

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

1. PRODUCT IDENTIFIER

1.1 PRODUCT NAME -----> **Ethylene Glycol All Grades**

PRODUCT NUMBER(S)-----> 158500, 158200, 157600, 157610, 157630

TRADE NAMES AND SYNONYMS ----> 1,2-Ethanediol; glycol; 1,2-Dihydroxyethane

CAS-No: 107-21-1

CHEMICAL FAMILY: Diol

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

RECOMMENDED USE: Industrial: Use in lubricants, Use in water treatment chemicals, Use in cleaning agents, Polymer production, Printing inks, Cooling chemicals, Use in coatings, Use in functional fluids, Oilfield drilling, Use in metal working fluids, Distribution of substance, Manufacture of Substances; 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)

Acute Toxicity Oral (Category 4), H302

Specific target organ toxicity - repeated exposure, Oral (Category 2), Kidney, H373

2.2 GHS Label elements, including precautionary statements



Pictogram

GHS07

GHS08

Signal word: **WARNING**

Hazard statement(s)

H302 Harmful if swallowed.

H373 May cause damage to organs (Kidney) through prolonged or repeated exposure if swallowed.

Precautionary statement(s)

Prevention:

P260 Do not breathe dust/ fume/ gas/ mist/ vapors/ spray.

P264 Wash skin thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

Response:

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

P314 Get medical advice/ attention if you feel unwell

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
Ethylene Glycol EC.No.203-473-3 Index No.603-027-00-1 Reg.-No.01-2119456816-28-XXXX	107-21-1	96-100	Acute Toxicity Oral (Category 4), H304 STOT-RE, Oral (Category 2), Kidney, H373
Diethylene Glycol EC-No.203-872-2 Index No. 603-140-00-6 Reg. No. 01-2119457857-21-XXXX	111-46-6	2-4	Acute toxicity, Oral (Category 4), H304 STOT-RE, Oral (Category 2), Kidney, H373

3.2 MIXTURE: Not applicable

4. FIRST-AID MEASURES

4.1 DESCRIPTION OF FIRST AID MEASURES:

INHALATION: Ethylene Glycol

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

SKIN CONTACT: Ethylene Glycol

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

EYE CONTACT: Ethylene Glycol

****FIRST AID- Wash eyes immediately with large amounts of water, occasionally lifting upper and lower lids, until no evidence of chemical remains (approximately 15-20 minutes). Remove contact lenses, if worn, after initial flush. Consult a physician if irritation persists.**

INGESTION: Ethylene Glycol

****FIRST AID- Do not induce vomiting. Never give anything by mouth to an unconscious person. Have patient drink several glasses of water. Consult a physician or poison control center, treat symptomatically.**

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

Eye: Vapors and mists are mildly irritating; Splashes may cause irritation, pain and eye damage.

Skin: Mildly irritating;

Inhalation: If heated or sprayed concentrations may be attained that are sufficient to cause irritation to the upper respiratory tract. May cause nausea, vomiting, dizziness and drowsiness. When heated or misted, has produced rapid, involuntary eye movement and coma.

Ingestion: Initial symptoms in massive dosage parallel alcohol intoxication, progressing to CNS depression, vomiting, headache, rapid respiratory and heart rate, lowered blood pressure, stupor, collapse and unconsciousness with convulsions. Death from respiratory arrest or cardiovascular collapse may follow. Lethal dose in humans

100ml (3-4 ounces)

Chronic Exposure: Repeated small exposures by any route can cause severe kidney problems. Brain damage may also occur.

Medical Conditions Aggravated by Exposure: Persons with pre-existing skin disorders, eye problems, or impaired liver, kidney, or respiratory function may be more susceptible to the effects of this substance.

