

G.J. CHEMICAL COMPANY, INC. SAFETY DATA SHEET

1. PRODUCT IDENTIFIER

1.1 PRODUCT NAME> **2-Hydroxypropyl Methacrylate Inhibited**

PRODUCT NUMBER(S)> 180090 - 180-250ppm MEHQ

TRADE NAME OR SYNONYMS --> 2-Hydroxypropyl Methacrylate (HPMA)

1.2 RELEVANT IDENTIFIED USES OF THE SUBSTANCE OR MIXTURE AND USES ADVISED AGAINST

RECOMMENDED USE: Polymerization at downstream user's sites. Reactive monomer used in adhesives and coatings or other flexible substrates. Resins for radiation cure.

USES ADVISED AGAINST: No information available

CAS-NO: 27813-02-1

CHEMICAL FAMILY: Ester

1.3 DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET

Company: **G.J. CHEMICAL CO., INC.**

Address: **40 VERONICA AVENUE
SOMERSET, NJ 08873**

Telephone: **1-973-589-1450**

Fax: **1-973-589-3072**

1.4 Emergency Telephone Number

Emergency Phone: **1-800-424-9300 (CHEMTREC)**

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29CFR 1910

Skin irritation (Category 2), H315

Eye irritation (Category 2A), H319

Skin sensitization (Category 1), H317

Germ cell mutagenicity (Category 1B), H340

Carcinogenicity (Category 2), H351

2.2 GHS Label elements, including precautionary statements



Pictogram

GHS08

GHS07

Signal word: **DANGER**

Hazard statement(s)

- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H319 Causes serious eye irritation.
- H340 May cause genetic defects.
- H351 Suspected of causing cancer.

Precautionary statement(s)

Prevention:

- P201 Obtain special instructions before use.
- P202 Do not handle until all safety precautions have been read and understood.
- P261 Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.
- P264 Wash skin thoroughly after handling.
- P272 Contaminated work clothing should not be allowed out of the workplace.
- P280 Wear protective gloves/eye protection/ face protection.
- P281 Use personal protective equipment as required.

Response:

- P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
- P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P308 + P313 IF exposed or concerned: Get medical advice/ attention.
- P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.
- P337 + P313 If eye irritation persists: Get medical advice/ attention.
- P362 Take off contaminated clothing and wash before reuse.

Storage:

- P405 Store locked up.

Disposal:

- P501 Dispose of contents/ container to an approved waste disposal plant.

3. INGREDIENTS

3.1 SUBSTANCE: Not applicable

3.2 MIXTURE: Multi constituent substance

Ingredient	CAS No.	% by WT. Range	CLASSIFICATION
2-Hydroxypropyl Methacrylate	27813-02-1 EC-No.248-666-3 Reg.-No. 01-2119490226-37-XXXX	96.5	Skin irritation (Category 2), H315 Eye irritation (Category 2A), H319 Skin sensitization (Category 1), 317

			Germ cell mutagenicity (Category 1B), H340 Carcinogenicity (Category 2), H351
2-Methylpropenoic acid	79-41-4 EC-No.201-204-4 Index-No.607-088-00-5 Reg.-No. 01-2119463884-26-XXXX	1-5	Flammable Liquid (Category 4), H227 Acute toxicity, Oral (Category 4), H302 Acute toxicity, Inhalation (Category 4), H332 Acute toxicity, Dermal (Category 3), H311 Skin corrosion (Category 1), H314 Serious eye damage (Category 1), H318 STOT-SE (Category 3) Respiratory System, H335 Acute aquatic toxicity (Category 3), H402
Methyloxirane	75-56-9 EC-No. 200-879-2 Index-No.603-055-00-4 Reg.-No.01-2119480483-35-XXXX	0.1-1	Flammable liquids (Category 1), H224 Acute toxicity, Oral (Category 4), H302 Acute toxicity, Inhalation (Category 3), H331 Acute toxicity, Dermal (Category 3), H312 Skin irritation (Category 2), H315 Serious eye damage (Category 1), H318 Germ cell mutagenicity (Category 1B), H340 Carcinogenicity (Category 1B), H350 STOT-SE (Category 3), Respiratory System, H335 Acute aquatic toxicity (Category 3), H402
Monomethyl Ether of Hydroquinone	150-76-5 EC-No.205-769-8 Index-No.604-044-00-7 Reg.-No. 01-2119541813-40-XXXX	180- 250 ppm	Acute toxicity, Oral (Category 4), H302 Eye irritation (Category 2A), H319 Acute aquatic toxicity (Category 3), H401 Chronic aquatic toxicity (Category 1), H412

