

SECTION 1: IDENTIFICATION

1.1. Product Identifier

Product Form: Mixture
Product Name: Epoxy Primer Kit-Part A

1.2. Intended Use of the Product

Use of the Substance/Mixture: Primer.

1.3. Name, Address, and Telephone of the Responsible Party

Company

Metacrylics
365 Obata Ct.
Gilroy, CA 95020
408-280-7733

www.metacrylics.com

1.4. Emergency Telephone Number

Transportation: CHEMTEL Tel. 800-255-3924, +1 813-248-0585 (International)
Medical: CHEMTEL Tel. 800-255-3924, +1 813-248-0585 (International)

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the Substance or Mixture

GHS-US Classification

Aquatic Chronic, 2 H411
Aquatic Acute, 3 H402
Acute toxicity, dermal, 5 H313
Acute toxicity, oral, 4 H302

Full text of hazard classes and H-statements : see section 16

2.2 Label

Elements GHS-US

Labeling

Hazard Pictograms (GHS-US) :



Signal Word (GHS-US)

: Warning

Hazard Statements (GHS-US)

: H313 - May be harmful in contact with skin
H302 - Harmful if swallowed
H402 - Harmful to aquatic life
H411 - Toxic to aquatic life with long lasting effects

Precautionary Statements (GHS-US)

: P101 - If medical advice is needed, have product container or label at hand.
P102 - Keep out of reach of children.
P103 - Read label before use.
P273 - Avoid release to the environment.
P264 - Wash thoroughly after handling.
P312 - Call a POISON CENTER/doctor if you feel unwell.
P301 + P312 - IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
P391 - Collect spillage.
P501 - Dispose of contents/ container to an approved waste disposal plant.

2.3. Other Hazards

Exposure may aggravate pre-existing eye, skin, or respiratory conditions.

2.4. Unknown Acute Toxicity (GHS-US)

No data available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substance

Not applicable

3.2. Mixture

Name	Product Identifier	%
Diglycidyl ether of bisphenol A	(CAS-No.) 25085-99-8	21-38
Zinc oxide	(CAS-No.) 1314-13-2	0.6-1.1
Crystalline silica	(CAS No.) 14808-60-7	0.3-0.5
Cadmium	(CAS no.) 7440-43-9	Trace
Lead	(CAS no.) 7439-92-1	Trace

Full text of H-phrases: see section 16

The specific chemical identity and/or exact percentage of composition have been withheld as a trade secret [29 CFR 1910.1200].

SECTION 4: FIRST AID MEASURES

4.1. Description of First-aid Measures

First-aid Measures General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-aid Measures After Inhalation: Remove source of exposure or move person to fresh air and keep comfortable for breathing. If exposed/ feel unwell/ concerned: Call a poison center/ doctor.

First-aid Measures After Skin Contact: rinse/ wash with lukewarm, gently flowing water and mild soap for 15-20 minutes or until product is removed. If skin irritation occurs or you feel unwell: Get medical advice/ attention.

First-aid Measures After Eye Contact: Remove source of exposure or move person to fresh air. Rinse eyes cautiously with lukewarm, gently flowing water for several minutes, while holding the eyelids open. Remove contact lenses, if present and easy to do. Continue rinsing for a duration of 15-20 minutes. Take care not to rinse contaminated water into the unaffected eye or onto the face. If eye irritation persists: Get medical advice/attention.

First-aid Measures After Ingestion: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER/doctor. If vomiting occurs naturally, lie on your side, in the recovery position. Give 3 or 4 glasses of water to drink. Never give anything by mouth to an unconscious person.

SECTION 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing Media

Suitable Extinguishing Media: Water spray, dry chemical, foam, carbon dioxide, fog.

Unsuitable Extinguishing Media: Do not use a heavy water stream. Use of heavy stream of water may spread fire.

5.2. Special Hazards Arising From the Substance or Mixture

Fire Hazard: Yes

Explosion Hazard: Excessive pressure or temperature may cause explosive ruptured of containers.

5.3. Advice for Firefighters

Precautionary Measures Fire: Exercise caution when fighting any chemical fire.

Firefighting Instructions: Use water spray or fog for cooling exposed containers.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

Hazardous Combustion Products: Carbon oxides (CO, CO₂). Hydrocarbons.

Other Information: Do not allow run-off from fire fighting to enter drains or water courses.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Emergency Procedure:

ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).

Do not touch or walk through spilled material.

