



**MATERIAL SAFETY DATA SHEET****Di-isopropanolamine**

MSDS Name:	Di-isopropanolamine
Synonyms:	Diisopropanolamine, 1-(2-hydroxypropylamino)propan-2-ol, Di-2-propanolamine, DIPA, DIPA (alcohol), Dipropyl-2,2'-dihydroxy-amine
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#
1335-54-2	Di-isopropanolamine	99%	203-820-9

Hazard Symbols:	F C
	
Risk Phrases:	11 20/22 34

Section 3 - Hazards Identification**EMERGENCY OVERVIEW**

Highly flammable. Harmful by inhalation and if swallowed. Causes burns.

Potential Health Effects

Eye:	Causes eye burns. Causes redness and pain.
Skin:	Causes skin burns. Causes redness and pain.
Ingestion:	Harmful if swallowed. Causes gastrointestinal tract burns. May cause nausea and vomiting.
Inhalation:	Harmful if inhaled. May cause severe irritation of the respiratory tract with sore throat, coughing, shortness of breath and delayed lung edema. Causes chemical burns to the respiratory tract.
Chronic:	

Section 4 - First Aid Measures

Eyes:	Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.
Skin:	Get medical aid immediately. Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.
Ingestion:	Do not induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Get medical aid immediately.
Inhalation:	Get medical aid immediately. Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.
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. Vapors can travel to a source of ignition and flash back. Will burn if involved in a fire. Flammable liquid and vapor.
Extinguishing Media:	Use water spray to cool fire-exposed containers. Use foam, dry chemical, or carbon dioxide.

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. Remove all sources of ignition. Use a spark-proof tool.

Section 7 - Handling and Storage

Handling:	Use spark-proof tools and explosion proof equipment. Avoid breathing dust, vapor, mist, or gas. Avoid contact with skin and eyes. Use only in a chemical fume hood.
Storage:	Keep away from sources of ignition. Store in a cool, dry place. Store in a tightly closed container. Flammables-area.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls:	
	Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.
Exposure Limits	
	CAS# 108-18-9:
	United Kingdom, WEL - TWA: 5 ppm TWA; 21 mg/m3 TWA United Kingdom, WEL - STEL: 15 ppm STEL; 63 mg/m3 STEL
	United States OSHA: 5 ppm TWA; 20 mg/m3 TWA
	Belgium - TWA: 5 ppm VLE; 21 mg/m3 VLE
	France - VME: 5 ppm VME; 20 mg/m3 VME
	Germany: 20 mg/m3 TWA Germany: skin notation
	Malaysia: 5 ppm TWA; 21 mg/m3 TWA
	Netherlands: 5 ppm MAC; 20 mg/m3 MAC
	Spain: 5 ppm VLA-ED; 21 mg/m3 VLA-ED

Personal Protective Equipment	
Eyes:	Wear chemical splash goggles.
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:	Clear liquid
Color:	colorless
Odor:	ammonia-like
pH:	12.3 (100 g/l water)
Vapor Pressure:	80mbar @20 deg C
Viscosity:	0.4 mPa s @20 deg C
Boiling Point:	84 deg C @760mmHg (183.20 °F)
Freezing/Melting Point:	-61 deg C (-77.80 °F)
Autoignition Temperature:	285 deg C (545.00 deg F)
Flash Point:	(-) 7 deg C (19.40 deg F)
Explosion Limits: Lower:	1.1 Vol %
Explosion Limits: Upper:	8.5 Vol %
Decomposition Temperature:	Not available
Solubility in water:	100 g/l (20 °C)
Specific Gravity/Density:	0.716 g/cc
Molecular Formula:	C6H15N
Molecular Weight:	101.19

Section 10 - Stability and Reactivity

Chemical Stability:	Stable under normal temperatures and pressures.
Conditions to Avoid:	Incompatible materials, ignition sources.
Incompatibilities with Other Materials	Ignition sources, strong acids, acids, strong bases, plastics.
Hazardous Decomposition Products	Nitrogen oxides, carbon monoxide, carbon dioxide.
Hazardous Polymerization	Will not occur.

Section 11 - Toxicological Information

RTECS#:	CAS# 108-18-9: IM4025000
LD50/LC50:	RTECS: CAS# 108-18-9: Inhalation, mouse: LC50 = 4200 mg/m ³ /2H; Inhalation, rat: LC50 = 4800 mg/m ³ /2H; Oral, mouse: LD50 = 2120 mg/kg; Oral, rabbit: LD50 = 4700 mg/kg; Oral, rat: LD50 = 770 mg/kg; Skin, rabbit: LD50 = >10 gm/kg; Other:
Carcinogenicity:	Diisopropylamine - 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

Ecotoxicity:	Not available
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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:	DIISOPROPYLAMINE	DIISOPROPYLAMINE	DIISOPROPYLAMINE
Hazard Class:	3 (8)	3 (8)	3 (8)
UN Number:	1158	1158	1158
Packing Group:	II	II	II

Section 15 - Regulatory Information

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: F C

Risk Phrases:

- R 11 Highly flammable.
- R 20/22 Harmful by inhalation and if swallowed.
- R 34 Causes burns.

Safety Phrases:

- S 16 Keep away from sources of ignition - No smoking.
- S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- S 36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
- S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

WGK (Water Danger/Protection)

- CAS# 108-18-9: 2

Canada

- CAS# 108-18-9 is listed on Canada's DSL List

US Federal

- TSCA
- CAS# 108-18-9 is listed on the TSCA Inventory.

Section 16 - Other Information

MSDS Creation Date: September 21, 2007

Revision #0 Date

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