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**Material Safety Data Sheet**

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<b>Product Name</b>	<b><u>Monothioglycerol</u></b>
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**SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE  
COMPANY/UNDERTAKING**

**1.1. Product identification:****Product Description:** Monothioglycerol, 3-Mercapto-1, 2-propanediol,**Synonyms:** 1-Thioglycerol, 3-Mercapto-1, 2-propanediol; 1-Mercapto-2, 3-propanediol;  
1-Mercaptoglycerol; 1-Thioglycerol; alpha-Monothioglycerol; alphaThioglycerol;  
Monothioglycerin; Thioglycerin; Thioglycerol**CAS-No:** 96-27-5**EC-No.:** 202-495-0**Molecular Formula:** C<sub>3</sub>H<sub>8</sub>O<sub>2</sub>S**REACH Registration No:** A registration number is not available for this substance as the substance or its uses are exempted from registration, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.**1.2. Relevant identified uses of the substance or mixture and uses advised against:****Recommended Use:** Laboratory analysis and as Excipients**Uses advised against:** No Information available**1.3. Details of the supplier of the safety data sheet:**

- **Company** **Finar Limited**  
184-186/P, Chacharwadi Vasna,  
Sarkhej-Bavla Highway,  
Ta.: Sanand, Dist.: Ahmedabad,  
Email: [info@finarchemicals.com](mailto:info@finarchemicals.com)  
Web: [www.finarchemicals.com](http://www.finarchemicals.com)
- **E-mail Address** [safety@finarchemicals.com](mailto:safety@finarchemicals.com); [info@finarchemicals.com](mailto:info@finarchemicals.com)

**1.4. Emergency telephone number:**

- For Emergency contact on: +91 - 2717 - 616 717
- Registered office No: +91 - 79 – 40040085

**Material Safety Data Sheet**

<b>Product Name</b>	<u><b>Monothioglycerol</b></u>
---------------------	--------------------------------

**SECTION 2: HAZARDS IDENTIFICATION**

**2.1. Classification of the substance or mixture:**

**Classification according to Regulation (EC) No 1272/2008**

Acute toxicity, Oral (Category 4), H302

Acute toxicity, Dermal (Category 3), H311

Skin irritation (Category 2), H315

Skin sensitisation (Sub-category 1B), H317

For the full text of the H-Statements mentioned in this Section, see Section 16.

**2.2. Label elements:**

**Labelling according Regulation (EC) No 1272/2008**

**Pictogram**



**Signal Word:** Danger

**Hazard Statements:**

H302 - Harmful if swallowed

H311 - Toxic in contact with skin

H315 - Causes skin irritation

H317 - May cause an allergic skin reaction

**Precautionary Statements:**

P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.

P264 Wash skin thoroughly after handling.

P280 Wear protective gloves/ protective clothing.

P301 + P312 + P330 **IF SWALLOWED:** Call a POISON CENTER/doctor if you feel unwell. Rinse mouth.

P302 + P352 + P312 **IF ON SKIN:** Wash with plenty of water. Call a POISON CENTER/doctor if you feel unwell.

P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.

## Material Safety Data Sheet

Product Name	<u>Monothioglycerol</u>
--------------	-------------------------

Supplemental Hazard            None  
Statements

### 2.3. Other hazards:

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1. Substances: Monothioglycerol

### 3.2. Mixtures:

Component	CAS-No	EC-No.	Weight %
Monothioglycerol	96-27-5	202-495-0	98-100

## SECTION 4: FIRST AID MEASURES

### 4.1. Description of first aid measures:

- **General Advice:** Consult a physician. Show this safety data sheet to the doctor in attendance.
- **Eye Contact:** Flush eyes with water as a precaution.
- **Skin Contact:** Wash off with soap and plenty of water. Take victim immediately to hospital.  
Consult a physician.
- **Swallowed:** Never give anything by mouth to an unconscious person. Rinse mouth with water.  
Consult a physician.
- **Inhalation:** If breathed in, move person into fresh air. If not breathing, give artificial respiration.  
Consult a physician.

