

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

1. PRODUCT IDENTIFIER

1.1 PRODUCT NAME -----> **Ethyl Acrylate, Inhibited**

PRODUCT NUMBERS -----> 155000 - 10-20ppm MEHQ
155200 - 200ppm MEHQ
155400 - 50-70ppm MEHQ

CHEMICAL NAME OR SYNONYMS --> Acrylic Acid, Ethyl Ester
2-propenoic acid, ethyl ester

CAS-NO: 140-88-5

CHEMICAL FAMILY: Ester

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

RECOMMENDED USE: Industrial: Manufacture of intermediates at downstream user sites, Polymerization at downstream user sites, Use as an odorant in natural gas.

USES ADVISED AGAINST: No information available

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

Acute toxicity, Oral (Category 4), H302

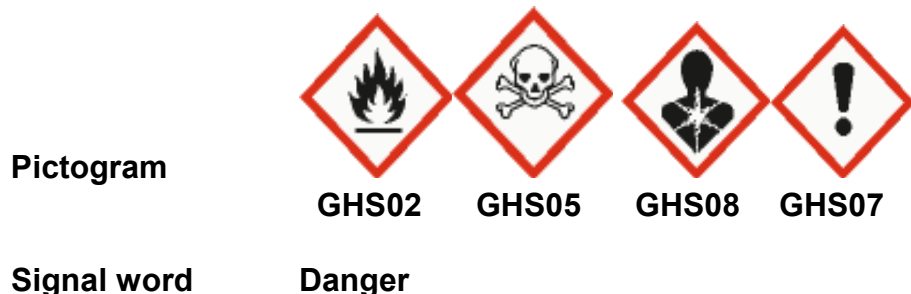
Acute toxicity, Inhalation (Category 3), H331

Acute toxicity, Dermal (Category 5), H312

Skin irritation (Category 2), H315

Eye irritation (Category 2A), H319
Skin sensitization (Category 1), H317
Carcinogenicity (Category 2), H351
Specific target organ toxicity - single exposure (Category 3), respiratory system
H335
Acute aquatic toxicity (Category 2), H401
Chronic aquatic toxicity (Category 2), H412

2.2 GHS Label elements, including precautionary statements



Hazard statement(s)

H225 Highly flammable liquid and vapor.
H302 + H312 Harmful if swallowed or in contact with skin
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H331 Toxic if inhaled.
H335 May cause respiratory irritation.
H351 Suspected of causing cancer.
H401 Toxic to aquatic life.
H412 Harmful to aquatic life with long lasting effects.

Precautionary statement(s)

Prevention:

P201 Obtain special instructions before use
P202 Do not handle until all safety precautions have been read and understood.
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.
P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.
P272 Contaminated work clothing should not be allowed out of the workplace.

P273 Avoid release to the environment.

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

Response:

P301 + P312 + P330 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth

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.

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.

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 Acrylate	140-88-5 EC-No.205-438-8 Index-No.607-032-00-X Reg.-No. 01-2119459301-46-XXXX	>99.5	Flammable liquids (Category 3), H225 Acute toxicity, Oral (Category 4), H302 Acute toxicity, Inhalation (Category 4), H331 Acute toxicity, Dermal (Category 4), H312 Skin irritation (Category 2), H315 Eye irritation (Category 2A), H319 Skin sensitization (Category 1), H317 Carcinogenicity (Category 2), H351 STOT-SE (Category3) Respiratory, H335 Acute aquatic toxicity (Category 2), H401 Chronic aquatic toxicity (Category 3), H412

Monomethyl Ether of 150-76-5
Hydroquinone EC-No.205-769-8
(MEHQ) Index-No.604-044-00-7
Reg.-No. 01-2119541813-40-XXXX
(Mequinol)

10-	Acute toxicity, Oral (Category 4), H332
200PPM	Eye irritation (Category 2A), H319
	Acute aquatic toxicity (Category 3), H401
	Chronic aquatic toxicity (Category 3), H412

3.2 MIXTURE: Not applicable

4. FIRST-AID MEASURES

4.1 DESCRIPTION OF FIRST AID MEASURES:

Inhalation: Ethyl Acrylate

****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): Ethyl Acrylate

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

Skin Contact (Splash): Ethyl Acrylate

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

Ingestion: Ethyl Acrylate

****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: Severe burns and possible loss of vision; damage irreversible; Symptoms may include irritation, burning, pain, watering and/or change of vision.