4. FIRST-AID MEASURES:

4.1 DESCRIPTION OF FIRST AID MEASURES:

INHALATION: 2-Hydroxypropyl Methacrylate

****FIRST AID- Remove from exposure to fresh air, restore breathing use oxygen if needed. Keep warm and quiet. Immediately notify a physician.**

EYE CONTACT (Splash): 2-Hydroxypropyl Methacrylate

****FIRST AID- Immediately flush eyes with water for 15 minutes. Hold eyelids open for complete irrigation. Remove contact lenses, if worn, after initial flush. Immediately take to a physician.**

SKIN CONTACT (Splash): 2-Hydroxypropyl Methacrylate

****FIRST AID- Wash affected area with soap and large amounts of water. Remove contaminated clothing and shoes. Consult a**

physician if irritation persists.

INGESTION: 2-Hydroxypropyl Methacrylate

****FIRST AID- Patient should be made to drink large amounts of water.**

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Consult a physician or poison control center, treat symptomatically.

4.2 MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED INGESTION:

Eye: Severe eye irritation; damage reversible. May cause permanent eye injury. May cause blindness.

Skin: May be fatal if absorbed through skin. Material can cause severe irritation of skin. May cause allergic skin sensitization, an allergic reaction. Toxic in contact with skin.

Inhalation: May be fatal if inhaled. Irritation of the respiratory tract can cause drowsiness and headaches. Accumulation of fluid in lungs. Symptoms can be delayed for several hours.

Ingestion: Can severely irritate the mouth, throat and stomach. Can cause dizziness, severe difficulty in breathing and nervousness.

Chronic: May cause kidney and liver damage. Overexposure may cause irritation of respiratory tract. Local irritation at the site of exposure. Allergic reaction and local irritation of the skin.

Medical Conditions Aggravated by Exposure: Can cause severe eye/skin irritation. May cause blindness. Significant exposure to this chemical may adversely affect people with chronic disease of the respiratory system. Skin contact may aggravate an existing dermatitis.

4.3 INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED:

Specific details on antidote:

Note to physician: Due to the hazardous nature of this product through ingestion, immediate evacuation of the stomach is advised. No specific antidote. Treat symptomatically.

5. FIRE FIGHTING MEASURES

Flash Point: 95°C (203°F) CC

Auto-ignition Temperature: 335°C (635°F)

UNIFORM FIRE CODE: Combustible Liquid: IIIB

LEL %: NA

UEL%: NA

5.1 SUITABLE EXTINGUISHING MEDIA: Foam--> x CO2--> x Dry Chemical-->
x Water-fog--> x Other-->

Unsuitable extinguishing media: Do not use waterjet.

5.2 SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR

MIXTURE: Keep containers tightly closed. Combustible Liquid; isolate from all sources of ignition. Rapid, uncontrolled polymerization can cause explosion. Material creates a special hazard because it floats on water.

CONDITIONS OF FLAMMABILITY: Flammable in the presence of a source of ignition when the temperature is above the flash point.

HAZARDOUS COMBUSTION PRODUCTS: Highly dependent on combustion conditions. A complex mixture of airborne solids, liquids, and gases including carbon monoxide, carbon dioxide, carbon oxides and other unidentified organic compounds evolve when this material undergoes combustion.

5.3 ADVICE FOR FIREFIGHTERS: Shut off source. Keep unnecessary people away; isolate hazard area and deny entry. Avoid breathing vapors, stay upwind Do not spray pool fires directly. A solid stream of water or foam directed into hot burning liquid can cause frothing. Move container from fire area if you can do it without risk. Apply cooling water to sides of containers that are exposed to flames until well after fire is out. For massive fire in cargo area, use unmanned hose holder or monitor nozzles; if this is impossible, withdraw from area and let fire burn. Withdraw immediately in case of rising sound from venting safety device or any discoloration of tank due to fire. Cool containers with water fog from as far a distance as possible. Wear NIOSH/MSHA approved self-contained breathing apparatus (SCBA) for confined spaces. Use full fire-fighting protective clothing. If protective equipment is not available or not used, fight fire from a protected location or safe distance.

