



MATERIAL SAFETY DATA SHEET

Propylene glycol

Section 1 - Chemical Product and Company Identification

MSDS Name:	Propylene glycol
Synonyms:	1,2-Dihydroxypropane; Methylethylene glycol; Monopropylene glycol; 1,2-Propylene glycol; 1,2-Propanediol; 2-Hydroxypropanol.

Company Identification:	Hazel Mercantile Limited
Company Identification: (INDIA)	701/712 A, Embassy Centre, Nariman Point, Mumbai - 400 021.
For information in the INDIA, call:	+91 - 22 - 2282 4444 (50 Lines)

Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name:	%	EINECS#
57-55-6	Propylene glycol	100	200-338-0

Hazard Symbols:	None listed
Risk Phrases:	None listed

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Hygroscopic (absorbs moisture from the air).

Potential Health Effects

Eye:	May cause slight transient injury.
Skin:	May be absorbed through damaged or abraded skin in harmful amounts. Allergic reactions have been reported. A single prolonged skin exposure is not likely to result in the material being absorbed in harmful amounts. Prolonged contact is essentially non-irritating to skin. Repeated exposures may cause problems.
Ingestion:	May cause gastrointestinal irritation with nausea, vomiting and diarrhea. Low hazard for usual industrial handling. May cause hemoglobinuric nephrosis. May cause changes in surface EEG.
Inhalation:	Low hazard for usual industrial handling. Inhalation of a mist of this material may cause respiratory tract irritation. Material has a low vapor pressure, so exposure to vapor is not likely.
Chronic:	Exposure to large doses may cause central nervous system depression. Chronic ingestion may cause lactic acidosis and possible seizures. Exposures to propylene glycol having no adverse effects on the mother should have no effect on the fetus. Birth defects are unlikely. In animal studies, propylene glycol has been shown not to interfere with reproduction.



Section 4 - First Aid Measures

Eyes:	In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical aid.
Skin:	In case of contact, flush skin with plenty of water. Remove contaminated clothing and shoes. Get medical aid if irritation develops and persists. Wash clothing before reuse.
Ingestion:	If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical aid.
Inhalation:	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.
Notes to Physician:	Persons with impaired kidney function may be more susceptible to the effects of this substance. Treat symptomatically and supportively.

Section 5 - Fire Fighting Measures

General Information:	As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.
Extinguishing Media:	Use water spray, dry chemical, carbon dioxide, or alcohol-resistant foam.

Section 6 - Accidental Release Measures

General Information:	Use proper personal protective equipment as indicated in Section 8.
Spills/Leaks:	Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Clean up spills immediately, observing precautions in the Protective Equipment section. Provide ventilation.

Section 7 - Handling and Storage

Handling:	Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use with adequate ventilation. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid ingestion and inhalation.
Storage:	Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances. Store protected from moisture.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.	
Exposure Limits CAS# 57-55-6: United Kingdom, WEL - TWA: 150 ppm TWA (total particulate and vapour); 474 mg/m ³ TWA (total particulate and United Kingdom, WEL - STEL: 450 ppm STEL (total particulate and vapour); 1422 mg/m ³ STEL (total particulate Russia: 7 mg/m ³ TWA (particulates)	
Personal Protective Equipment	
Eyes:	Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.
Skin:	Wear appropriate protective gloves to prevent skin exposure.
Clothing:	Wear appropriate protective clothing to prevent skin exposure.
Respirators:	A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.



Section 9 - Physical and Chemical Properties

Physical State:	Liquid
Color:	colorless viscous
Odor:	Odorless
pH:	Not available
Vapor Pressure:	0.08 mm Hg @ 20 deg C
Viscosity:	58.1 cps @ 20 deg C
Boiling Point:	187 deg C (368.60°F)
Freezing/Melting Point:	60 deg C (-76.00°F)
Autoignition Temperature:	371 deg C (699.80 deg F)
Flash Point:	99 deg C (210.20 deg F)
Explosion Limits: Lower:	2.6 vol %
Explosion Limits: Upper:	12.6 vol %
Decomposition Temperature:	Not available
Solubility in water:	Soluble
Specific Gravity/Density:	1.0360 g/cm ³
Molecular Formula:	C ₃ H ₈ O ₂
Molecular Weight:	76.09

Section 10 - Stability and Reactivity

Chemical Stability:	Stable under normal temperatures and pressures. Hygroscopic: absorbs moisture or water from the air.
Conditions to Avoid:	Excess heat, moist air.
Incompatibilities with Other Materials	Strong oxidizing agents.
Hazardous Decomposition Products	Carbon monoxide, carbon dioxide, aldehydes.
Hazardous Polymerization	Will not occur.

Section 11 - Toxicological Information

RTECS#:	CAS# 57-55-6: TY2000000
LD50/LC50:	RTECS: CAS# 57-55-6: Draize test, rabbit, eye: 100 mg Mild; Draize test, rabbit, eye: 500 mg/24H Mild; Oral, mouse: LD50 = 22 gm/kg; Oral, mouse: LD50 = 20300 mg/kg; Oral, rabbit: LD50 = 18500 mg/kg; Oral, rat: LD50 = 20 gm/kg; Skin, rabbit: LD50 = 20800 mg/kg; Skin, rabbit: LD50 = 20800 mg/kg;
Carcinogenicity:	Propylene glycol - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.
Other:	Standard Draize Test: Administration into the eye (rabbit) = 100 mg (Mild). Standard Draize Test: Administration into the eye (rabbit) = 500 mg/24H (Mild). Standard Draize Test: Administration onto the skin (human) = 500 mg/7days (Mild). Standard Draize Test: Administration onto the skin (human) = 104 mg/3 days-Intermittent (Moderate).

Section 12 - Ecological Information

Ecotoxicity:	Water flea Daphnia: EC50 > 10000 mg/L; 48 Hr; Unspecified
	Bacteria: Phytobacterium phosphoreum: EC50 = 710 mg/L; 30 min; Microtox test
	Fish: Goldfish: LC50 > 5000 mg/L; 24 Hr; Unspecified
	Fish: Guppy: LC50 > 1000 mg/L; 48 Hr; Unspecified



Section 13 - Disposal Considerations

Products considered hazardous for supply are classified as Special Waste and the disposal of such chemicals is covered by regulations which may vary according to location. Contact a specialist disposal company or the local authority for advice. Empty containers must be decontaminated before returning for recycling.

Section 14 - Transport Information

	IATA	IMO	RID/ADR
Shipping Name:	Not regulated.	Not regulated.	Not regulated.
Hazard Class:			
UN Number:			
Packing Group:			

Section 15 - Regulatory Information

European/International Regulations
European Labeling in Accordance with EC Directives
Hazard Symbols: Not available
Risk Phrases:
Safety Phrases:
➤ S 24/25 Avoid contact with skin and eyes.
WGK (Water Danger/Protection)
➤ CAS# 57-55-6: 0
Canada
➤ CAS# 57-55-6 is listed on Canada's DSL List
US Federal
➤ TSCA
➤ CAS# 57-55-6 is listed on the TSCA Inventory.

Section 16 - Other Information

MSDS Creation Date:	08/16/2007
Revision #1 Date	

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