Isolate hazard area and keep unnecessary people away. Remove all possible sources of ignition in the surrounding area. Notify authorities if any exposure to the general public or the environment occurs or is likely to occur.

If spilled material is cleaned up using a regulated solvent, the resulting waste mixture may be regulated.

6.2. Recommended Equipment:

Positive pressure, full-face piece self-contained breathing apparatus(SCBA), or positive pressure supplied air respirator with escape SCBA (NIOSH approved).

6.3. Personal Precautions:

Avoid breathing vapors. Avoid contact with skin, eyes or clothing. Do not touch damaged containers or spilled materials unless wearing appropriate protective clothing.

6.4. Environmental Precautions:

Stop spill/release if it can be done safely. Prevent spilled material from entering sewers, storm drains, other unauthorized drainage systems and natural waterways by using sand, earth, or other appropriate barriers.

6.5. Methods and Materials for Containment and Cleaning up:

Soak up material with absorbent and shovel into a chemical waste container. Cover container, but do not seal, and remove from work area. Residues from spill cleanup may continue to be regulated under provisions of RCRA and require storage and disposal as hazardous waste. For major spills, call CHEMTEL at 800-255-3924.

SECTION 7: HANDLING AND STORAGE

7.1. General:

Wash hands after use.

Do not get in eyes, on skin or on clothing.

Do not breathe vapors or mists.

Use good personal hygiene practices.

Eating, drinking and smoking in work areas is prohibited.

Remove contaminated clothing and protective equipment before entering eating areas.

Eyewash stations and showers should be available in areas where this material is used and stored.

Individuals with existing respiratory disease such as chronic bronchitis, emphysema, or asthma should not be exposed.

7.2. Ventilation Requirements:

Use only with adequate ventilation to control air contaminants to their exposure limits. The use of local ventilation is recommended to control emissions near the source.

7.3. Storage Room Requirements:

Keep container(s) tightly closed and properly labeled. Store in cool, dry, well-ventilated areas away from heat, direct sunlight and incompatibilities. Store in approved containers and protect against physical damage. Keep containers securely sealed when not in use. Indoor storage should meet OSHA standards and appropriate fire codes. Containers that have been opened must be carefully resealed to prevent leakage. Empty container retain residue and may be dangerous.

Store in tightly sealed containers to protect from atmospheric moisture. Store in a cool dry area. Store liquid in containers above ground and surround by dikes to contain spills or leaks.

Do not cut, drill, grind, weld, or perform similar operations on or near containers.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control Parameters

For substances listed in section 3 that are not listed here, there are no established exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), AIHA (WEEL), NIOSH (REL), or OSHA (PEL).

8.2. Exposure Controls

Appropriate Engineering Controls : Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value.

Chemical Name	OSHA TWA ppm	OSHA TWA mg/m ³	OSHA STEL ppm	OSHA STEL mg/m ³	OSHA Tables Z1, 2, 3	OSHA Carcinogen	OSHA Skin designation	NIOSH TWA ppm	NIOSH TWA mg/m ³	NIOSH STEL ppm
Cadmium (7440-43-9)		[0.1/0.3 ceiling]; [0.2/ 0.6 ceiling];			1	1				
Lead (7439-92-1)	a	50 µg/m ³			1	1			0.100b	
Crystalline Silica (14808-60-7)	a	10 mg/m ³ percent SiO ₂ +2/ 250 percent SiO ₂ +5 mppcf];[30 mg/m ³ percent SiO ₂ +2];			1,3				0.05e	
Zinc Oxide (1314-13-2)		[15]; [5];			1				5,5c	

Chemical Name	NIOSH STEL mg/m ³	NIOSH Carcinogen	ACGIH TWA ppm	ACGIH TWA mg/m ³	ACGIH STEL ppm	ACGIH STEL mg/m ³	ACGIH Carcinogen	ACGIH TLV Basis	ACGIH Notations
Cadmium (7440-43-9)				0.01	0.05		A2	Kidney, dam	A2, BEI
Lead (7439-92-1)				0.05			A3	CNS impair' PNS imp; hematologic eff	A3; BEI
Crystalline Silica (14808-60-7)		1		0.025 [®]			A2	Pulmonary fibrosis; lunch cancer	A2
Zinc Oxide (1314-13-2)	10d			2 (R)		10 (R)		Metal fume fever	

Eye and Face Protection

: Wear eye protection with side shields or goggles. Wear indirect-vent, impact and splash resistant goggles when working with liquids. If additional protection is needed for entire face, use in combination with a face shield.

