures

: Proper grounding procedures to avoid static electricity should befollowed.

Storage conditions

Storage area

: 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 fireproofplace.

: 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/m³)	9000 mg/m³	
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.

Eve 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.

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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 No data available pН Melting point No data available Freezing point : No data available **Boiling point** : 356 °F (180 °C) : > 141 °F (> 61 °C) Flash point Relative evaporation rate (butylacetate=1) : No data available Flammability (solid, gas) : Flammableaerosol. 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 No data available Explosive properties Oxidising properties No dataavailable

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. Incompatiblematerials.

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.





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PB Penetreating Catalyst		
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)	
Petroleum distillates, hydrotreated light (64742-47-8)		
LD50 oral rat	> 5000 mg/kg	
LD50 dermal rabbit	> 2000 mg/kg	
LC50 inhalation rat	> 5.2 mg/l/4h	
Solvent naphtha, petroleum, heavy aromatic (64742-94-5)		
LD50 oral rat	> 5000 mg/kg	
LD50 dermal rabbit	> 2 ml/kg	
LC50 inhalation rat	> 590 mg/m³ (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 tractirritation.

Symptoms/injuries afterskin 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 andtear

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.

Petroleum distillates, hydrotreated light (64742-47-8)		
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])	
Solvent naphtha, petroleum, heavy aromatic (64742-94-5)		
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)	
Distillates, petroleum, hydrotreated heavy naphthenic (64742-52-5)		
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)	

Persistence and degradability

PB Penetreating Catalyst		
Persistence and degradability	Not established.	





Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012

12.3. **Bioaccumulative potential**

PB Penetreating Catalyst		
Not established.		
Petroleum distillates, hydrotreated light (64742-47-8)		
61 - 159		
Solvent naphtha, petroleum, heavy aromatic (64742-94-5)		
61 - 159		
2.9 - 6.1		

Carbon	dioxide	(124-38-9)
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BCF fish 1 (no bioaccumulation)

Mobility in soil

No additional information available

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

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: Transportinformation

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

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. alifornia to cause cancer, developmental and/or reproductive harm

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Safety Data Sheet

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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 -	U.S California - Proposition 65 - Reproductive Toxicity -	Non-significant risk level (NSRL)
		Female	Male	
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: Otherinformation

Date of issue : 9/24/20198 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.





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 ONUSE

Use: Lubricant/Penetrant

1.3 DETAILS OF THE SUPPLIER OF THE SAFETY DATASHEET

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

EmergencyTelephoneNumber: 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/faceprotection.

Trade Name: PB Penetrating Catalyst (Aerosol)





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 White = Special Yellow = Reactivity

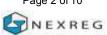
Hazard Rating: 0 = minimal, 1 = slight, 2 = moderate, 3 = severe, 4 = extreme

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 MIXTURES

Ingredient	UN#	H / F/ R / *	CAS No	Wt. %
			0.4=40.4=0	
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
	UN1334/			
Naphthalene	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



Section 4: FIRST- AID MEASURES

4.1 DESCRIPTION OF THE FIRST AID MEASURE

Eve: 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.

If swallowed, do NOT induce vomiting unless directed to do so by Ingestion:

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.

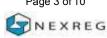
Unsuitable Extinguishing Media: Water may be ineffective for extinguishing fire.

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 asit may scatter and spread fire. Containers may explode when heated.





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 ofignition.

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 maybe

heavier than air and may travel along the ground to a distantignition

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: Donot

pierce or burn, even after use. (See section 8)

General Hygiene Advice: Launder contaminated clothing before reuse. Wash handsbefore

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-

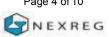
ventilated area. (See section 10)

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 CONTROL PARAMETERS

Exposure Guidelines

Occupational Exposure Limits				
Ingredient	OSHA-PEL	ACGIH-TLV		
Distillates (petroleum), hydrotreated light	100 ppm	200 mg/m³		
Solvent naphtha (petroleum), heavy aromatic	Not available.	Not available.		
Distillates (petroleum), hydrotreated heavy naphthenic	5 mg/m³ (mist)	5 mg/m³ (mist)		
	5000 ppm;			
Carbon dioxide	9000 mg/m ³	5000 ppm		
	10 ppm;			
Naphthalene	50 mg/m ³	10 ppm		
Dinonylphenol, ethoxylated, phosphated	Not available.	Not available.		





8.2 EXPOSURE CONTROLS

Engineering Controls: Use ventilation adequate to keep exposures (airborne levels ofdust,

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 safetypractices. 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

Appearance: Viscous / Oily.

