POLYPROPYLENE GLYCOL METHYL ETHER

PGM

CAUTIONARY RESPONSE INFORMATION

Common Synonyms	Liquid	Colorless	Odorless
Polyoxypropylene glycol methyl ether			
Poly (propylene glycol) methyl ether	Mixes with water.		

Keep people away.
Shut off ignition sources and call fire department.
Avoid contact with liquid.
Stay upwind and use water spray to ``knock down'' vapor.
Notify local health and pollution control agencies.

Fire	Fire data not available.
Exposure	CALL FOR MEDICAL AID. LIQUID Irritating to skin and eyes. Flush affected areas with plenty of 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

Dilute and disperse
Stop discharge

2. CHEMICAL DESIGNATIONS

- **2.1 CG Compatibility Group:** 40; Glycol ether
- **2.2 Formula:** $CH_3O(C_3H_6O)_nH$
- **2.3 IMO/UN Designation:** Not listed
- **2.4 DOT ID No.:** Not listed
- **2.5 CAS Registry No.:** 37286-64-9
- **2.6 NAERG Guide No.:** Not listed
- **2.7 Standard Industrial Trade Classification:** 51616

3. HEALTH HAZARDS

- **3.1 Personal Protective Equipment:** Goggles or face shield.
- **3.2 Symptoms Following Exposure:** Low toxicity. In high concentrations may be mildly anesthetic. Direct eye contact produces slight irritation.
- **3.3 Treatment of Exposure:** Remove victim from exposure.
- **3.4 TLV-TWA:** Not listed.
- **3.5 TLV-STEL:** Not listed.
- **3.6 TLV-Ceiling:** Not listed.
- **3.7 Toxicity by Ingestion:** Currently not available
- **3.8 Toxicity by Inhalation:** Currently not available.
- **3.9 Chronic Toxicity:** Currently not available
- **3.10 Vapor (Gas) Irritant Characteristics:** Currently not available
- **3.11 Liquid or Solid Characteristics:** Hazard to skin considered minor.
- **3.12 Odor Threshold:** Currently not available
- **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:** Currently not available
- **4.2 Flammable Limits in Air:** Currently not available
- **4.3 Fire Extinguishing Agents:** Currently not available
- **4.4 Fire Extinguishing Agents Not to Be Used:** Currently not available
- **4.5 Special Hazards of Combustion Products:** Not pertinent
- **4.6 Behavior in Fire:** Not pertinent
- **4.7 Auto Ignition Temperature:** Currently not available
- **4.8 Electrical Hazards:** Not pertinent
- **4.9 Burning Rate:** Currently not available
- **4.10 Adiabatic Flame Temperature:** Currently not available
- **4.11 Stoichometric Air to Fuel Ratio:** Not pertinent.
- **4.12 Flame Temperature:** Currently not available
- **4.13 Combustion Molar Ratio (Reactant to Product):** Not pertinent.
- **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:** Not pertinent
- **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:** 1
  - **Human Contact hazard:** 0
  - **Reduction of amenities:** 0

7. SHIPPING INFORMATION

- **7.1 Grades of Purity:** Technical
- **7.2 Storage Temperature:** Ambient
- **7.3 Inert Atmosphere:** No requirement
- **7.4 Venting:** Open
- **7.5 IMO Pollution Category:** D
- **7.6 Ship Type:** Data not avaialable
- **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:** Currently not available
- **9.3 Boiling Point at 1 atm:** Very high
- **9.4 Freezing Point:** Not pertinent
- **9.5 Critical Temperature:** Not pertinent
- **9.6 Critical Pressure:** Not pertinent
- **9.7 Specific Gravity:** (est.) 0.90 at 20°C (liquid)
- **9.8 Liquid Surface Tension:** Not pertinent
- **9.9 Liquid Water Interfacial Tension:** Not pertinent
- **9.10 Vapor (Gas) Specific Gravity:** Not pertinent
- **9.11 Ratio of Specific Heats of Vapor (Gas):** (est.) 1.066
- **9.12 Latent Heat of Vaporization:** Not pertinent
- **9.13 Heat of Combustion:** (est.) $-12,300$ Btu/lb $= -6860$ cal/g $= -287 \times 10^5$ J/kg
- **9.14 Heat of Decomposition:** Not pertinent
- **9.15 Heat of Solution:** Not pertinent
- **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
50	56.180	50	0.478		N		N
52	56.180	52	0.478		O		O
54	56.180	54	0.478		T		T
56	56.180	56	0.478				
58	56.180	58	0.478		P		P
60	56.180	60	0.478		E		E
62	56.180	62	0.478		R		R
64	56.180	64	0.478		T		T
66	56.180	66	0.478		I		I
68	56.180	68	0.478		N		N
70	56.180	70	0.478		E		E
72	56.180	72	0.478		N		N
74	56.180	74	0.478		T		T
76	56.180	76	0.478				
78	56.180	78	0.478				
80	56.180	80	0.478				
82	56.180	82	0.478				
84	56.180	84	0.478				

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
	M		N		N		N
	I		O		O		O
	S		T		T		T
	C						
	I		P		P		P
	B		E		E		E
	L		R		R		R
	E		T		T		T
			I		I		I
			N		N		N
			E		E		E
			N		N		N
			T		T		T