



MATERIAL SAFETY DATA SHEET

Bis(2-hydroxyethyl)ether

Section 1 - Chemical Product and Company Identification

MSDS Name:	Bis(2-hydroxyethyl)ether, 99%
Synonyms:	Di(ethylene glycol); Bis(2-hydroxyethyl)ether; 2,2'-Oxydiethanol
Company Identification:	Hazel Mercantile Limited
Company Identification: (INDIA)	701, 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#
111-46-6	Bis(2-hydroxyethyl)ether	99%	203-872-2

Hazard Symbols:	XN
	
Risk Phrases:	22

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Harmful if swallowed. Hygroscopic (absorbs moisture from the air).

Potential Health Effects

Eye:	Causes mild eye irritation. Causes redness and pain.
Skin:	Causes mild skin irritation.
Ingestion:	Harmful if swallowed. May cause headache. May cause nausea and vomiting.
Inhalation:	May cause respiratory tract irritation. Prolonged exposure may result in dizziness and general weakness.
Chronic:	May cause liver and kidney damage. Prolonged or repeated exposure may cause nausea, dizziness, and headache.

Section 4 - First Aid Measures

Eyes:	Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.
Skin:	Get medical aid. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.
Ingestion:	Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Get medical aid. Wash mouth out with water.
Inhalation:	Remove from exposure and move to fresh air immediately. Get medical aid.
Notes to Physician:	



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.
Extinguishing Media:	Use foam, dry chemical, or carbon dioxide. Water spray may cause frothing.

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.

Section 7 - Handling and Storage

Handling:	Avoid breathing dust, vapor, mist, or gas. Avoid contact with skin and eyes. Take precautionary measures against static discharges.
Storage:	Store in a cool, dry place. Store in a tightly closed container.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls:	
	Use adequate ventilation to keep airborne concentrations low.
Exposure Limits	
	CAS# 111-46-6:
	United Kingdom, WEL - TWA: 23 ppm TWA; 101 mg/m3 TWA United Kingdom, WEL - STEL: 69 ppm STEL; 303 mg/m3 STEL
	Germany: 10 ppm TWA; 44 mg/m3 TWA
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:	Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Section 9 - Physical and Chemical Properties

Physical State:	Viscous liquid
Color:	APHA: 5 max
Odor:	practically odorless
pH:	Not available
Vapor Pressure:	0.03 hPa @ 20 deg C
Viscosity:	38 mPas 20 deg C
Boiling Point:	245 deg C @ 760.00mm Hg (473.00°F)
Freezing/Melting Point:	-10 deg C (14.00°F)
Autoignition Temperature:	225 deg C (437.00 deg F)



Flash Point:	143 deg C (289.40 deg F)
Explosion Limits: Lower:	0.12 vol %
Explosion Limits: Upper:	0.02 vol %
Decomposition Temperature:	Not available
Solubility in water:	Soluble
Specific Gravity/Density:	1.1180 g/cm3
Molecular Formula:	C4H10O3
Molecular Weight:	106.12

Section 10 - Stability and Reactivity

Chemical Stability:	Stable under normal temperatures and pressures.
Conditions to Avoid:	Incompatible materials, excess heat, exposure to moist air or water.
Incompatibilities with Other Materials	Strong oxidizing agents, strong acids, sodium hydroxide.
Hazardous Decomposition Products	Carbon monoxide, carbon dioxide.
Hazardous Polymerization	Will not occur.

Section 11 - Toxicological Information

RTECS#:	CAS# 111-46-6: ID5950000
LD50/LC50:	RTECS: CAS# 111-46-6: Draize test, rabbit, eye: 50 mg Mild; Draize test, rabbit, skin: 500 mg Mild; Oral, mouse: LD50 = 23700 mg/kg; Oral, mouse: LD50 = 2300 mg/kg; Oral, rabbit: LD50 = 4400 mg/kg; Oral, rat: LD50 = 12565 mg/kg; Oral, rat: LD50 = 12000 mg/kg; Skin, rabbit: LD50 = 11890 mg/kg; Other:
Carcinogenicity:	Bis(2-hydroxyethyl)ether-Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.
Other:	See actual entry in RTECS for complete information.

Section 12 - Ecological Information

Other:	Biodegradable.
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Section 13 - Disposal Considerations

Dispose of in a manner consistent with federal, state, and local regulations.

Section 14 - Transport Information

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



Section 15 - Regulatory Information

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: XN

Risk Phrases:

- R 22 Harmful if swallowed.

Safety Phrases:

- S 46 If swallowed, seek medical advice immediately and show this container or label.

WGK (Water Danger/Protection)

- CAS# 111-46-6: 1

Canada

- CAS# 111-46-6 is listed on Canada's DSL List

US Federal

- TSCA
- CAS# 111-46-6 is listed on the TSCA Inventory.

Section 16 - Other Information

MSDS Creation Date:	September 12, 2007
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Revision #0 Date	
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