



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



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## Material Safety Data Sheet DL-Camphor

### SECTION 1.1 – PRODUCT IDENTIFICATION

Product name : Camphor  
Molecular formula : C<sub>10</sub> H<sub>16</sub> O  
Molecular weight : 152.24  
CAS no. : 76-22-2

### 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  
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### SECTION 2: HAZARD IDENTIFICATION

#### Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Flammable solids	Category 2
Acute oral toxicity	Category 4
Skin Corrosion/irritation	Category 2
Serious Eye Damage/Eye Irritation	Category 2
Specific target organ toxicity (single exposure)	Category 3.
Target Organs - Respiratory system.	

#### Label Elements

#### Signal Word

Warning

#### Hazard Statements

Flammable solid  
Harmful if swallowed

Causes skin irritation  
 Causes serious eye irritation  
 May cause respiratory irritation

**Precautionary Statements**

**Prevention**

Wash face, hands and any exposed skin thoroughly after handling  
 Do not eat, drink or smoke when using this product  
 Wear protective gloves/protective clothing/eye protection/face protection  
 Avoid breathing dust/fume/gas/mist/vapors/spray  
 Use only outdoors or in a well-ventilated area  
 Keep away from heat/sparks/open flames/hot surfaces. - No smoking  
 Ground/bond container and receiving equipment  
 Use explosion-proof electrical/ventilating/lighting/equipment

**Inhalation**

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing  
 Call a POISON CENTER or doctor/physician if you feel unwell

**Skin**

IF ON SKIN: Wash with plenty of soap and water  
 If skin irritation occurs: Get medical advice/attention  
 Take off contaminated clothing and wash before reuse

**Eyes**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
 If eye irritation persists: Get medical advice/attention

**Ingestion**

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell  
 Rinse mouth

**Fire**

In case of fire: Use CO2, dry chemical, or foam for extinction

**Storage**

Store in a well-ventilated place. Keep container tightly closed  
 Store locked up

**Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)**

None identified

**SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS**

Component	CAS No	Weight %
Camphor	76-22-2	>95

**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:** Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Obtain medical attention.

**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

**Suitable Extinguishing Media:** Water spray. Carbon dioxide (CO<sub>2</sub>). Dry chemical. chemical foam.

**Unsuitable Extinguishing Media:** No information available

**Flash Point:** 64 °C / 147.2 °F

**Method** - No information available

**Autoignition Temperature:** 460 °C / 860 °F

**Explosion Limits**

**Upper** No data available

**Lower** No data available

**Sensitivity to Mechanical Impact:** No information available

**Sensitivity to Static Discharge:** No information available

**Specific Hazards Arising from the Chemical**

Flammable.

**Hazardous Combustion Products:** Carbon monoxide (CO) Carbon dioxide (CO<sub>2</sub>)

**Protective Equipment and Precautions for Firefighters:** As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

**NFPA** Health 2 Flammability 2 Instability 0 Physical hazards N/A

## SECTION 6: ACCIDENTAL RELEASE MEASURES

**Personal Precautions:** Ensure adequate ventilation. Use personal protective equipment.

**Environmental Precautions:** See Section 12 for additional ecological information.

**Methods for Containment and Clean Up:** Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment. Sweep up or vacuum up spillage and collect in suitable container for disposal. Do not let this chemical enter the environment.

## SECTION 7: HANDLING AND STORAGE

**Handling:** Avoid contact with skin and eyes. Do not breathe dust. Do not breathe vapors or spray mist. Do not ingest. Use explosion-proof equipment. Use only non-sparking tools.

**Storage:** Keep in a dry, cool and well-ventilated place. Keep container tightly closed. Keep away from heat and sources of ignition. Flammables area.

## SECTION 8: EXPOSURE CONTROL / PERSONAL PROTECTION

**Exposure Guidelines:**

Component	ACGIH TLV	OSHA PEL	NIOSH IDLH
Camphor	TWA: 2 ppm STEL: 3 ppm	(Vacated) TWA: 2 mg/m <sup>3</sup> TWA: 2 mg/m <sup>3</sup>	TWA: 2 mg/m <sup>3</sup> IDLH: 200 mg/m <sup>3</sup> TWA: 2 mg/m <sup>3</sup>

Component	Quebec	Mexico OEL (TWA)	Ontario TWAEV
Camphor	TWA: 2 ppm TWA: 12 mg/m <sup>3</sup> STEL: 3 ppm STEL: 19 mg/m <sup>3</sup>	TWA: 2 ppm TWA: 12 mg/m <sup>3</sup> STEL: 3 ppm STEL: 19 mg/m <sup>3</sup>	TWA: 2 ppm STEL: 3 ppm

**Engineering Measures:** Use explosion-proof electrical/ventilating/lighting/equipment. Ensure that eyewash stations and safety showers are close to the workstation location.