Color: Orange.

Odor: Heavy aromatic. **Odor Threshold:** Not available.

Physical State: Gas/pressurized liquid.

pH: Not available. **Melting Point/Freezing Point:** Not available. Initial Boiling Point and Boiling Range: 177.8 °C (352 °F) Flash Point: 65.6 °C (150 °F)

Evaporation Rate: <1 (n-butyl acetate = 1)

Flammability: Flammable. Not available. Lower Flammability/Explosive Limit: **Upper Flammability/Explosive Limit:** Not available. Vapor Pressure: Not available. Vapor Density: >1 (Air = 1)

Relative Density/Specific Gravity: 0.91 (Water = 1)

Solubility: Negligible.



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Partition coefficient: n-octanol/water: Not available. Not available. **Auto-ignition Temperature: Decomposition Temperature:** Not available. Viscosity: Not available. **Oxidizing Properties:** Not available. **Explosive Properties:** Not available.

VOC Content: < 25% Flame Projection: 0 cm **Heat of Combustion:** 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. Containermay 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

Skin:

Likely Routes of Exposure: Skin contact, eye contact, inhalation, and ingestion.

Symptoms related to physical/chemical/toxicological characteristics:

Causes serious eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swellingof the conjunctiva.

May cause skin irritation. Symptoms may include redness, drying,

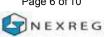
defatting and cracking of the skin.

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.





Acute Toxicity:

Ingredient	IDLH	LC50	LD50
Distillator (setudo es)		lubalation	0
Distillates (petroleum),		Inhalation	Oral >5000 mg/kg, rat;
hydrotreated light	Not available.	>5.2 mg/L 4h rat	Dermal >2000 mg/kg, rabbit
Solvent naphtha			
(petroleum), heavy		Inhalation	Oral >5000 mg/kg, rat;
aromatic	Not available.	>5.28 mg/L 4h, rat	Dermal >2000 mg/kg, rabbit
Distillates (petroleum),			
hydrotreated heavy		Inhalation	Oral >5000 mg/kg, rat;
naphthenic	Not available.	>5.0 mg/L 4h, rat	Dermal >5000 mg/kg, rabbit
Carbon dioxide	40000 ppm	Not available.	Not available.
			Oral 490 mg/kg, rat;
			Dermal >2500 mg/kg, rat;
Naphthalene	250 ppm	Not available.	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.

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.

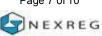
Reproductive Toxicity:

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.





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

DOT NOM-004-SCT2-1994

UN1950 UN1950

14.2 UN PROPER SHIPPING NAME

DOT NOM-004-SCT2-1994

AEROSOLS, flammable, limited quantities AEROSOLS, flammable, limited quantities

14.3 TRANSPORT HAZARD CLASS (ES)

NOM-004-SCT2-1994 DOT

2.1 2.1

14.4 PACKING GROUP

DOT NOM-004-SCT2-1994

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	20011011 002 (2110)		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.

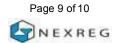
State Regulations

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.





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 tohumans.

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

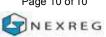
Date of Preparation: Feb. 3, 2016

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





Control # 1110 date 5/29/15

SECTION: 1 IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

1.1 Product Name: Weldcote Soap Stone (Talc)
Product Identification: Soap Stone, Round, Flat and Thin

Product Specification:

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

1.2.1 Relevant identified uses: For welding consumables and related products.
1.2.2 Uses advised: Reference the [7. Handling and storage]

1.3 <u>Details of the supplier of the safety data sheet:</u>

Supplier: Weldcote Metals Inc.

842 Oak Grove Rd.

Kings Mountain, NC 28086

<u>Emergency telephone number:</u> (800) 424-9300 or (704) 739-4115

Email: info@weldcotemetals.com

SECTION: 2 HAZARDS IDENTIFICATION

2.1 <u>Classification of the mixture:</u>

The product is placed on the market in solid form

2.1.1 Classification in accordance with GHS-US

Not Classified

Label elements:

2.2 GHS-US labeling

No labeling is used

Hazard Pictograms (GHS-US):

No hazard pictogram is used

Hazard statements (GHS-US):

Not Classified

Precautionary statements:

SECTION: 3 COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances: No data available

Full Text of H-phrases: see section 16

3.2 Mixtures: The mixture does not contain dangerous substances:

Substance name	Product Identifier % Percent		GHS-US	
	(CAS No)		classification	
Talc	14807-96-6	100	Not classified	



SECTION: 4

FIRST AID MEASURES

4.1 Description of first aid measures:

<u>First-aid measures after inhalation</u>: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen and get medical attention.