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

Notes to Physician: For Ethylene Glycol; Give sodium bicarbonate intravenously to treat acidosis. Urinalysis may show low specific gravity, proteinuria, pyuria, cylindruria, hematuria, calcium oxalate, and hippuric acid crystals. Ethanol can be used in antidotal treatment but monitor blood glucose when administering ethanol because it can cause hypoglycemia. Consider infusion of a diuretic such as mannitol to help prevent or control brain edema and hemodialysis to remove ethylene glycol from circulation.

5. FIRE FIGHTING MEASURES

FLASH POINT: 111°C (232°F)

LEL %:3.2 (V)

AUTO-IGNITION TEMP: in air is 400°C (752°F)

UEL %:15.3 (V)

UNIFORM FIRE CODE: Combustible Liquid: III-B

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 all sources of ignition. Closed containers may explode when exposed to extreme heat.

Sensitivity to Mechanical Impact: No

Sensitivity to Static Discharge: No

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

HAZARDOUS COMBUSTION PRODUCTS: Carbon oxides

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.

6. ACCIDENTAL RELEASE MEASURES

6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES: Eliminate ignition sources in the vicinity of the spill or released vapor. Immediately evacuate all nonessential people. Verify that responders are properly trained and wearing appropriate respiratory equipment and fire resistant protective clothing during cleanup operations.

6.2 ENVIRONMENTAL PRECAUTIONS:

Keep out of water sources, drains and sewers. Do not flush into surface water or sanitary sewer system

6.3 METHODS AND MATERIAL FOR CONTAINMENT AND CLEANING UP:

Methods for cleanup and containment:

Use explosion proof equipment. Shut off valves, contain spill, 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.

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.

REPORTABLE QUANTITY (RQ): 5000lbs.

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: Liquid evaporates and forms vapor (fumes), which can catch fire and burn. 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. 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.

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. Recommended storage temperature: 15 - 25°C. Store large quantities only in buildings designed to comply with OSHA 1910.106. Keep containers tight and upright to prevent leakage. Do not store with incompatible materials. Keep containers closed when not in use. Hygroscopic. Storage class (TRGS 510): 10: Combustible 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.	Exposure Range Limits
Ethylene Glycol	107-21-1 EC-No.203-473-3 Index-No.603-027-00-1 Reg.-No.01-2119456816-28-XXXX	96-100	25ppm TWA (ACGIH) 50ppm STEL (ACGIH) 50ppm TWA (OSHA) (Ceiling)

Diethylene Glycol	111-46-6	2-4	N.E.
	EC-No.203-872-2		
	Index No. 603-140-00-6		
	Reg. No. 01-2119457857-21-XXXX		

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 2), 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):

Atmospheric levels should be maintained below the exposure limit. 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 NIOSH/MSHA approved positive pressure full face-piece supplied air respirator (SCBA).

SKIN PROTECTION: Employee must wear appropriate protective gloves to prevent contact with this substance.

Full contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: 480 min

Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: 480 min

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.

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:

Ethylene Glycol 107-21-1

APPEARANCE:	Clear oily liquid
COLOR:	Colorless
ODOR:	No distinct odor.
ODOR THRESHOLD:	No data available
pH:	No data available
MOLECULAR WEIGHT:	106.12 amu
MELTING POINT:	-13°C (9°F)
BOILING POINT:	196 - 198°C (385 - 388°F)
SPECIFIC GRAVITY:	1.129@20°C
DENSITY (25°C):	1.113 g/ml @25°C
VAPOR PRESSURE:	0.08 mm Hg @ 20°C (68.0°F)
VAPOR DENSITY:	2.14
WATER SOLUBILITY:	Complete
PARTITION COEFFICIENT N-OCTANOL/WATER	log Pow: -1.36
FLASH POINT:	111°C (232°F) - closed cup
EVAPORATION RATE (BUTYL ACETATE=1):	1
UPPER FLAMMABILITY LIMIT:	15.3% (V)
LOWER FLAMMABILITY LIMIT:	3.2% (V)
AUTO IGNITION TEMPERATURE:	400°C (752°F)
DECOMPOSITION TEMPERATURE:	No data available
VISCOSITY:	No data available
EXPLOSIVE PROPERTIES:	No data available
OXIDIZING PROPERTIES:	No data available

