

MATERIAL SAFETY DATA SHEET (C1)R
G.J. Chemical Co

Section I Identification

Distribution Source-----> G.J. Chemical Co., Inc.
Street Address-----> 370-376 Adams St., Newark, NJ 07114
Telephone Number-----> 973-589-1450
Emergency Telephone Number> 1-800-424-9300 Chemtrec

Product Name-----> Epoxy Reactive Diluent 8
Product Number-----> 151314
Chemical Name or Synonyms--> Glycidyl Ethers

Section II Ingredients

Ingredient	CAS No.	% by WT. Range	Exposure Limits

Oxirane, mono[(C12-C14-alkyloxy) methyl] derivatives	68609-97-2 EC#271-846-8	100	N.E.

Key: (PEL) = OSHA
(TLV) = OSHA & ACGIH (STEL) = ACGIH
CAS = Chemical Abstracts Registry Number
IDLH = Immediate Danger to Life and Health

Section III Health Hazard Data

Physical Appearance: Clear Liquid

EMERGENCY OVERVIEW:

Irritating to eyes and skin.

May cause sensitization by skin contact.

Not classifiable as flammable but will burn. Material will not burn unless preheated.

CERCLA RATINGS (SCALE 0-3):	Health=2	Fire=1	Reactivity=0	Persistence=0
NFPA RATINGS (SCALE 0-4):	Health=2	Fire=1	Reactivity=0	
HMIS RATINGS (SCALE 0-4):	Health=2	Fire=1	Reactivity=0	PPE=G

REACH R-PHRASES: R38-40-42/43

REACH S-PHRASES: S23-26-36

REACH SYMBOL: X

See Section 16 for Reach definitions.

Exposure limits: See Section II

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

Effects of overexposure: Acute: Eye> Mildly irritating; Skin> Skin sensitization (Allergy) may be evidenced by rashes, especially hives; Inhalation> Moderately irritating to respiratory passages at elevated temperatures.

Ingestion> Not likely to be a relevant route of exposure.

Chronic: N/A

Medical Conditions Aggravated by Exposure> Preexisting skin and eye disorders may be aggravated by exposure to this product. Preexisting skin or lung allergies may increase the chance of developing increased allergy symptoms from exposure to this product.

Section IV First Aid Measures

Emergency and First Aid Procedures: Inhalation> Remove from exposure, restore breathing. Keep warm and quiet. Notify physician.

Eyes (Splash)> Immediately flush eyes with water for 15 minutes. Hold eyelids open for complete irrigation. Rest eyes for 30 minutes, if redness, burning,

blurred vision or swelling persist take to a physician. Skin (Splash)> Wash affected area with soap and water. Remove contaminated clothing. Consult a

physician if irritation persists. Do not reuse clothing until cleaned. Contaminated leather articles, including shoes cannot be decontaminated and should be destroyed to prevent reuse. If rapid recovery does not occur, get medical attention immediately. Ingestion> Do not induce vomiting. Have victim rinse out mouth with water, then drink sips of water to remove taste from mouth. Consult a physician or poison control center, treat symptomatically.

Section V Fire and Explosion Hazard Data

Flash Point: >309 °F PMCC

LEL %: N/A

UEL %: N/A

Extinguishing Media Foam--> x CO2--> x Dry Chemical--> x
Water-fog--> x Other-->

Special Fire Fighting Procedures: Material will not burn unless preheated. Shut off source. Water fog may be used to cool closed containers exposed to extreme heat to prevent pressure build up and possible auto ignition or explosion. Wear NIOSH approved positive pressure self contained breathing apparatus for confined spaces and full bunker gear. Not classifiable as flammable but will burn. **Unusual Fire and Explosion Hazards:** Material will float on water and can be reignited. Keep containers tightly closed. Combustible liquid; isolate from all sources of ignition. Closed containers may explode when exposed to extreme heat.

Section VI Accidental Release Measures

Steps to be taken in case material is released or spilled> Shut off valves, contain spill, keep out of water sources and sewers, for small spills add non-flammable absorbent in spill area. Place saturated absorbent in an approved container for disposal. Remove contaminated soil to remove contaminated trace residues. for large spills remove with vacuum trucks or pump to storage/salvage vessels. Then clean up residue with an absorbent such as clay, silica or other suitable material. 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.

Section VII Handling and Storage

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. Keep away from direct sunlight.

Do not take internally. Avoid prolonged or repeated contact with skin, eyes, and clothing. Do not breathe mists, aerosols or spray. Containers should be Bonded and Grounded when pouring. 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.

Avoid breathing vapors in top of shipping container. To prevent thermal burns avoid contact with hot product. Use with adequate ventilation. Use non-sparking tools to open or close containers.

Section VIII Exposure Controls and Personal Protection

Respiratory Protection> No respiratory protection is usually required under normal conditions of use. If there is a risk of vapor inhalation use a NIOSH/OSHA approved respirator to prevent overexposure.

Ventilation> 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.

Protective Gloves> Butyl Rubber chemical resistant gloves.

Eye Protection> Use safety eyewear with splash guards or face shield.

