

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

1. PRODUCT IDENTIFIER

1.1 PRODUCT NAME -----> **Ethyl Methacrylate, Inhibited**
PRODUCT NUMBER(S) -----> 160200 – 14-20ppm MEHQ
160300 - 15-56ppm MEHQ
160310 – 17-25ppm MEHQ

CHEMICAL NAME OR SYNONYMS>2-Propenoic acid, 2-methyl, ethyl ester

1.2 RELAVENT IDENTIFIED USES OF THE SUBSTANCE OR MIXTURE AND USES ADVISED AGAINST:

RECOMMENDED USE: Manufacture of substances. Laboratory chemicals.
USES ADVISED AGAINST: No information available

CAS NO: 97-63-2

Chemical Family: Methacrylate 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 (OSHA HCS)

Flammable liquids (Category 2), H225

Skin irritation (Category 2), H315

Eye irritation (Category 2A), H319

Skin sensitization (Category 1), H317

Specific target organ toxicity - single exposure (Category 3) Respiratory System
H335

2.2 GHS Label elements, including precautionary statements



Pictogram

GHS02 GHS07

Signal word: **DANGER**

Hazard statement(s)

H225 Highly flammable liquid and vapor.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.

Precautionary statement(s)

Prevention:

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P233 Keep container tightly closed.
P240 Ground/bond container and receiving equipment.
P241 Use explosion-proof electrical/ ventilating/ lighting/ equipment.
P242 Use only non-sparking tools.
P243 Take precautionary measures against static discharge.
P261 Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.
P264 Wash skin thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.
P272 Contaminated work clothing should not be allowed out of the workplace.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response:

P303 + P361 + P353 IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.
P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312 Call a POISON CENTER or doctor/ physician if you feel unwell.
P321 Specific treatment (see supplemental first aid instructions on this label).
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.
P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.

Storage:

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
P403 + P235 Store in a well-ventilated place. Keep cool.
P405 Store locked up.

Disposal:

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

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS: Lachrymator

3. INGREDIENTS

3.1 SUBSTANCE:

Ingredient	CAS No.	% by WT. Range	CLASSIFICATION
Ethyl Methacrylate EC-No.202-597-5 Index-No.607-071-00-2 Reg.-No.01-2119490215-40-XXXX	97-63-2	99.5 min.	Flammable liquids (Category 2), H225 Skin irritation (Category 2), H315 Eye irritation (Category 2A), H319 Skin sensitization (Category 1), H317 STOT-SE - (Category 3) Respiratory System, H335
Monomethyl Ether of Hydroquinone (MEHQ) (Mequinol) Other Ester Adducts	150-76-5 EC-No. 205-769-8 Index-No.604-044-00-7 Reg.-No. 01-2119541813-40-XXXX	14-56 ppm 0.15	Acute toxicity, Oral (Category 4), H301 Eye irritation (Category 2A), H319 Skin sensitization (Category 1), H317 Acute aquatic toxicity (Category 3), H401 Chronic aquatic toxicity (Category3), H412

3.2 MIXTURE: Not applicable.

4. FIRST-AID MEASURES

4.1 DESCRIPTION OF FIRST AID MEASURES:

Inhalation: Ethyl Methacrylate

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

Eye Contact (Splash): Ethyl 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): Ethyl Methacrylate

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

Ingestion: Ethyl 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:

Eye: Causes irritation;

Skin: May cause skin sensitization, an allergic reaction. Not a skin irritant; May be harmful if absorbed through skin.

Inhalation: Causes respiratory tract irritation.

Ingestion: May be harmful if swallowed. This product has a low order of acute oral toxicity based on animal data.

Chronic: Overexposure to ethyl methacrylate may aggravate skin allergies. May cause skin sensitization, an allergic reaction, which becomes evident on re-exposure.

4.3 INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED: Call a physician immediately, if you feel unwell.

5. FIRE FIGHTING MEASURES

FLASH POINT: 19°C (66°F) CC

LEL %: 1.8(V)

AUTO-IGNITION TEMP: 400°C (752°F)

UEL %: N/A

UNIFORM FIRE CODE: Flammable Liquid Class IB

5.1 EXTINGUISHING MEDIA:

Suitable extinguishing media: Foam--> x CO2--> x Dry Chemical--> x Water-fog--> x Other--> Alcohol resistant foams (ATC type) are preferred.

Unsuitable extinguishing media: Do not use waterjet.