9.2 OTHER INFORMATION: No data available

10. STABILITY AND REACTIVITY INFORMATION

10.1 REACTIVITY: No data available.

10.2 CHEMICAL STABILITY: Unstable () Stable (X)

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

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

10.4 CONDITIONS TO AVOID: Heat, Sparks, and Open Flame.

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

10.6 HAZARDOUS DECOMPOSITION PRODUCTS: From fire: Fumes, Smoke, Carbon Monoxide and Carbon Dioxide.

11. TOXICOLOGICAL INFORMATION

11.1 INFORMATION ON TOXICOLOGICAL EFFECTS:

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

ACUTE HEALTH EFFECTS:

Effects of overexposure:

Eye> Vapors and mists are mildly irritating; Splashes may cause irritation, pain and eye damage.

Skin> Mildly irritating;

Inhalation> If heated or sprayed concentrations may be attained that are sufficient to cause irritation to the upper respiratory tract. May cause nausea, vomiting, dizziness and drowsiness. When heated or misted, has produced rapid, involuntary eye movement and coma.

Ingestion> Initial symptoms in massive dosage parallel alcohol intoxication, progressing to CNS depression, vomiting, headache, rapid respiratory and heart rate, lowered blood pressure, stupor, collapse and unconsciousness with convulsions. Death from respiratory arrest or cardiovascular collapse may follow. Lethal dose in humans
100ml (3-4 ounces)

Chronic Exposure: Repeated small exposures by any route can cause severe kidney problems. Brain damage may also occur.

Medical Conditions Aggravated by Exposure> Persons with pre-existing skin disorders, eye problems, or impaired liver, kidney, or respiratory function may be more susceptible to the effects of this substance.`

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
Ethylene Glycol	4700mg/kg	10626mg/kg	1460ppm/4hr
Diethylene Glycol	12500mg/kg	12000mg/kg	

SKIN CORROSION/IRRITATION: Skin - Rabbit Result: No skin irritation

SERIOUS EYE DAMAGE/EYE IRRITATION: Eyes - Rabbit Result: Mild eye irritation - 24 h

RESPIRATORY OR SKIN SENSITIZATION: No data available

MUTAGENIC EFFECTS: No information available.

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 identified as a carcinogen or potential carcinogen by OSHA.

Based on long-term animal studies, diethylene glycol, is not believed to pose a carcinogenic risk to man. Ethylene Glycol did not cause cancer in long-term animal studies.

REPRODUCTIVE TOXICITY: Based on animal studies, ingestion of very large amounts of ethylene glycol appears to be the major and possibly only route of exposure to produce birth defects.

Laboratory experiments have shown teratogenic effects. Overexposure may cause reproductive disorder(s) based on tests with laboratory animals

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): Oral - May cause damage to organs through prolonged or repeated exposure. - Kidney

ASPIRATION HAZARD: No data available

11.2 ADDITIONAL DATA: When ingested early symptoms mimic alcohol

inebriation and are followed by nausea, vomiting, abdominal pain, weakness, muscle tenderness, respiratory failure, convulsions, cardiovascular collapse, pulmonary edema, hypocalcemic tetany, and severe metabolic acidosis. Without treatment, death may occur in 8 to 24 hours. Victims who survive the initial toxicity period usually develop renal failure along with brain and liver damage. Exposure to and/or consumption of alcohol may increase toxic effects. Observations in animals include kidney and liver effects and deposition of calcium salts in various tissues after long-term dietary intake of ethylene glycol.

RTECS: KW2975000

12. ECOLOGICAL INFORMATION

12.1 AQUATIC TOXICITY (Acute):

Toxicity to fish:

LC50 - *Oncorhynchus mykiss* (rainbow trout) - 18,500 mg/l - 96 h

LC50 - *Leuciscus idus* (Golden orfe) - > 10,000 mg/l - 48 h

LC50 96-hour fish are over 100mg/L.