Skin and Body Protection

: Use of gloves approved to relevant standards made from the following materials may provide suitable chemical protection: PVC, neoprene or nitrile rubber gloves. Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, glove thickness, dexterity. Always seek advice from glove suppliers. Contaminated gloves should be replaced. Use of an apron and over-boots of chemically impervious materials such as neoprene or nitrile rubber is recommended to avoid skin sensitization. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. Launder soiled clothes or properly disposed of contaminated material, which cannot be decontaminated.

Respiratory Protection

: If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker, a respiratory protection program that meets or is equivalent to OSHA 29 CFR 1910.134 and ANSI Z88.2 should be followed. Check with respiratory protective equipment suppliers. Use either an atmosphere supplying respirator or an air-purifying respirator for organic vapors.

Other Information

: When using, do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on Basic Physical and Chemical Properties

Density	: 9.43 lbs/gal
Specific Gravity	: 1.13
VOC Regulatory	: 0.00 g/L
VOC Part A & B Combined	: 0.38 g/L
Appearance	: Yellow Liquid
Odor Threshold	: N.A.
Odor Description	: Mild
pH	: N.A.
Water Solubility	: N.A.
Flammability	: N/A
Flash Point Symbol	: N.A.
Flash Point	: 478°F (248°C)
Viscosity	: N.A.
Lower Explosion Level	: N.A.
Upper Explosion Level	: N.A.
Vapor Pressure	: N.A.
Vapor Density	: N.A.
Freezing Point	: N.A.
Melting Point	: N.A.
Low Boiling Point	: 212°F (100 °C)

High Boiling Point	: N.A.
Auto Ignition Temp	: N.A.
Decomposition Pt	: N.A.
Evaporation Rate	: N.A.
Coefficient Water/Oil	: N.A.

9.2. **Other Information** No additional information available

SECTION 10: STABILITY AND REACTIVITY

- 10.1. **Reactivity:** Hazardous reactions will not occur under normal conditions.
- 10.2. **Chemical Stability:** Stable under recommended handling and storage conditions (see section 7).
- 10.3. **Possibility of Hazardous Reactions:** Hazardous polymerization will not occur.
- 10.4. **Conditions to Avoid:** Heat, high temperature, open flame, sparks, moisture, incompatible materials.
- 10.5. **Incompatible Materials:** Epoxies, isocyanates, strong oxidizing agents. Some reactions can be violent.
- 10.6. **Hazardous Decomposition Products:** Organic vapors and thermal decomposition fragments

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on Toxicological Effects

Acute Toxicity: Irritation or chemical burns of the mouth, pharynx, esophagus, and stomach can develop following ingestion..

Lead (CAS no.) 7439-92-1	
LC50 invertebrate-daphnia	Chemical added to tank with water (dissolved in water). 300 µg/L, 48 hr exposure. Toxic effects: Details of toxic effects not reported other than lethal dose value.
Zinc Oxide (CAS no.) 1314-13-2	
LD50 Oral Mouse	7950 mg/kg body weight (9)
Cadmium (CAS no.) 7440-43-9	
LD50 Oral Rat	2330 mg/kg. Toxic effects: Details of toxic effects not reported other than lethal dose value.
LD50 Unreported Rat	1140 mg/kg. Toxic effects: Details of toxic effects not reported other than lethal dose value.

Skin Corrosion/Irritation: Repeated skin contact may cause a persistent irritation or dermatitis. May also aggravate an existing skin condition.

Serious Eye Damage/Irritation: No data available.

Respiratory or Skin Sensitization: Exposure may cause mucous membrane and respiratory tract irritation, tightness of chest, headache, shortness of breath, and a dry cough. The effects of acute exposure may be delayed in onset up to 12-24 hours. Repeated exposure above current occupational limits may cause an allergic sensitization of the respiratory tract. This is characterized by an asthma-like response upon re-exposure to the chemical. The symptoms may include coughing, wheezing, shortness of breath and chest tightness.

Germ Cell Mutagenicity: No data available.

Carcinogenicity: No data available.

Reproductive Toxicity: No data available.

Specific Target Organ Toxicity (Single Exposure): No data available.

Specific Target Organ Toxicity (Repeated Exposure): Repeated exposure generally aggravates the following medical conditions : Cardiovascular disease and Chronic respiratory disease.