6. ACCIDENTAL RELEASE MEASURES

6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES: Combustible Liquid; Eliminate ignition sources in the vicinity of the spill or released vapor. Immediately evacuate all nonessential people. Verify that responders are properly trained and wearing appropriate respiratory equipment and fire resistant protective clothing during cleanup operations.

6.2 ENVIRONMENTAL PRECAUTIONS:

Keep out of water sources, drains and sewers. Do not flush into surface water or sanitary sewer system.

6.3 METHODS AND MATERIAL FOR CONTAINMENT AND CLEANING UP:

Methods for cleanup and containment:

Use explosion proof equipment. Shut off valves, contain spill, keep out of water sources and sewers, for smaller spills add non-flammable absorbent such as clay or silica in spill area. If an odor or acidity problem exists, add lime or sodium bicarbonate. For large spills use foam on spill to minimize vapors clean up by vacuuming then using non-flammable absorbent. Remove contaminated soil to remove contaminated trace residues.

Methods for disposal:

Place all saturated absorbent, using non-sparking tools, in an approved container for disposal. Flush with water to remove trace residue. Minimize breathing vapors and skin contact, ventilate confined areas, open all windows and doors, assure conformity with applicable government regulations. Keep all nonessential people away. Caution: Spontaneous polymerization can occur if material is released or mixed with incompatibles.

6.4 REFERENCE TO OTHER SECTIONS: See Sections 8 and 13.

7. HANDLING AND STORAGE

7.1 PRECAUTIONS FOR SAFE HANDLING: This material presents a fire hazard. Invisible vapor spreads easily and can be set on fire by many sources, such as pilot lights, welding equipment, and electrical motors and switches. Vapor is heavier than air and can travel considerable distance to a source of ignition and flash back. Avoid breathing vapors in top of shipping container. Use with adequate ventilation. Avoid prolonged or repeated contact with skin, eyes, and clothing. Do not take internally. Avoid work practices that may release volatile components in the atmosphere. Avoid contaminating soil or releasing material into sewage and drainage systems. Use non-sparking tools to open or close containers.

Advice on general occupational hygiene:

Wash hands before breaks and after work. Keep away from food, drink and animal feeding stuffs. When using do not smoke.

STATIC HAZARD: Electrostatic charge may accumulate and create a hazardous condition when handling this material. To minimize this hazard, bonding and grounding may be necessary but may not be sufficient. For more information refer to OSHA Standard 29CFR 1910.106 “Flammable and Combustible Liquids” and National Fire Protection Association (NFPA 77) “Recommended Practice on Static Electricity”.

7.2 CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES:

Follow maximum allowed pile heights specified in the BOCA codes or the NFPA manual. Local fire authorities should be notified for storage of this material in any quantity. Local permits are required for storage in warehouse quantities. Store in closed containers away from direct sunlight. Do not store above 100°F. Store large quantities only in buildings designed to comply with OSHA 1910.106. Avoid storage under an oxygen free atmosphere. This product should never be stored under an inert gas atmosphere, but should always be stored under an atmosphere containing 5 to 21% vol. oxygen. Keep containers tight and upright to prevent leakage. Do not store with incompatible materials. Keep containers closed when not in use. Recommended storage temperature 2 - 8°C
Storage class (TRGS 510): Non-combustible, acute toxic Cat.3 / toxic hazardous materials or hazardous materials causing chronic effects

CONTAINER WARNINGS: Containers should be Bonded and Grounded when pouring. Avoid free fall of liquid in excess of a few inches. Empty containers release residue and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, or expose such containers to heat, sparks, static electricity or other sources of ignition. Do not attempt to clean. "Empty" drums should be completely drained, properly bunged and promptly returned to a drum re-conditioner.

7.3 SPECIFIC END USES: Apart from the uses mentioned in section 1.2 no other specific uses are stipulate.

8. EXPOSURE CONTROL (PERSONAL PROTECTION)

8.1 CONTROL PARAMETERS:

Ingredient	CAS No.	% by WT. Range	Exposure Limits
2-Hydroxypropyl Methacrylate Reg.-No. 01-2119490226-37-XXXX	27813-02-1 EC-No.248-666-3	96.5	N.E.
2-Methylpropenoic acid Reg.-No. 01-2119463884-26-XXXX	79-41-4 EC-No.201-204-4 Index-No.607-088-00-5	1-5	20ppm (TWA) ACGIH 20ppm (TWA) NIOSH
Methyloxirane	75-56-9 EC-No. 200-879-2 Index-No.603-055-00-4	0.1-1.0	2ppm (TWA) ACGIH 100ppm (TWA) OSHA

