

# ISOPROPYL GLYCIDYL ETHER

IGE

## CAUTIONARY RESPONSE INFORMATION

<b>Common Synonyms</b> Glycidyl isopropyl ether Isopropyl epoxypropyl ether	Liquid	Colorless
<p><b>Wear full impervious protective clothing and approved respirator.</b>  <b>Remove all ignition sources.</b>  <b>Call fire department.</b>  <b>Notify local health and pollution control agencies.</b></p>		
<b>Fire</b>	<p>Flammable.                  Vapors can flow along surfaces to remote ignition source and flash back.                  Wear full protective clothing and self-contained breathing apparatus.                  Extinguish with dry chemical, carbon dioxide, or alcohol foam.</p>	
<b>Exposure</b>	<p>CALL FOR MEDICAL AID.</p> <p>VAPOR                  Move victim to fresh air.                  If breathing is difficult, give oxygen.</p> <p>LIQUID                  Remove contaminated clothing and shoes.                  Wash skin with soap and water.                  IF IN EYES, hold eyelids open and flush with plenty of water.</p>	
<b>Water Pollution</b>	<p>Effect of low concentrations on aquatic life is unknown.                  May be dangerous if it enters water intakes.                  Notify local health and wildlife officials.                  Notify operators of nearby water intakes.</p>	

<b>1. CORRECTIVE RESPONSE ACTIONS</b> Stop discharge	<b>2. CHEMICAL DESIGNATIONS</b> 2.1 CG Compatibility Group: Not listed. 2.2 Formula: C <sub>3</sub> H <sub>7</sub> OCH <sub>2</sub> CHOCH <sub>2</sub> 2.3 IMO/UN Designation: Currently not available 2.4 DOT ID No.: Not listed. 2.5 CAS Registry No.: 4016-14-2 2.6 NAERG Guide No.: Not listed 2.7 Standard Industrial Trade Classification: 51616
<b>3. HEALTH HAZARDS</b>	
<p><b>3.1 Personal Protective Equipment:</b> Wear full impervious protective clothing and approved respirator. Where splashing is possible wear full face shield or chemical safety goggles.</p> <p><b>3.2 Symptoms Following Exposure:</b> Exposure can cause mental confusion and moderate irritation of the eyes, skin, and respiratory tract. Chronic exposure can cause dermatitis and skin sensitization.</p> <p><b>3.3 Treatment of Exposure:</b> Get medical attention. <b>INHALATION:</b> Remove to fresh air. <b>EYES:</b> Flush with water for at least 15 min., lifting lids occasionally. Contact lenses should not be worn when working with this chemical. <b>SKIN:</b> Remove contaminated clothing and shoes. Wash with soap and water.</p> <p><b>3.4 TLV-TWA:</b> 50 ppm.  <b>3.5 TLV-STEL:</b> 75 ppm  <b>3.6 TLV-Ceiling:</b> Not listed.  <b>3.7 Toxicity by Ingestion:</b> Currently not available  <b>3.8 Toxicity by Inhalation:</b> Currently not available.  <b>3.9 Chronic Toxicity:</b> Acute oral administration to mice, rats, and rabbits caused central nervous system depression. Subchronic inhalation by rats caused decreased weight gain, inflammation of the lungs, pneumonia, and respiratory distress.  <b>3.10 Vapor (Gas) Irritant Characteristics:</b> Vapors are moderately irritating such that personnel will not usually tolerate moderate or high concentrations.  <b>3.11 Liquid or Solid Characteristics:</b> Minimum hazard. If spilled on clothing and allowed to remain, may cause smarting and reddening of skin.  <b>3.12 Odor Threshold:</b> Currently not available.  <b>3.13 IDLH Value:</b> 400 ppm.  <b>3.14 OSHA PEL-TWA:</b> 50 ppm.  <b>3.15 OSHA PEL-STEL:</b> Not listed.  <b>3.16 OSHA PEL-Ceiling:</b> Not listed.  <b>3.17 EPA AEGL:</b> Not listed</p>	

## 4. FIRE HAZARDS

- 4.1 Flash Point: 92°F C.C.
- 4.2 Flammable Limits in Air: Currently not available
- 4.3 Fire Extinguishing Agents: Dry chemical, carbon dioxide or alcohol foam.
- 4.4 Fire Extinguishing Agents Not to Be Used: Water.
- 4.5 Special Hazards of Combustion  
 Products: Toxic vapors and gases, such as carbon monoxide, may be released in a fire.
- 4.6 Behavior in Fire: Vapors can flow along surfaces to remote ignition source and flash back.
- 4.7 Auto Ignition Temperature: Currently not available
- 4.8 Electrical Hazards: May cause some plastics, coatings, and rubber to deteriorate (insulators).
- 4.9 Burning Rate: Currently not available
- 4.10 Adiabatic Flame Temperature: Currently not available
- 4.11 Stoichiometric Air to Fuel Ratio: 38.1 (calc.)
- 4.12 Flame Temperature: Currently not available
- 4.13 Combustion Molar Ratio (Reactant to Product): 12.0 (calc.)
- 4.14 Minimum Oxygen Concentration for Combustion (MOCC): Not listed