### 4.2. Most important symptoms and effects, both acute and delayed:

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

### 4.3. Indication of any immediate medical attention and special treatment needed:

No data available

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**Material Safety Data Sheet**

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<b>Product Name</b>	<u><b>Monothioglycerol</b></u>
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**SECTION 5: FIREFIGHTING MEASURES****5.1. Extinguishing media:**

Suitable Extinguishing Media- Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**5.2. Special hazards arising from the substance or mixture:**

Carbon oxides, Sulphur oxides

**5.3. Advice for firefighters:**

Wear self-contained breathing apparatus for firefighting if necessary.

**5.4 Further Information:**

No data available

**SECTION 6: ACCIDENTAL RELEASE MEASURES****6.1. Personal precautions, protective equipment and emergency procedures:**

Wear respiratory protection. Avoid breathing vapours, mist or gas. Ensure adequate ventilation.

Evacuate personnel to safe areas. For personal protection see section 8.

**6.2. Environmental precautions:**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Discharge into the environment must be avoided.

**6.3. Methods and material for containment and cleaning up:**

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

**6.4. Reference to other sections:**

For disposal see section 13.

**SECTION 7: HANDLING AND STORAGE****7.1. Precautions for safe handling**

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.

For precautions see section 2.2.

**7.2. Conditions for safe storage, including any incompatibilities:**

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Store in cool place.

Air sensitive.

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**Material Safety Data Sheet**

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<b>Product Name</b>	<b><u>Monothioglycerol</u></b>
---------------------	--------------------------------

**7.3. Specific end use(s):**

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION****8.1. Control parameters:**

**Components with workplace control parameters**

**8.2. Exposure controls:**

**Appropriate engineering controls**

Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location.

**Personal protective equipment:**

**Eye/Face Protection-**

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin & Body Protection-**

Wear appropriate protective gloves and clothing to prevent skin exposure.

**Respiratory protection-**

No protective equipment is needed under normal use conditions.

**Control of environmental exposure-**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Discharge into the environment must be avoided.

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES****9.1. Information on basic physical and chemical properties :**

- **Appearance: Color:** Colorless
- **Physical State:** Viscous Liquid
- **Odor:** No data available
- **Odor Threshold:** No Data Available
- **pH:** 4.79 at 10 g/l at 20 °C
- **Melting Point:** < -20 °C
- **Auto-Ignition Temperature:** 300 °C at 1.013 hPa
- **Vapor Pressure:** 0.01 hPa at 20 °C

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**Material Safety Data Sheet**

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<b>Product Name</b>	<b><u>Monothioglycerol</u></b>
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- **Vapor Density:** Not available
- **Relative Density:** 1.25 g/cm<sup>3</sup> at 20 °C
- **Volatility:** Not available.
- **Odor Threshold:** Not available.
- **Water/Oil Dist. Co eff.:** Not available.
- **Partition coefficient n-octanol/water:** log Pow: < 0 at 20 °C - OECD Test Guideline 117 –  
Bioaccumulation is not expected.
- **Ionicity (in Water):** Not available.
- **Decomposition Temperature:** 210°C - 340 °C
- **Boiling Point/Range:** 118°C 5 mm Hg
- **Flash Point:** > 112 °C
- **Specific Gravity / Density:** 1.295
- **Water Solubility:** 1.000 g/l at 20 °C

**9.2. Other information:****Molecular Formula:** C<sub>3</sub>H<sub>8</sub>O<sub>2</sub>S**Molecular Weight:** 108.16 g/mol**SECTION 10: STABILITY AND REACTIVITY****10.1. Reactivity:**

No data available

**10.2. Chemical stability:**

Stable under recommended storage conditions.

**10.3. Possibility of hazardous reactions:**

No data available

**10.4. Conditions to avoid:**

Air sensitive.

**10.5. Incompatible materials:**

Bases, Oxidizing agents, Reducing agents, Alkali metals

**10.6. Hazardous decomposition products:**

Hazardous decomposition products formed under fire conditions. - Carbon oxides, Sulphur oxides

Other decomposition products - No data available

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**Material Safety Data Sheet**

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<b>Product Name</b>	<b><u>Monothioglycerol</u></b>
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In the event of fire: see section 5

## **SECTION 11: TOXICOLOGICAL INFORMATION**

### **11.1. Information on toxicological effects:**

#### **Acute toxicity**

LD50 Oral - Rat - male and female - 648 mg/kg

(OECD Test Guideline 401)

LC50 Inhalation - Rat - male and female - 4 h - > 0,51 mg/l

(OECD Test Guideline 403)

LD50 Dermal - Rabbit - 673 mg/kg

(OECD Test Guideline 402)

#### **Skin corrosion/irritation**

No data available

Skin - Rabbit

Result: Skin irritation

(US-EPA)

#### **Serious eye damage/eye irritation**

Eyes - Rabbit

Result: slight irritation

(US-EPA)

#### **Respiratory or skin sensitisation**

Local lymph node assay (LLNA) - Mouse

Result: positive

(OECD Test Guideline 429)

#### **Germ cell mutagenicity**

No data available

In vitro mammalian cell gene mutation test

Mouse lymphoma test

Result: negative

Mutagenicity (mammal cell test): chromosome aberration.

