

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

1. PRODUCT IDENTIFIER

1.1 PRODUCT NAME -----> **GLYCOL ETHER PM ACETATE**

PRODUCT NUMBER(S)-----> 173100, 172900

TRADE NAMES/SYNONYMS----> 1-Methoxy-2-propyl acetate, 1-methoxy-2-methylethyl acetate, Propylene Glycol Methyl Ether Acetate

CAS-No: 108-65-6

Chemical Family: Glycol Ether Ester

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

RECOMMENDED USE: Industrial: Use in printing inks, Use in liquid coatings, Developing and printing process, Use in cleaning agents, Use as a process solvent, Intermediate, Use in thermosets, Manufacturing of electronic devices, Use in adhesives and sealants, Laboratory chemicals.

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 3), H226

Reproductive toxicity (Category 1B), H360

2.2 GHS Label elements, including precautionary statements



Pictogram

GHS02

GHS08

Signal word: **DANGER**

Hazard statement(s)

H226 Flammable liquid and vapor.

H360 May damage fertility or the unborn child.

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.

P273 Avoid release to the environment.

P280 Wear protective gloves/ 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.

P308 + P313 IF exposed or concerned: Get medical advice/ attention.

P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.

Storage:

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 - none

3. INGREDIENTS

3.1 SUBSTANCE:

Ingredient	CAS No. % by WT.	CLASSIFICATION
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Range

1-Methoxy-2-propyl acetate 108-65-6 EC-No.203-603-9 Index-No. 607-195-00-7 Reg.-No. 01-2119475751-29-XXXX	98+	Flammable liquids (Category 3), H226 Reproductive toxicity (Category 1B), H360
2-Methoxy-1-propanol 1589-47-1 EC-No.216-45-5 Index-No.603-106-00-0	0.5 max.	Flammable liquids (Category 3), H226 Skin Irritation (Category 2), H315 Serious Eye Damage (Category 1), H318 Reproductive toxicity (Category 1B), H360D STOT-SE (Category 3), H335

3.2 MIXTURE: Not applicable

4. FIRST-AID MEASURES:

4.1 DESCRIPTION OF FIRST AID MEASURES:

INHALATION: 1-Methoxy-2-propyl acetate

****FIRST AID- Remove from exposure area to fresh air immediately. If breathing has stopped, give oxygen and/or perform artificial respiration. Keep person warm and at rest. Treat symptomatically and supportively. Get medical attention immediately.**

SKIN CONTACT: 1-Methoxy-2-propyl acetate

****FIRST AID- Remove contaminated clothing and shoes immediately. Wash affected area with waterless cleaner then soap and large amounts or water until no evidence of chemical remains (approximately 15-20 minutes). Prompt action is essential. Get medical attention immediately.**

EYE CONTACT: 1-Methoxy-2-propyl acetate

****FIRST AID- Wash eyes immediately with large amounts of water or normal saline, occasionally lifting upper and lower lids, until no evidence of chemical remains (approximately 15-20 minutes). Remove contact lenses, if worn, after initial flush. Get medical attention immediately.**

INGESTION: 1-Methoxy-2-propyl acetate

****FIRST AID- Do not induce vomiting. Risk of damage to lungs**

exceeds poisoning Never give anything by mouth to an unconscious person. Rinse mouth with water. Small amounts, which enter the mouth should be rinsed out until taste is gone. Get medical attention immediately.

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

Eye: May cause minor eye irritation;

Skin: Possible systemic toxicity by skin absorption;

Inhalation: Prolonged overexposure may cause coughing, shortness of breath, dizziness and intoxication;

Ingestion: If swallowed in large quantities this product would likely cause gastrointestinal tract irritation with nausea, vomiting, lethargy, or diarrhea.

Chronic:

Inhalation: Prolonged overexposure to either vapor or mist may cause coughing, shortness of breath, dizziness and stupor. Repeated or prolonged exposure may irritate the mucous membranes.