Skin: Can cause burns which may be delayed; May cause allergic skin reaction. Symptoms may include redness, discoloration, swelling, itching, burning or blistering.

Inhalation: Irritation of the respiratory tract or acute nervous system depression characterized by headache, dizziness, staggering gait, confusion,

unconsciousness. Accumulation of fluid in the lungs can be delayed for several hours.

Ingestion: Can severely irritate mouth, throat, and stomach. Ethyl Acrylate is very toxic by ingestion.

Chronic:

Ethyl Acrylate is listed as a possible human carcinogen, IARC Group 2B, based on limited evidence in experimental animals.

Target Organ Effects: Injury to eyes, digestive tract damage, respiratory tract damage and skin damage.

Medical Conditions Aggravated by Exposure: Significant exposure to this chemical may adversely affect people with acute or chronic diseases of Respiratory Tract, Skin and eyes.

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

Specific details on antidote: No recommendation given.

5. FIRE FIGHTING MEASURES

FLASH POINT: 9°C (48°F) TCC

LEL %:1.8 (V)

AUTO-IGNITION POINT: 372°C (702°F)

UEL %:12.1 (V)

UNIFORM FIRE CODE: Flammable Liquid Class IB

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: 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. Vapors is be heavier than air and can travel considerable distance to a source of ignition and flashback. Rapid uncontrolled polymerization can cause explosion. Containers that rupture explosively, due to polymerization, may auto-ignite.

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. Water run off and vapor cloud may be corrosive. Wear NIOSH/MSHA approved self-contained breathing apparatus (SCBA) and turn out gear. Thoroughly decontaminate turn out gear and other equipment before reuse.

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. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.

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.

Methods for disposal:

Remove contaminated soil to remove contaminated trace residues. 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. Material creates a special hazard because it floats on water.

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. Use with adequate ventilation. Avoid prolonged or repeated contact with eyes, skin 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. Maintain contact with atmosphere of 5-21% oxygen. Do not use inert atmosphere as blanket. Under proper storage conditions a storage stability of 1 year is expected at ambient temperature.

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. Recommended storage temperature: 15 - 25°C. Store large quantities only in cool, dry areas in buildings designed to comply with OSHA 1910.106. Store in closed containers away from direct sunlight. Avoid storage under an oxygen free atmosphere. An air space is required above the liquid in all containers. Keep containers tight and upright to prevent leakage. Do not store with incompatible materials. Keep containers closed when not in use. Storage class (TRGS 510): Flammable liquids

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 Acrylate	140-88-5 EC-No.205-438-8 Index-No.607-032-00-X Reg.-No. 01-2119453301-46-XXXX	99.5 min.	25ppmTWA (OSHA) 5ppmTWA (ACGIH) 15ppmSTEL (ACGIH) 300ppm (IDLH)
Monomethyl Ether of Hydroquinone (Mequinol, MEHQ)	150-76-5 EC-No.205-769-8 Index-No.604-044-00-7 Reg.-No. 01-2119541813-40-XXXX	10-200ppm	5mg/m3

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 1 to 10 times ACGIH TWA use an air purifying NIOSH/MSHA Approved respirator with full face-piece and organic vapor cartridges. For concentrations over 10 times ACGIH TWA, in confined areas, and/or where vapor concentrations are unknown use a approved positive pressure full face-piece supplied air respirator.

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.

Splash contact

Material: butyl-rubber

Minimum layer thickness: 0.3 mm

Break through time: 104 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, goggles with face-shield. 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 Acrylate 140-88-5

Appearance-----> Clear mobile liquid

Color-----> Colorless

Odor-----> Acrid penetrating odor

Odor Threshold----- > 1ppb

pH-----> No data available

Molecular Weight-----> 100.1

Melting/Freezing Point)-----> -71°C (-96°F)

Boiling Point (°F)-----> 99°C (210°F)

Specific Gravity-----> .918@20°C

Vapor Pressure-----> 31mmHg20°C

Vapor Density (air=1)-----> 3.46

Water Solubility-----> 2%

Partition Coefficient n-Octanol/Water-> 1.18 @ 25°C (77°F)

Evaporation Rate (Butyl Acetate=1)----> 3.3

Flash Point-----> 9°C (48°F) CC

Upper Flammability Limit-----> 12.1% (V)

