



Alpha Chemika



ISO 9001 QUALITY SYSTEM CERTIFIED ORGANIZATION

MATERIAL SAFETY DATA SHEET

MSDS

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

Section 1 - Chemical Product and Company Identification

Product Name : 1,4-NAPHTHOQUINONE

Synonyms:

CAS No.: 130-15-4

Molecular Weight : 158.15

Chemical Formula: C₁₀H₆O₂

Section 2 - Composition, Information on Ingredients

Ingredient	CAS No	Percent	Hazardous
1,4-Naphthoquinone	130-15-4	98%	Yes

Section 3 - Hazardous Identification

Risk advice to man and the environment

Toxic if swallowed. Very toxic by inhalation. Irritating to eyes, respiratory system and skin. May cause sensitization by skin contact. Very toxic to aquatic organisms.

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

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.

Section 6 - Accidental Release Measures

Personal precautions

Wear respiratory protection. Avoid dust formation. Avoid breathing dust. Ensure adequate ventilation. 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

Pick up and arrange disposal without creating dust. Keep in suitable, closed containers for disposal.

Section 7 - Handling and Storage

Handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols.

Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

Storage

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

Light sensitive.

Section 8 - Exposure Controls, Personal Protection

Personal protective equipment

Respiratory protection

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 beige

Safety data

pH no data available Melting

point 119 - 122 °C Boiling

point no data available Flash

point no data available

Ignition temperature no data available

Lower explosion limit no data available

Upper explosion limit no data available

Water solubility soluble

Partition coefficient:

n-octanol/water

log Pow: 1,71

Section 10 - Stability and Reactivity

Storage stability

Stable under recommended storage conditions.

Materials to avoid

Strong oxidizing agents, Strong reducing agents

Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides

Section 11 - Toxicological Information

Acute toxicity

LD50 Oral - rat - 190 mg/kg

Remarks: Behavioral:Somnolence (general depressed activity). Nutritional and Gross Metabolic:Weight loss or decreased weight gain.

Irritation and corrosion

no data available

Sensitisation

Prolonged or repeated exposure may cause allergic reactions in certain sensitive individuals.

Chronic exposure

Carcinogenicity - mouse - Skin

Tumorigenic:Equivocal tumorigenic agent by RTECS criteria. Lungs, Thorax, or Respiration:Tumors. Skin and Appendages: Other: Tumors.

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Genotoxicity in vitro - Human - lymphocyte

Micronucleus test

Reproductive toxicity - rat - Subcutaneous

Maternal Effects: Ovaries, fallopian tubes.

Signs and Symptoms of Exposure

burning sensation, Cough, wheezing, laryngitis, Shortness of breath, Headache, Nausea, Vomiting, To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Potential Health Effects

Inhalation May be fatal if inhaled. Causes respiratory tract irritation.

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

Eyes Causes eye irritation.

Ingestion Toxic if swallowed.

Target Organs Blood, Liver,

Additional Information

RTECS: QL7175000

Section 12 - Ecological Information

Elimination information (persistence and degradability)

no data available

Ecotoxicity effects

Toxicity to algae LC50 - *Dunaliella bioculata* - 0,011 mg/l - 72 h

IC50 - other microorganisms - 0,011 mg/l - 72 h

Toxicity to bacteria

Further information on ecology

Very toxic to aquatic organisms.

Section 13 - Disposal Considerations

Product

Observe all federal, state, and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Contaminated packaging

Dispose of as unused product.

Section 14 - Transport Information

ADR/RID

UN-Number: 2811 Class: 6.1 Packing group: I

Proper shipping name: TOXIC SOLID, ORGANIC, N.O.S. (1,4-Naphthoquinone)

IMDG

UN-Number: 2811 Class: 6.1 Packing group: I EMS-No: F-A, S-A

Proper shipping name: TOXIC SOLID, ORGANIC, N.O.S. (1,4-Naphthoquinone)

Marine pollutant: No

IATA

UN-Number: 2811 Class: 6.1 Packing group: I

Proper shipping name: Toxic solid, organic n.o.s. (1,4-Naphthoquinone)

Section 15 - Regulatory Information

Labelling according to EC Directives

Hazard symbols

T+ Very toxic

N Dangerous for the environment

R-phrase(s)

R25 Toxic if swallowed.

R26 Very toxic by inhalation.

R36/37/38 Irritating to eyes, respiratory system and skin.

R43 May cause sensitization by skin contact.

R50 Very toxic to aquatic organisms.

S-phrase(s)

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

S36/37 Wear suitable protective clothing and gloves.

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

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

Section 16 - Additional Information

Not Available