First-aid measures after skin contact: Flush with water for at least 15 minutes. Seek medical attention if irritation develops or persists.

<u>First-aid measures after eye contact:</u> Immediately flush eyes with water and continue washing for at least 15 minutes. Obtain medical attention if discomfort persists.

First-aid measures after ingestion: Do NOT induce vomiting. Get immediate medical attention.

4.2 <u>Most important symptoms and effects, both acute and delayed:</u>

Symptoms/injuries after inhalation: Short-term (acute) overexposure to the gases, fumes, and dusts may include irritation of the eyes, lungs, nose, and throat. Acute overexposure may include signs and symptoms such as watery eyes, nose and throat irritation, headache, dizziness, difficulty in breathing, frequent coughing, or chest pain.

Symptoms/injuries after skin contact:

Dusts may cause irritation.

Symptoms/injuries after eye contact:

Causes eye irritation.

Symptoms/injuries after ingestion: Not an anticipated route of exposure during normal product handling.

4.3 Indication of any immediate medical attention and special treatment needed: No data available.

SECTION: 5

FIREFIGHTING MEASURES

5.1 Extinguishing media:

Suitable extinguishing media: Use extinguishing media appropriate for surrounding fire.

Unsuitable extinguishing media: No data available.

5.2 Special hazards arising from the substance or mixture:

Fire hazard:

Not flammable

Explosion hazard:

None known

5.3 Advice for firefighters: In the event of fire, wear self-contained breathing apparatus and full protective gear.

SECTION: 6

ACCIDENTAL RELEASE MEASURES

6.1 <u>Personal precautions, protective equipment and emergency procedures:</u>

<u>For non-emergency personnel</u>: Wear appropriate personal protective equipment as specified in Section 8. Ensure adequate ventilation. <u>For emergency responders:</u> No data available.

- 6.2 <u>Environmental precautions:</u> Contain contaminated water/firefighting water. Do not discharge into drains/surface waters/groundwaters.
- 6.3 <u>Methods and material for containment and cleaning up</u>: Pick up and arrange disposal without creating dust. Sweep up and shovel. Collect the material in labeled containers and dispose of according to local and regional authority requirements.
- 6.4 <u>Reference to other sections:</u> See Section 7 for information of safe handling. See Section 8 for information on personal protection equipment. See Section 13 for disposal information.

SECTION: 7

HANDLING AND STORAGE

- 7.1 <u>Precautions and safe handling:</u> Avoid contact with skin and eyes. Avoid formation of dust. Provide appropriate exhaust ventilation at places where dust is formed.
 - 7.2 Conditions for safe storage, including and incompatibilities: Store in cool, dry and well-ventilated place.
 - 7.3 Specific end use(s): For the temporary marking of metal surfaces during welding and fabricating.



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SECTION: 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 <u>Control parameters:</u> Exposure limits were not established for this product

Talc	(CAS No) 14807-96-6	
USA ACGIH	ACGIH (TWA) (ppm)	.01 mg/m3

8.2 Exposure controls:

<u>Appropriate engineering controls:</u> local exhaust and general ventilation must be adequate to meet exposure standards. Wash hands before breaks and at the end of the workday.

Hand protection: Wear gloves: Preferably nitrile rubber with minimum thickness of 0.11 mm.

Eye protection: Wear safety glasses with side-shields.

Skin and body protection: Handle in accordance with good industrial hygiene and safety practices. Wearing of closed work clothing is

Respiratory protection: If exposure limits are exceeded or irritation is experienced, NIOSH approved respiratory protection should be worn.

SECTION: 9 PHYSICAL AND CHEMICAL PROPERTIES

9.1 <u>Information on basic physical and chemical properties:</u>

Physical state:	- Solid
Appearances:	- flat or round rod
Color:	- white to gray
Odor:	- No odor
Odor threshold:	- No data available
pH:	- No data available
Relative evaporation rate (butyl acetate = I):	- No data available
Melting point:	- 800°C
Freezing point:	- No data available
Initial boiling point and boiling range:	- No data available
Flash point:	- No data available
Self ignition temperature:	- No data available
Decomposition temperature:	- No data available
Flammability (solid, gas):	- No data available
Vapour pressure:	- No data available
Relative vapour density at 20· C:	- No data available
Relative density:	- No data available
Solubility(ies)	- Insoluble
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
Oxidizing properties:	- No data available
Explosive limits:	- No data available



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9.2 Other information: No additional information available.