Aspiration Hazard: No data available.

Chronic Exposure

Crystalline silica (CAS no.) 14808-61-7. Prolonged inhalation of respirable crystalline silica dust can result in lung disease (i.e. silicosis and/or lung cancer). Symptoms include coughing, shortness of breath, wheezing and reduced pulmonary function.

Potential Health Effects – Miscellaneous:

Crystalline silica (CAS no.) 14808-61-7. Is an IARC, NTP or OSHA carcinogen. Repeated overexposure to crystalline silica may lead to x-ray changes and chronic lung disease. Inhalation of high dust concentrations may cause: breathing difficulties, lung injury.

WARNING: This chemical is known to the State of California to cause cancer.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Ecology - General

: No data available. Harmful to aquatic life. Toxic to aquatic life with long lasting effects.

12.2. Persistence and Degradability

No data available.

12.3. Bioaccumulative Potential

No data available.

12.4. Mobility in Soil

No data available.

12.5. Other Adverse Effects

No data available.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste Treatment Methods

Under RCRA, it is the responsibility of the user of the product, to determine at the time of disposal whether the product meets RCRA criteria for hazardous waste. Waste management should be in full compliance with federal, state, and local laws. Empty containers retain product residue, which may exhibit hazards of material, therefore do not pressurize, cut, glaze, weld or use for any other purposes. Return drums to reclamation centers for proper cleaning and reuse

SECTION 14: TRANSPORT INFORMATION

The shipping description(s) stated herein were prepared in accordance with certain assumptions at the time the SDS was authored, and can vary based on a number of variables that may or may not have been known at the time the SDS was issued.

14.1. In Accordance with DOT Not regulated for transport

14.2. In Accordance with IMDG Not regulated for transport

14.3. In Accordance with IATA Not regulated for transport

SECTION 15: REGULATORY INFORMATION

15.1. US Federal Regulations

Zinc Oxide (CAS no.) 1314-13-2
Listed on the United States TSCA (Toxic Substances Control Act) inventory, SARA 312, SARA 313, CERCLA
Lead (CAS no.) 7439-92-1
Listed on the United States TSCA (Toxic Substances Control Act) inventory, SARA 312, SARA 313, CERCLA, HAPS, California Prop 65
Cadmium (CAS no.) 7440-43-9
Listed on the United States TSCA (Toxic Substances Control Act) inventory, SARA 312, SARA 313, CERCLA, HAPS, California Prop 65
Crystalline silica (CAS no.) 14808-61-7
Listed on the United States TSCA (Toxic Substances Control Act) inventory, SARA 312, California Prop 65
Diglycidyl Ether of Bisphenol A (CAS no.) 25085-99-8
Listed on the United States TSCA (Toxic Substances Control Act) inventory, SARA 312

SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Date of Preparation or Latest Revision : 08/18/2017
Other Information : This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

SECTION 1: IDENTIFICATION

1.1. Product Identifier

Product Form: Mixture
Product Name: Epoxy Primer Kit-Part B

1.2. Intended Use of the Product

Use of the Substance/Mixture: Primer.

1.3. Name, Address, and Telephone of the Responsible Party

Company

Metacrylics
365 Obata Ct.
Gilroy, CA 95020
408-280-7733

www.metacrylics.com

1.4. Emergency Telephone Number

Transportation: CHEMTEL Tel. 800-255-3924, +1 813-248-0585 (International)
Medical: CHEMTEL Tel. 800-255-3924, +1 813-248-0585 (International)

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the Substance or Mixture

GHS-US Classification

Skin irritation, 3 H316
Eye irritation, 2 H319
Flammable Liquid, 3 H226

Full text of hazard classes and H-statements : see section 16

2.2 Label

Elements GHS-US

Labeling

Hazard Pictograms

(GHS-US) :



Signal Word (GHS-US)

Hazard Statements (GHS-US)

: Warning
: H226 – Flammable liquid and vapor
H319 - Causes serious eye irritation
H316 - Causes mild skin irritation

Precautionary Statements (GHS-US)

: P101 - If medical advice is needed, have product container or label at hand.
P102 - Keep out of reach of children.
P103 - Read label before use.
P264 - Wash thoroughly after handling.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233 - Keep container tightly closed.
P240 - Ground/bond container and receiving equipment.
P241 - Use explosion-proof [electrical/ventilating/lighting/...] equipment.
P242 - Use only non-sparking tools.
P243 - Take action to prevent static discharges.
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313 - If eye irritation persists: Get medical advice/attention.
P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P370 + P378 - In case of fire: Check Section-5 (Fire Fighting Measures)
P332 + P313 - If skin irritation occurs: Get medical advice/attention.
P403 + P235 - Store in a well-ventilated place. Keep cool.
P501 - Dispose of contents/ container to an approved waste disposal plant.

