



**INDENTA™**  
**Chemicals (India) Pvt. Ltd.**  
**(ISO 9001:2008 Certified Company)**



201 Adamji Building, 413 Narshi Natha Street, Mumbai - 400 009. (INDIA)  
Office : 91-22-23449820 / 23411655 • Fax : 91-22-23432060 • E-mail : indenta@indenta.com • Website : www.indenta.com

## Material Safety Data Sheet

*Pine Oil*

### SECTION 1.1 – PRODUCT IDENTIFICATION

**Product name** : Pine Oil  
**Botanical name** : Pinus sylvestris  
**CAS no.** : 8023-99-2

### SECTION: 1.2 – COMPANY IDENTIFICATION

**Company Name:** Indenta Chemicals (India) Pvt. Ltd.

**Address:** 201, Adamji Building, 413, Narshi Natha Street, Mumbai -400 009. (India)

**Telephone #:** +91-22-23449820 / 23411655

**Fax #:** +91-22-23432060

### SECTION 2: HAZARD IDENTIFICATION

**Potential Acute Health Effects:** Hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, of inhalation. Slightly hazardous in case of skin contact (permeator).

**Potential Chronic Health Effects:**

**CARCINOGENIC EFFECTS:** Not available.

**MUTAGENIC EFFECTS:** Not available.

**TERATOGENIC EFFECTS:** Not available.

**DEVELOPMENTAL TOXICITY:** Not available. Repeated or prolonged exposure is not known to aggravate medical condition.

### SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

Component	CAS No	Weight %
Pine Oil	8023-99-2	100%

### SECTION 4: FIRST AID MEASURES

**Eye Contact:** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Obtain medical attention.

**Skin Contact:** After contact with skin, wash immediately with plenty of water. Gently and thoroughly wash the contaminated skin with running water and non-abrasive soap. Be particularly careful to clean folds, crevices, creases and groin. Cover the irritated skin with an emollient. If irritation persists, seek medical attention. Wash contaminated clothing before reusing.

**Inhalation:** Remove from exposure, lie down. Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Obtain medical attention.

**Ingestion:** Clean mouth with water. Get medical attention

**Most important symptoms/effects:** No information available.

**Notes to Physician:** Treat symptomatically.

## SECTION 5: FIRE FIGHTING MEASURES

---

**Flash Point:** 77 °C

**Flammable Limits:** Not available.

**Products of Combustion:** Not available.

**Fire Hazards in Presence of Various Substances:** Flammable in presence of open flames and sparks, of heat.

Explosion Hazards in Presence of Various Substances: Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.

**Fire Fighting Media and Instructions:** SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray, fog or foam. Do not use water jet.

**Special Remarks on Fire Hazards:** Not available.

**Special Remarks on Explosion Hazards:** Not available.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

---

**Small Spill:** Absorb with an inert material and put the spilled material in an appropriate waste disposal.

**Large Spill:** Combustible material. Keep away from heat. Keep away from sources of ignition. Stop leak if without risk.

## SECTION 7: HANDLING AND STORAGE

---

**Precautions:** Keep away from heat. Keep away from sources of ignition. Ground all equipment containing material. Do not ingest. Do not breathe gas/fumes/ vapour/spray. Wear suitable protective clothing In case of insufficient ventilation, wear suitable respiratory equipment If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes.

**Storage:** Flammable materials should be stored in a separate safety storage cabinet or room. Keep away from heat. Keep away from sources of ignition. Keep container tightly closed. Keep in a cool, well-ventilated place. Ground all equipment containing material. Keep container dry. Keep in a cool place.

## SECTION 8: EXPOSURE CONTROL / PERSONAL PROTECTION

---

**Engineering Controls:** Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.

**Personal Protection:** Splash goggles. Labcoat. Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

**Personal Protection in Case of a Large Spill:** Splash goggles. Fullsuit. Vapor respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

**Exposure Limits:** Not available.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

---

Test	Specifications
Colour and appearance	Pale straw yellow color liquid

<b>Odour</b>	Shall have pleasant, sweet, odour reminiscent of terpineols with mild aromatic (piney) touch.
<b>Specific gravity at 27/27 °c</b>	0.87 to 0.928
<b>Refractive index at 27°c</b>	1.472 to 1.482
<b>Acid value</b>	Max 1
<b>Dissolved water % by mass</b>	Max 1.0%
<b>Residue after polymerization</b>	Max 5%
<b>Total terpineols &amp; other terpene alcohol's</b>	Min 70%

## SECTION 10: STABILITY AND REACTIVITY

---

**Stability:** The product is stable.

**Instability Temperature:** Not available.

**Conditions of Instability:** Not available.

**Incompatibility with various substances:** Not available.

**Corrosivity:** Non-corrosive in presence of glass.

**Special Remarks on Reactivity:** Not available.

**Special Remarks on Corrosivity:** Not available.

**Polymerization:** No.

## Section 11: TOXICOLOGICAL INFORMATION

---

**Routes of Entry:** Eye contact. Inhalation. Ingestion.

**Toxicity to Animals:** Acute oral toxicity (LD50): 3200 mg/kg [Rat]. Acute dermal toxicity (LD50): 5000 mg/kg [Rabbit].

