



## MATERIAL SAFETY DATA SHEET

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### SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**MSDS Name:** 1,2-Ethanedithiol

**Catalog Numbers:**

11785-0000, 11785-1000, 11785-5000

**Synonyms:**

Dithioethyleneglycol

**Company Identification:**

LEONID CHEMICALS  
62/A-2 2nd Stage, Industrial Suburb  
Yeshwanthpur, Bangalore -22, INDIA  
Ph- +91-80-23378354

### SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS

CAS #	:	540-63-6
Chemical Name	:	1,2-Ethanedithiol
%	:	96%
EINECS#	:	208-752-3
Hazard Symbols	:	XN
Risk Phrases	:	10 22

### SECTION 3 - HAZARDS IDENTIFICATION

**EMERGENCY OVERVIEW**

Flammable. Harmful if swallowed.

**Potential Health Effects**

**Eye:**

May cause eye irritation.

**Skin:**

May cause skin irritation. May be harmful if absorbed through the skin.

**Ingestion:**

Harmful if swallowed. May cause irritation of the digestive tract.

**Inhalation:**

May cause respiratory tract irritation. May be harmful if inhaled.

**Chronic:**

Not available.



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#### SECTION 4 - FIRST AID MEASURES

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**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:**

Get medical aid. Wash mouth out with water.

**Inhalation:**

Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

**Notes to Physician:**

Treat symptomatically and supportively.

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#### SECTION 5 - FIRE FIGHTING MEASURES

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**General Information:**

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Flammable liquid and vapor.

**Extinguishing Media:**

Use water spray to cool fire-exposed containers.

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#### SECTION 6 - ACCIDENTAL RELEASE MEASURES

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**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.

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#### SECTION 7 - HANDLING AND STORAGE

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**Handling:**

Avoid breathing dust, vapor, mist, or gas. Avoid contact with skin and eyes. Use only in a chemical fume hood.

**Storage:**

Store in a cool, dry place. Store in a tightly closed container. Flammables-area.

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## SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION

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### Engineering Controls:

Use adequate ventilation to keep airborne concentrations low. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

### Personal Protective Equipment

#### Eyes:

Wear chemical goggles. Wear safety glasses and chemical goggles if splashing is possible.

#### Skin:

Wear appropriate protective gloves and clothing to prevent skin exposure. Wear appropriate protective gloves to prevent skin exposure.

#### Clothing:

Wear appropriate protective clothing to minimize contact with skin. Wear appropriate protective clothing to prevent skin exposure.

#### Respirators:

Wear a NIOSH/MSHA or European Standard EN 149 approved full-facepiece airline respirator in the positive pressure mode with emergency escape provisions. Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Always use a NIOSH or European Standard EN 149 approved respirator when necessary.

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## SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

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Physical State	: Clear liquid
Color	: colorless
Odor	: stench - penetrating odor
PH	: Not available.
Vapor Pressure	: 4.8mmHg @20 deg C
Viscosity	: Not available.
Boiling Point	: 144 - 146 deg C @760mmHg
Freezing/Melting Point	: -41 deg C
Autoignition Temperature	: Not available.
Flash Point	: 50 deg C ( 122.00 deg F)
Explosion Limits, lower	: Not available.
Explosion Limits, upper	: Not available.
Decomposition Temperature	NA
Solubility in water	: insoluble
Specific Gravity/Density	:1.123
Molecular Formula	C2H6S2
Molecular Weight	94.19

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## SECTION 10 - STABILITY AND REACTIVITY

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**Chemical Stability:**

Stable under normal temperatures and pressures.

**Conditions to Avoid:**

Incompatible materials, ignition sources.

**Incompatibilities with Other Materials:**

Oxidizing agents, reducing agents, bases, alkali metals.

**Hazardous Decomposition Products:**

Carbon monoxide, oxides of sulfur, carbon dioxide, hydrogen sulfide.

**Hazardous Polymerization:**

Has not been reported.

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**SECTION 11 - TOXICOLOGICAL INFORMATION**

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**RTECS#:**

CAS# 540-63-6: KI3325000

**LD50/LC50:**

CAS# 540-63-6: Oral, mouse: LD50 = 342 mg/kg.

**Carcinogenicity:**

1,2-Ethanedithiol -

Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.

See actual entry in RTECS for complete information.

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**SECTION 12 - ECOLOGICAL INFORMATION**

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NA

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**SECTION 13 - DISPOSAL CONSIDERATIONS**

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

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**SECTION 14 - TRANSPORT INFORMATION**

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**IATA**

Shipping Name: FLAMMABLE LIQUID, TOXIC, N.O.S.\*

Hazard Class: 3

UN Number: 1992

Packing Group: III

**IMO**

Shipping Name: FLAMMABLE LIQUID, TOXIC, N.O.S.

Hazard Class: 3

UN Number: 1992

Packing Group: III

**RID/ADR**

Shipping Name: FLAMMABLE LIQUID, TOXIC, N.O.S.

Hazard Class: 3

UN Number: 1992

Packing group: III

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**SECTION 15 - REGULATORY INFORMATION**

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**European/International Regulations**

European Labeling in Accordance with EC Directives

Hazard Symbols: XN

Risk Phrases:

R 10 Flammable.

R 22 Harmful if swallowed.

Safety Phrases:

S 16 Keep away from sources of ignition - No smoking.

WGK (Water Danger/Protection)

CAS# 540-63-6: No information available.

**United Kingdom Occupational Exposure Limits**

**United Kingdom Maximum Exposure Limits**

**Canada**

CAS# 540-63-6 is listed on Canada's DSL List.

CAS# 540-63-6 is not listed on Canada's Ingredient Disclosure List.

Exposure Limits

**US FEDERAL**

TSCA

CAS# 540-63-6 is listed on the TSCA inventory.

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**SECTION 16 - ADDITIONAL INFORMATION**

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MSDS Creation Date: 7/16/1996 Revision #0 Date: Original.

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no way shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if the company has been advised of the possibility of such damages.

