

**Section 1: Identification**

|                            |   |
|----------------------------|---|
| <b>Product Name</b>        | Camphor USP Synthetic   |
| <b>Commercial Name</b>     | Not available.  |
| <b>Product Use</b>         | Not available.  |
| <b>Restrictions On Use</b> | Not available.  |
| <b>Product Code</b>        | 50-1200   |
| <b>Company</b>             | <p>PCCA<br/> 9901 South Wilcrest<br/> Houston, TX 77099<br/> Phone: 1-800-331-2498<br/> Fax: 1-800-874-5760</p> |
|                            | <p>In case of emergency contact:<br/> <b>CHEMTREC (24hr) 1-800-424-9300</b></p>                                 |

**Section 2: Hazard(s) Identification**

**OSHA Haz Com:** Flam. Sol. 2 H228 - Flammable solid. Acute Tox. 4 (Oral) H302 - Harmful if swallowed. Acute Tox. 4 (Inhalation:dust,mist) H332 - Harmful if inhaled. STOT SE 2 H371 - May cause damage to organs. Aquatic Acute 3 H402 - Harmful to aquatic life

**CFR 1910.1200**

**Signal Word** DANGER

**Hazard Statement(s)** Flammable solid. Harmful if swallowed or if inhaled. May cause damage to organs. Harmful to aquatic life

**Pictogram(s) or Symbol(s)**


**Precautionary Statement(s):**

|                   |   |
|-------------------|---|
| <b>Prevention</b> | P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P240 - Ground/Bond container and receiving equipment. P241 - Explosion-free electrical equipment and lighting with earth P260 - Do not breathe gas, fumes, vapour or spray P261 - Avoid breathing dust/fume/gas/mist/vapours/spray. P264 - Wash hands thoroughly after handling P270 - Do not eat, drink or smoke when using this product. P271 - Use only outdoors or in a well-ventilated area. P273 - Avoid release to the environment. P280 - Wear protective gloves/protective clothing/eye protection |
| <b>Response</b>   | P301+P312 - IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing. P312 - Call a POISON CENTER/doctor if you feel unwell. P330 - Rinse mouth. P370+P378 - In case of fire: Use media other than water to extinguish.  |
| <b>Storage</b>    | P405 Store locked up.   |
| <b>Disposal</b>   | P501 Dispose in a safe manner in accordance with local/national regulations.  |

**Section 3: Composition/Information on Ingredients**

|                          |   |
|--------------------------|---|
| <b>Substance/Mixture</b> | Substance   |
| <b>Components</b>        | Camphor (DL)  |
| <b>% By Weight</b>       | 100   |
| <b>CAS#</b>              | 76-22-2   |
| <b>Molecular Weight</b>  | 152.24 g/mole   |
| <b>Chemical Formula</b>  | C10H16O   |
| <b>Synonym(s)</b>        | *1,7,7-Trimethylbicyclo[2.2.1]heptan-2-one* (+)-Camphor* Camphor synthetic* 2-Bornanone* 2-Camphonone* Bicyclo(2.2.1)heptan-2-one* 1,7,7-trimethyl-* Gum Camphor* |

**Mixtures**

| <b>Name</b>  | <b>CAS#</b> | <b>% by Weight</b> | <b>TLV/PEL</b>            | <b>LC50/LD50</b>                       |
|--------------|-------------|--------------------|---------------------------|--|
| Camphor (DL) | 76-22-2     | 100                | TWA: 12 STEL: 19 (mg/m3). | ORAL (LD50): Acute: 1310mg/kg [Mouse]. |

**Section 4: First-Aid Measures**

|                         |   |
|-------------------------|---|
| <b>Inhalation</b>       | Remove person to fresh air and keep comfortable for breathing. Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell. Call a poison center or a doctor if you feel unwell.  |
| <b>Skin Contact</b>     | Gently wash with plenty of soap and water. Wash skin with plenty of water.  |
| <b>Eye Contact</b>      | Remove contact lenses, if present and easy to do. Continue rinsing. Rinse cautiously with water for several minutes.  |
| <b>Ingestion</b>        | Rinse mouth. Do NOT induce vomiting. Call a POISON CENTER/doctor if you feel unwell. Call a poison center or a doctor if you feel unwell.   |
| <b>Symptoms/Effects</b> |   |
| <b>Acute</b>            | Symptoms/effects : May cause damage to organs. Symptoms/effects after inhalation : Danger of serious damage to health by prolonged exposure through inhalation. Harmful if inhaled. Symptoms/effects after ingestion : Swallowing a small quantity of this material will result in serious health hazard. |
| <b>Delayed</b>          | Symptoms/effects : May cause damage to organs. Symptoms/effects after inhalation : Danger of serious damage to health by prolonged exposure through inhalation. Harmful if inhaled. Symptoms/effects after ingestion : Swallowing a small quantity of this material will result in serious health hazard. |