SECTION: 10

STABILITY AND REACTIVITY

- 10.1 Reactivity: No additional information available.
- 10.2 Chemical stability: The product is stable under normal conditions. When using it may produce dangerous fumes and gases.
- 10.3 Possibility of hazardous reactions: Will not occur.
- 10.4 Conditions to avoid: None
- 10.5 Incompatible materials: None
- 10.6 Hazardous decomposition products: Magnesium oxide, silicon oxides.

SECTION: 11

TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects:

Acute toxicity: May be harmful if

swallowed

Substance name	CAS number	LD5O oral rat (mg/kg)	ATE (oral) (mg/kg)	Comments
Talc	14807-96-6			No Data
Skin corrosion/irritation:	-	May cause skin irritation		
0 1 1 11 11				

Serious eye damage/irritation:

May cause eye irritation

Respiratory or skin sensitization: May cause an allergic skin reaction.

Germ cell mutagenicity:

No data available
Carcinogenicity:

Not classified

Reproductive toxicity

Specific target organ toxicity (single exposure):

Not classified

Specific target organ toxicity (repeated exposure):

No data available
Aspiration hazard:

No data available

Aspiration hazard: SECTION: 12

ECOLOGICAL INFORMATION

12.1 Toxicity:

Ecology - general: No data available.

Talc	(CAS No) 14807-96-6	
LC50 fishes 1	(no bioaccumulation expected)	

- 12.2 Persistence and degradability: No additional information available.
 - 12.3 <u>Bioaccumulative potential:</u> No additional information available.
 - 12.4 Mobility in soil: No additional information available.
 - 12.5 Other adverse effects: No additional information available.

SECTION: 13

DISPOSAL CONSIDERATIONS

3.1 Waste treatment methods: Dispose of in accordance with local and national regulations.
Waste disposal recommendations: Dispose of contents/container in accordance with local/regional/national/international regulations.

SECTION: 14

TRANSPORT INFORMATION

In accordance with DOT / ADR / RID / ADNR / IMDG / ICAO / IATA

- 14.1 UN Number: Not a dangerous good in sense of transport regulations
- 14.2 <u>UN proper shipping name:</u> Not applicable



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SECTION: 15

REGULATORY INFORMATION

15.1 US Federal Regulations:

Talc (CAS No) 14	807-96-6	
Listed on the United States TSCA (Toxic S	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:

Talc	(CAS No) 14807-96-6			
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	No Significance risk level (NSRL)
Yes	Yes			

Talc	(CAS No)	14807-96-6
U.S Massachusetts - Right To Know List		
U.S Minnesota - Hazardous Substance List		
U.S New Jersey - Right to Know Hazardous Substance List		
U.S Pennsylvania - RTK (Right to Know) List		

SECTION: 16 OTHER INFORMATION

This information (SDS) 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. Therefore Weldcote Metals Inc. assumes no responsibility for personal damage caused by the product. User assumes all risks associated with use.



NFPA health hazard: 0 – Minimal health hazard
NFPA fire hazard: 0 – Minimal fire hazard

MFPA reactivity: 0- Normally stable, even under fire exposure conditions, and are not reactive with water

HMIS III Rating

Health:0 - Minimal HazardFlammability:0 - Minimal HazardPhysical:0 - Minimal Hazard

We believe that the information contained herein is believed to be true and accurate as of the date of this SOS. All statements or suggestions are made without any warranty, expressed or implied, regarding the accuracy of the information, the hazard connected with the use of this material or the results to be obtained for use thereof. As the condition or methods of use are beyond our control, we do not assume any responsibility and expressly disclaim any liability for any use of this material. It is the user's obligation to determine the conditions of safe use of these products.

All chemical products can in fact present unknown risks to health, safety and / or the environment, even in relation to the different operating conditions, and they must therefore be used with care. For this reason we cannot guarantee that the risk described in this form are the only foreseeable risks. The user must therefore satisfy himself as to the particular conditions under which it is intended to be use in. Moreover, it must be noted that the user is obliged to comply with all the legislative, administrative and regulatory provisions regarding the product and its use in terms of occupational hygiene and safety, and environmental protection, apart from the information given in the form, given purely as guidance.

