

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

## 1. PRODUCT IDENTIFIER

1.1 PRODUCT NAME-----> **Isobornyl Methacrylate Inhibited**

PRODUCT NUMBER(S)--> 180200

TRADE NAME OR SYNONYMS----> Exo-1, 7, 7-trimethylbicyclo[2.2.1] hept-2-yl  
Methacrylate

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

RECOMMENDED USE: Industrial use as an intermediate. End use as a monomer in polymerization.

USES ADVISED AGAINST: No information available

CAS NO: 7534-94-3

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

Classification of the substance or mixture

GHS Classification in accordance with 29CFR 1910 (OSHA HCS)

Skin Irritation (Category 2), H315

Eye irritation (Category 2), H319

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

Acute aquatic toxicity (Category 2), H401

Chronic aquatic toxicity (Category 3), H412

GHS Label elements, including precautionary statements



Pictogram:

GHS07

Signal word: **WARNING**

**Hazard statement(s)**

**H315 Causes skin irritation.**

**H319 Causes serious eye irritation.**

**H335 May cause respiratory irritation.**

**H401 Toxic to aquatic life**

**H412 Harmful to aquatic life with long lasting effects.**

**Precautionary statement(s)**

**Prevention:**

**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.**

**P273 Avoid release to the environment.**

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

**Response:**

**P302 + P352 IF ON SKIN: Wash with plenty of soap and water.**

**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).**

**P332 + P313 If skin irritation occurs: Get medical advice/ attention.**

**P337 + P313 If eye irritation persists: Get medical advice/ attention.**

**P362 Take off contaminated clothing and wash before reuse.**

**P391 Collect spillage.**

**Storage:**

**P403 + P233 Store in a well-ventilated place. Keep container tightly closed.**

**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 - none**

**3. INGREDIENTS**

**3.1 SUBSTANCE:**

<b>Ingredient</b>	<b>CAS No.</b>	<b>% by WT. Range</b>	<b>CLASSIFICATION</b>
Isobornyl Methacrylate	7534-94-3 EC# 231-403-1 Reg.-No. 01-2119886505-27-XXXX	98.5	Skin irritation (Category 2), H315   Eye irritation (Category 2), H319   STOT-SE (Category 3) Respiratory System,   H335   Acute aquatic toxicity (Category 2), H401   Chronic aquatic toxicity (Category 3), H412

Monomethyl Ether of Hydroquinone	150-76-5 EC# 205-769-8 Index-No.604-044-00-7 Reg.-No. 01-2119541813-40-XXXX (MEHQ) (Mequinol)	90- 110	Acute toxicity, Oral (Category 4), H302 Eye irritation (Category 2A), H319 Acute aquatic toxicity (Category 3), H401 Chronic aquatic toxicity (Category3), H412
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3.2 MIXTURE: Not applicable.

#### 4. FIRST-AID MEASURES

##### 4.1 DESCRIPTION OF FIRST AID MEASURES:

**INHALATION: Isobornyl Methacrylate**

**\*\*FIRST AID- Remove from exposure to fresh air. If not breathing, give artificial respiration . Keep warm and quiet. Consult a physician.**

**EYE CONTACT (Splash): Isobornyl Methacrylate**

**\*\*FIRST AID- Flush eyes with water as a precaution.**

**SKIN CONTACT (Splash): Isobornyl Methacrylate**

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

**INGESTION: Isobornyl Methacrylate**

**\*\*FIRST AID- Rinse mouth with water. 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:** Irritating; Causes redness and pain.

**Skin:** Irritating; Causes redness and pain.

**Inhalation:** Irritation of the respiratory tract. Sore throat, coughing, shortness of breath.

**Ingestion:** Can severely irritate mouth, throat and stomach.

**Chronic:** No information.

**Medical Conditions Aggravated by Exposure:** May adversely affect people with chronic disease of the respiratory system.

##### 4.3 INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED: No data available.

#### 5. FIRE FIGHTING MEASURES

Flash Point: 114°C (237°F) PMCC

Auto-Ignition Temp: 385°C (725°F)

LEL %: N.D.

UEL %: N.D.

**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. Isolate from heat and all sources of ignition. Closed containers may explode when exposed to extreme heat.

**CONDITIONS OF FLAMMABILITY:** Not flammable or Combustible.

**HAZARDOUS COMBUSTION PRODUCTS:** Highly dependent on combustion conditions. A complex mixture of airborne solids, liquids, and gases including carbon monoxide, carbon dioxide, 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. Wear NIOSH/MSHA approved self-contained breathing apparatus (SCBA) for confined spaces and where there is exposure to vapors. Use full fire-fighting protective clothing. If protective equipment is not available or not used, fight fire from a protected location or safe distance.