Medical Conditions Aggravated by Exposure: None known.

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: 45.5°C (113.9°F) TCC

LEL %:1.3 (V)

Auto-ignition Temp: 333°C (631°F)

UEL %:13.1 (V)

UNIFORM FIRE CODE: Combustible Liquid: Class II

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. Keep containers tightly closed. Flammable liquid; isolate from all sources of ignition. Closed containers may explode when exposed to extreme heat. Liquid floats on water.

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

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 flooding amounts of water 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. For large spills evacuate downwind areas as conditions warrant to prevent exposure and to allow vapors or fumes to dissipate.

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 in spill area.

For large spills use foam on spill to minimize vapors clean up by vacuuming then using non-flammable absorbent.

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.

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. Liquid quickly evaporates and forms vapor (fumes), which can catch fire and burn with explosive violence. 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 contact with eyes, skin and clothing. 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. Recommended storage temperature: 15 - 25°C. Store large quantities only in cool, dry areas in buildings designed to comply with OSHA 1910.106. Keep containers tight and upright to prevent leakage. Do not contact with oxidizing materials. Keep containers closed when not in use. Do not take internally. 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
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1-Methoxy-2-propyl acetate 108-65-6 EC-No.203-603-9 Index-No. 607-195-00-7 Reg.-No. 01-2119475751-29-XXXX	98-100	50ppm TWA (WEEL)
2-Methoxy-1-propanol 1589-47-5 EC-No.216-45-5 Index-No.603-106-00-0	0.5max.	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 vapor concentrations 1 to 10 times exposure limits, an air purifying NIOSH/MSHA Approved respirator with full face-piece and organic vapor cartridges. For concentrations over 10 times OSHA TWA, PEL or WEEL and in confined areas use an approved positive pressure full face-piece supplied air respirator (SCBA).

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: butyl-rubber

Minimum layer thickness: 0.3 mm

Break through time: > 480 min

Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0.4 mm

Break through time: 79 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. 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:

1-Methoxy-2-propyl acetate 108-65-6

APPEARANCE:

Clear liquid

COLOR:

Colorless

ODOR:

Aromatic fruity odor.

ODOR THRESHOLD:

No data Available

pH:

No data available

MOLECULAR WEIGHT:

132.16 amu

MELTING POINT:

< -66°C (< -87°F)

BOILING POINT:

145 - 146°C (293 - 295°F)

SPECIFIC GRAVITY:

0.97@20°C

DENSITY (25°C):

0.97 g/ml @25°C

VAPOR PRESSURE:

2.69 mm Hg @ 20°C (68.0°F)

VAPOR DENSITY:

3.1

WATER SOLUBILITY:

198g/L @ 20°C (68.0°F)

PARTITION COEFFICIENT N-

log Pow: 1.2 @ 20°C (68.0°F)

OCTANOL/WATER

OECD Test Guideline 117

FLASH POINT:

45.5°C (113.9°F) - closed cup

EVAPORATION RATE (BUTYL ACETATE=1): 0.7

UPPER FLAMMABILITY LIMIT:

13.1% (V)

LOWER FLAMMABILITY LIMIT:

1.3% (V)

AUTO IGNITION TEMPERATURE:

333°C (631°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 data available.

10.2 CHEMICAL STABILITY: Unstable () Stable (X)

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

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

10.4 CONDITIONS TO AVOID: Heat, Sparks, Pilot Lights, Static Electricity, Open Flame and oxidizing conditions.

10.5 INCOMPATIBLE MATERIALS: Strong oxidants such as liquid chlorine, sodium hypochlorite, inorganic acids e.g. hydrochloric acid hydrogen peroxide. Alkali metals, aluminum or zinc or their alloys. May react with oxygen to form peroxides.