**Immediate Medical Attention**

Treat symptomatically

**Section 5: Fire-Fighting Measures**
**Suitable Extinguishing Media**

Foam. Dry powder. Carbon dioxide. Water spray. Sand.

**Unsuitable Extinguishing Media**

Do not use a heavy water stream.

**Products of Combustion**

Fire hazard : Flammable solid. Explosion hazard : May form flammable/explosive vapour-air mixture. Reactivity : On combustion, forms: carbon oxides (CO and CO<sub>2</sub>). Reacts violently with (strong) oxidizers: (increased) risk of fire/explosion. Flammable solid.

**Firefighters Special Equipment and Precautions**

Precautionary measures fire : Fire. Keep upwind. Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment. Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection. Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

**Section 6: Accidental Release Measures**

General measures : Remove ignition sources. Use special care to avoid static electric charges. No open flames. No smoking. For non-emergency personnel: Protective equipment : Protective clothing. Dust cloud production: compressed air/oxygen apparatus.

See "Material-Handling" to select protective clothing. Gloves. Face shield. Emergency procedures : Ventilate spillage area.

Evacuate unnecessary personnel. No open flames, no sparks, and no smoking. Do not breathe gas, fumes, vapour or spray.

Measures in case of dust release : In case of dust production: keep upwind. Dust production: have neighbourhood close doors and windows. In case of dust production: stop engines and no smoking. In case of dust production: no naked flames or sparks. Dust: spark-/explosionproof appliances/lighting equipment. For emergency responders Protective equipment : Do not attempt to take action without suitable protective equipment. Equip cleanup crew with proper protection. Avoid breathing

dust/fume/gas/mist/vapours/spray. For further information refer to section 8: "Exposure controls/personal protection". Emergency

procedures : Ventilate area. Environmental precautions: Avoid release to the environment. Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters. Methods and material for containment and cleaning up: For

containment : Dam up the liquid spill. Contain leaking substance, pump over in suitable containers. Stop leak if safe to do so.

Knock down/dilute dust cloud with water spray. Consult "Material-handling" to select material of containers. Methods for cleaning up

: Mechanically recover the product. On land, sweep or shovel into suitable containers. Store away from other materials. Notify

authorities if product enters sewers or public waters. Other information : Dispose of materials or solid residues at an authorized site.

**Section 7: Handling and Storage**

Additional hazards when processed : Handle empty containers with care because residual vapours are flammable. Precautions for safe handling : Wear personal protective equipment. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour. No open flames. No smoking. Use only outdoors or in a well-ventilated area. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Do not breathe gas, fumes, vapour or spray. Hygiene measures : Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Always wash hands after handling the product. Conditions for safe storage, including any incompatibilities Technical measures : Proper grounding procedures to avoid static electricity should be followed. Ground/bond container and receiving equipment. Explosion-free electrical equipment and lighting with earth. Storage conditions : Keep only in the original container in a cool, well ventilated place away from : Keep container closed when not in use. Keep in fireproof place. Keep cool. Protect from sunlight. Keep away from ignition sources. Store locked up. Store in a well-ventilated place. Incompatible products : Strong bases. Strong acids. Incompatible materials : Sources of ignition. Direct sunlight. Heat sources. Heat and ignition sources : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Information on mixed storage : Keep away from oxidizing agents. Storage area : Meet the legal requirements. Store in a dry area. Store in a well-ventilated place. Provide the tank with earthing. Special rules on packaging : Special rules on packaging. Store in a closed container. Clean. Meet the legal requirements. Packaging materials : Suitable packing materials. wood. glass. Tin.

