

# MATERIAL SAFETY DATA SHEET

## Distributor

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## Product identification

Product name: PINE OIL  
CAS NO. 8002-09-3  
Synonyms: fir oil, terpentinoel, unipine  
Formula: C<sub>10</sub>H<sub>18</sub>O  
Molecular weight: unspecified

## Composition/information on ingredients

Typical value: mixture of terpene alcohols (C<sub>10</sub>H<sub>17</sub>OH)  
50-85%, terpene hydrocarbons (C<sub>10</sub>H<sub>16</sub>) 10-25%, other  
components 5-25%.

## 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

Alcohol content: 50%-85% min.

Appearance: transparent liquid

Color (Specie Number): 6 max.

Moisture: 1% max.

Specific gravity (20 deg C): 0.866-0.920 min.

Flash point: 73-86 degree 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 TOXICITY 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).

## 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: 1272. Packing group: III

## Regulatory Information

MSDS collection references.

## Disclaimer

The information provided on this MSDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.