5.2 SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR

MIXTURE: FIRE AND EXPLOSION HAZARD: DANGEROUS FIRE HAZARD WHEN EXPOSED TO HEAT OR FLAME. VAPORS ARE HEAVIER THAN AIR AND MAY TRAVEL A CONSIDERABLE DISTANCE TO A SOURCE OF IGNITION AND FLASH BACK. VAPOR-AIR MIXTURES ARE EXPLOSIVE.

Keep containers tightly closed. Flammable liquid; isolate from all sources of ignition. Closed containers may explode when exposed to extreme heat. Heat from fire may initiate violent polymerization. Rapid uncontrolled polymerization can cause explosion. Containers that rupture explosively, due to polymerization, may auto-ignite. 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. Water fog may be used to cool closed containers to prevent pressure build up and possible auto ignition or explosion when exposed to extreme heat. Fight advanced fires from a protected location. Consider the use of unmanned hose holders or monitor nozzles. Wear self-contained breathing apparatus and turn out gear for confined spaces and where there is exposure to vapors. Burning liquids may be moved by flushing with water to protect personnel and minimize property damage. Use full fire-fighting turn out gear including NIOSH approved positive pressure self-contained breathing apparatus. Avoid contact with chemical during fire-fighting operations. If contact is likely change to full chemical resistant fire-fighting clothing with NIOSH/MSHA approved self-contained breathing apparatus (SCBA). Fight advanced fires from a protected position.

6. ACCIDENTAL RELEASE MEASURES

6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES: Flammable 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, for small 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. Flush with water to remove trace residue. For large spills use foam on spill to minimize vapors clean up by vacuuming then using non-flammable absorbent. Minimize breathing vapors and skin contact, ventilate confined areas, open all windows and doors, assure conformity with applicable government regulations.

Methods for disposal:

Place all saturated absorbent, using non-sparking tools, in an approved container for disposal. 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. Contaminated monomer may be unstable. Caution: Spontaneous polymerization can occur if

material is released or mixed with incompatibles. Add inhibitor to prevent polymerization. All recovered material should be packaged, labeled, transported and disposed of in conformance with applicable laws and regulations.

REPORTABLE QUANTITY (RQ): 1000lbs.

The Superfund Amendments and Reauthorization Act (SARA) Section 304 requires that a release equal to or greater than the reportable quantity for this substance be immediately reported to the local emergency planning committee and the state emergency response commission (40 CFR 355.40). If the release of this substance is reportable under CERCLA Section 103, the national response center must be notified immediately at (800) 424-8882 or (202) 426-2675 in the metropolitan Washington, D. C. area (40 CFR 302.6).

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. Do not take internally. Use with adequate ventilation. Avoid contact with eyes, skin and clothing. Maintain contact with atmosphere of 5-21% oxygen. Do not use inert atmosphere as blanket. 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. Recommended storage

temperature: 15 - 25 °C. Store large quantities only in buildings designed to comply with OSHA 1910.106. Storage area should not be subject to rapid temperature changes. Structural materials should be resistant to corrosion by this product. A spill control and containment plan should be provided. Do not store with incompatible materials.

Avoid storage under an oxygen free atmosphere. An air space is required above the liquid in all containers. Introduce air periodically in air space over liquid in all containers if stored over 6 months. Use monomer within 1 year. Conduct a inhibitor test on bulk material every month, drums and pails every 3 months. Keep containers tight and upright to prevent leakage. Do not store with incompatible materials. Keep containers closed when not in use.

Under proper storage conditions a storage stability of 1 year is expected at ambient temperature. Light sensitive. Heat sensitive

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 stipulated

8. EXPOSURE CONTROL (PERSONAL PROTECTION)

8.1 CONTROL PARAMETERS:

Ingredient	CAS No.	% by WT. Range	Exposure Limits
Ethyl Methacrylate	97-63-2 EC-No.202-597-5 Index-No.607-071-00-2 Reg.-No.01-2119490215-40-XXXX	99.5min.	N.E. PEL (OSHA) N.E. TWA (OSHA) N.E. STEL (ACGIH)
Monomethyl Ether of Hydroquinone (MEHQ) (Mequinol)	150-76-5 EC-No. 205-769-8 Index-No.604-044-00-7 Reg.-No. 01-2119541813-40-XXXX	14-56ppm	5mg/m3 TWA (ACGIH)
Other Ester Adducts		0.15	N.E.

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 known vapor concentrations use an air purifying NIOSH/MSHA Approved respirator with full face-piece and organic vapor cartridges. For confined spaces use a NIOSH/MSHA approved positive pressure full face-piece supplied air respirator (SCBA).

BODY CLOTHING: Use chemical resistant apron or other impervious clothing. Remove and wash contaminated clothing before reuse.

SKIN PROTECTION: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product.

Glove Material: Butyl Rubber

Material thickness \geq 0.3mm.