Material must be moderately heated or exposed to relatively high ambient temperatures before ignition can occur.

## **6. ACCIDENTAL RELEASE MEASURES**

**6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES:** Immediately evacuate all nonessential people. Verify that responders are properly trained and wearing appropriate respiratory equipment and fire resistant protective clothing during cleanup operations. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Avoid contact with skin, eyes and clothing

### **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. 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. Contaminated monomer may be unstable. Add inhibitor to prevent polymerization. All recovered material should be packaged, labeled, transported and disposed of in conformance with applicable laws and regulations.

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

## **7. HANDLING AND STORAGE**

**7.1 PRECAUTIONS FOR SAFE HANDLING:** Avoid breathing vapors in top of shipping container. Use with adequate ventilation. Do not take internally. Avoid prolonged or repeated contact with skin, eyes, and clothing. To prevent thermal burns avoid contact with hot product. 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. 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.

### **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. 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 an 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.

**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:**

<b>Ingredient</b>	<b>CAS No.</b>	<b>% by WT. Range</b>	<b>Exposure Limits</b>
Isobornyl Methacrylate Reg.-No. 01-2119886505-27-XXXX	7534-94-3 EC# 231-403-1	99.5min.	N.E.
Monomethyl Ether of Hydroquinone (MEHQ) (MEHQ) (Mequinol) Reg.-No. 01-2119541813-40-XXXX	150-76-5 EC# 205-769-8 Index-No.604-044-00-7	90-110ppm	5mg/m3 (NIOSH) 5mg/m3 (ACGIH)

**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  
 N.D. = Not Determined

### **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):

Where risk assessment shows air purifying respirators are appropriate, use an air purifying NIOSH/MSHA approved respirator with full face-piece and organic vapor cartridges. For concentrations in confined areas, and/or where vapor concentrations are unknown 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. Use proper glove removal technique (without touching gloves outer surface)

Full contact

Material: Nitrile rubber

Minimum layer thickness: 0.2 mm

Break through time: > 480 min

Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: 122 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 conforming to EN166 or face shield must be worn where possibility exists for eye contact. Contact lenses should not be worn. Emergency shower and eyewash fountains should be easily available in the immediate vicinity of any potential exposure.

## **9. PHYSICAL AND CHEMICAL PROPERTIES**

### **9.1 INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES:**

Isobornyl Methacrylate 7534-94-3

Appearance-----> Clear liquid

Color-----> Colorless

Odor-----> Ester-like odor

Odor Threshold----- > No data available

pH-----> No data available

Molecular Weight-----> 222.33amu

Melting/Freezing Point)-----> -93.99°C (-137.18°F) @760mmHg

Boiling Point ( °F)-----> 245°C (473°F) @760mmHg

Specific Gravity-----> 0.98@25°C

Vapor Pressure-----> No data available

Vapor Density (air=1)-----> 7.7

Water Solubility-----> 5.44mg/L@20°C (68°F)

Partition Coefficient n-Octanol/Water-> log Pow 5.09

Evaporation Rate (Butyl Acetate=1)----> No data available

Flash Point----- > 114°C (237°F) - closed cup  
Upper Flammability Limit-----> No data available  
Lower Flammability Limit-----> No data available

Auto-Ignition Temperature----- > 385°C (725°F) @760mmHg  
Decomposition Temperature-----> No data available  
Viscosity-----> 8.39mm/2s @20°C (68°F)  
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)

This product is considered stable under specified conditions of storage, shipment and use. Must be equilibrated with an atmosphere containing 5-8% (by volume) oxygen for inhibitor to function.

10.3 POSSIBILITY OF HAZARDOUS REACTIONS: Reacts with strong oxidizing agents.

HAZARDOUS POLYMERIZATION: May occur ( ) Will not occur (X)at elevated temperatures.

10.4 CONDITIONS TO AVOID: No data available

10.5 INCOMPATIBLE MATERIALS: Oxidizing agents, Reducing agents, Peroxides, strong oxidizing agents.

10.6 HAZARDOUS DECOMPOSITION PRODUCTS: No data available

## 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> Irritating; Causes redness and pain.

Skin> Irritating; Causes redness and pain.

Inhalation> Irritation of the respiratory tract. Sore throat, coughing, shortness of



breath.

Ingestion> Can severely irritate mouth, throat and stomach.

Chronic: No information.

Medical Conditions Aggravated by Exposure> May adversely affect people with chronic disease of the respiratory system.

