

# TERPINEOL CAS NO 8006-39-1

# MATERIAL SAFETY DATA SHEET SDS/MSDS

# SECTION 1: Identification of the substance/mixture and of the company/undertaking

| 1.1 | Product identifiers<br>Product name                | Terpineol  |      |
|-----|--|--|------|
|     | CAS-No.  | : 8006-39-1  |      |
| 1.2 | Relevant identified uses of                        | the substance or mixture and uses advised against                                |      |
|     | Identified uses                                    | : Laboratory chemicals, Industrial & for professional use on                     | ıly. |
| 1.3 | 3 Details of the supplier of the safety data sheet |  |      |
|     | Company  | : Central Drug House (P) Ltd<br>7/28 Vardaan House<br>New Delhi -110002<br>INDIA |      |
|     | Telephone  | +91 11 49404040  |      |
|     | Email  | care@cdhfinechemical.com   |      |
| 1.4 | Emergency telephone number                         |  |      |
|     | Emergency Phone #                                  | : +91 11 49404040 (9:00am - 6:00 pm) [Office hours]                              |      |

# **SECTION 2: Hazards identification**

#### 2.1 Classification of the substance or mixture

#### **Classification according to Regulation (EC) No 1272/2008** Skin irritation (Category 2), H315 Eye irritation (Category 2), H319

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

Warning

Hazard statement(s) H315 H319

Causes skin irritation. Causes serious eye irritation.

Precautionary statement(s) P305 + P351 + P338

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

| 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

| Formula          | : | C <sub>10</sub> H <sub>18</sub> O |
|------------------|---|-----------------------------------|
| Molecular weight | : | 154.25 g/mol                      |
| CAS-No.          | : | 8000-39-1                         |
| EC-No.           | : | 232-268-1                         |

# Hazardous ingredients according to Regulation (EC) No 1272/2008

| Component            |           | Classification                     | Concentration |
|----------------------|-----------|------------------------------------|---------------|
| Terpineol<br>CAS-No. | 8000-39-1 | Skin Irrit. 2; Eye Irrit. 2; H315, | <= 100 %      |
| EC-No.               | 232-268-1 | H319                               |               |

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

#### **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.

#### If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

#### In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

# In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

#### If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. 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

#### **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

#### **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

Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. For personal protection see section 8.

- 6.2 Environmental precautions Do not let product enter drains.
- 6.3 Methods and materials 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 Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Storage class (TRGS 510): Non Combustible Liquids

#### 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

#### 8.2 Exposure controls

#### Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

#### Personal protective equipment

#### Eye/face protection

Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

#### Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

#### **Body Protection**

Impervious clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

#### **Respiratory protection**

Where risk assessment shows air-purifying respirators are appropriate use (US) or type ABEK (EN 14387) respirator cartridges as a backup to enginee protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

#### **Control of environmental exposure**

Do not let product enter drains.

#### **SECTION 9: Physical and chemical properties**

#### 9.1 Information on basic physical and chemical properties

- a) Appearance
- Form: liquid Colour: colourless

|                                      | b)  | Odour  | No data available  |
|--------------------------------------|---|--|--|
|                                      | c)  | Odour Threshold                                    | No data available  |
|                                      | d)  | рН   | No data available  |
|                                      | e)  | Melting point/freezing<br>point                    | Melting point/freezing point: -35.928.2 °C - OECD Test Guideline 102 |
|                                      | f)  | Initial boiling point and boiling range            | 214 - 224 °C at 1.01 hPa   |
|                                      | g)  | Flash point  | ca.88 °C at ca.1,013 hPa   |
|                                      | h)  | Evaporation rate                                   | No data available  |
|                                      | i)  | Flammability (solid, gas)                          | No data available  |
|                                      | j)  | Upper/lower<br>flammability or<br>explosive limits | No data available  |
|                                      | k)  | Vapour pressure                                    | 3 hPa at 20 °C - OECD Test Guideline 104                             |
|                                      | I)  | Vapour density                                     | No data available  |
|                                      | m)  | Relative density                                   | 0.93 g/cm3 at 25 °C - lit.   |
|                                      | n)  | Water solubility                                   | 2.54 g/l at 20 °C - OECD Test Guideline 105 - soluble                |
|                                      | o)  | Partition coefficient: n-<br>octanol/water         | log Pow: 2.6 at 30 °C - OECD Test Guideline 117                      |
|                                      | p)  | Auto-ignition<br>temperature                       | ca.264 °C<br>at 980 - 981 hPa  |
|                                      | q)  | Decomposition<br>temperature                       | No data available  |
|                                      | r)  | Viscosity  | No data available  |
|                                      | s)  | Explosive properties                               | No data available  |
|                                      | t)  | Oxidizing properties                               | No data available  |
| 9.2                                  | Other safety information<br>No data available |  |  |
| SECTION 10: Stability and reactivity |   |  |  |
| 10.1                                 |   | activity   |  |
|                                      | 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 No data available