2.3. Other Hazards

Exposure may aggravate pre-existing eye, skin, or respiratory conditions.

2.4. Unknown Acute Toxicity (GHS-US)

No data available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substance

Not applicable

3.2. Mixture

Name	Product Identifier	%
Epoxy resin adduct	(CAS-No.) Trade Secret	23-43
Propylene glycol monomethyl ether	(CAS-No.) 107-98-2	10-19

Full text of H-phrases: see section 16

The specific chemical identity and/or exact percentage of composition have been withheld as a trade secret [29 CFR 1910.1200].

SECTION 4: FIRST AID MEASURES

4.1. Description of First-aid Measures

First-aid Measures General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-aid Measures After Inhalation: Remove source of exposure or move person to fresh air and keep comfortable for breathing. If exposed/ feel unwell/ concerned: Call a poison center/ doctor.

First-aid Measures After Skin Contact: rinse/ wash with lukewarm, gently flowing water and mild soap for 15-20 minutes or until product is removed. If skin irritation occurs or you feel unwell: Get medical advice/ attention.

First-aid Measures After Eye Contact: Remove source of exposure or move person to fresh air. Rinse eyes cautiously with lukewarm, gently flowing water for several minutes, while holding the eyelids open. Remove contact lenses, if present and easy to do. Continue rinsing for a duration of 15-20 minutes. Take care not to rinse contaminated water into the unaffected eye or onto the face. If eye irritation persists: Get medical advice/attention.

First-aid Measures After Ingestion: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER/doctor. If vomiting occurs naturally, lie on your side, in the recovery position. Give 3 or 4 glasses of water to drink. Never give anything by mouth to an unconscious person.

SECTION 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing Media

Suitable Extinguishing Media: Water spray, dry chemical, foam, carbon dioxide, fog.

Unsuitable Extinguishing Media: Do not use a heavy water stream. Use of heavy stream of water may spread fire.

5.2. Special Hazards Arising From the Substance or Mixture

Fire Hazard: Yes

Explosion Hazard: Excessive pressure or temperature may cause explosive ruptured of containers.

5.3. Advice for Firefighters

Precautionary Measures Fire: Exercise caution when fighting any chemical fire.

Firefighting Instructions: Use water spray or fog for cooling exposed containers.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

Hazardous Combustion Products: Carbon oxides (CO, CO₂). Hydrocarbons.

Other Information: Do not allow run-off from fire fighting to enter drains or water courses.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Emergency Procedure:

ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).

Do not touch or walk through spilled material.

Isolate hazard area and keep unnecessary people away. Remove all possible sources of ignition in the surrounding area. Notify authorities if any exposure to the general public or the environment occurs or is likely to occur.

If spilled material is cleaned up using a regulated solvent, the resulting waste mixture may be regulated.

6.2. Recommended Equipment:

Positive pressure, full-face piece self-contained breathing apparatus(SCBA), or positive pressure supplied air respirator with escape SCBA (NIOSH approved).

6.3. Personal Precautions:

Avoid breathing vapors. Avoid contact with skin, eyes or clothing. Do not touch damaged containers or spilled materials unless wearing appropriate protective clothing.

6.4. Environmental Precautions:

Stop spill/release if it can be done safely. Prevent spilled material from entering sewers, storm drains, other unauthorized drainage systems and natural waterways by using sand, earth, or other appropriate barriers.

6.5. Methods and Materials for Containment and Cleaning up:

Soak up material with absorbent and shovel into a chemical waste container. Cover container, but do not seal, and remove from work area. Residues from spill cleanup may continue to be regulated under provisions of RCRA and require storage and disposal as hazardous waste. For major spills, call CHEMTEL at 800-255-3924.

SECTION 7: HANDLING AND STORAGE

7.1. General:

Wash hands after use.

Do not get in eyes, on skin or on clothing.

Do not breathe vapors or mists.

Use good personal hygiene practices.

Eating, drinking and smoking in work areas is prohibited.

Remove contaminated clothing and protective equipment before entering eating areas.