#### **Personal Protective Equipment**

**Eye/face Protection:** Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

**Skin and body protection:** Wear appropriate protective gloves and clothing to prevent skin exposure.

**Respiratory Protection:** Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

**Hygiene Measures:** Handle in accordance with good industrial hygiene and safety practice.

### **SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

Physical State	Solid
Appearance	White
Odor	Characteristic
Odor Threshold	No information available
pH	No information available
Melting Point / Range	175 - 177 °C / 347 - 350.6 °F
Boiling Point / Range	204 °C / 399.2 °F
Flash Point	64 °C / 147.2 °F
Evaporation Rate	No information available
Flammability (Solid, Gas)	No information available
Flammability or Explosive Limits	
Upper	No data available
Lower	No data available
Vapor Pressure	0.27 mbar @ 20 °C
Vapor Density	No information available
Relative Density	No information available
Solubility	No information available
Partition coefficient; n-octanol/water	No data available
Autoignition Temperature	460 °C / 860 °F
Decomposition Temperature	No information available
Viscosity	No information available
Molecular formula	C <sub>10</sub> H <sub>16</sub> O
Molecular weight	152.24

### **SECTION 10: STABILITY AND REACTIVITY**

**Reactive Hazard:** None known, based on information available

**Stability:** Stable under normal conditions.

**Conditions to Avoid:** Keep away from open flames, hot surfaces and sources of ignition. Incompatible products.

**Incompatible Materials:** Organic materials, Strong oxidizing agents, Strong reducing agents

**Hazardous Decomposition Products:** Carbon monoxide (CO), Carbon dioxide (CO<sub>2</sub>).

**Hazardous Polymerization:** Hazardous polymerization does not occur.

**Hazardous Reactions:** None under normal processing.

## Section 11: TOXICOLOGICAL INFORMATION

### Acute Toxicity

#### Component Information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Camphor	1310 mg/kg (Mouse)	Not listed	Not listed

**Toxicologically Synergistic Products:** No information available

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

**Irritation:** No information available

**Sensitization:** No information available

**Carcinogenicity:** The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component	CAS-No	IARC	NTP	ACGIH	OSHA	Mexico
Camphor	76-22-2	Not listed	Not listed	Not listed	Not listed	Not listed

**Mutagenic Effects:** No information available

**Reproductive Effects:** No information available.

**Developmental Effects:** No information available

**Teratogenicity:** No information available.

**STOT - single exposure:** Respiratory system

**STOT - repeated exposure:** None known

**Aspiration hazard:** No information available.

**Symptoms / effects, both acute and delayed:** No information available

**Endocrine Disruptor Information:** No information available

**Other Adverse Effects:** The toxicological properties have not been fully investigated. See actual entry in RTECS for complete information.

## Section 12: ECOLOGICAL INFORMATION

### Ecotoxicity

Do not empty into drains.

**Persistence and Degradability:** No information available.

**Bioaccumulation/ Accumulation:** No information available.

**Mobility:** No information available

## Section 13: DISPOSAL CONSIDERATION

**Waste Disposal Methods:** Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

**Section 14: TRANSPORT INFORMATION**

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**DOT** Not regulated

**TDG** Not regulated

**IATA**

**UN-No** 2717

**Proper Shipping Name** CAMPHOR

**Hazard Class** 4.1

**Packing Group** III

**IMDG/IMO**

**UN-No** 2717

**Proper Shipping Name** CAMPHOR

**Hazard Class** 4.1

**Packing Group** III

**15: OTHER REGULATORY INFORMATION**

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**International Inventories**

Component	TSCA	DSL	NDSL	EINECS	ELINCS	NLP	PICCS	ENCS	AICS	IECSC	KECL
Camphor	X	X	-	200-945-0	-		X	X	X	X	X

**Legend:**

X - Listed

E - Indicates a substance that is the subject of a Section 5(e) Consent order under TSCA.

F - Indicates a substance that is the subject of a Section 5(f) Rule under TSCA.

N - Indicates a polymeric substance containing no free-radical initiator in its inventory name but is considered to cover the designated polymer made with any free-radical initiator regardless of the amount used.

P - Indicates a commenced PMN substance

R - Indicates a substance that is the subject of a Section 6 risk management rule under TSCA.

S - Indicates a substance that is identified in a proposed or final Significant New Use Rule

T - Indicates a substance that is the subject of a Section 4 test rule under TSCA.

XU - Indicates a substance exempt from reporting under the Inventory Update Rule, i.e. Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(B)).

Y1 - Indicates an exempt polymer that has a number-average molecular weight of 1,000 or greater

Y2 - Indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.

**U.S. Federal Regulations**

**TSCA 12(b)** Not applicable

**SARA 313:** Not applicable

**SARA 311/312 Hazardous Categorization**

**Acute Health Hazard** Yes

**Chronic Health Hazard** No

**Fire Hazard** Yes

**Sudden Release of Pressure Hazard** No

**Reactive Hazard No**

**Clean Water Act:** Not applicable

**Clean Air Act:** Not applicable

**OSHA Occupational Safety and Health Administration**

Not applicable

**CERCLA**

Not applicable

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

**State Right-to-Know:**

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Camphor	X	X	X	-	X

**U.S. Department of Transportation**

**Reportable Quantity (RQ):** N

**DOT Marine Pollutant** N

**DOT Severe Marine Pollutant** N

**U.S. Department of Homeland Security**

This product does not contain any DHS chemicals.

**Other International Regulations**

**Mexico – Grade:** No information available

**Canada**

**This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR**

**WHMIS Hazard Class:** B4 Flammable solid

D1B Toxic materials

D2B Toxic materials

**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

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