Human lymphocytes

**Material Safety Data Sheet**

<b>Product Name</b>	<b><u>Monothioglycerol</u></b>
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Result: negative

**Carcinogenicity**

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

**Reproductive toxicity**

**Specific target organ toxicity - single exposure**

Acute inhalation toxicity - Cough, Shortness of breath, mucosal irritations, Possible damages:, damage of respiratory tract

**Specific target organ toxicity - repeated exposure**

No data available

**Aspiration hazard**

No data available

**Additional Information**

RTECS: TY8140000

Cough, Shortness of breath, Headache, Nausea, Vomiting

**SECTION 12: ECOLOGICAL INFORMATION**

**12.1. Toxicity:**

Toxicity to fish: Flow-through test LC50 - Oncorhynchus mykiss (rainbow trout) – 35 mg/l - 96 h  
(OECD Test Guideline 203)

Remarks: (in analogy to similar products)

Toxicity to daphnia: Flow-through test EC50 - Daphnia magna (Water flea) - 11 mg/l - 48h  
and other aquatic (OECD Test Guideline 202)

invertebrates Remarks: (in analogy to similar products)

Toxicity to algae: Static test ErC50 - Pseudokirchneriella subcapitata (green algae) - 11 mg/l - 72 h  
(OECD Test Guideline 201)

Remarks: (in analogy to similar products)

Static test EC10 - Pseudokirchneriella subcapitata (green algae) - 3,4 mg/l - 72 h

(OECD Test Guideline 201)

Remarks: (in analogy to similar products)



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**Material Safety Data Sheet**

---

<b>Product Name</b>	<b><u>Monothioglycerol</u></b>
---------------------	--------------------------------

**12.2. Persistence and degradability Persistence:**

Biodegradability aerobic - Exposure time 28 d  
Result: 80,3 % - Readily biodegradable.  
(OECD Test Guideline 301F)

**12.3. Bio accumulative potential:**

No data available

**12.4. Mobility in soil:**

No data available

**12.5. Results of PBT and vPvB assessment:**

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

**12.6. Other adverse effects:**

Harmful to aquatic life.  
No data available

### **SECTION 13: DISPOSAL CONSIDERATIONS**

**13.1. Waste treatment methods:****Product**

Offer surplus and non-recyclable solutions to a licensed disposal company. Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations. Leave chemicals in original containers. No mixing with other waste.

Handle uncleaned containers like the product itself.

**Contaminated packaging**

Dispose of as unused product.

## Material Safety Data Sheet

Product Name	<u>Monothioglycerol</u>
--------------	-------------------------

### SECTION 14: TRANSPORT INFORMATION

	Land transport (ADR/RID)	Air transport (IATA)	Sea transport (IMDG)
14.1 UN number	2810		
14.2 Proper shipping name	TOXIC LIQUID, ORGANIC, N.O.S. (3-Mercaptopropane-1,2-diol)		
14.3 Class	6.1		
14.4 Packing group	III		
14.5 Environmentally hazardous	No		
14.6 Special precautions for user	No data available		
14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not Relevant		

### SECTION 15: REGULATORY INFORMATION

**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture:**

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

**15.2 Chemical safety assessment:**

For this product a chemical safety assessment was not carried out.

### SECTION 16: OTHER INFORMATION

- **Full text of H-Statements referred to under sections 2 and 3 :**
  - H302 - Harmful if swallowed
  - H311 - Toxic in contact with skin
  - H315 - Causes skin irritation
  - H317 - May cause an allergic skin reaction

**References:** Not available

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**Material Safety Data Sheet**

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<b>Product Name</b>	<b><u>Monothioglycerol</u></b>
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**Created on:** 10/06/2020

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