Breakthrough times of the glove material: >60 minutes

Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0.4 mm

Break through time: 30 min

Observe glove manufacturer's instructions concerning penetrability and breakthrough time.

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

EYE/FACE PROTECTION: Use safety eyewear with splash guards, goggles with face shield. 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:

Ethyl Methacrylate 97-63-2

Appearance-----> Clear mobile liquid
Color-----> Colorless
Odor-----> Sharp ester-like odor
Odor Threshold----- > No data available
pH-----> No data available
Molecular Weight-----> 114.14amu
Melting/Freezing Point)-----> -60 °C (-76 °F)
Boiling Point (°F)-----> 118 - 119 °C (244 - 246 °F)
Specific Gravity-----> .917@25°C
Vapor Pressure-----> 15mmHg@20°C
Vapor Density (air=1)-----> 3.94
Water Solubility-----> 0.6g/L@20°C
Partition Coefficient n-Octanol/Water-> log Pow: 1.87 at 20 °C (68 °F)
Evaporation Rate (Butyl Acetate=1)----> <1
Flash Point-----> 19 °C (66 °F) - closed cup
Upper Flammability Limit-----> No data available
Lower Flammability Limit-----> 1.8% (V)
Auto-Ignition Temperature-----> 400 °C (752 °F)
Decomposition Temperature-----> No data available
Viscosity-----> No data available
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)
Contains the following stabilizer(s): Mequinol (>=15 - <=20 ppm)

10.3 POSSIBILITY OF HAZARDOUS REACTIONS: Vapors may form explosive mixtures with air.

HAZARDOUS POLYMERIZATION: May occur (X) Will not occur ()
with excessive heat or in the absence of inhibitor.

10.4 CONDITIONS TO AVOID: Excessive ageing, contamination with polymerization catalysts, oxygen free atmosphere, inhibitor depletion or UV light may cause polymerization, Heat, Sparks, Pilot Lights, Static Electricity, and Open Flame.

10.5 INCOMPATIBLE MATERIALS: Strong oxidants such as liquid chlorine, oxygen, sodium hypochlorite, inorganic acids e.g. hydrochloric acid, hydrogen peroxide and UV light.

10.6 HAZARDOUS DECOMPOSITION PRODUCTS: Fumes, Smoke, Carbon Monoxide, carbon dioxide.

11. TOXICOLOGICAL INFORMATION

11.1 INFORMATION ON TOXICOLOGICAL EFFECTS:

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

ACUTE HEALTH EFFECTS:

Effects of overexposure:

Eye> Causes irritation;

Skin> May cause skin sensitization, an allergic reaction. Not a skin irritant;
May be harmful if absorbed through skin.

Inhalation> Causes respiratory tract irritation.

Ingestion> May be harmful if swallowed. This product has a low order of acute oral toxicity based on animal data.

Chronic: Overexposure to ethyl methacrylate may aggravate skin allergies. May cause skin sensitization, an allergic reaction, which becomes evident on re-exposure.

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
Ethyl Methacrylate	13424mg/kg	>9100mg/kg	8300ppm/4hr.
Methyl Ether of Hydroquinone (MEHQ) (Mequinol)	1370mg/kg	2000mg/kg	N.D.

SKIN CORROSION/IRRITATION: Rabbit Result: Irritations; Causes skin irritation.

SERIOUS EYE DAMAGE/EYE IRRITATION: Rabbit Result: slight irritation (Regulation (EC) No 1272/2008, Annex VI) Causes serious eye irritation.

RESPIRATORY OR SKIN SENSITIZATION:

Respiratory: Based on available data, the classification criteria are not met

Skin: May cause allergic skin reaction. May cause sensitization by skin contact.

MUTAGENIC EFFECTS: Ethyl Methacrylate tests positive as a mutagen on laboratory animals.

CARCINOGEN STATUS:

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

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

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

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

REPRODUCTIVE TOXICITY: No data available.

Specific target organ toxicity (STOT-SE) - single exposure (Globally Harmonized System): May cause respiratory irritation.

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

ASPIRATION HAZARD: No data available

11.2 ADDITIONAL DATA: Cough, Shortness of breath, Headache, Nausea, Vomiting,
RTECS: OZ4550000

12. ECOLOGICAL INFORMATION

12.1 AQUATIC TOXICITY (Acute):

Toxicity to fish:

LC50 - Salmo gairdneri (Rainbow Trout) - 100 mg/l - 96 h

Method: Flow through test OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrate:

EC50 – Daphnia magna (Water flea) - > 66 mg/l - 48 h

Method flow through test OECD Test Guideline 202

Toxicity to algae:

EC50 - Pseudokirchneriella subcapitata (green algae) - > 110 mg/l - 72 h

Method: OECD Test Guideline 201

12.2 PERSISTANCE AND DEGRADABILITY:

Biotic/Aerobic Result: 79.10 % - Readily biodegradable.

