MSDS – Alpha pinene

Synergy Semiochemicals Corporation

IDENTITY (As Used on Label and List)

Alpha pinene

Note: Blank spaces are not permitted. If any item is not applicable, or no information is available, the space must be marked to indicate that.

Section I

Manufacturer's Name
Synergy Semiochemicals Corporation

Address
7572 Progress Way
Delta, British Columbia,
Canada
V4G 1E9

Emergency Telephone Number
CANUTEC @ 1-(613)-996-6666

Telephone Number for Information
1-(604)-454-1122

Date Prepared
2018-09-07

Signature of Preparer (optional)

Section II - Hazardous Ingredients/Identity Information

<table>
<thead>
<tr>
<th>Hazardous Components (Specific Chemical Identity; Common Name(s))</th>
<th>OSHA PEL</th>
<th>ACGIH TLV</th>
<th>Other Limits Recommended</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alpha pinene CAS 80-56-8</td>
<td>N/A</td>
<td>20 ppm</td>
<td>20-25ppm</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Section III - Physical/Chemical Characteristics

Boiling Point
156°C

Specific Gravity (H₂O = 1)
0.858

Melting Point
-62°C

Evaporation Rate (Butyl Acetate = 1)
<1

Solubility in Water
Insoluble

Appearance and Odour
Clear mobile liquid with odour of turpentine
Section IV - Fire and Explosion Hazard Data

<table>
<thead>
<tr>
<th>Flash Point (Method Used)</th>
<th>Flammable Limits</th>
<th>LEL</th>
<th>UEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>33 C, closed cup</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

**Extinguishing Media**
Carbon dioxide, dry chemical, foam. Do not use water.

**Special Fire Fighting Procedures**
Use water spray to cool fire exposed containers. Firefighters & other exposed to product of combustion should wear self-contained breathing apparatus & full firefighting protective clothing. Dike area to prevent runoff.

**Unusual Fire and Explosion Hazards**
When heated, material and vapours are a moderate fire hazard.

Section V - Reactivity Data

<table>
<thead>
<tr>
<th>Stability</th>
<th>Conditions to Avoid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unstable</td>
<td>Exposure to oxidizing agents or open flame</td>
</tr>
</tbody>
</table>

**Incompatibility (Materials to Avoid)**
Oxidizing agents, chlorinating agents, strong acids, strong heating or flame

**Hazardous Decomposition or Byproducts**
Oxides of carbon. Incomplete combustion generates aldehydes and acids

<table>
<thead>
<tr>
<th>Hazardous Polymerization</th>
<th>Conditions to Avoid</th>
</tr>
</thead>
<tbody>
<tr>
<td>May Occur</td>
<td>N/A</td>
</tr>
<tr>
<td>Will Not Occur</td>
<td></td>
</tr>
</tbody>
</table>

Section VI - Health Hazard Data

**Route(s) of Entry:**

- Inhalation?: YES
- Skin?: YES
- Ingestion?: YES

**Health Hazards (Acute and Chronic)**
Mucous membrane, skin, eye and respiratory tract irritant. May be an allergic sensitizer in some individuals.

**Carcinogenicity:**
- NTP?: NO
- IARC Monographs?: NO
- OSHA Regulated?: NO

This material is not known to be carcinogenic

**Signs and Symptoms of Exposure**
Exposure to small amounts is likely to be asymptomatic. Larger amounts may cause irritation of skin, eyes, or mucous membranes. Ingestion may lead to nausea and vomiting. Inhalation of large amounts of vapour may produce dizziness, headache, chest pain, and in severe cases pulmonary oedema, cyanosis and intoxication leading to unconsciousness.

If concerned about exposure levels, remove victim to fresh air and contact your local poison control centre.
Section VI - Health Hazard Data cont’d.

Medical Conditions Generally Aggravated by Exposure
Dermatitis, pneumonia, upper respiratory tract irritation.

Emergency and First Aid Procedures
Remove affected to fresh air. For skin contact, wash affected area with warm soapy water. For eye contact, wash eyes thoroughly with cold water. Treat symptomatically and supportively.

Section VII - Precautions for Safe Handling and Use

Steps to Be Taken in Case Material is Released or Spilled
Provide adequate ventilation to remove fumes from spill area. Personnel should use protection against contact with liquids & against breathing large amounts of vapours. Pick up with absorbent material & place in waste disposal container. Use vermiculite or other suitable absorbent. Flush area with water.

Waste Disposal Method
Incineration or sanitary disposal in accordance with local regulations

Precautions to Be taken in Handling and Storing
Flammable liquid - class 1C. Store in well ventilated, cool dry place away from sources of heat & ignition. No smoking in areas of storage or use. Ground metal containers when transferring liquid to prevent static accumulation & discharge. "Empty" containers may retain residue (liquid/vapour) & be dangerous.

Other Precautions
N/A

Section VIII - Control Measures

Respiratory Protection (Specify Type)
For high exposures, use NIOSH approved air line or self contained respirators. Eye protection may be needed to prevent eye irritation from high levels of vapours.

Ventilation
<table>
<thead>
<tr>
<th>Local Exhaust</th>
<th>Special</th>
</tr>
</thead>
<tbody>
<tr>
<td>YES</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Mechanical (General)
<table>
<thead>
<tr>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>N/A</td>
</tr>
</tbody>
</table>

Protective Gloves
Organic resistant, e.g. Butyl rubber

Eye Protection
Organic resistant

Other Protective Clothing or Equipment
Provide eye wash station, safety shower, and suitable cleanup materials in case of spill.

Work/Hygienic Practices
Avoid contact with skin and eyes. Do not eat, drink, or smoke when handling material.