10.6 HAZARDOUS DECOMPOSITION PRODUCTS: 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> May cause minor eye irritation;

Skin> Possible systemic toxicity by skin absorption;

Inhalation> Prolonged overexposure may cause coughing, shortness of breath, dizziness and intoxication;

Ingestion> If swallowed in large quantities this product would likely cause gastrointestinal tract irritation with nausea, vomiting, lethargy, or diarrhea.

Chronic:

Inhalation: Prolonged overexposure to either vapor or mist may cause coughing, shortness of breath, dizziness and stupor. Repeated or prolonged exposure may irritate the mucous membranes.

Medical Conditions Aggravated by Exposure> None known.

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
1-Methoxy-2-Propyl acetate	8532mg/kg	>2000mg/kg	No Data

SKIN CORROSION/IRRITATION: Skin - Rabbit Result: No skin irritation (OECD Test Guideline 404)

SERIOUS EYE DAMAGE/EYE IRRITATION: Eyes - Rabbit Result: No eye irritation

RESPIRATORY OR SKIN SENSITIZATION: Maximization Test - Guinea pig did not cause sensitization on laboratory animals. (OECD Test Guideline 406)

MUTAGENIC EFFECTS: Reverse mutation assay *S. typhimurium* Result: 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.

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 on OSHA's list of regulated carcinogens.

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 DATA: No data available

RTECS: AI8925000

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 - *Salmo gairdneri* (Rainbow Trout) - 100 - 180 mg/l - 96 h

Method: OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates:

EC50 - *Daphnia magna* (Water flea) - > 500 mg/l - 48 h Immobilization

Method: Tested according to Annex V of Directive 67/548/EEC.

12.2 PERSISTANCE AND DEGRADABILITY: Biotic/Aerobic - Exposure time 28 d

Result: 83 % - Readily biodegradable. (OECD Test Guideline 301F)

Biochemical Oxygen Demand (BOD) 0.36 mg/l

Chemical Oxygen Demand (COD) 1.74 mg/g

12.3 BIOACCUMULATIVE POTENTIAL: log Octanol/water coefficient 1.2 @ 20°C (68.0°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 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. Dilute aqueous waste may biodegrade. Avoid overloading/poisoning plant biomass.

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-----> UN3271

14.2 USDOT Shipping Name-----> Ethers, n.o.s.

(1-methoxy-2-methylethyl acetate)

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-----> No
Emergency Response Guide-----> 129

Sea Transport (IMDG)

14.1 ID Number-----> UN3271
14.2 Proper shipping name-----> ETHERS, N.O.S.
(1-methoxy-2-methylethyl acetate)
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-----> N/A
EMS-Number-----> F-E, S-D

Air Transport (IATA)

14.1 ID Number-----> UN3271
14.2 Proper shipping name-----> Ethers, n.o.s.
(1-methoxy-2-methylethyl acetate)
14.3 Hazard Classification-----> 3 (Flammable Liquid)
Label Codes-----> 3
14.4 Package Code-----> III
14.5 Environmental hazard-----> None
14.6 Special precautions for user-----> None

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) - Chronic Health Hazard, Fire 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

No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right to Know Components

2-Methoxy-1-methylethyl acetate CAS-No.108-65-6

New Jersey Right to Know Components

2-Methoxy-1-methylethyl acetate CAS-No.108-65-6

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)

2-Methoxy-1-methylethyl acetate CAS-No.108-65-6 is listed on the TSCA Inventory.

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 (AICS)	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 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=0 Fire=2 Reactivity=0
HMIS RATINGS (SCALE 0-4): Health=0 Fire=2 Reactivity=0 PPE=B

**Hazard statement(s) from Section 2 and 3:
Flammable liquids (Category 3), H226
Reproductive toxicity (Category 1B), H360**

Date of preparation-----> December 5, 2013

Revision Number-----> 1.4

Revision Content-----> Updated Sections: 1, 4, 7, 8, 10, 11, and 16.

Revision Date-----> May 07, 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
HMS	-	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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