



Alpha Chemika



ISO 9001 QUALITY SYSTEM CERTIFIED ORGANIZATION

MATERIAL SAFETY DATA SHEET

MSDS

Savgan Heights ; 102 ,B Wing ; R.T.D. Lane ,Andheri (West) Mumbai - 400053 , INDIA

Section 1 - Chemical Product and Company Identification

Product Name : 1-NITRO NAPHTHALENE

Synonyms : a-nitro naphthalene

CAS No. : 86-57-7

Molecular Weight : 173.17

Chemical Formula: $C_{10}H_7NO_2$

Section 2 - Composition, Information on Ingredients

Ingredient	CAS No	Percent	Hazardous
1-Nitro naphthalene	86-57-7	98-100%	Yes

Section 3 - Hazardous Identification

Risk advice to man and the environment

Highly flammable. Toxic if swallowed. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

Section 4 - First Aid Measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled

If breathed in, move person into fresh air. If not breathing give artificial respiration Consult a physician.

In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

Section 5 - Fire Fighting Measures

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special protective equipment for fire-fighters

Wear self contained breathing apparatus for fire fighting if necessary.

Further information

Use water spray to cool unopened containers.

Section 6 - Accidental Release Measures

Personal precautions

Use personal protective equipment. Avoid dust formation. Avoid breathing dust. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

Methods for cleaning up

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13). Keep in suitable, closed containers for disposal

Section 7 - Handling and Storage

Handling

Avoid formation of dust and aerosols.

Provide appropriate exhaust ventilation at places where dust is formed. Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge.

Storage

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

Section 8 - Exposure Controls, Personal Protection

Personal protective equipment

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Where risk assessment shows air-purifying respirators are appropriate use a dust mask type N95 (US) or type P1 (EN 143) respirator. Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N99 (US) or type P2 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it. Handle with gloves.

Eye protection

Safety glasses

Skin and body protection

Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Hygiene measures

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

Section 9 - Physical and Chemical Properties

Appearance Form

crystalline Colour
light yellow

Safety data

pH no data available

Melting point 53 - 57 °C

Boiling point 304 °C

Flash point 164,00 °C - closed cup

Ignition temperature no data available

Lower explosion limit no data available

Upper explosion limit no data available

Vapour pressure 0,00064 hPa at 25 °C

Density 1,223 g/mL at 25 °C

Water solubility no data available

Partition coefficient:

n-octanol/water

log Pow: 3,19

Section 10 - Stability and Reactivity

Storage stability

Stable under recommended storage conditions.

Conditions to avoid

Heat, flames and sparks.

Materials to avoid

Strong reducing agents

Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides, nitrogen oxides (NOx)

Section 11 - Toxicological Information

Acute toxicity

LD50 Oral - rat - 120 mg/kg

Irritation and corrosion

no data available

Sensitisation

no data available

Chronic exposure

IARC: Group 3 - Not classifiable as to carcinogenicity to humans (1-Nitronaphthalene)

Genotoxicity in vitro - Human - HeLa cell

DNA inhibition

Genotoxicity in vitro - Hamster - Lungs

Mutation in mammalian somatic cells.

Genotoxicity in vitro - Hamster - Lungs

Sister chromatid exchange

Genotoxicity in vitro - S. typhimurium

Mutation in microorganisms

Signs and Symptoms of Exposure

Absorption into the body leads to the formation of methemoglobin which in sufficient concentration causes cyanosis. Onset may be delayed 2 to 4 hours or longer.

Potential Health Effects

Inhalation May be harmful if inhaled. May cause respiratory tract irritation.

Skin May be harmful if absorbed through skin. May cause skin irritation.

Eyes May cause eye irritation.

Ingestion Toxic if swallowed.

Additional Information

RTECS: QJ9720000

Section 12 - Ecological Information

Elimination information (persistence and degradability)

no data available

Ecotoxicity effects

Toxicity to fish LC50 - Pimephales promelas (fathead minnow) - 2 - 4 mg/l - 96 h

Further information on ecology

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Section 13 - Disposal Considerations

Product

Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Observe all federal, state, and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material.

Contaminated packaging

Dispose of as unused product.

Section 14 - Transport Information

ADR/RID

UN-Number: 2538 Class: 4.1 Packing group: III

Proper shipping name: NITRONAPHTHALENE

IMDG

UN-Number: 2538 Class: 4.1 Packing group: III EMS-No: F-A, S-G

Proper shipping name: NITRONAPHTHALENE

Marine pollutant: No

IATA

UN-Number: 2538 Class: 4.1 Packing group: III

Proper shipping name: Nitronaphthalene

Section 15 - Regulatory Information

Labelling according to EC Directives

Hazard symbols

F Highly flammable

T Toxic

N Dangerous for the environment

R-phrase(s)

R11 Highly flammable.

R25 Toxic if swallowed.

R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S-phrase(s)

S16 Keep away from sources of ignition - No smoking.

S45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

S60 This material and its container must be disposed of as hazardous waste.

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

Section 16 - Additional Information

Not Available