Other Protective Clothing or Equipment> Use chemical resistant apron or other impervious clothing. Remove and wash contaminated clothing before reuse. Shower and eyewash should be easily accessible to the work area.

Section IX Physical and Chemical Properties

Appearance -----> Clear liquid.

Odor-----> Mild

Boiling Range (°F)----->>300

Solubility in water-----> Negligible

Vapor Density (air=1)-----> N/A

Evaporation Rate (Butyl Acetate=1)> N/A

Vapor Pressure-----> <13.3Pa

Specific Gravity-----> 0.899

Melting/Freeze point-----> 36°F

Section X Stability and Reactivity Data

Stability: Unstable () Stable (X)

Conditions to avoid--> Extremes of temperature and direct sunlight. Exposure to water vapor.

Incompatibility (Materials to Avoid)--> Can react vigorously with strong oxidizing agents, strong Lewis or mineral acids, and strong mineral and organic bases. Especially primary and secondary aliphatic amines. Polymerizes exothermically with amines, mercaptans and Lewis acids at ambient temperature.

Hazardous decomposition products--> Fumes, Smoke, Carbon Monoxide, Decomposition and combustion products may be toxic.

Hazardous Polymerization--> May occur () Will not occur (X)

Section XI Toxicity Data

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
Oxirane, mono[(C12-C14-alkyloxy) methyl] derivatives	> 2000mg/kg	2000mg/kg	>5mg/L



This product has not been classified by IARC, the International Agency for Research on Cancer.

Not considered to be Mutagenic hazard.

Section XII Ecological Information

Biodegradability - n-Octanol/Water partition coefficient is $\log P_{ow} > 3$

Ecotoxicity - This section will be updated as ecological reviews are completed.

Section XIII Disposal Considerations

Waste Disposal Method> 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. This material as waste would not be considered hazardous by RCRA criteria.

Section XIV Transport Information

DOT Shipping Name-----> Not DOT Regulated

DOT Hazard Classification---->

DOT Label Codes----->

DOT ID Number----->

DOT Package Code----->

Emergency Response Guide->

Marine Pollutant----->

Section XV Regulatory Information

(RQ) Reportable Quantity-> No RQ CERCLA

Sara 302 - No TPQ

Sara 313 - No de minimis concentration

Sara Section 311 List Hazards:

(a) Immediate Acute Health>>>>>>> Yes

(b) Delayed Chronic Health>>>>>>> Yes

(c) Fire>>>> N/A (d) Reactive>>>> N/A

(e) Sudden Release of Pressure>>>>N/A

Components not listed in Section II;

1-chloro-2,3-epoxy propane CAS 106-89-8 at <10ppm under California Safe

Drinking Water & Toxic Enforcement Act was listed Oct. 1, 1990 as carcinogenic, listed under PA right to know as a special hazard and MA right to know as carcinogenic..

Section XVI Other Information

HMIS (Hazardous Materials Identification System)

Hazard Rating:

4-Extreme

3-High

2-Moderate

1-Slight

0-Insignificant

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/ | \
Fire- / | \-Reactivity
/ 1 | 0 \
<---|--->
 \ 2 | G /
Toxicity- \ | /-Personal
 \ | / **Protection**
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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

REACH SYMBOLS:

Xi – Irritant; Xn – Harmful; F – Flammable; N – Environment

SELECTED REACH RISK PHRASES (R-PHRASES):

R10: Flammable

R11: Highly Flammable

R20/22: Harmful by inhalation and if swallowed.

R22: Harmful if swallowed.

R36: Irritating to the eyes.

R36/38: Irritating to eyes and skin.

R37: Irritating to the respiratory system.

R37/38: Irritating to the respiratory system and skin.

R38: Irritating to skin

R40: Limited evidence of carcinogenic effect.

R41: Risk of serious damage to eyes.

R42/43: May cause sensitization by inhalation and skin contact.

R43: May cause sensitization by skin contact.

R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R52/53: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R65: Harmful: may cause lung damage if swallowed

R67: Vapors may cause drowsiness and dizziness.

R68: Possible risk of irreversible effects.

SELECTED SAFETY PHRASES (S-PHRASES):

S2: Keep out of the reach of children.

S7/9: Keep container tightly closed and in a well ventilated place.

S9: Keep container in a well-ventilated place.

S13: Keep away from food, drink and animal feeding stuffs.

S16: Keep away from sources of ignition – No smoking.

S23: Do not breathe fumes/vapors/spray.

S24: Avoid contact with skin.

S24/25: Avoid contact with skin and eyes.

S25: Avoid contact with eyes.

S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S28: After contact with skin, wash immediately with plenty of water and soap.

S29: Do not empty into drains.

S36: Wear suitable protective clothing.

S36/37: Wear suitable protective clothing and gloves.

S37/39: Wear suitable gloves and eye/face protection.

S46: If swallowed, seek medical advice immediately and show this container or label.

S60: This material and its container must be disposed of as hazardous waste.

S61: Avoid release to the environment. Refer to special instructions/Safety data sheets.

S62: If swallowed do not induce vomiting: seek medical advice immediately and show this container or label.

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