Eyewash stations and showers should be available in areas where this material is used and stored.

Individuals with existing respiratory disease such as chronic bronchitis, emphysema, or asthma should not be exposed.

7.2. Ventilation Requirements:

Use only with adequate ventilation to control air contaminants to their exposure limits. The use of local ventilation is recommended to control emissions near the source.

7.3. Storage Room Requirements:

Keep container(s) tightly closed and properly labeled. Store in cool, dry, well-ventilated areas away from heat, direct sunlight and incompatibilities. Store in approved containers and protect against physical damage. Keep containers securely sealed when not in use. Indoor storage should meet OSHA standards and appropriate fire codes. Containers that have been opened must be carefully resealed to prevent leakage. Empty container retain residue and may be dangerous.

Store in tightly sealed containers to protect from atmospheric moisture. Store in a cool dry area. Store liquid in containers above ground and surround by dikes to contain spills or leaks.

Do not cut, drill, grind, weld, or perform similar operations on or near containers.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control Parameters

For substances listed in section 3 that are not listed here, there are no established exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), AIHA (WEEL), NIOSH (REL), or OSHA (PEL).

8.2. Exposure Controls

Appropriate Engineering Controls : Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value.

Chemical Name	OSHA TWA ppm	OSHA TWA mg/m ³	OSHA STEL ppm	OSHA STEL mg/m ³	OSHA Tables Z1, 2, 3	OSHA Carcinogen	OSHA Skin designation	NIOSH TWA ppm	NIOSH TWA mg/m ³	NIOSH STEL ppm
Propylene Glycol Monomethyl Ether (107-98-2)								100	360	150

Chemical Name	NIOSH STEL mg/m ³	NIOSH Carcinogen	ACGIH TWA ppm	ACGIH TWA mg/m ³	ACGIH STEL ppm	ACGIH STEL mg/m ³	ACGIH Carcinogen	ACGIH TLV Basis	ACGIH Notations
Propylene Glycol Monomethyl Ether (107-98-2)	540		50		100		A4	Eye & amp; URT irr	A4

Eye and Face Protection

: Wear eye protection with side shields or goggles. Wear indirect-vent, impact and splash resistant goggles when working with liquids. If additional protection is needed for entire face, use in combination with a face shield.

Skin and Body Protection

: Use of gloves approved to relevant standards made from the following materials may provide suitable chemical protection: PVC, neoprene or nitrile rubber gloves. Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, glove thickness, dexterity. Always seek advice from glove suppliers. Contaminated gloves should be replaced. Use of an apron and over-boots of chemically impervious materials such as neoprene or nitrile rubber is recommended to avoid skin sensitization. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. Launder soiled clothes or properly disposed of contaminated material, which cannot be decontaminated.

Respiratory Protection

: If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker, a respiratory protection program that meets or is equivalent to OSHA 29 CFR 1910.134 and ANSI Z88.2 should be followed. Check with respiratory protective equipment suppliers. Use either an atmosphere supplying respirator or an air-purifying respirator for organic vapors.

In poorly ventilated areas, a cartridge mask NIOSH approved for organic vapors is recommended under the following conditions: emergency situations, when product vapor concentration is greater than 20 ppm for a period longer than 15 min., during repair and cleaning of equipment, during transfer or discharge of the product.

Other Information

: When using, do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on Basic Physical and Chemical Properties

Density	: 8.90 lb/gal
Specific Gravity	: 1.07
VOC Regulatory	: 0.00 g/L
VOC Part A & B Combined	: 0.38 g/L
Appearance	: Off White Liquid
Odor Threshold	: N.A.
Odor Description	: Mild Aromatic
pH	: N.A.
Water Solubility	: N.A.
Flammability	: N/A
Flash Point Symbol	: N.A.
Flash Point	: 50 °C
Viscosity	: N.A.
Lower Explosion Level	: N.A.
Upper Explosion Level	: N.A.
Vapor Pressure	: N.A.
Vapor Density	: N.A.
Freezing Point	: N.A.
Melting Point	: N.A.
Low Boiling Point	: 100 °C
High Boiling Point	: N.A.
Auto Ignition Temp	: N.A.
Decomposition Pt	: N.A.
Evaporation Rate	: N.A.
Coefficient Water/Oil	: N.A.