**Section 8: Exposure Controls/Personal Protection**

|                             |  |
|-----------------------------|--|
| <b>Exposure Limits</b>      | ACGIH ACGIH TWA (ppm) 2 ppm ACGIH ACGIH STEL (ppm) 2 ppm   |
| <b>Engineering Controls</b> | Ensure good ventilation of the work station.   |
| <b>Personal Protection</b>  | Personal protective equipment : Avoid all unnecessary exposure. Wash hands thoroughly after handling. Materials for protective clothing : Excellent resistance: Butyl rubber. Polyvinylchloride (PVC). Hand protection : Wear protective gloves/protective clothing/eye protection protective gloves. Eye protection : Chemical goggles or safety glasses. Safety glasses. Skin and body protection : Measures in case of dust release. Protective clothing. Dustproof clothing. Head/neck protection. Respiratory protection : Where exposure through inhalation may occur from use, respiratory protection equipment is recommended. [In case of inadequate ventilation] wear respiratory protection. Environmental exposure controls : Avoid release to the environment. Other information : Do not eat, drink or smoke during use. Do not breathe gas, fumes, vapour or spray. Do not eat, drink or smoke when using this product. |

**Section 9: Physical and Chemical Properties**

|  |   |  |                          |
|--|---|--|--------------------------|
| <b>Appearance</b>                                | white Colourless Crystalline solid. Crystalline powder. Solid.  |  |                          |
| <b>Odor</b>                                      | aromatic  |  |                          |
| <b>Odor Threshold</b>                            | Not available   |  |                          |
| <b>Melting Point</b>                             | 165 - 177 °C  | <b>pH</b>                                | No information available |
| <b>Freezing Point</b>                            | No information available  | <b>Vapor Pressure</b>                    | 0.27 hPa                 |
| <b>Boiling Point/Range</b>                       | 204 °C  | <b>Vapor Density</b>                     | Not available.           |
| <b>Decomposition temperature</b>                 | No information available  | <b>Viscosity</b>                         | Not available.           |
| <b>Partition Coefficient:</b><br>n-octanol/water | No information available  | <b>Evaporation Rate</b>                  | Not available            |
| <b>Flash Point</b>                               | Not available.  | <b>Autoignition temperature</b>          | 467C/ 872.6F             |
| <b>Flammability</b>                              | Not available   | <b>Flammability or Explosive Limits:</b> |                          |
|  |   | <b>Lower</b>                             | Not available            |
|  |   | <b>Upper</b>                             | Not available            |
| <b>Solubility(ies)</b>                           | Soluble in ethanol. Soluble in ether. Soluble in oil. Soluble in sulfur dioxide. Poorly soluble in water. Soluble in chloroform. Soluble in methanol. Soluble in acetic acid. Soluble in Sulfur. Soluble in sulfuric acid. Soluble in chlorinated hydrocarbons. Water: 0.15 g/100ml |  |                          |
| <b>Other</b>                                     | Log Pow : < 3 (QSAR) Other properties : Electrostatic charges may be generated during handling. Gas/vapour heavier than air at 20'C.  |  |                          |

**Section 10: Stability and Reactivity**

|   |   |
|---|---|
| <b>Reactivity</b>                       | On combustion, forms: carbon oxides (CO and CO <sub>2</sub> ). Reacts violently with (strong) oxidizers: (increased) risk of fire/explosion. Flammable solid.                         |
| <b>Chemical Stability</b>               | Flammable solid. May form flammable/explosive vapour-air mixture.   |
| <b>Hazardous Polymerization</b>         | Not established.  |
| <b>Conditions to Avoid</b>              | Direct sunlight. Extremely high or low temperatures. Open flame. Overheating. Heat. Sparks. Avoid contact with hot surfaces. No flames, no sparks. Eliminate all sources of ignition. |
| <b>Incompatible Materials</b>           | Strong acids. Strong bases.   |
| <b>Hazardous Decomposition Products</b> | fume. Carbon monoxide. Carbon dioxide. May release flammable gases.   |

**Section 11: Toxicological Information**

|              |           |
|--------------|-----------|
| <b>RTECS</b> | EX1225000 |
|--------------|-----------|

**Acute Toxicity**  
ATE US (oral) 500 mg/kg bodyweight ATE US (dust,mist) 1.5 mg/l/4h

**Skin Corrosion/Irritation**

No information available

**Serious Eye Damage/Irritation**

No information available

**Respiratory or Skin Sensitization**

No information available

**Germ Cell Mutagenicity**

No information available

**Carcinogenicity**

No information available

**Reproductive Toxicity**

No information available

**Routes of Entry**

Not available.

**Symptoms Related to Exposure**

Harmful if swallowed. Harmful if inhaled. after inhalation : Danger of serious damage to health by prolonged exposure through inhalation. Harmful if inhaled after ingestion : Swallowing a small quantity of this material will result in serious health hazard.

