

TRIETHYLENE GLYCOL METHYL ETHER

TGY

CAUTIONARY RESPONSE INFORMATION

Common Synonyms Triethylene glycol monomethyl ether Triglycol methyl ether		Liquid	Colorless	Odorless
Call fire department. Notify local health and pollution control agencies. Protect water intakes.				
Fire	Combustible. Extinguish with dry chemical, alcohol foam, or carbon dioxide. Water and foam may be ineffective on fire. Cool exposed containers with water.			
Exposure	CALL FOR MEDICAL AID. VAPOR Move victim to fresh air. If breathing has stopped, give artificial respiration. If breathing is difficult, give oxygen. LIQUID Remove contaminated clothing and shoes. Wash affected areas with soap and water. IF IN EYES, hold eyelids open and flush with plenty of water.			
Water Pollution	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.			

1. CORRECTIVE RESPONSE ACTIONS

Stop discharge

2. CHEMICAL DESIGNATIONS

- 2.1 CG Compatibility Group: Not listed.
- 2.2 Formula: $\text{CHO}(\text{CH}_2)_2\text{O}(\text{CH}_2)_2\text{OCH}_2\text{CH}_2\text{OH}$
- 2.3 IMO/UN Designation: Currently not available
- 2.4 DOT ID No.: Not listed.
- 2.5 CAS Registry No.: 112-35-6
- 2.6 NAERG Guide No.: Not listed
- 2.7 Standard Industrial Trade Classification: 51616

3. HEALTH HAZARDS

- 3.1 Personal Protective Equipment: Chemical safety goggles and adequate protective clothing.
- 3.2 Symptoms Following Exposure: No appreciable hazard in ordinary handling or use.
- 3.3 Treatment of Exposure: Wash affected parts with water.
- 3.4 TLV-TWA: Not listed.
- 3.5 TLV-STEL: Not listed.
- 3.6 TLV-Ceiling: Not listed.
- 3.7 Toxicity by Ingestion: Grade 1; $\text{LD}_{50} = 11.3 \text{ g/kg (rat)}$
- 3.8 Toxicity by Inhalation: Currently not available.
- 3.9 Chronic Toxicity: Currently not available
- 3.10 Vapor (Gas) Irritant Characteristics: Vapors are nonirritating to the eyes and throat.
- 3.11 Liquid or Solid Characteristics: No appreciable hazard. Practically harmless to the skin.
- 3.12 Odor Threshold: Odorless
- 3.13 IDLH Value: Not listed.
- 3.14 OSHA PEL-TWA: Not listed.
- 3.15 OSHA PEL-STEL: Not listed.
- 3.16 OSHA PEL-Ceiling: Not listed.
- 3.17 EPA AEGL: Not listed

4. FIRE HAZARDS

- 4.1 Flash Point: $>230^\circ\text{F C.C.}$
- 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 or foam may cause frothing.
- 4.5 Special Hazards of Combustion Products: Currently not available
- 4.6 Behavior in Fire: Currently not available
- 4.7 Auto Ignition Temperature: Currently not available
- 4.8 Electrical Hazards: Not listed.
- 4.9 Burning Rate: Currently not available
- 4.10 Adiabatic Flame Temperature: Currently not available
- 4.11 Stoichiometric Air to Fuel Ratio: 42.8 (calc.)
- 4.12 Flame Temperature: Currently not available
- 4.13 Combustion Molar Ratio (Reactant to Product): 15.0 (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: No reaction.
- 5.3 Stability During Transport: Stable.
- 5.4 Neutralizing Agents for Acids and Caustics: Not pertinent.
- 5.5 Polymerization: Will not polymerize.
- 5.6 Inhibitor of Polymerization: Not pertinent.

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: None.
- 6.5 GESAMP Hazard Profile:
 Bioaccumulation: 0
 Damage to living resources: 0
 Human Oral hazard: 0
 Human Contact hazard: 0
 Reduction of amenities: 0

7. SHIPPING INFORMATION

- 7.1 Grades of Purity: Currently not available
- 7.2 Storage Temperature: Ambient.
- 7.3 Inert Atmosphere: No requirement.
- 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:

Category	Classification
Health Hazard (Blue).....	0
Flammability (Red).....	1
Instability (Yellow).....	0
- 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: 164.23
- 9.3 Boiling Point at 1 atm: Currently not available
- 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: 1.026
- 9.8 Liquid Surface Tension: Currently not available
- 9.9 Liquid Water Interfacial Tension: Currently not available
- 9.10 Vapor (Gas) Specific Gravity: Currently not available
- 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: Not pertinent.
- 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
	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