

# MATERIAL SAFETY DATA SHEET

## Distributor

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## Product identification

Product name: p-Menthane (para-Menthane)  
CAS NO. 99-82-1  
Synonyms: 1-methyl-4-(1-methylethyl)cyclohexane,  
1-isopropyl-4-methylcyclohexane  
Formula: C<sub>10</sub>H<sub>20</sub>  
Molecular weight: 140.26

## Composition/information on ingredients

p-Menthane: 95-97%, Terpenoids: 3-5%, Total:100%.

## Hazards identification

**Eye:** Contact with eyes may cause severe irritation, and possible eye burns.

**Skin:** Causes skin irritation. May cause skin sensitization, an allergic reaction.

**Ingestion:** Causes gastrointestinal irritation with nausea, vomiting and diarrhea. May cause kidney damage. May cause central nervous system depression, characterized by excitement, followed by headache, dizziness, drowsiness, and nausea.

**Inhalation:** May cause respiratory tract irritation.

## First aid measures

**Eyes:** Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.

**Skin:** Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists. Ingestion: Do not induce vomiting. Get medical aid.

**Inhalation:** Get medical aid immediately. Remove from exposure and move to fresh air immediately. If not or difficult breathing, give artificial respiration or oxygen.

## Fire fighting measures

**Extinguishing Media:** Use water fog, dry chemical, carbon dioxide, or regular foam.

**Other Information:** As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. As flammable Liquid, it can release vapors that form explosive mixtures at temperatures above the flashpoint.

## Accidental release measures

Absorb with inert material (eg vermiculite, sand or earth), then place in suitable container. Use a spark-proof tool.

## Handling and storage

**Handling:** Use only in a well-ventilated area. Ground and bond containers when transferring material. Do not pressurize, cut, weld, braze, solder, drill, grind, or

expose empty containers to heat, sparks or open flames.

**Storage:** Keep away from sources of ignition. Store in a cool place in the original container and protect from sunlight. Store in a tightly closed container

## Exposure controls/Personal protection

ACGIH: 20 ppm TWA

NIOSH: 100 ppm TWA; 560 mg/m<sup>3</sup> TWA 800 ppm IDLH

OSHA - Final PELs: 100 ppm TWA; 560 mg/m<sup>3</sup> TWA

**Eyes:** Wear chemical splash goggles.

**Skin:** Wear appropriate gloves to prevent skin exposure.

**Respirators:** If exposure limits are exceeded.

## Physical and chemical properties

Appearance: colorless transparent liquid

Specific gravity (d 20/4): 0.790 - 0.810

Refractive index (n 20): 1.4370 - 1.4500

p-Cymene content: 0.5% max

Purity (GC analysis): 95-97% min.

Flash point: 55 deg C

Boiling point: 168 deg C

Vapor Pressure: 2.16 mm/Hg @ 25 deg C

## Stability and reactivity data

Acids or acidic material and strong oxidizing agents.

Stability condition to avoid: material can undergo auto oxidation in air & generate heat which can build up in confined spaces causing spontaneous combust.

Hazardous decomposition products: carbon monoxide and/or carbon dioxide.

## Toxicological information

Toxicological Information: 1985-86 TOXICICITY DATA.

Rabbit, Skin: 500 mg administered for 24 hr produces severe irritation.

Man, oral, TDLO: 4700 mg/kg ingested produces behavioral changes (excitement, ataxia (loss of muscular coordination), headache).

Other toxicity data: listed in EPA TSCA Inventory, 1980.

## Ecological information

Ecotoxicity: n/a

Environmental: n/a

Other: May be toxic to aquatic organisms; May cause long-term adverse effects in the aquatic environment.

## Disposal considerations

Dispose of container and unused contents in accordance with federal, state and local requirements.

## Transport Information

IMO hazard Class: 3.3 UN No: 2319. Packing group: III

## Regulatory Information

MSDS collection references.

## Disclaimer

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