Technical Department



Control # 1110 date 5/29/15

SECTION: 1 IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

1.1 Product Name: Weldcote Soap Stone (Talc)
Product Identification: Soap Stone, Round, Flat and Thin

Product Specification:

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

1.2.1 Relevant identified uses: For welding consumables and related products.
1.2.2 Uses advised: Reference the [7. Handling and storage]

1.3 <u>Details of the supplier of the safety data sheet:</u>

Supplier: Weldcote Metals Inc.

842 Oak Grove Rd.

Kings Mountain, NC 28086

<u>Emergency telephone number:</u> (800) 424-9300 or (704) 739-4115

Email: info@weldcotemetals.com

SECTION: 2 HAZARDS IDENTIFICATION

2.1 <u>Classification of the mixture:</u>

The product is placed on the market in solid form

2.1.1 Classification in accordance with GHS-US

Not Classified

Label elements:

2.2 GHS-US labeling

No labeling is used

Hazard Pictograms (GHS-US):

No hazard pictogram is used

Hazard statements (GHS-US):

Not Classified

Precautionary statements:

SECTION: 3 COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances: No data available

Full Text of H-phrases: see section 16

3.2 Mixtures: The mixture does not contain dangerous substances:

Substance name	Product Identifier % Percent		GHS-US	
	(CAS No)		classification	
Talc	14807-96-6	100	Not classified	



SECTION: 4

FIRST AID MEASURES

4.1 <u>Description of first aid measures:</u>

<u>First-aid measures after inhalation</u>: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen and get medical attention.

First-aid measures after skin contact: Flush with water for at least 15 minutes. Seek medical attention if irritation develops or persists.

<u>First-aid measures after eye contact:</u> Immediately flush eyes with water and continue washing for at least 15 minutes. Obtain medical attention if discomfort persists.

First-aid measures after ingestion: Do NOT induce vomiting. Get immediate medical attention.

4.2 Most important symptoms and effects, both acute and delayed:

Symptoms/injuries after inhalation: Short-term (acute) overexposure to the gases, fumes, and dusts may include irritation of the eyes, lungs, nose, and throat. Acute overexposure may include signs and symptoms such as watery eyes, nose and throat irritation, headache, dizziness, difficulty in breathing, frequent coughing, or chest pain.

Symptoms/injuries after skin contact:

Dusts may cause irritation.

Symptoms/injuries after eye contact:

Causes eye irritation.

Symptoms/injuries after ingestion: Not an anticipated route of exposure during normal product handling.

4.3 <u>Indication of any immediate medical attention and special treatment needed:</u> No data available.

SECTION: 5

FIREFIGHTING MEASURES

5.1 Extinguishing media:

Suitable extinguishing media: Use extinguishing media appropriate for surrounding fire.

Unsuitable extinguishing media: No data available.

5.2 Special hazards arising from the substance or mixture:

Fire hazard:

Not flammable

Explosion hazard:

None known

5.3 Advice for firefighters: In the event of fire, wear self-contained breathing apparatus and full protective gear.

SECTION: 6

ACCIDENTAL RELEASE MEASURES

6.1 <u>Personal precautions, protective equipment and emergency procedures:</u>

<u>For non-emergency personnel</u>: Wear appropriate personal protective equipment as specified in Section 8. Ensure adequate ventilation. <u>For emergency responders:</u> No data available.

- 6.2 <u>Environmental precautions:</u> Contain contaminated water/firefighting water. Do not discharge into drains/surface waters/groundwaters.
- 6.3 <u>Methods and material for containment and cleaning up</u>: Pick up and arrange disposal without creating dust. Sweep up and shovel. Collect the material in labeled containers and dispose of according to local and regional authority requirements.
- 6.4 <u>Reference to other sections:</u> See Section 7 for information of safe handling. See Section 8 for information on personal protection equipment. See Section 13 for disposal information.

SECTION: 7

HANDLING AND STORAGE

- 7.1 <u>Precautions and safe handling:</u> Avoid contact with skin and eyes. Avoid formation of dust. Provide appropriate exhaust ventilation at places where dust is formed.
 - 7.2 Conditions for safe storage, including and incompatibilities: Store in cool, dry and well-ventilated place.
 - 7.3 Specific end use(s): For the temporary marking of metal surfaces during welding and fabricating.



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SECTION: 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters: Exposure limits were not established for this product

Talc	(CAS No) 14807-96-6	
USA ACGIH	ACGIH (TWA) (ppm)	.01 mg/m3

8.2 Exposure controls:

<u>Appropriate engineering controls:</u> local exhaust and general ventilation must be adequate to meet exposure standards. Wash hands before breaks and at the end of the workday.