Reg-No.01-2119480483-35-XXXX		
Monomethyl Ether of Hydroquinone	150-76-5 EC-No.205-769-8 Index-No.604-044-00-7 Reg.-No. 01-2119541813-40-XXXX	180-250ppm 5mg/m

Key: (PEL) = Permissible Exposure Limit OSHA
(TLV) = Threshold Limit Value OSHA & ACGIH
(STEL) = Short Term Exposure Limit ACGIH
(WEEL) = USA. Workplace Environmental Exposure Levels
(TWA) = Time Weighted Average
CAS = Chemical Abstracts Registry Number
IDLH = Immediate Danger to Life and Health
N.E. =None Established

8.2 EXPOSURE CONTROLS

EXPOSURE GUIDELINES: Consider the potential hazards of this material (Section 3), applicable exposure limits, job activities, and other substances in the work place when designing engineering controls and selecting personal protective equipment. If engineering controls or work practices are not adequate to prevent exposure to harmful levels of this material, the personal protective equipment listed below is recommended.

ENGINEERING CONTROLS: Provide general dilution or local exhaust ventilation in volume and pattern to keep concentrations within permitted exposure limits. All areas should be ventilated in accordance with OSHA Regulation 29 CFR Part 1910. Explosion proof motors should be used in mechanical ventilation.

RESPIRATORY PROTECTION: The specific respirator selected must be based on contamination levels found in the work place, must not exceed the working limits of the respirator and be jointly approved by the National Institute for Occupational Safety and Health and the Mine Safety and Health Administration (NIOSH-MSHA):

For vapor concentrations up to 10 times the TWA or PEL an air purifying NIOSH/MSHA Approved respirator with full face-piece and organic vapor cartridges. For concentrations up to 50 times the TWA or in confined areas use a NIOSH approved positive pressure full face-piece supplied air respirator.

BODY CLOTHING: Employee must wear appropriate protective (impervious) clothing and equipment to prevent repeated or prolonged contact with this substance. Use chemical resistant apron or other impervious clothing. Remove and wash contaminated clothing before reuse.

SKIN PROTECTION: Employee must wear appropriate protective gloves to prevent contact with this substance.

Full contact

Material: Chloroprene

Minimum layer thickness: 0.6 mm

Break through time: 480 min

Splash contact

Material: Chloroprene

Minimum layer thickness: 0.6 mm

Break through time: 480 min

HYGIENE: Use good personal hygiene practices, wash hands before eating, drinking, smoking or using toilet facilities.

EYE/FACE PROTECTION: Use safety eyewear with splash-guards or face shield. Contact lenses should not be worn. Emergency shower and eyewash should be easily accessible to the work area.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES:

2-Hydroxypropyl Methacrylate 27813-02-1

Appearance-----> Clear liquid
Color-----> Colorless
Odor-----> Pungent sweet odor
Odor Threshold----- > No data available
pH-----> No data available
Molecular Weight-----> 144.17amu
Melting/Freezing Point-----> -60°C (-76°F)
Boiling Range -----> 205 - 209°C (401 - 408°F)
Specific Gravity-----> 1.044 @25°C
Vapor Pressure-----> 0.05mmHg@20°C (68°F)
Vapor Density (air=1)-----> 4.9
Water Solubility-----> Soluble
Partition Coefficient n-Octanol/Water-> log Pow: 0.97 at 20 °C (68 °F)
Evaporation Rate (Butyl Acetate=1)----> No data available
Flash Point-----> 95°C (203°F) - closed cup
Upper Flammability Limit-----> No data available
Lower Flammability Limit-----> No data available
Auto-Ignition Temperature-----> 335°C (635°F)
Decomposition Temperature-----> No data available
Viscosity-----> 8.88mm²/s@20°C

Explosive Properties-----> No data available
Oxidizing Properties-----> No data available

9.2 Other Information: No Data Available

10. STABILITY AND REACTIVITY INFORMATION

10.1 REACTIVITY: No applicable information available

10.2 CHEMICAL STABILITY: Unstable () Stable (X)

The stability of the product depends upon the availability of both dissolved oxygen and MEHQ inhibitor. The presence of oxygen is necessary for the MEHQ to function effectively.

