Material Safety Data Sheet

**Section 1. Chemical Product and Company Identification**

**Common Name/Trade Name** 1,2,3,4-Tetrahydronaphthalene

**Manufacturer** SPECTRUM LABORATORY PRODUCTS INC. 14422 S. SAN PEDRO STREET GARDENA, CA 90248

**CAS#** 119-64-2

**RTECS** QK3850000

**TSCA** T S C A 8(b) i n v e n t o r y: 1,2,3,4-Tetrahydronaphthalene

**Commercial Name(s)** Not available.

**Synonym** Tetralin; Tetranap

**Chemical Name** 1,2,3,4-Tetrahydronaphthalene

**Chemical Family** Not available.

**Chemical Formula** C10H12

**Supplier** SPECTRUM LABORATORY PRODUCTS INC. 14422 S. SAN PEDRO STREET GARDENA, CA 90248

**Section 2. Composition and Information on Ingredients**

**Name** 1) {1,2,3,4-}Tetrahydronaphthalene

**CAS #** 119-64-2

**Exposure Limits**

<table>
<thead>
<tr>
<th>Name</th>
<th>CAS #</th>
<th>TWA (mg/m³)</th>
<th>STEL (mg/m³)</th>
<th>CEIL (mg/m³)</th>
<th>% by Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) {1,2,3,4-}Tetrahydronaphthalene</td>
<td>119-64-2</td>
<td></td>
<td></td>
<td></td>
<td>100</td>
</tr>
</tbody>
</table>

**Toxicological Data on Ingredients**

**1,2,3,4-Tetrahydronaphthalene:**

- ORAL (LD50): Acute: 1620 mg/kg [Rat].
- DERMAL (LD50): Acute: 17300 mg/kg [Rabbit].

**Section 3. Hazards 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 (sensitizer, permeator).

**Potential Chronic Health Effects**

- CARCINOGENIC EFFECTS: Not available.
- MUTAGENIC EFFECTS: Not available.
- TERATOGENIC EFFECTS: Not available.
- DEVELOPMENTAL TOXICITY: Not available.

The substance may be toxic to kidneys, liver, skin, eyes, central nervous system (CNS). Repeated or prolonged exposure to the substance can produce target organs damage.

**Continued on Next Page**
Section 4. First Aid Measures

| Eye Contact | Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention. |
| Skin Contact | In case of contact, immediately flush skin with plenty of water. Cover the irritated skin with an emollient. Remove contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention. |
| Serious Skin Contact | Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek immediate medical attention. |
| Inhalation | If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention. |
| Serious Inhalation | Not available. |
| Ingestion | Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband. |
| Serious Ingestion | Not available. |

Section 5. Fire and Explosion Data

| Flammability of the Product | Combustible. |
| Auto-Ignition Temperature | 385°C (725°F) |
| Flash Points | CLOSED CUP: 82°C (179.6°F). OPEN CUP: 77°C (170.6°F). |
| Flammable Limits | LOWER: 0.8%  UPPER: 5% |
| Products of Combustion | These products are carbon oxides (CO, CO2). |
| 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 | Can react explosively with dinitrogen pentoxide, and chromic anhydride. Prolonged contact with air may cause an explosion. |

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. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system. |

Continued on Next Page
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/vapor/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
Air sensitive. Keep container in a cool, well-ventilated area. Keep container tightly closed and sealed until ready for use. Avoid all possible sources of ignition (spark or flame).

Section 8. Exposure Controls/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
Safety glasses. Lab coat. Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Gloves (impervious).

Personal Protection in Case of a Large Spill
Splash goggles. Full suit. 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

Physical state and appearance
Liquid.

Molecular Weight
132.21 g/mole

pH (1% soln/water)
Not applicable.

Boiling Point
207.6°C (405.7°F)

Melting Point
-36°C (-32.8°F)

Critical Temperature
Not available.

Specific Gravity
0.973 (Water = 1)

Vapor Pressure
0 kPa (@ 25°C)

Vapor Density
4.6 (Air = 1)

Odor
Aromatic. Resembling a mixture of benzene and menthol.

Taste
Not available.

Color
Colorless to light yellow. Clear

Solubility
Soluble in methanol.
Insoluble in cold water.
Miscible with ethanol, butanol, benzene, acetone, petroleum ether, chloroform, Decalin.
Soluble in methanol: 50.6% wt/wt., aniline.

Water/Oil Dist. Coeff.
Not available.

Dispersion Properties
See solubility in water, methanol.