NOEC - *Pimephales promelas* (fathead minnow) - 32,000 mg/l - 7 d

NOEC - *Pimephales promelas* (fathead minnow) - 39,140 mg/l - 96 h

Toxicity to daphnia and other aquatic invertebrates:

EC50 - *Daphnia magna* (Water flea) - 74,000 mg/l - 24 h

NOEC - *Daphnia* - 24,000 mg/l - 48 h

LC50 - *Daphnia magna* (Water flea) - 41,000 mg/l - 48 h

12.2 PERSISTANCE AND DEGRADABILITY:

Ratio BOD/ThBOD 0.78 %

For Ethylene Glycol when released into the soil, this material is expected to readily biodegrade. When released into the soil, this material is expected to leach into ground water. When released into the water, this material is expected to readily biodegrade. When released into the water this material is expected to have a half-life between 1 and 10 days.

12.3 BIOACCUMULATIVE POTENTIAL: This material is not expected to bioaccumulate. Ethylene Glycol has a log octanol water partition coefficient of log Pow -1.36. When release into the air, this material, is expected to be readily degraded by reaction with photochemically produced hydroxyl radicals.

Bio-concentration Factor (BCF): 0.6

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.

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-----> UN3082
- 14.2 USDOT Shipping Name-----> Environmentally hazardous substance,
liquid, n.o.s. (Ethylene Glycol)
- 14.3 USDOT Hazard Classification-----> 9
USDOT Label Codes-----> 9
- 14.4 USDOT Package Code-----> III
- 14.5 Environmental hazard-----> Yes
- 14.6 Special precautions for user-----> None
Emergency Response Guide-----> 171
Reportable quantity-----> 5000lbs.

Sea Transport (IMDG)

- 14.1 ID Number-----> N/A
- 14.2 Proper shipping name-----> Not Hazardous Goods
- 14.3 Hazard Classification-----> N/A
Label Codes-----> N/A
- 14.4 Package Code-----> N/A
- 14.5 Environmental hazard-----> None
- 14.6 Special precautions for user-----> N/A
EMS-Number-----> N/A

Air Transport (IATA)

- 14.1 ID Number-----> N/A
- 14.2 Proper shipping name-----> Not Hazardous Goods

14.3 Hazard Classification-----> N/A
Label Codes-----> N/A
14.4 Package Code-----> N/A
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) - Listed Ethylene Glycol
CAS 107-21-1**

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

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

**SECTION 102(A) Hazardous Substances (40 CFR 302.4) - Listed
Ethylene glycol CAS-No.107-21-1; Reportable Quantity – 5000lbs**

SECTION 101(14) Reportable Quantity: 5000lbs.

**Massachusetts Right to Know Components
Ethylene glycol CAS-No.107-21-1**

**Pennsylvania Right to Know Components
Ethylene glycol CAS-No.107-21-1**

**New Jersey Right to Know Components
Ethylene glycol CAS-No.107-21-1**

**California Prop. 65 Components
is or are known to State of California to cause cancer, birth defects, or any other
reproductive harm. Ethylene Glycol CAS-No.107-21-1**

TSCA (Toxic Substance Control Act)

Ethylene Glycol CAS 107-21-1 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=2 Fire=1 Reactivity=0
HMIS RATINGS (SCALE 0-4): Health=2 Fire=1 Reactivity=0

Hazard statement(s) from Section 2 and 3:

H302 Harmful if swallowed.

H373 May cause damage to organs (Kidney) through prolonged or repeated exposure if swallowed.

Date of preparation-----> February 24, 2005

Revision Number-----> 1.7

Revision Content-----> Updated sections: 1, 3, 4, 5, 7, 8, 10, 11, 15, and 16

Revision Date-----> January 28, 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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