Lower Flammability Limit-----> 1.8% (V)
Auto-Ignition Temperature-----> 372°C (702°F)
Decomposition Temperature-----> No data available
Viscosity-----> No data available
Explosive Properties-----> No data available
Oxidizing Properties-----> No data available

9.2 Other Information:

Surface tension-----> 25 mN/m at 20 °C (68 °F)

10. STABILITY AND REACTIVITY INFORMATION

10.1 REACTIVITY: No applicable information available

10.2 CHEMICAL STABILITY: Unstable () Stable (X) his product is considered stable under specified conditions of storage, shipment and use. Contains the following stabilizer(s): Mequinol (>=0.001 - <=0.002 %) Must be equilibrated with an atmosphere containing 5-8% (by volume) oxygen for inhibitor to function.

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

HAZARDOUS POLYMERIZATION: May occur (X) Will not 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 depends on the presence of oxygen.

10.4 CONDITIONS TO AVOID: Avoid temperatures over 38°C. Avoid sunlight, x-ray or UV radiation. Heat, Sparks, Pilot Lights, Static Electricity, and Open Flame. Avoid contamination with impurities such as peroxides and free radical forming compounds even in part per million concentrations.

10.5 INCOMPATIBLE MATERIALS: Strong oxidants such as liquid chlorine, oxygen, sodium hypochlorite, inorganic acids e.g. hydrochloric acid hydrogen peroxide, aldehydes, ethers and azides. Polymerization initiators.

10.6 HAZARDOUS DECOMPOSITION PRODUCTS: Hazardous polymerization may occur. Fumes, Smoke, Carbon Monoxide 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 Eye--> x

ACUTE HEALTH EFFECTS:

Effects of overexposure:

Eye>Severe burns and possible loss of vision; damage irreversible; Symptoms may include irritation, burning, pain, watering and/or change of vision.

Skin>Can cause burns which may be delayed; May cause allergic skin reaction. Symptoms may include redness, discoloration, swelling, itching, burning or blistering.

Inhalation> Irritation of the respiratory tract or acute nervous system depression characterized by headache, dizziness, staggering gait, confusion, unconsciousness. Accumulation of fluid in the lungs can be delayed for several hours.

Ingestion> Can severely irritate mouth, throat, and stomach. Ethyl Acrylate is very toxic by ingestion.

Chronic:

Ethyl Acrylate is listed as a possible human carcinogen, IARC Group 2B, based on limited evidence in experimental animals.

Target Organ Effects: Injury to eyes, digestive tract damage, respiratory tract damage and skin damage.

Medical Conditions Aggravated by Exposure> Significant exposure to this chemical may adversely affect people with acute or chronic diseases of Respiratory Tract, Skin and eyes.

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 (Mouse)	 Inhalation LC50
Ethyl Acrylate	1120mg/kg Rat - male	1800mg/kg	9mg/L/4hrs Rat - male
Mequinol (MEHQ)	1370mg/kg	2000mg/kg	N.D.

SKIN CORROSION/IRRITATION: Skin - Rabbit Result: Irritating to skin. - 4 h (OECD Test Guideline 404)

SERIOUS EYE DAMAGE/EYE IRRITATION: Eyes - Rabbit Result: Irritating to eyes. - 72 h (Draize Test)

RESPIRATORY OR SKIN SENSITIZATION: - Mouse Result: May cause sensitization by skin contact. (OECD Test Guideline 429)

MUTAGENIC EFFECTS: Reverse mutation assay Salmonella typhimurium Result: negative (OECD Test Guideline 474) Mouse - male Result: negative

CARCINOGEN STATUS:

IARC: 2B - Group 2B: Possibly carcinogenic to humans (Ethyl acrylate)

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.

Not carcinogenic in rats exposed orally by drinking water at doses up to 2000ppm for 2 years.

Not carcinogenic after exposure by inhalation to 5, 25 or 75 ppm ethyl acrylate 6hrs/day, 5 days/week for 27 months. Not carcinogenic after lifetime dermal exposure to 25 microliters 3 times/week in male mice.

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 INFORMATION: Repeated dose toxicity Rat - male and female - Oral - NOAEL : 55 mg/kg - LOAEL : 110 mg/kg – (OECD Test Guideline 408)

RTECS: AT0700000

12. ECOLOGICAL INFORMATION

Ethyl acrylate exhibits moderate acute toxicity to aquatic species.

