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

## 1. PRODUCT IDENTIFIER

1.1 PRODUCT NAME ------ Glycol Ether PE (Ethoxypropanol)

PRODUCT NUMBER(S) -----> 152400

TRADE NAMES/SYNONYMS -----> 1-Ethoxy-2-Propanol,

**Propylene Glycol Monoethyl Ether** 

CAS-No: 1569-02-4 Chemical Family: Glycol Ether

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

RECOMMENDED USE: Industrial: Use as a solvent in coatings, Use as an intermediate, Use in cleaning agents, Manufacture of substances, Use as a fuel, Use in Laboratories.

**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 Specific target organ toxicity - single exposure (Category 3), Central nervous system, H336

2.2 GHS Label elements, including precautionary statements

#### **Pictogram**



Signal word: WARNING

**Hazard statement(s)** 

H226 Flammable liquid and vapor.

H336 May cause drowsiness or dizziness.

#### **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.

P271 Use only outdoors or in a well-ventilated area.

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.

P312 Call a POISON CENTER or doctor/ physician if you feel unwell.

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 - none

## 3. <u>INGREDIENTS</u>

#### 3.1 SUBSTANCE:

| Ingredient  | CAS No. | % by<br>Rang            | CLASSIFICATION  |
|---|---------|-------------------------|---|
| 1-ethoxy-2-Propanol 1569<br>EC-No.216-<br>Index-No.603-17<br>RegNo. 01-2119462792-32- | 7-00-8  | <br>  >90<br> <br> <br> | able liquids (Category 3)<br>SE (Category 3) Central Nervous<br>n |
| 2-ethoxy-1-Propanol 19089<br>EC-No.242-   | _       | <10<br> <br> <br>       | able Liquids (Category 3)<br>SE (Category 3) Central Nervous<br>n |

3.2 MIXTURE: Not applicable

## 4. <u>FIRST-AID MEASURES</u>

#### 4.1 DESCRIPTION OF FIRST AID MEASURES:

**INHALATION:** Ethoxypropanol

\*\*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: Ethoxypropanol**

\*\*FIRST AID- Remove contaminated clothing and shoes immediately. Wash affected area with soap or mild detergent and large amounts or water until no evidence of chemical remains (approximately 15-20 minutes). Get medical attention immediately.

## **EYE CONTACT: Ethoxypropanol**

\*\*<u>FIRST AID- Wash eyes immediately with large amounts of</u> 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:** Ethoxypropanol

\*\*<u>FIRST AID-</u> Do not induce vomiting. 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 eye irritation; burning and redness.

<u>Skin</u>: May be harmful if absorbed through skin. May causes skin irritation; <u>Inhalation</u>: May be harmful if inhaled. Causes respiratory tract irritation; May cause drowsiness and dizziness.

<u>Ingestion</u>: May be harmful if swallowed. May cause gastrointestinal irritation with nausea, vomiting and diarrhea.

**Chronic:** 

Inhalation: No information found.

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

Specific details on antidote: No recommendation given.

## **<u>5. FIRE FIGHTING MEASURES</u>**

Flash Point: 40°C (104°F) TCC LEL %:1.3 (V) Auto-ignition Temp: 287°C (549°F) UEL %:12 (V)

**UNIFORM FIRE CODE: Combustible Liquid Class II** 

# 5.1 <u>SUITABLE EXTINGUISHING MEDIA</u>: 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

<u>MIXTURE</u>: 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 vapor and liquid; isolate from all sources of ignition. Closed containers may explode when exposed to extreme

heat. Releases vapors at ambient temperatures. Fine sprays/mists may be combustible at temperature below flash point.