10.3 POSSIBILITY OF HAZARDOUS REACTIONS: No data available.

HAZARDOUS POLYMERIZATION: May occur (X) Will not occur ()

Can occur. Uncontrolled polymerization can cause rapid evolution of heat and increased pressure which can result in violent rupture of storage vessels or containers. The effectiveness of the inhibitor is dependent on the presence of oxygen.

10.4 CONDITIONS TO AVOID: Avoid storage at product temperatures above 100°F. Avoid Excessive aging, sunlight, x-ray, or ultra violet radiation. Heat, Sparks, Pilot Lights, Static Electricity, and Open Flame. May polymerize on exposure to light.

10.5 INCOMPATIBLE MATERIALS: Strong oxidants such as liquid chlorine, oxygen, sodium hypochlorite, inorganic acids; e.g. Peroxides, t-butyl peroxide and hydrogen peroxide.

10.6 HAZARDOUS DECOMPOSITION PRODUCTS: Fumes, Smoke, Carbon Monoxide, Aldehydes and other decomposition products where combustion is not complete.

11. TOXICOLOGICAL INFORMATION

11.1 INFORMATION ON TOXICOLOGICAL EFFECTS:

Routes of Entry: Inhalation--> x Skin--> x Ingestion--> x

ACUTE HEALTH EFFECTS:

Effects of overexposure:

Eye> Severe eye irritation; damage reversible. May cause permanent eye injury. May cause blindness.

Skin> May be fatal if absorbed through skin. Material can cause severe irritation of skin. May cause allergic skin sensitization, an allergic reaction. Toxic in contact with skin.;

Inhalation> May be fatal if inhaled. Irritation of the respiratory tract Can cause drowsiness and headaches. Accumulation of fluid in lungs. Symptoms can be delayed for several hours.

Ingestion> Can severely irritate the mouth, throat and stomach. Can cause dizziness, severe difficulty in breathing and nervousness.

Chronic: May cause kidney and liver damage. Overexposure may cause irritation of respiratory tract. Local irritation at the site of exposure. Allergic reaction and local irritation of the skin.

Medical Conditions Aggravated by Exposure> Can cause severe eye/skin irritation. May cause blindness. Significant exposure to this chemical may adversely affect people with chronic disease of the respiratory system. Skin contact may aggravate an existing dermatitis.

ACUTE TOXICITY:

The effects of overexposure shown in Section II are based on acute toxicity profiles. Typical values are:

Ingredient	 Oral LD50 (Rat)	 Skin LD50(Rabbit) 	Inhalation LC50
2-Hydroxypropyl Methacrylate	>2000mg/kg	N.D.	N.D.
Mequinol (MEHQ)	1370mg/kg	2000mg/kg	N.D.

SKIN CORROSION/IRRITATION: No data available.

SERIOUS EYE DAMAGE/EYE IRRITATION: No data available.

RESPIRATORY OR SKIN SENSITIZATION: No data available.

MUTAGENIC EFFECTS: No data available.

CARCINOGEN STATUS: IARC: 2B - Group 2B: Possibly carcinogenic to humans (Methyloxirane)

NTP: Reasonably anticipated to be a human carcinogen (Methyloxirane)

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

REPRODUCTIVE TOXICITY: No data available

Specific target organ toxicity (STOT-SE) - single exposure (Globally Harmonized System): no data available

Specific target organ toxicity (STOT-RE) - repeated exposure (Globally Harmonized System): no data available

Aspiration hazard: No data available

11.2 Additional Information:

Stomach - Irregularities - Based on Human Evidence (2-Methylpropenoic acid)

Stomach - Irregularities - Based on Human Evidence (Methyloxirane)

Stomach - Irregularities - Based on Human Evidence (Mequinol)

12. ECOLOGICAL INFORMATION

DANGEROUS TO AQUATIC LIFE IN HIGH CONCENTRATIONS

May be dangerous if it enters water intakes.

Notify local health and pollution control officials.

Notify operators of nearby water intakes.

12.1 AQUATIC TOXICITY:

Toxicity to fish:

LC50 – Leuciscus idus (orfe fish) – 493mg/l - 48 h

Toxicity to daphnia and other aquatic invertebrates:

EC-50 - Daphnia magna (water flea) 143mg/l – 48 h

Toxicity to algae:

Algae – pseudokirchneriella (green algae) GLP – 97.2mg/l – 72 h

12.2 PERSISTENCE AND DEGRADABILITY: Readily biodegradable in water.

12.3 BIOACCUMULATIVE POTENTIAL: The log octanol/water partition coefficient is log Pow: 0.97 at 20 °C (68 °F)

Bio-concentration Factor (BCF): No data available.

