

# TRIPROPYLENE GLYCOL

TGC

CAUTIONARY RESPONSE INFORMATION				4. FIRE HAZARDS	7. SHIPPING INFORMATION								
Common Synonyms	Liquid	Colorless	Characteristic odor  May float or sink and mix with water.	<p><b>4.1 Flash Point:</b> 285°F O.C.</p> <p><b>4.2 Flammable Limits in Air:</b> 0.8%-5.0% (est.)</p> <p><b>4.3 Fire Extinguishing Agents:</b> "Alcohol" foam, dry chemical, carbon dioxide</p> <p><b>4.4 Fire Extinguishing Agents Not to Be Used:</b> Water may be ineffective</p> <p><b>4.5 Special Hazards of Combustion Products:</b> Acrid fumes of acids and aldehydes may form in fires.</p> <p><b>4.6 Behavior in Fire:</b> Currently not available</p> <p><b>4.7 Auto Ignition Temperature:</b> Currently not available</p> <p><b>4.8 Electrical Hazards:</b> Currently not available</p> <p><b>4.9 Burning Rate:</b> Currently not available</p> <p><b>4.10 Adiabatic Flame Temperature:</b> Currently not available</p> <p><b>4.11 Stoichiometric Air to Fuel Ratio:</b> 57.1 (calc.)</p> <p><b>4.12 Flame Temperature:</b> Currently not available</p> <p><b>4.13 Combustion Molar Ratio (Reactant to Product):</b> 19.0 (calc.)</p> <p><b>4.14 Minimum Oxygen Concentration for Combustion (MOCC):</b> Not listed</p>	<p><b>7.1 Grades of Purity:</b> Commercial, 99%</p> <p><b>7.2 Storage Temperature:</b> Ambient</p> <p><b>7.3 Inert Atmosphere:</b> No requirement</p> <p><b>7.4 Venting:</b> Open (flame arrester)</p> <p><b>7.5 IMO Pollution Category:</b> Currently not available</p> <p><b>7.6 Ship Type:</b> Currently not available</p> <p><b>7.7 Barge Hull Type:</b> Currently not available</p>								
Call fire department. Notify local health and pollution control agencies. Protect water intakes.	Fire	Combustible. Extinguish with dry chemicals, alcohol foam, or carbon dioxide. Water may be ineffective on fire. Cool exposed containers with water.			<p><b>8. HAZARD CLASSIFICATIONS</b></p> <p><b>8.1 49 CFR Category:</b> Not listed</p> <p><b>8.2 49 CFR Class:</b> Not pertinent</p> <p><b>8.3 49 CFR Package Group:</b> Not listed</p> <p><b>8.4 Marine Pollutant:</b> No</p> <p><b>8.5 NFPA Hazard Classification:</b></p> <table> <tr> <th>Category</th> <th>Classification</th> </tr> <tr> <td>Health Hazard (Blue).....</td> <td>0</td> </tr> <tr> <td>Flammability (Red).....</td> <td>1</td> </tr> <tr> <td>Instability (Yellow).....</td> <td>0</td> </tr> </table> <p><b>8.6 EPA Reportable Quantity:</b> Not listed.</p> <p><b>8.7 EPA Pollution Category:</b> Not listed.</p> <p><b>8.8 RCRA Waste Number:</b> Not listed</p> <p><b>8.9 EPA FWC List:</b> Not listed</p>	Category	Classification	Health Hazard (Blue).....	0	Flammability (Red).....	1	Instability (Yellow).....	0
Category	Classification												
Health Hazard (Blue).....	0												
Flammability (Red).....	1												
Instability (Yellow).....	0												