12.3 BIOACCUMULATIVE POTENTIAL:

The log n-octanol/water partition coefficient is: log Pow: 1.87 at 20 °C (68 °F)

12.4 MOBILITY IN SOIL: No information 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: This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

13. DISPOSAL CONSIDERATIONS

13.1 WASTE TREATMENT METHODS: 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. After the addition of excess inhibitor, incinerate under controlled conditions in a permitted facility.

CONTAMINATED PACKAGING: Dispose of as unused product

RCRA: The unused product is a RCRA hazardous waste if discarded. The RCRA ID number is: D001.

DISPOSAL MUST BE IN ACCORDANCE WITH STANDARDS APPLICABLE TO GENERATORS OF HAZARDOUS WASTE, 48 CFR 262

14. TRANSPORT INFORMATION

Land Transport (DOT)

- 14.1 USDOT ID Number-----> UN2277
- 14.2 USDOT Shipping Name-----> Ethyl Methacrylate, stabilized
- 14.3 USDOT Hazard Classification-----> 3 (Flammable Liquid)
USDOT Label Codes-----> 3
- 14.4 USDOT Package Code-----> II
- 14.5 Marine Pollutant-----> No
- 14.6 Special precautions for user-----> Yes
Emergency Response Guide-----> 129P
Reportable quantity-----> 1000lbs.

Sea Transport (IMDG)

- 14.1 ID Number-----> UN2277
- 14.2 Proper shipping name-----> ETHYL METHACRYLATE, STABILIZED
- 14.3 Hazard Classification-----> 3 (Flammable Liquid))
Label Codes-----> 3
- 14.4 Package Code-----> II
- 14.5 Marine Pollutant-----> No
- 14.6 Special precautions for user-----> Yes
EMS-Number-----> F-E, S-D
Excepted quantities-----> E2
Limited Quantity-----> 1L

Air Transport (IATA)

- 14.1 ID Number-----> UN2277
- 14.2 Proper shipping name-----> Ethyl Methacrylate, inhibited
- 14.3 Hazard Classification-----> 3 (Flammable Liquid)
Label Codes-----> 3
- 14.4 Package Code-----> II
- 14.5 Environmental hazard-----> None
- 14.6 Special precautions for user-----> No

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

15. REGULATORY INFORMATION

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

SECTION 302 AND 304: Extremely Hazardous Substance List (40 CFR 355) - Not Listed

SECTION 313: Toxic Chemicals Listing (40 CFR 372.65) - Not Listed

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

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

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

Ethyl Methacrylate CAS 97-63-2 Reportable Quantity – 1000lbs.

SECTION 101(14) Reportable Quantity: 1000lbs.

Listed on the following state Right to Know Hazardous Material Lists:

Massachusetts Right to Know Components

Ethyl methacrylate CAS-No.97-63-2

Mequinol CAS-No.150-76-5

Pennsylvania Right to Know Components

Ethyl methacrylate CAS-No.97-63-2

Mequinol CAS-No.150-76-5

New Jersey Right to Know Components

Ethyl methacrylate CAS-No.97-63-2

Mequinol CAS-No.150-76-5

California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

TSCA (Toxic Substance Control Act)

Ethyl Methacrylate CAS 97-63-2 and Mequinol CAS-No.150-76-5 are listed on the TSCA Inventory.

Ethyl Methacrylate FDA Indirect Food Contact Approvals:

21CFR175.105, 21CFR175.320, 21CFR176.170, 21CFR176.180, 21CFR177.1010, 21CFR177.1200, 21CFR177.1630, 21CFR178.3130, FDA list of indirect additives used in food contact substances.

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 Chemical 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
<u>United States & Puerto Rico</u>	Toxic Substances Control Act Inventory	Yes

15.2 CHEMICAL SAFETY ASSESSMENT: A Chemical Safety Assessment has been conducted.

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=2 Fire=3 Reactivity=1
HMIS RATINGS (SCALE 0-4): Health=2 Fire=3 Reactivity=1 PPE=H

Text of hazard statement codes in Section 2 and 3:

H225 Highly flammable liquid and vapor.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

Date of preparation-> February 12, 2007

Revision Number----> 1.8

Revision Content----> General Update all sections

Revision Date-----> January 25, 2019

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

Acronyms:

- ACGIH - American Conference of Governmental Industrial Hygenists**
- 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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