9.2. Other Information No additional information available

SECTION 10: STABILITY AND REACTIVITY

- 10.1. **Reactivity:** Hazardous reactions will not occur under normal conditions.
- 10.2. **Chemical Stability:** Stable under recommended handling and storage conditions (see section 7).
- 10.3. **Possibility of Hazardous Reactions:** Hazardous polymerization will not occur.
- 10.4. **Conditions to Avoid:** Heat, high temperature, open flame, sparks, moisture, incompatible materials.
- 10.5. **Incompatible Materials:** Epoxies, isocyanates, strong oxidizing agents. Some reactions can be violent.
- 10.6. **Hazardous Decomposition Products:** Organic vapors and thermal decomposition fragments

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on Toxicological Effects

Acute Toxicity: If ingested: In humans, irritation or chemical burns of the mouth, pharynx, esophagus and stomach can develop following ingestion and injury may be severe and cause death.

Propylene Glycol Monomethyl Ether (CAS no.) 107-98-2	
LC50 Rat	15000 ppm, 4 hr exposure (2)
LC50 Guinea Pig	15000 ppm, 10 hr exposure (2)
LD50 Oral Rat	6.6 g/kg (5.2-7.5 g/kg) (10)
LD50 Oral Dog	4.6-5.5 g/kg (2), approx. 9.2 g/kg (2)
LD50 Oral Rabbit	5.2-5.3 g/kg (2,12)
LD50 Dermal Rabbit	13-14 g/kg (10)
LD50 Oral Mouse	10.7-10.8 g/kg (2,12)

Skin Corrosion/Irritation: Causes mild skin irritation.

Serious Eye Damage/Irritation: Any contact should not be left untreated. Causes serious eye irritation.

Respiratory or Skin Sensitization: Exposure may cause mucous membrane and respiratory tract irritation, tightness of chest, headache, shortness of breath, and a dry cough. The effects of acute exposure may be delayed in onset up to 12-24 hours. Repeated exposure above current occupational limits may cause an allergic sensitization of the respiratory tract. This is characterized by an asthma-like response upon re-exposure to the chemical. The symptoms may include coughing, wheezing, shortness of breath and chest tightness.

Germ Cell Mutagenicity: No data available.

Carcinogenicity: No data available.

Reproductive Toxicity: No data available.

Specific Target Organ Toxicity (Single Exposure): No data available.

Specific Target Organ Toxicity (Repeated Exposure): Repeated exposure generally aggravates the following medical conditions : Cardiovascular disease and Chronic respiratory disease.

Aspiration Hazard: No data available.

Symptoms/Injuries After Skin Contact: Causes mild skin irritation.

Potential Health Effects – Miscellaneous:

Propylene Glycol Monomethyl Ether (CAS no.) 107-98-2: Tests in laboratory animals have shown effects on any of the following organs/ systems: kidneys, liver. Aspiration may occur during swallowing or coming, resulting in lung damage.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Ecology - General : No data available.

12.2. Persistence and Degradability

No data available.

12.3. Bioaccumulative Potential

No data available.

12.4. Mobility in Soil

No data available.

12.5. Other Adverse Effects

No data available.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste Treatment Methods

Under RCRA, it is the responsibility of the user of the product, to determine at the time of disposal whether the product meets RCRA criteria for hazardous waste. Waste management should be in full compliance with federal, state, and local laws. Empty containers retain product residue, which may exhibit hazards of material, therefore do not pressurize, cut, glaze, weld or use for any other purposes. Return drums to reclamation centers for proper cleaning and reuse.

SECTION 14: TRANSPORT INFORMATION

The shipping description(s) stated herein were prepared in accordance with certain assumptions at the time the SDS was authored, and can vary based on a number of variables that may or may not have been known at the time the SDS was issued.

14.1. In Accordance with DOT Not regulated for transport

- 14.2. In Accordance with IMDG** Shipping Name: PAINT
UN/NA #: 1263
Hazard Class: 3 Packing Group: III
Placard: Flammable
Marine Pollutant: No data available
- 14.3. In Accordance with IATA** Shipping Name: PAINT
UN/NA #: 1263
Hazard Class: 3 Packing Group: III
Placard: Flammable

SECTION 15: REGULATORY INFORMATION

15.1. US Federal Regulations

Propylene Glycol Monomethyl Ether (107-98-2)

Listed on the United States TSCA (Toxic Substances Control Act) inventory, SARA 312, and VOC

SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

- Date of Preparation or Latest Revision** : 08/18/2017
- Other Information** : This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

SDS US (GHS HazCom)