Hand protection: Wear gloves: Preferably nitrile rubber with minimum thickness of 0.11 mm.

Eye protection: Wear safety glasses with side-shields.

Skin and body protection: Handle in accordance with good industrial hygiene and safety practices. Wearing of closed work clothing is

Respiratory protection: If exposure limits are exceeded or irritation is experienced, NIOSH approved respiratory protection should be worn.

SECTION: 9 PHYSICAL AND CHEMICAL PROPERTIES

9.1 <u>Information on basic physical and chemical properties:</u>

[
Physical state:	- Solid
Appearances:	- flat or round rod
Color:	- white to gray
Odor:	- No odor
Odor threshold:	- No data available
pH:	- No data available
Relative evaporation rate (butyl acetate = I):	- No data available
Melting point:	- 800°C
Freezing point:	- No data available
Initial boiling point and boiling range:	- No data available
Flash point:	- No data available
Self ignition temperature:	- No data available
Decomposition temperature:	- No data available
Flammability (solid, gas):	- No data available
Vapour pressure:	- No data available
Relative vapour density at 20· C:	- No data available
Relative density:	- No data available
Solubility(ies)	- Insoluble
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
Oxidizing properties:	- No data available
Explosive limits:	- No data available



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9.2 Other information: No additional information available.

SECTION: 10

STABILITY AND REACTIVITY

- 10.1 Reactivity: No additional information available.
- 10.2 Chemical stability: The product is stable under normal conditions. When using it may produce dangerous fumes and gases.
- 10.3 Possibility of hazardous reactions: Will not occur.
- 10.4 Conditions to avoid: None
- 10.5 Incompatible materials: None
- 10.6 Hazardous decomposition products: Magnesium oxide, silicon oxides.

SECTION: 11

TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects:

Acute toxicity: May be harmful if

swallowed

Substance name	CAS number	LD5O oral rat (mg/kg)	ATE (oral) (mg/kg)	Comments
Talc	14807-96-6			No Data
Skin corrosion/irritation:		May cause skin irritation		

Serious eye damage/irritation: May cause eye irritation

Respiratory or skin sensitization: May cause an allergic skin reaction.

Germ cell mutagenicity:

No data available
Carcinogenicity:

Not classified

Reproductive toxicity

Specific target organ toxicity (single exposure):

Not classified

Specific target organ toxicity (repeated exposure):

No data available
Aspiration hazard:

No data available

SECTION: 12

ECOLOGICAL INFORMATION

12.1 Toxicity:

Ecology - general: No data available.

Talc	(CAS No) 14807-96-6	
LC50 fishes 1	(no bioaccumulation expected)	

- 12.2 Persistence and degradability: No additional information available.
 - 12.3 <u>Bioaccumulative potential:</u> No additional information available.
 - 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: Dispose of in accordance with local and national regulations.
Waste disposal recommendations: Dispose of contents/container in accordance with local/regional/national/international regulations.

SECTION: 14

TRANSPORT INFORMATION

In accordance with DOT / ADR / RID / ADNR / IMDG / ICAO / IATA

- 14.1 UN Number: Not a dangerous good in sense of transport regulations
- 14.2 <u>UN proper shipping name:</u> Not applicable



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SECTION: 15

REGULATORY INFORMATION

15.1 <u>US Federal Regulations:</u>

Talc (CAS No) 1	4807-96-6
Listed on the United States TSCA (Toxic	Substances Control Act) Inventory
Listed on SARA Section 313 (Specific to	xic chemical listings)
SARA Section 313 - Emission Reporting	1.0%

15.2 US State Regulations:

Talc	(CAS No) 14807-96-6			
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	No Significance risk level (NSRL)
Yes	Yes			

Talc	(CAS No)	14807-96-6
U.S Massachusetts - Right To Know List		
U.S Minnesota - Hazardous Substance List		
U.S New Jersey - Right to Know Hazardous Substance List		
U.S Pennsylvania - RTK (Right to Know) List		

SECTION: 16 OTHER INFORMATION

This information (SDS) 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. Therefore Weldcote Metals Inc. assumes no responsibility for personal damage caused by the product. User assumes all risks associated with use.



NFPA health hazard: 0 – Minimal health hazard
NFPA fire hazard: 0 – Minimal fire hazard

MFPA reactivity: 0- Normally stable, even under fire exposure conditions, and are not reactive with water

HMIS III Rating

Health:0 - Minimal HazardFlammability:0 - Minimal HazardPhysical:0 - Minimal Hazard

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