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

<u>HAZARDOUS COMBUSTION PRODUCTS</u>: 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. <u>ACCIDENTAL RELEASE MEASURES</u>

6.1 <u>PERSONAL PRECAUTIONS</u>, <u>PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES</u>: 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): 3: Flammable liquids

<u>CONTAINER WARNINGS:</u> 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

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

### EXPOSURE CONTROL (PERSONAL PROTECTION)

#### **8.1 CONTROL PARAMETERS:**

| Ingredient          | CAS No.  | % by WT.<br>Range       | Exposure<br>Limits              |
|---------------------|--|-------------------------|---------------------------------|
|                     | 1569-02-4<br>EC-No.216-374-5<br>c-No.603-177-00-8<br>9462792-32-XXXX | <br>  >90<br> <br> <br> | <br> N.E.<br> N.E.<br> N.E.<br> |
| 2-ethoxy-1-Propanol | 19089-47-5<br>EC-No.242-806-7  | <br>  <10<br>           | <br> N.E.<br>                   |

**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.

<u>RESPIRATORY PROTECTION</u>: 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, an air purifying NIOSH/MSHA Approved respirator with full face-piece and organic vapor cartridges. For emergencies and

concentrations in confined areas use a NIOSH/MSHA approved positive pressure full face-piece supplied air respirator (SCBA).

<u>BODY CLOTHING</u>: 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.

<u>SKIN PROTECTION</u>: Employee must wear appropriate protective gloves to prevent contact with this substance. Rubber or neoprene chemical resistant gloves.

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

<u>EYE/FACE PROTECTION</u>: 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:

Glycol Ether PE (Ethoxypropanol) 1569-02-4

APPEARANCE:

COLOR:

COLOR:

COlorless

ODOR:

CHear liquid

Colorless

Ether-like odor

No data Available

No data available

MOLECULAR WEIGHT: 104.14 amu MELTING POINT: < -70°C (< -94°F)

BOILING POINT: 130.5 - 134.5°C (266.9 - 274.1°F)

 SPECIFIC GRAVITY:
 0.887@20°C

 DENSITY (25°C):
 0.887 g/ml @20°C

VAPOR PRESSURE: 10 mm Hg @ 20°C (68.0°F)

VAPOR DENSITY: 3.59

WATER SOLUBILITY: No data available

PARTITION COEFFICIENT N- log Pow: < 1 at 20°C (68°F)

OCTANOL/WATER

FLASH POINT: 40°C (104°F) - closed cup

**EVAPORATION RATE (BUTYL ACETATE=1): No data available** 

UPPER FLAMMABILITY LIMIT:

LOWER FLAMMABILITY LIMIT:

AUTO INGNITION TEMPERATURE:

DECOMPOSITION TEMPERATURE:

VISCOSITY:

EXPLOSIVE PROPERTIES:

OXIDIZING PROPERTIES:

12.0% (V)

1.3% (V)

287°C (549°F)

No data available

2.0mPa.s@20°C (68°F)

No data available

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: No data available

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

- 10.4 <u>CONDITIONS TO AVOID</u>: Heat, Sparks, Pilot Lights, Static Electricity, Open Flame and oxidizing conditions.
- 10.5 <u>INCOMPATIBLE MATERIALS</u>: Strong oxidants such as liquid chlorine, sodium hypochlorite, inorganic acids e.g. hydrochloric acid hydrogen peroxide.
- 10.6 <u>HAZARDOUS DECOMPOSITION PRODUCTS</u>: Fumes, Smoke, Carbon Monoxide, Carbon Dioxide 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 eye irritation; burning and redness.

Skin> May be harmful if absorbed through skin. May causes skin irritation;

Inhalation> May be harmful if inhaled. Causes respiratory tract irritation; May cause drowsiness and dizziness.

Ingestion> May be harmful if swallowed. May cause gastrointestinal irritation with nausea, vomiting and diarrhea.

Chronic:

Inhalation: No information found.

**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-ethoxy-2-<br>Propanol | <br>  1792mg/kg<br> | <br>  >2000mg/kg<br> | <br> <br>  9.59mg/L/4hr<br> | <br> <br> <br> |
|-------------------------|---------------------|----------------------|-----------------------------|----------------|
| 2-ethoxy -1-propanol    | l<br>  7.11g/kg<br> | <br> <br>            | !<br> <br>                  | <br> <br>      |
|                         | į                   | į                    | į                           | į              |
|                         |                     |                      |                             | ļ              |
|                         |                     |                      | l                           | l              |

SKIN CORROSION/IRRITATION: Skin - Rabbit Result: No skin irritation - 4 h (OECD Test Guideline 404)

SERIOUS EYE DAMAGE/EYE IRRITATION: Eyes - Rabbit Result: No eye irritation (OECD Test Guideline 405)

