



MATERIAL SAFETY DATA SHEET

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1,2,3,4-Tetrahydronaphthalene, 95-98%

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MSDS Name: 1,2,3,4-Tetrahydronaphthalene, 95-98%

Catalog Numbers:

T070

Synonyms:

THN

Company Identification:

LEONID CHEMICALS

62/A-2 2nd Stage, Industrial Suburb

Yeshwanthpur, Bangalore -22, INDIA

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SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS

CAS #	:	119-64-2
Chemical Name	:	1,2,3,4-Tetrahydronaphthalene
%	:	95-98%
EINECS#	:	204-340-2
Hazard Symbols	:	XI N
Risk Phrases	:	19 36/38

SECTION 3 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

May form explosive peroxides. Irritating to eyes and skin. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Air sensitive.

Potential Health Effects

Eye:

Causes eye irritation. Causes redness and pain.

Skin:

Causes skin irritation. Causes redness and pain. May be harmful if absorbed through the skin.

Ingestion:

May cause irritation of the digestive tract. May be harmful if swallowed.

Inhalation:

Inhalation of high concentrations may cause central nervous system effects characterized by nausea, headache, dizziness, unconsciousness and coma. Causes respiratory tract irritation. May be harmful if inhaled.

Chronic:



Prolonged or repeated inhalation may cause lung damage and/or central nervous system disturbances. May cause liver and kidney damage. Chronic exposure may cause blood effects.

SECTION 4 - FIRST AID MEASURES

Eyes:

Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

Skin:

Get medical aid. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.

Ingestion:

Get medical aid. Wash mouth out with water.

Inhalation:

Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

Notes to Physician:

Treat symptomatically and supportively.

SECTION 5 - FIRE FIGHTING MEASURES

General Information:

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Vapors can travel to a source of ignition and flash back. Will burn if involved in a fire. May form explosive peroxides. Combustible liquid. Vapors may form an explosive mixture with air.

Extinguishing Media:

Use water spray, dry chemical, carbon dioxide, or chemical foam.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks:

Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container.

SECTION 7 - HANDLING and STORAGE

Handling:

Avoid breathing dust, vapor, mist, or gas. Avoid contact with skin and eyes.

Storage:

Keep away from sources of ignition. Store in a cool, dry place. Store in a tightly closed container. Store under nitrogen.

SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION

Engineering Controls:

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

Personal Protective Equipment

Eyes:

Wear chemical goggles.

Skin:

Wear appropriate protective gloves to prevent skin exposure.

Clothing:

Wear appropriate protective clothing to prevent skin exposure.

Respirators:

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Always use a NIOSH or European Standard EN 149 approved respirator when necessary.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Clear liquid

Color: colorless to light yellow

Odor: aromatic odor

pH: Not available.

Vapor Pressure: 0.3 mm Hg @ 20 deg C

Viscosity: 2.2 mPa.s @ 20 deg C

Boiling Point: 207 deg C

Freezing/Melting Point: -35 deg C

Autoignition Temperature: 425 deg C (797.00 deg F)

Flash Point: 77 deg C (170.60 deg F)

Explosion Limits, lower: .80 vol %

Explosion Limits, upper: 5.00 vol %

Decomposition Temperature:

Solubility in water: Insoluble.

Specific Gravity/Density: .9730

Molecular Formula: C₁₀H₁₂

Molecular Weight: 132.20

SECTION 10 - STABILITY AND REACTIVITY

Chemical Stability:

Stable under normal temperatures and pressures.

Conditions to Avoid:

Incompatible materials, exposure to air.

Incompatibilities with Other Materials:
Oxidizing agents.
Hazardous Decomposition Products:
Carbon monoxide, carbon dioxide.
Hazardous Polymerization: Will not occur.

SECTION 11 - TOXICOLOGICAL INFORMATION

RTECS#:
CAS# 119-64-2: QK3850000
LD50/LC50:
CAS# 119-64-2: Oral, rat: LD50 = 1620 uL/kg; Skin, rabbit: LD50 = 17300 uL/kg.
Carcinogenicity:
1,2,3,4-Tetrahydronaphthalene -
Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.
See actual entry in RTECS for complete information.

SECTION 12 - ECOLOGICAL INFORMATION

Ecotoxicity:
Fish: Leuciscus idus: LC50: 21 mg/l; 48h; .Fish: LC50: 3.2 mg/l; 96h;
CE 92/69Daphnia: Daphnia: EC50: 2.4 mg/l; 48h; .Daphnia: Daphnia:
EC50: 9.5 mg/l; 48h; .Algae: EC50: 7 mg/l; 72h; .Log Pow: 3.8
Other
Readily biodegradable.

SECTION 13 - DISPOSAL CONSIDERATIONS

Dispose of in a manner consistent with federal, state, and local regulations.

SECTION 14 - TRANSPORT INFORMATION

IATA
Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S
*
Hazard Class: 9
UN Number: 3082
Packing Group: III
IMO
Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S
*
Hazard Class: 9
UN Number: 3082
Packing Group: III
RID/ADR
Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S
*

Hazard Class: 9
UN Number: 3082
Packing group: III

SECTION 15 - REGULATORY INFORMATION

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: XI N

Risk Phrases:

- R 19 May form explosive peroxides.
- R 36/38 Irritating to eyes and skin.
- R 51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety Phrases:

- S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- S 28A After contact with skin, wash immediately with plenty of water.
- S 61 Avoid release to the environment. Refer to special instructions/safety data sheets.

WGK (Water Danger/Protection)

CAS# 119-64-2: 2

United Kingdom Occupational Exposure Limits

United Kingdom Maximum Exposure Limits

Canada

CAS# 119-64-2 is listed on Canada's DSL List.

CAS# 119-64-2 is listed on Canada's Ingredient Disclosure List.

Exposure Limits

US FEDERAL

TSCA

CAS# 119-64-2 is listed on the TSCA inventory.

SECTION 16 - ADDITIONAL INFORMATION

MSDS Creation Date: 7/16/1996 Revision #1 Date: 3/04/2002

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no way shall the 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 the company has been advised of the possibility of such damages.