## 5. CHEMICAL REACTIVITY

- 5.1 Reactivity with Water: No reaction.
- 5.2 Reactivity with Common Materials:  
 Contact with strong oxidizing agents can cause fires and explosions. Contact with strong caustics may cause polymerization. Exposure to air or light may cause formation of explosive peroxides.
- 5.3 Stability During Transport: Stable.
- 5.4 Neutralizing Agents for Acids and Caustics: Not pertinent.
- 5.5 Polymerization: May occur in contact with strong caustics.
- 5.6 Inhibitor of Polymerization: Currently not available

## 6. WATER POLLUTION

- 6.1 Aquatic Toxicity: Currently not available
- 6.2 Waterfowl Toxicity: Currently not available
- 6.3 Biological Oxygen Demand (BOD): Currently not available
- 6.4 Food Chain Concentration Potential: Currently not available
- 6.5 GESAMP Hazard Profile: Not listed

## 7. SHIPPING INFORMATION

- 7.1 Grades of Purity: Technical; 98%.
- 7.2 Storage Temperature: Currently not available
- 7.3 Inert Atmosphere: Currently not available
- 7.4 Venting: Not listed.
- 7.5 IMO Pollution Category: Currently not available
- 7.6 Ship Type: Currently not available
- 7.7 Barge Hull Type: Currently not available

## 8. HAZARD CLASSIFICATIONS

- 8.1 49 CFR Category: Not listed.
- 8.2 49 CFR Class: Not pertinent.
- 8.3 49 CFR Package Group: Not listed.
- 8.4 Marine Pollutant: No
- 8.5 NFPA Hazard Classification: Not listed
- 8.6 EPA Reportable Quantity: Not listed.
- 8.7 EPA Pollution Category: Not listed.
- 8.8 RCRA Waste Number: Not listed
- 8.9 EPA FWPCA List: Not listed

## 9. PHYSICAL & CHEMICAL PROPERTIES

- 9.1 Physical State at 15° C and 1 atm: Liquid
- 9.2 Molecular Weight: 116.18
- 9.3 Boiling Point at 1 atm: 270°F = 137°C = 410°K
- 9.4 Freezing Point: Currently not available
- 9.5 Critical Temperature: Currently not available
- 9.6 Critical Pressure: Currently not available
- 9.7 Specific Gravity: 0.92
- 9.8 Liquid Surface Tension: Currently not available
- 9.9 Liquid Water Interfacial Tension: Currently not available
- 9.10 Vapor (Gas) Specific Gravity: 4.0
- 9.11 Ratio of Specific Heats of Vapor (Gas): Currently not available
- 9.12 Latent Heat of Vaporization: Currently not available
- 9.13 Heat of Combustion: Currently not available
- 9.14 Heat of Decomposition: Currently not available
- 9.15 Heat of Solution: Currently not available
- 9.16 Heat of Polymerization: Currently not available
- 9.17 Heat of Fusion: Currently not available
- 9.18 Limiting Value: Currently not available
- 9.19 Reid Vapor Pressure: Currently not available

NOTES

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9.20 SATURATED LIQUID DENSITY		9.21 LIQUID HEAT CAPACITY		9.22 LIQUID THERMAL CONDUCTIVITY		9.23 LIQUID VISCOSITY	
Temperature (degrees F)	Pounds per cubic foot	Temperature (degrees F)	British thermal unit per pound-F	Temperature (degrees F)	British thermal unit inch per hour-square foot-F	Temperature (degrees F)	Centipoise
	C U R R E N T L Y  N O T  A V A I L A B L E		C U R R E N T L Y  N O T  A V A I L A B L E		C U R R E N T L Y  N O T  A V A I L A B L E		C U R R E N T L Y  N O T  A V A I L A B L E

9.24 SOLUBILITY IN WATER		9.25 SATURATED VAPOR PRESSURE		9.26 SATURATED VAPOR DENSITY		9.27 IDEAL GAS HEAT CAPACITY	
Temperature (degrees F)	Pounds per 100 pounds of water	Temperature (degrees F)	Pounds per square inch	Temperature (degrees F)	Pounds per cubic foot	Temperature (degrees F)	British thermal unit per pound-F
68	18.800	77	0.182	77	0.00367		C U R R E N T L Y  N O T  A V A I L A B L E