Exposure	LIQUID. Not harmful.			<p><b>5. CHEMICAL REACTIVITY</b></p> <p><b>5.1 Reactivity with Water:</b> No reaction</p> <p><b>5.2 Reactivity with Common Materials:</b> May attack some forms of plastics</p> <p><b>5.3 Stability During Transport:</b> Stable</p> <p><b>5.4 Neutralizing Agents for Acids and Caustics:</b> Not pertinent</p> <p><b>5.5 Polymerization:</b> Not pertinent</p> <p><b>5.6 Inhibitor of Polymerization:</b> Not pertinent</p>	<p><b>9. PHYSICAL &amp; CHEMICAL PROPERTIES</b></p> <p><b>9.1 Physical State at 15° C and 1 atm:</b> Liquid</p> <p><b>9.2 Molecular Weight:</b> 192.26</p> <p><b>9.3 Boiling Point at 1 atm:</b> 523°F = 273°C = 546°K</p> <p><b>9.4 Freezing Point:</b> (sets to glass) -49°F = -45°C = 228°K</p> <p><b>9.5 Critical Temperature:</b> Not pertinent</p> <p><b>9.6 Critical Pressure:</b> Not pertinent</p> <p><b>9.7 Specific Gravity:</b> 1.022 at 20°C (liquid)</p> <p><b>9.8 Liquid Surface Tension:</b> Currently not available</p> <p><b>9.9 Liquid Water Interfacial Tension:</b> Not pertinent</p> <p><b>9.10 Vapor (Gas) Specific Gravity:</b> Not pertinent</p> <p><b>9.11 Ratio of Specific Heats of Vapor (Gas):</b> Not pertinent</p> <p><b>9.12 Latent Heat of Vaporization:</b> Currently not available</p> <p><b>9.13 Heat of Combustion:</b> (est.) -13,700 Btu/lb = -7,610 cal/g = -318 X 10<sup>5</sup> J/kg</p> <p><b>9.14 Heat of Decomposition:</b> Not pertinent</p> <p><b>9.15 Heat of Solution:</b> Not pertinent</p> <p><b>9.16 Heat of Polymerization:</b> Not pertinent</p> <p><b>9.17 Heat of Fusion:</b> Currently not available</p> <p><b>9.18 Limiting Value:</b> Currently not available</p> <p><b>9.19 Reid Vapor Pressure:</b> Low</p>								
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.				NOTES								
1. CORRECTIVE RESPONSE ACTIONS	2. CHEMICAL DESIGNATIONS												
Dilute and disperse Stop discharge	<p><b>2.1 CG Compatibility Group:</b> 40; Glycol ether</p> <p><b>2.2 Formula:</b> HO(C<sub>2</sub>H<sub>5</sub>O)<sub>2</sub>C<sub>2</sub>H<sub>5</sub>OH</p> <p><b>2.3 IMO/UN Designation:</b> Not listed</p> <p><b>2.4 DOT ID No.:</b> Not listed</p> <p><b>2.5 CAS Registry No.:</b> 24800-44-0</p> <p><b>2.6 NAERG Guide No.:</b> Not listed</p> <p><b>2.7 Standard Industrial Trade Classification:</b> 51229</p>												
3.1 Personal Protective Equipment: Plastic gloves; safety glasses or face shield	3. HEALTH HAZARDS												
3.2 Symptoms Following Exposure: Non-irritating; no symptoms observed by any exposure route.													
3.3 Treatment of Exposure: INGESTION: if large amounts are swallowed, induce vomiting; treat symptomatically. EYES or SKIN: flush with water; get medical attention if ill effects develop.													
3.4 TLV-TWA: Currently not available													
3.5 TLV-STEL: Not listed.													
3.6 TLV-Ceiling: Not listed.													
3.7 Toxicity by Ingestion: Grade 2; oral LD <sub>50</sub> = 3,000 mg/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 eyes and throat.													
3.11 Liquid and 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 A EGL: Not listed													

# TRIPROPYLENE GLYCOL

TGC

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
34	64.849		N O T		N O T		N O T
36	64.780		P E R		P E R		P E R
38	64.709		T I N E N T		T I N E N T		T I N E N T
40	64.639						
42	64.570						
44	64.500						
46	64.429						
48	64.360						
50	64.290						
52	64.230						
54	64.160						
56	64.089						
58	64.020						
60	63.950						
62	63.880						
64	63.810						
66	63.740						
68	63.670						
70	63.600						
72	63.530						
74	63.460						
76	63.390						
78	63.320						
80	63.250						
82	63.190						
84	63.120						

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