- 10.5 Incompatible materials Oxidizing agents
- **10.6 Hazardous decomposition products** Hazardous decomposition products formed under fire conditions. - Carbon oxides Other decomposition products - No data available In the event of fire: see section 5

#### **SECTION 11: Toxicological information**

11.1 Information on toxicological effects

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Acute toxicity
LD50 Oral - Rat - male and female - > 2,000 mg/kg(Terpineol)
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(OECD Test Guideline 401) LC50 Inhalation - Rat - male and female - 4 h - > 4.76 mg/l(Terpineol) (OECD Test Guideline 403) LD50 Dermal - Rat - male and female - > 2,000 mg/kg(Terpineol) (OECD Test Guideline 402)

### Skin corrosion/irritation

Skin - Rabbit(Terpineol) Result: Skin irritation (OECD Test Guideline 404)

# Serious eye damage/eye irritation

Eyes - Rabbit(Terpineol) Result: Irritating to eyes. (OECD Test Guideline 405)

# Respiratory or skin sensitisation

Maximisation Test - Guinea pig(Terpineol) Did not cause sensitisation on laboratory animals. (OECD Test Guideline 406)

#### Germ cell mutagenicity

in vitro assay(Terpineol) S. typhimurium 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.

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**

No data available(Terpineol)

Specific target organ toxicity - single exposure No data available(Terpineol)

Specific target organ toxicity - repeated exposure No data available

Aspiration hazard No data available(Terpineol)

#### **Additional Information**

Repeated dose toxicity - Rat - male and female - Oral - No observed adverse effect level - 250 mg/kg(Terpineol) RTECS: WZ6600000

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. (Terpineol)

#### **SECTION 12: Ecological information**

#### 12.1 Toxicity

| Toxicity to fish  | semi-static test LC50 - Danio rerio (zebra fish) - ca. 62.80 mg/l  - 96<br>h(Terpineol)<br>(OECD Test Guideline 203)             |
|-------------------|--|
| Toxicity to algae | static test LC50 - Pseudokirchneriella subcapitata (green algae) - ca. 68 mg/l -<br>72 h(Terpineol)<br>(OECD Test Guideline 201) |

#### 12.2 Persistence and degradability

Biodegradability aerobic - Exposure time 28 d(Terpineol) Result: 80 % - Readily biodegradable. (OECD Test Guideline 310)

| 12.3                              | <b>Bioaccumulative potential</b><br>No data available   |                           |          |
|-----------------------------------|---|---------------------------|----------|
| 12.4                              | Mobility in soil<br>No data available(Terpineol)  |                           |          |
| 12.5                              | <b>Results of PBT and vPvB assessment</b><br>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<br>No data available  |                           |          |
| SECT                              | TION 13: Disposal considerations  |                           |          |
| 13.1                              | Waste treatment methods   |                           |          |
|                                   | <b>Product</b><br>Offer surplus and non-recyclable solutions to a licensed disposal company.  |                           |          |
|                                   | Contaminated packaging<br>Dispose of as unused product.   |                           |          |
| SECTION 14: Transport information |   |                           |          |
| 14.1                              | <b>UN number</b><br>ADR/RID: -  | IMDG: -                   | IATA: -  |
| 14.2                              | UN proper shipping nameADR/RID:Not dangerous goodsIMDG:Not dangerous goodsIATA:Not dangerous goods  |                           |          |
| 14.3                              | Transport hazard class(es)<br>ADR/RID: -  | IMDG: -                   | IATA: -  |
| 14.4                              | Packaging group<br>ADR/RID: -   | IMDG: -                   | IATA: -  |
| 14.5                              | Environmental hazards<br>ADR/RID: no  | IMDG Marine pollutant: no | IATA: no |
| 14.6                              | <b>Special precautions for user</b><br>No data available  |                           |          |

# **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.

| H315 | Causes skin irritation.        |
|------|--------------------------------|
| H319 | Causes serious eye irritation. |

#### **Further information**

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Central Drug House (P) Ltd and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.cdhfinechemical.com for additional terms and conditions of sale.