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 (Acute):

Toxicity to fish:

LC50 - Pimephales promelas (fathead minnow) - 2.5 mg/l - 96 h

LC50 - Cyprinodon variegatus (sheepshead minnow) - 2 mg/l - 96 h Flow through test

Toxicity to daphnia and other invertebrates:

LC50 Daphnia magna (Water Flea) 4.4-7.9ppm – 48 h Flow through test

LC50 Arternia salina (Brine shrimp) 12ppm – 24 h

Toxicity to algae:

EC50 Algae (*Selenastrum capricornutum*) 11ppm – 96 h

12.2 PERSISTANCE AND DEGRADABILITY:

Aerobic - Exposure time 28 d Result: 80 - 90 % - Readily biodegradable (OECD Test Guideline 310)

12.3 BIOACCUMULATIVE POTENTIAL: The log octanol/water partition coefficient is 1.18.

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: Toxic to aquatic life.

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. 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: U113 and 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-----> UN1917

14.2 USDOT Shipping Name-----> Ethyl Acrylate, Stabilized

14.3 USDOT Hazard Classification-----> 3 (Flammable Liquid)

USDOT Label Codes-----> 3

14.4 USDOT Package Code-----> III

14.5 Marine Pollutant-----> No

14.6 Special precautions for user-----> None

Emergency Response Guide-----> 129P

Reportable Quantity-----> 1000lbs.

Sea Transport (IMDG)

14.1 ID Number-----> UN1917

14.2 Proper shipping name-----> ETHYL ACRYLATE, STABILIZED

14.3 Hazard Classification-----> 3 (Flammable Liquid)
Label Codes-----> 3
14.4 Package Code-----> III
14.5 Marine Pollutant-----> No
14.6 Special precautions for user-----> Yes
EMS-Number-----> F-E, S-D

Air Transport (IATA)

14.1 ID Number-----> UN1917
14.2 Proper shipping name-----> Ethyl Acrylate, Stabilized
14.3 Hazard Classification-----> 3 (Flammable Liquid)
Label Codes-----> 3
14.4 Package Code-----> III
14.5 Environmental hazard-----> No
14.6 Special precautions for user-----> None

15. REGULATORY INFORMATION

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

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SARA TITLE III (Superfund Amendment and Reauthorization Act)

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

SECTION 313: Toxic Chemicals Listing (40 CFR 372.65) - Listed Ethyl Acrylate CAS 140-88-5

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

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

SECTION 102(A) Hazardous Substances (40 CFR 302.4) - Listed; Ethyl Acrylate CAS 140-88-5

Reportable Quantity – 1000lbs.

SECTION 101(14) Reportable Quantity: 1000lbs

Massachusetts Right to Know Components

Ethyl acrylate CAS-No.140-88-5

Mequinol CAS-No.150-76-5

Pennsylvania Right to Know Components

Ethyl acrylate CAS-No.140-88-5

Mequinol CAS-No.150-76-5

New Jersey Right to Know Components

Ethyl acrylate CAS-No.140-88-5

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. Ethyl acrylate CAS-No.140-88-5

TSCA (Toxic Substance Control Act)

Ethyl Acrylate CAS 140-88-5 and Mequinol CAS-No.150-76-5 are listed on the TSCA Inventory.

Ethyl Acrylate FDA Indirect Food Contact Approvals:

21CFR175.105, 21CFR175.300, 21CFR175.360, 21CFR177.1010, 21CFR177.2420, 21CFR178.3790

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
<u>United States & Puerto Rico</u>	Toxic Substances Control Act Inventory	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=3 Reactivity=2
HMIS RATINGS (SCALE 0-4): Health=2 Fire=3 Reactivity=2 PPE=H

Hazard statement(s) from Section 2 and 3:

H225 Highly flammable liquid and vapor.

H302 + H312 Harmful if swallowed or in contact with skin

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H331 Toxic if inhaled.

H335 May cause respiratory irritation.

H351 Suspected of causing cancer.

H401 Toxic to aquatic life.

H412 Harmful to aquatic life with long lasting effects.

Date of preparation-> February 27, 2003

Revision Number----> 2.1

Revision Content----> Updated sections:1, 2, 5, 6, 7, 10, 11,12, and 16.

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

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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