**Chronic Effects on Humans:** Not available.

**Other Toxic Effects on Humans:** Hazardous in case of skin contact (irritant), of ingestion, of inhalation. Slightly hazardous in case of skin contact (permeator).

**Special Remarks on Toxicity to Animals:** Not available.

**Special Remarks on Chronic Effects on Humans:** Not available.

**Special Remarks on other Toxic Effects on Humans:** Not available.

## Section 12: ECOLOGICAL INFORMATION

---

**Ecotoxicity:** Not available.

**BOD5 and COD:** Not available.

**Products of Biodegradation:** Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

**Toxicity of the Products of Biodegradation:** The products of degradation are more toxic.

**Special Remarks on the Products of Biodegradation:** Not available.

## Section 13: DISPOSAL CONSIDERATION

---

**Waste Disposal Methods:** Dispose off in accordance with the local, provincial and federal regulations. Check with disposal expert to ensure compliance.

## Section 14: TRANSPORT INFORMATION

---

**DOT Classification:** Not a DOT controlled material (United States).

**Identification:** : Not available. : UN1272 PG: III  
**Special Provisions for Transport:** No DOT, ref 49CFR, 173.150

## 15: OTHER REGULATORY INFORMATION

---

**Federal and State Regulations:** TSCA 8(b) inventory: Pine oil  
**Other Regulations:** OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).  
**Other Classifications:**  
**WHMIS (Canada):** CLASS B-3: Combustible liquid with a flash point between 37.8°C (100°F) and 93.3°C (200°F).  
**DSCL (EEC):** R36/38- Irritating to eyes and skin.  
**HMIS (U.S.A.):**  
**Health Hazard:** 0  
**Fire Hazard:** 2  
**Reactivity:** 0  
**Personal Protection:** h  
**National Fire Protection Association (U.S.A.):**  
**Health:** 0  
**Flammability:** 2  
**Reactivity:** 0  
**Specific hazard:**  
**Protective Equipment:** Gloves. Lab coat. Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate. Splash goggles.

## SECTION 16: ADDITIONAL INFORMATION

---

This information is provided for documentation purposes only.  
The information contained in this Certificate of Analysis and Material Safety Data Sheet is obtained from current and reliable sources. The information contained herein is true and to the best of Indenta Chemicals (India) Pvt. Ltd. knowledge. Nothing herein should be interpreted as a recommendation to infringe existing patents or violate any Laws or Regulation. Final determination of the suitability of the material is the sole responsibility of the user. Customers should purchase products from Indenta Chemicals (India) Pvt. Ltd. with the clear understanding that all products must be used at the customers own discretion and only after referencing Material Safety Data Sheets (MSDS) and all other relevant technical information specific to the product. Indenta Chemicals (India) Pvt. Ltd. shall not be held responsible for any damages to property or for any adverse physical effects (including injury or bodily harm) caused by insufficient knowledge or the improper use of a product. The user of the product is solely responsible for compliance with all laws and regulations applying to the use of the products, including intellectual property rights of third parties. As with any manufacturing process, Indenta Chemicals (India) Pvt. Ltd. strongly recommends small lab scale testing for evaluation purposes prior to full commercial manufacturing. The information on the Indenta Chemicals (India) Pvt. Ltd. website is obtained from current and reliable sources but makes no representation as to its comprehensiveness or accuracy. Nothing contained herein should be considered as a recommendation by Indenta Chemicals (India) Pvt. Ltd. as to the fitness for any use. As the ordinary or otherwise use(s) of this product is outside the control of Indenta Chemicals (India) Pvt. Ltd., no representation or warranty, expressed or implied is made as to the effect(s) of such use(s) (including damage or injury), or the results obtained. The liability of Indenta Chemicals (India) Pvt. Ltd. is limited to the value of the goods and does not include any consequential loss. Indenta Chemicals (India) Pvt. Ltd. shall not be liable for any errors or delays in the content, or for any actions taken in reliance thereon.