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Material Safety Data Sheet

1,2,3,4-Tetrahydronaphthalene MSDS

Section 1: Chemical Product and Company Identification

Product Name: 1,2,3,4-Tetrahydronaphthalene

Catalog Codes: SLT1378

CAS#: 119-64-2

RTECS: QK3850000

TSCA: TSCA 8(b) inventory: 1,2,3,4-Tetrahydronaphthalene

CI#: Not available.

Synonym: Tetralin; Tetranap

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

Chemical Formula: C10H12

Contact Information:

Sciencelab.com, Inc.
14025 Smith Rd.
Houston, Texas 77396

US Sales: **1-800-901-7247**
International Sales: **1-281-441-4400**

Order Online: ScienceLab.com

CHEMTREC (24HR Emergency Telephone), call:
1-800-424-9300

International CHEMTREC, call: 1-703-527-3887

For non-emergency assistance, call: 1-281-441-4400

Section 2: Composition and Information on Ingredients

Composition:

Name	CAS #	% by Weight
{1,2,3,4-}Tetrahydronaphthalene	119-64-2	100

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.

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 Hazards in Presence of Various Substances:

Flammable in presence of open flames and sparks, of heat.

Non-flammable in presence of shocks.

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:

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.

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.

Odor:

Aromatic. Resembling a mixture of benzene and menthol.

Taste: Not available.

Molecular Weight: 132.21 g/mole

Color: Colorless to light yellow. Clear

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)

Volatility: Not available.

Odor Threshold: 0.084ppm

Water/Oil Dist. Coeff.: Not available.

Ionicity (in Water): Not available.

Dispersion Properties: See solubility in water, methanol.

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.

Section 10: Stability and Reactivity Data

Stability: The product is stable.

Instability Temperature: Not available.

Conditions of Instability: Heat, ignition sources (sparks, flames), incompatible materials

Incompatibility with various substances: Reactive with oxidizing agents.

Corrosivity: Non-corrosive in presence of glass.

Special Remarks on Reactivity:

Air sensitive. Oxidizes on exposure to air.

Attacks some forms of plastic, rubber, and coatings

Special Remarks on Corrosivity: Not available.

Polymerization: Will not occur.

Section 11: Toxicological Information

Routes of Entry: Absorbed through skin. Eye contact.

Toxicity to Animals:

Acute oral toxicity (LD50): 1620 mg/kg [Rat].

Acute dermal toxicity (LD50): 17300 mg/kg [Rabbit].

Chronic Effects on Humans: May cause damage to the following organs: kidneys, liver, skin, eyes, central nervous system (CNS).

Other Toxic Effects on Humans:

Hazardous in case of skin contact (irritant), of ingestion, of inhalation.

Slightly hazardous in case of skin contact (sensitizer, 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:

Acute Potential Health Effects:

Skin: Causes skin irritation. Skin irritation may be severe.

Eyes: It can cause eye irritation, conjunctivitis, and profuse lachrymation..

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.

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 less toxic than the product itself.

Special Remarks on the Products of Biodegradation: Not available.

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.

Section 15: Other Regulatory Information

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

Other Regulations:

OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).

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

Other Classifications:

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: 2

Fire Hazard: 2

Reactivity: 0

Personal Protection: G

National Fire Protection Association (U.S.A.):

Health: 1

Flammability: 2

Reactivity: 0

Specific hazard:

Protective Equipment:

Gloves (impervious).

Lab coat.

Vapor respirator. Be sure to use an approved/certified respirator or equivalent.

Safety glasses.

Section 16: Other Information

References: Not available.

Other Special Considerations: Not available.

Created: 10/10/2005 08:29 PM

Last Updated: 11/06/2008 12:00 PM

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