12.4 MOBILITY IN SOIL: No data available

12.5 RESULTS OF PBT AND vPvB :

PBT assessment results: This substance is not classified as PBT or vPvB.

12.6 OTHER ADVERSE EFFECTS: No data available.

13. DISPOSAL CONSIDERATIONS

13.1 Waste Disposal Method: Hazard characteristic and regulatory waste stream classification can change with product use. Accordingly it is the responsibility of the user to determine the proper storage, transportation, treatment and or disposal methodologies for spent materials and residues at time of disposition. Dispose in accordance with all applicable disposal regulations. Burn concentrate liquids in systems compatible with water-soluble wastes in a permitted facility. Dilute aqueous waste may biodegrade.

CONTAMINATED PACKAGING: Dispose of as unused product

The information offered here is for the product as shipped. Use and/or alterations to the product such as mixing with other materials may significantly

change the characteristics of the material and alter the RCRA classification and the proper disposal method.

This product does not meet RCRA's definition of ignitability, corrosivity, or reactivity and is not listed in 40CFR261.33.

14. TRANSPORT INFORMATION

Land Transport (DOT)

- 14.1 USDOT ID Number-----> N/A
- 14.2 USDOT Shipping Name-----> Not DOT Regulated
- 14.3 USDOT Hazard Classification-----> N/A
 - USDOT Label Codes-----> N/A
- 14.4 USDOT Package Code-----> N/A
- 14.5 Environmental hazard-----> No
- 14.6 Special precautions for user-----> None

Sea Transport (IMDG)

- 14.1 UN Number:-----> N/A
- 14.2 Proper Shipping Name-----> Not Dangerous Goods
- 14.3 Hazard Class:-----> N/A
 - USDOT Label Codes-----> N/A
- 14.4 Packing Group:-----> N/A
- 14.5 Environmental hazard-----> No

Air Transport (IATA)

- 14.1 UN Number:-----> N/A
- 14.2 Proper Shipping Name:-----> Not Dangerous goods
- 14.3 Hazard Class:-----> N/A
 - USDOT Label Codes-----> N/A
- 14.4 Packing Group:-----> N/A
- 14.5 Environmental hazard-----> No

15. REGULATORY INFORMATION

15.1 SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS/LEGISLATION SPECIFIC FOR THE SUBSTANCE OR MIXTURE:

SARA TITLE III (Superfund Amendment and Reauthorization Act)

SECTION 302 AND 304: Extremely Hazardous Substance List (40 CFR 355) - Component Listed; Methyloxirane CAS-No. 75-56-9 EHS RQ 100lbs; TPQ-10000lbs.

SECTION 313: Toxic Chemicals Listing (40 CFR 372.65) - Component Listed; Methyloxirane CAS-No. 75-56-9

SECTION 311/312: Hazard Categorization (40 CFR 370) - Acute Health Hazard, Chronic Health Hazard

CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act)

SECTION 102(A) Hazardous Substances (40 CFR 302.4)- Listed

Methyloxirane CAS-No. 75-56-9
Reportable Quantity – 100lbs.
SECTION 101(14) Reportable Quantity: 100lbs.

Massachusetts Right to Know Components

2-Methylpropenoic acid CAS-No. 79-41-4
Methyloxirane CAS 75-56-9
Mequinol CAS-No.150-76-5

Pennsylvania Right to Know Components

Methacrylic acid, monoester with propane-1, 2-diol CAS-No. 27813-02-1
2-Methylpropenoic acid CAS 79-41-4
Methyloxirane CAS 75-56-9
Mequinol CAS-No.150-76-5

New Jersey Right to Know Components

Methacrylic acid, monoester with propane-1, 2-diol CAS-No. 27813-02-1
2-Methylpropenoic acid CAS 79-41-4
Methyloxirane CAS 75-56-9
Mequinol CAS-No.150-76-5

California Prop. 65 Components WARNING! This product contains a chemical known to the State of California to cause cancer. Methyloxirane CAS-No.75-56-9

TSCA (Toxic Substance Control Act)

Methacrylic acid, monoester with propane-1, 2-diol CAS-No. 27813-02-1,
2-Methylpropenoic acid CAS 79-41-4, Methyloxirane CAS 75-56-9 and Mequinol
CAS-No.150-76-5 are listed on the TSCA Inventory.