**Potential Health Effects**

No information available.

**Target Organ(s)**

No information available

**Section 12: Ecological Information****Ecotoxicity**

Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment. Ecology - air : TA-Luft Klasse 5.2.5/l. Ecology - water : Toxic to fish. Toxic to aquatic organisms. Harmful to algae. CAMPHOR GUM (76-22-2) LC50 fish 1 110 mg/l (96 h; Pimephales promelas; Other isomer) EC50 Daphnia 1 100 mg/l (48 h; Daphnia magna; QSAR) Threshold limit algae 1 68 mg/l (72 h; Algae)

**Persistence and Degradability**

ThOD 2.8 g O<sub>2</sub>/g substance

**Bioaccumulative Potential**

Log Pow < 3 (QSAR) Bioaccumulative potential Not established.

**Mobility in Soil**

No information available

**Other Adverse Effects**

Avoid release to the environment.

**Section 13: Disposal Considerations****Waste Disposal**

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Dispose in a safe manner in accordance with local/national regulations. Ecology - waste materials : Avoid release to the environment.

**Disposal of Container**

Handle empty containers with care because residual vapours are flammable.

**Other Considerations**

No information available

**Section 14: Transport Information****DOT Classification**



## Safety Data Sheet

For Compliance with OSHA 29 CFR 1910.1200 and ANSI Z400.1-1998

Camphor USP Synthetic

50-1200

In accordance with DOT Transport document description : UN2717 Camphor, 4.1, III UN-No.(DOT) : UN2717 Proper Shipping Name (DOT) : Camphor Class (DOT) : 4.1 - Class 4.1 - Flammable Solid 49 CFR 173.124 Hazard labels (DOT) : 4.1 - Flammable solid Packing group (DOT) : III - Minor Danger DOT Packaging Non Bulk (49 CFR 173.xxx) : 213 DOT Packaging Bulk (49 CFR 173.xxx) : 240 DOT Special Provisions (49 CFR 172.102) : A1 - Single packagings are not permitted on passenger aircraft. IB8 - Authorized IBCs: Metal (11A, 11B, 11N, 21A, 21B, 21N, 31A, 31B and 31N); Rigid plastics (11H1, 11H2, 21H1, 21H2, 31H1 and 31H2); Composite (11HZ1, 11HZ2, 21HZ1, 21HZ2, 31HZ1 and 31HZ2); Fiberboard (11G); Wooden (11C, 11D and 11F); Flexible (13H1, 13H2, 13H3, 13H4, 13H5, 13L1, 13L2, 13L3, 13L4, 13M1 or 13M2). IP3 - Flexible IBCs must be sift-proof and water-resistant or must be fitted with a sift-proof and water-resistant liner. T1 - 1.5 178.274(d)(2) Normal..... 178.275(d)(2) TP33 - The portable tank instruction assigned for this substance applies for granular and powdered solids and for solids which are filled and discharged at temperatures above their melting point which are cooled and transported as a solid mass. Solid substances transported or offered for transport above their melting point are authorized for transportation in portable tanks conforming to the provisions of portable tank instruction T4 for solid substances of packing group III or T7 for solid substances of packing group II, unless a tank with more stringent requirements for minimum shell thickness, maximum allowable working pressure, pressure-relief devices or bottom outlets are assigned in which case the more stringent tank instruction and special provisions shall apply. Filling limits must be in accordance with portable tank special provision TP3. Solids meeting the definition of an elevated temperature material must be transported in accordance with the applicable requirements of this subchapter. DOT Packaging Exceptions (49 CFR 173.xxx) : None DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27) : 25 kg DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75) : 100 kg DOT Vessel Stowage Location : A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel. Other information : No supplementary information available

### Section 15: Regulatory Information

#### Regulations

CAMPHOR GUM (76-22-2) Listed on the United States TSCA (Toxic Substances Control Act) inventory

#### Other

Not available.

### Section 16: Other Information

Disclaimer The information set forth above is believed to be accurate as of the last revision date indicated above. The information set forth above relates to the specific material identified in this MSDS and may not be valid for such material when used in combination with any other materials, in any process or if used in a manner other than for which it is intended. Ruger Chemical Company makes no warranty of merchantability or any other warranty, express or implied, with respect to the information set forth above, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information provided above for their particular purposes. In no event shall Ruger Chemical Company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Ruger Chemical Company has been advised of the possibility of such damages