**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
Isobornyl Methacrylate	>2000mg/kg	N.D.	N.D.
Mequinol (MEHQ)	1370mg/kg	2000mg/kg	

**SKIN CORROSION/IRRITATION:** Skin - Rabbit Result: Mild skin irritation - 4 h (OECD Test Guideline 404)

**SERIOUS EYE DAMAGE/EYE IRRITATION:** No data available.

**RESPIRATORY OR SKIN SENSITIZATION:** Maximization Test (GPMT) - Guinea pig Result: Does not cause skin sensitization. (OECD Test Guideline 406)

**MUTAGENIC EFFECTS:** Ames test – S. typhimurium - negative

**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): Inhalation – Respiratory system

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

**ASPIRATION HAZARD:** No data available

**11.2 ADDITIONAL DATA:** No data available  
**RTECS#** not available

## **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 –Danio rerio (zebra fish) – 1.79mg/l – 96 h semi-static test  
(OECD Test Guideline 203)

Toxicity to daphnia and other aquatic invertebrates:

EC50 - Daphnia magna (water flea) – 2.57 mg/l – 48 h Semi-static test  
(OECD Test Guideline 202)

Toxicity to algae:

EC50 – Pseudokirchmeriella subcapitata (green algae) – 2.28mg/l – 72 h  
static test (OECD Test Guideline 201)

**12.2 PERSISTENCE AND DEGRADABILITY:** aerobic – Exposure time 28d; Result  
70% Readily biodegradable. (OECD Test Guideline 310)

**12.3 BIOACCUMULATIVE POTENTIAL:** log Pow 5.09  
**Biological Oxygen Demand (BOD):** 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:** 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

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.

## 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) - Not Listed

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

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

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

SECTION 102(A) Hazardous Substances (40 CFR 302.4) - Not Listed

Reportable Quantity: None

SECTION 101(14) Reportable Quantity: None

**Massachusetts Right to Know Components**  
**Mequinol CAS-No.150-76-5**

**Pennsylvania Right to Know Components**  
**Exo-1, 7, 7-trimethylbicyclo (2.2.1) hept-2-yl methacrylate CAS 7534-94-3**  
**Mequinol CAS-No.150-76-5**

**New Jersey Right to Know Components**  
**Exo-1, 7, 7-trimethylbicyclo (2.2.1) hept-2-yl methacrylate CAS 7534-94-3**  
**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)**  
**Isobornyl Methacrylate CAS 7534-94-3 is listed on the TSCA Inventory.**

**Isobornyl Methacrylate FDA Indirect Food Contact Approvals:**  
**21CFR177.1010: FDA list of indirect additives used in food contact substances.**

**International Inventories:**

<b><u>Country or Region</u></b>	<b><u>Inventory Name</u></b>	<b><u>On inventory yes/no</u></b>
<b><u>Australia</u></b>	Australian Inventory of Chemical Substances	Yes
<b><u>Canada</u></b>	Domestic Substances List (DSL)	Yes
<b><u>Canada</u></b>	Non-Domestic Substances List (NDSL)	No
<b><u>China</u></b>	Inventory of Existing Chemical Substances in China (IECSC)	Yes
<b><u>Europe</u></b>	European Inventory of Existing Commercial Chemicals Substances (EINECS)	Yes
<b><u>Europe</u></b>	European List of Notified Chemical Substances (ELINCS)	No
<b><u>Japan</u></b>	Inventory of Existing and New Chemical Substances (ENCS)	Yes
<b><u>Japan</u></b>	Industrial Safety & Health Law Inventory (ISHL)	Yes
<b><u>Korea</u></b>	Existing Chemicals List (ECL)	Yes
<b><u>Mexico</u></b>	National Inventory of Chemical Substances (INSQ)	Yes
<b><u>New Zealand</u></b>	New Zealand Inventory	Yes
<b><u>Philippines</u></b>	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	<b>Yes</b>
<b><u>Switzerland</u></b>	Inventory of Notified New Substances (CHINV)	Yes
<b><u>Taiwan</u></b>	National Existing Chemical Inventory (NECI)	Yes
<b><u>United States &amp; Puerto Rico</u></b>	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=2 Fire=1 Reactivity=0**  
**HMIS RATINGS (SCALE 0-4): Health=2 Fire=1 Reactivity=0 PPE=H**

**Hazard statement(s) from Section 2 and 3:**

**H315 Causes skin irritation.**

**H319 Causes serious eye irritation.**

**H335 May cause respiratory irritation.**

**H401 Toxic to aquatic life**

**H412 Harmful to aquatic life with long lasting effects.**

**Date of preparation-> October 2, 2017**

**Revision Number----> 1.1**

**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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