2-Hydroxypropyl Methacrylate FDA Indirect Food Contact Approvals:
21CFR177.1010, 21CFR177.3790

International Inventories:

<u>Country or Region</u>	<u>Inventory Name</u>	<u>On inventory yes/no</u>
<u>Australia</u>	Australian Inventory of Chemical Substances	Yes
<u>Canada</u>	Domestic Substances List (DSL)	Yes
<u>Canada</u>	Non-Domestic Substances List (NDSL)	No
<u>China</u>	Inventory of Existing Chemical Substances in China (IECSC)	Yes
<u>Europe</u>	European Inventory of Existing Commercial Chemicals Substances (EINECS)	Yes
<u>Europe</u>	European List of Notified Chemical Substances (ELINCS)	No
<u>Japan</u>	Inventory of Existing and New Chemical Substances (ENCS)	Yes
<u>Japan</u>	Industrial Safety & Health Law Inventory (ISHL)	Yes
<u>Korea</u>	Existing Chemicals List (ECL)	Yes
<u>Mexico</u>	National Inventory of Chemical Substances (INSQ)	Yes
<u>New Zealand</u>	New Zealand Inventory	Yes
<u>Philippines</u>	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
<u>Switzerland</u>	Inventory of Notified New Substances (CHINV)	Yes
<u>Taiwan</u>	National Existing Chemical Inventory (NECI)	Yes

15.2 CHEMICAL SAFETY ASSESSMENT: A chemical safety assessment has been carried out for this substance.

16. OTHER INFORMATION:

HMIS (Hazardous Materials Identification System)

Hazard Rating:

4-Extreme

3-High

2-Moderate

1-Slight

0-Insignificant

NFPA RATINGS (SCALE 0-4): **Health=3** **Fire=1** **Reactivity=0**
HMIS RATINGS (SCALE 0-4): **Health=3** **Fire=1** **Reactivity=0** **PPE = X**

Hazard statement(s) from Section 2 and 3:

H224 Extremely flammable liquid and vapor.

H227 Combustible liquid.

H302 Harmful if swallowed.

H302 + H332 Harmful if swallowed or if inhaled

H311 Toxic in contact with skin.

H311 + H331 Toxic in contact with skin or if inhaled.

H314 Causes severe skin burns and eye damage.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

H340 May cause genetic defects.

H350 May cause cancer.

H351 Suspected of causing cancer.

H402 Harmful to aquatic life.

H412 Harmful to aquatic life with long lasting effects.

Date of preparation-> March 8, 2011

Revision Number----> 1.4

Revision Content----> General update all sections

Revision Date-----> September 19, 2018

Prepared by-----> T.G. Fenstermaker, Jr.

Acronyms:

ACGIH - American Conference of Governmental Industrial Hygienists
AIHA - American Industrial Hygiene Association
ANSI - American Nation Standards Institute
API - American Petroleum Institute
CERCLA - Comprehensive Emergency Response, Compensation, and Liability Act
DOT - U.S. Department of Transportation
EPA - U.S. Environmental Protection Agency
HMIS - Hazardous Materials Information System
IARC - International Agency For Research On Cancer

MSHA	-	Mine Safety and Health Administration
NFPA	-	National Fire Protection Association
NIOSH	-	National Institute of Occupational Safety and Health
NOIC	-	Notice of Intended Change (Proposed change to ACGIH TLV)
NTP	-	National Toxicology Program
OPA	-	Oil Pollution Act of 1990
OSHA	-	U.S. Occupational Safety & Health Administration
PEL	-	Permissible Exposure Limit (OSHA)
RCRA	-	Resource Conservation and Recovery Act
REL	-	Recommended Exposure Limit (NIOSH)
SARA	-	Superfund Amendments and Reauthorization Act of 1986 Title III
SCBA	-	Self-Contained Breathing Apparatus
STEL	-	Short-Term Exposure Limit (generally 15 minutes)
TLV	-	Threshold Limit Value
TSCA	-	Toxic Substances Control Act
TWA	-	Time Weighted Average (8hr.)
WHMIS	-	Canadian Workplace Hazardous Materials Information System

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