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### Section 10. Stability and Reactivity Data

<table>
<thead>
<tr>
<th>Stability</th>
<th>The product is stable.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instability Temperature</td>
<td>Not available.</td>
</tr>
<tr>
<td>Conditions of Instability</td>
<td>Heat, ignition sources (sparks, flames), incompatible materials</td>
</tr>
<tr>
<td>Incompatibility with various substances</td>
<td>Reactive with oxidizing agents.</td>
</tr>
<tr>
<td>Corrosivity</td>
<td>Non-corrosive in presence of glass.</td>
</tr>
<tr>
<td>Special Remarks on Reactivity</td>
<td>Air sensitive. Oxidizes on exposure to air. Attacks some forms of plastic, rubber, and coatings</td>
</tr>
<tr>
<td>Special Remarks on Corrosivity</td>
<td>Not available.</td>
</tr>
<tr>
<td>Polymerization</td>
<td>Will not occur.</td>
</tr>
</tbody>
</table>

### Section 11. Toxicological Information

<table>
<thead>
<tr>
<th>Routes of Entry</th>
<th>Absorbed through skin. Eye contact.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toxicity to Animals</td>
<td>Acute oral toxicity (LD50): 1620 mg/kg [Rat]. Acute dermal toxicity (LD50): 17300 mg/kg [Rabbit].</td>
</tr>
<tr>
<td>Chronic Effects on Humans</td>
<td>May cause damage to the following organs: kidneys, liver, skin, eyes, central nervous system (CNS).</td>
</tr>
<tr>
<td>Other Toxic Effects on Humans</td>
<td>Hazardous in case of skin contact (irritant), of ingestion, of inhalation. Slightly hazardous in case of skin contact (sensitizer, permeator).</td>
</tr>
<tr>
<td>Special Remarks on Toxicty to Animals</td>
<td>Not available.</td>
</tr>
<tr>
<td>Special Remarks on Chronic Effects on Humans</td>
<td>Not available.</td>
</tr>
<tr>
<td>Special Remarks on other Toxic Effects on Humans</td>
<td>Acute Potential Health Effects: Skin: Causes skin irritation. Skin irritation may be severe. Eyes: It can cause eye irritation, conjunctivitis, and profuse lacrimation. Inhalation: Causes respiratory tract and mucous membrane irritation. It can affect behavior/central nervous system (CNS depression with effects including excitement, marked restlessness, headache, dizziness, drowsiness, malaise, stupor, incoordination, unconsciousness, coma), urinary system (scanty and green colored urine) Ingestion: Causes gastrointestinal tract irritation with vomiting, nausea, and diarrhea, intragastric discomfort, and scanty/green urine. It can affect affect behavior/central nervous system (central nervous system depression with symptoms similar to inhalation). It may also affect the liver. Chronic Potential Health Effects: Skin: Repeated or prolonged skin contact may cause dermatitis, an allergic reaction. Inhalation and Ingestion: Prolonged or repeated overexposure by inhalation or ingestion may cause liver and/or kidney damage.</td>
</tr>
</tbody>
</table>

### Section 12. Ecological Information

<table>
<thead>
<tr>
<th>Ecotoxicity</th>
<th>Not available.</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOD5 and COD</td>
<td>Not available.</td>
</tr>
<tr>
<td>Products of Biodegradation</td>
<td>Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.</td>
</tr>
<tr>
<td>Toxicity of the Products of Biodegradation</td>
<td>The products of degradation are less toxic than the product itself.</td>
</tr>
</tbody>
</table>

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### Section 13. Disposal Considerations

**Waste Disposal**

Waste must be disposed of in accordance with federal, state and local environmental control regulations.

### Section 14. Transport Information

**DOT Classification**

Not a DOT controlled material (United States).

**Identification**

Not applicable.

**Special Provisions for Transport**

Not applicable.

**DOT (Pictograms)**

![DOT Pictogram](image)

### Section 15. Other Regulatory Information and Pictograms

**Federal and State Regulations**

- Rhode Island RTK hazardous substances: 1,2,3,4-Tetrahydronaphthalene
- Pennsylvania RTK: 1,2,3,4-Tetrahydronaphthalene
- TSCA 8(b) inventory: 1,2,3,4-Tetrahydronaphthalene

**California Proposition 65 Warnings**


EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances.

**Other Regulations**

WHMIS (Canada) Not controlled under WHMIS (Canada).

**DSCL (EEC)**

- R19 - May form explosive peroxides.
- R22 - Harmful if swallowed.
- R36/38 - Irritating to eyes and skin.
- R51/53 - Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**S2-** Keep out of the reach of children.

**S26-** In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

**S28-** After contact with skin, wash immediately with plenty of water.

**S46-** If swallowed, seek medical advice immediately and show this container or label.

**S61-** Avoid release to the environment. Refer to special instructions/Safety data sheets.

**HMIS (U.S.A.)**

- **Health Hazard**
  - Level: 2
- **Fire Hazard**
  - Level: 2
- **Reactivity**
  - Level: 0

**WHMIS (Canada) (Pictograms)**

![WHMIS Pictogram](image)

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*Continued on Next Page*
Protective Equipment

- Gloves (impervious).
- Lab coat.
- Vapor respirator. Be sure to use an approved/certified respirator or equivalent.
- Safety glasses.

Section 16. Other Information

| MSDS Code | T3256 |
| References | Not available. |
| Other Special Considerations | Not available. |

Verified by Sonia Owen.

CALL (310) 516-8000

Notice to Reader

All chemicals may pose unknown hazards and should be used with caution. This Material Safety Data Sheet (MSDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this MSDS. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this MSDS is based on technical data judged to be reliable, Spectrum Quality Products, Inc. assumes no responsibility for the completeness or accuracy of the information contained herein.