

Material Safety Data Sheet

Terpineol

Section 1 - Chemical Product and Company Identification

Synonyms : ρ -Menth-1-en-8-ol, alpha-Terpineol
Molecular Weight : 154.25 g/mol
Chemical Formula : $C_{10}H_{18}O$
Company Identification : Tradeasia International Pte. Limited
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Section 2 - Composition and Information on Ingredients

Composition:

Chemical Name	CAS No	Purity, %
(+)-a-Terpineol	7785-5307	min. 90.0

Section 3 – Hazards Identification

3.1 Classification of the substance according to GHS

Skin irritation (Category 2)

H315: Causes skin irritation

Eye irritation (Category 2)

H319: Causes serious eye irritation

Specific target organ toxicity – single exposure (Category 1)

H335: May cause respiratory irritation.

3.2. GHS Label elements, including precautionary statements



Warning
GHS07: Harmful

Prevention

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

P264: Wash skin thoroughly after handling.

P271: Use only outdoors or in a well-ventilated area.

P280: Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response

P302 + P353: IF ON SKIN: Wash with plenty of soap and water.

P304 + P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P312: Call a POISON CENTER/doctor if you feel unwell.

P321: Specific treatment (see supplemental first aid instructions on this label).

P332 + P313: If skin irritation occurs: Get medical advice/ attention.

P337 + P313: If eye irritation persists: Get medical advice/ attention.

P362: Take off contaminated clothing and wash before reuse.

Storage

P403 + P233: Store in a well-ventilated place. Keep container tightly closed.

P405: Store locked up.

Disposal

P501: Dispose of contents/ container to an approved waste disposal plant.

3.3. Other hazards which do not result in classification

Not applicable.

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

Do NOT induce vomiting. 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

N.A.

Section 5 – Fire Fighting Measures

5.1. Suitable Extinguishing media

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

5.2. Specific hazards arising from the chemical

Carbon oxides

5.3. Special protective actions for fire-fighters

Wear a self-contained breathing apparatus for firefighting if necessary.

5.4 Fire-fighting/Further advice

Use water spray to cool unopened containers.

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. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low 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.

6.3. Methods and material for containment and cleaning up

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13). 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.

Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge.

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. Containers which are opened must be carefully resealed and kept upright to prevent leakage.
- Recommended storage temperature 2 - 8 °C

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

We are not aware of any national exposure limit.

8.2. Appropriate engineering controls

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

8.3. Individual protection measures, such as personal protective equipment (PPE)

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.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Full contact

Material: Nitrile rubber

Minimum layer thickness: 0,4 mm

Break through time: 480 min

Material tested: Camatril® (KCL 730 / Aldrich Z677442, Size M)

Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0,11 mm

Break through time: 30 min

Material tested: Dermatril® P (KCL 740 / Aldrich Z677388, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de

test method: EN374

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

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 a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of 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

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

Section 9 – Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance : Form: clear, viscous liquid. Color: Colorless.

Odour : N.A.

Odour threshold : N.A.

pH @ 20°C : N.A.

Melting point : 31°C

Boiling point : N.A.

Flash point : 90°C – closed cup

Evaporation rate : N.A.

Flammability : N.A.

Upper/lower flammability or explosive limits : N.A.

Vapour pressure : N.A.

Vapour density : N.A.

Relative density : 0.94 g/mL at 25°C

Solubility in water : N.A.

Partition coefficient: n-octanol/water : N.A.

Auto-ignition temperature : N.A.

Decomposition temperature : N.A.

Viscosity : N.A.

9.2. Other information

N.A.

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:

Heat, flames and sparks.

10.5. Incompatible materials

No data available.

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 likely routes of exposure

Eye contact: No data available.

Skin contact: No data available.

Specific target organ toxicity – single exposure: Inhalation – May cause respiratory irritation.

Ingestion: No data available.

11.2. Information on toxicological effects

Symptoms: No information available.

11.3. Delayed and immediate effects as well as chronic effects from short and long-term exposure

Chronic toxicity: No information available.

11.4. Numerical measures of toxicity – Product Information

No data available.

11.5. Additional Information

RTECS: Not available.

Section 12 – Ecological Information

12.1. Toxicity

No information available.

12.2. Persistence and degradability

No information available.

12.3. Bioaccumulative potential

No information available.

12.4. Mobility in soil

No information available. (p-Mentha-1,3-diene)

12.5. Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

12.6. Other adverse effects

No information available.

Section 13 – Disposal Considerations

13.1. Waste treatment methods

Product

This combustible material may be burned in a chemical incinerator equipped with an afterburner and scrubber.

Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging

Dispose of as unused product.

Section 14 – Transport Information

14.1. UN number : -

14.2. UN proper shipping name : -

14.3. Transport of hazard classes : -

14.4. Packing group : -

14.5. Environmental Hazards: No

14.6. Incompatible materials: -

14.7. Emergency Response Guide Number : -

Section 15 – Regulatory Information

15.1. International Inventories

All of the components in the product are on the following Inventory lists:

- Canada (DSL)
- Australia (AICS)
- South Korea (KECL)
- Japan (ENCS/ISHL)
- Philippines (PICCS)

15.2. US Federal Regulations

15.2.1. SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

15.2.2. SARA 311/312 Hazard Categories

Acute health hazard: No

Chronic Health Hazard: No

Fire hazard: Yes

Sudden release of pressure hazard: No

Reactive hazard: No

15.2.3. CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

15.3 US State Regulations

California Proposition 65: This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations: This product does not contain any substances regulated by state right-to-know regulations.

Section 16 : Additional Information

References: Not available.

Other Special Considerations: Not available.

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