RESPIRATORY OR SKIN SENSITIZATION: Maximization Test (GPMT) - Guinea pig Result: Does not cause skin sensitization

**MUTAGENIC EFFECTS: Ames test 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): Inhalation - May cause drowsiness or dizziness. - Central nervous system

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

**ASPIRATION HAZARD: No data available** 

**ADDITIONAL DATA: May cause drowsiness or dizziness** 

## **12. ECOLOGICAL INFORMATION**

#### 12.1 AQUATIC TOXICITY:

Toxicity to fish:

LC50 - Leuciscus idus (Golden orfe) - 4,600 - 10,000 mg/l - 96 h

Method: DIN 38412

Toxicity to daphnia and other aquatic invertebrates

EC50 Daphnia magna (Water flea) - 21,100 - 25,900 mg/l - 48 h immobilization Toxicity to algae:

EC50 - Selenastrum capricornutum (green algae) - > 1,000 mg/l - 7 d static test

- 12.2 <u>PERSISTANCE AND DEGRADABILITY</u>: aerobic Exposure time 28 d Result: 68 % Readily biodegradable. (OECD Test Guideline 301D)
- 12.3 <u>BIOACCUMULATIVE POTENTIAL</u>: The measured octanol/water(log Pow) partition coefficient 0<1.0 @ 20 °C (68 °F)

<u>Biological Oxygen Demand (BOD)</u>: No data available 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 <u>WASTE TREATMENT METHODS:</u> 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. Incinerate under controlled conditions in a permitted facility. Dispose in accordance with all applicable disposal regulations. 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-Ethoxy-2-propanol) |
| 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                          |

| Sea Transport (IMDG)  |
|---|
| 14.1 ID Number> UN3271  |
| 14.2 Proper shipping name> ETHERS, N.O.S. (1-Ethoxy-2-propanol  |
| 14.3 Hazard Classification> 3 (Flammable Liquid)                |
| Label Codes> 3  |
| 14.4 Package Code> III  |
| 14.5 Marine Pollutant> Yes                                      |
| 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-Ethoxy-2-propanol) |
| 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                         |
| 14.0 Opecial precautions for user                               |

## 15. <u>REGULATORY INFORMATION</u>

# 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, Fire Hazard

## <u>CERCLA</u> (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 1-Ethoxy-2-propanol CAS-No. 1569-02-4

# New Jersey Right to Know Components 1-Ethoxy-2-propanol CAS-No. 1569-02-4

#### **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)

1-Ethoxy-2-propanol CAS-No. 1569-02-4 is listed on the TSCA Inventory.

#### **International Inventories:**

| <b>Country or Region</b> | Inventory Name On inventory y                              | es/no |
|--------------------------|--|-------|
|                          |  |       |
| <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   |
| Europe                   | European Inventory of Existing Commercial Chemicals        | Yes   |
|                          | Substances (EINECS)  |       |
| <u>Europe</u>            | European List of Notified Chemical Substances (ELINCS)     | No    |
| <u>Japan</u>             | Inventory of Existing and New Chemical Substances (ENCS)   | Yes   |
| Japan                    | Industrial Safety & Health Law Inventory (ISHL)            | Yes   |
| Korea                    | Existing Chemicals List (ECL)                              | Yes   |
| <u>Mexico</u>            | National Inventory of Chemical Substances (INSQ)           | Yes   |
| New Zealand              | New Zealand Inventory                                      | Yes   |
| <b>Philippines</b>       | Philippine Inventory of Chemicals and Chemical Substances  | Yes   |
| Curitmoulousel           | (PICCS)  | Voc   |
| <u>Switzerland</u>       | Inventory of Notified New Substances (CHINV)               | Yes   |
| <u>Taiwan</u>            | National Existing Chemical Inventory (NECI)                | Yes   |
| United States &          | Toxic Substances Control Act Inventory                     | Yes   |
| Puerto Rico              |  |       |

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=2 Reactivity=0

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

Hazard statement(s) from Section 2 and 3:

H226 Flammable liquid and vapor.

#### H336 May cause drowsiness or dizziness.

Date of preparation-----> August 13, 2013

Revision Number----> 1.4

Revision Content-----> Updated Sections:1, 4, 5, 7, 8, 10, 11, and 16.

Revision Date----- May 07, 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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