



# 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 : 1,10-PHENANTHROLINE HYDROCHLORIDE

**Synonyms:** 1,10-Phenanthroline chloride monohydrate

**CAS No.:** 18851-33-7

**Molecular Weight :** 234.68

**Chemical Formula:** C<sub>12</sub>H<sub>8</sub>N<sub>2</sub>·HCl·H<sub>2</sub>

## Section 2 - Composition, Information on Ingredients

Ingredient	CAS No	Percent	Hazardous
1,10-Phenanthroline Hydrochloride	18851-33-7	98%	Yes

## Section 3 - Hazardous Identification

### Risk advice to man and the environment

Toxic if swallowed. Very 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

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**

Use personal protective equipment. 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 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.  
hygroscopic

## 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 solid

### Safety data

pH no data available

Melting point no data available

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 0,1 g/l - soluble

## Section 10 - Stability and Reactivity

### Storage stability

Stable under recommended storage conditions.

### Conditions to avoid

Exposure to moisture.

### Materials to avoid

Strong oxidizing agents, Strong acids

### Hazardous decomposition products

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

## Section 11 - Toxicological Information

### Acute toxicity

no data available

### Irritation and corrosion

no data available

### Sensitisation

no data available

### Chronic exposure

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.

### Signs and Symptoms of Exposure

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

### 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.

## Section 12 - Ecological Information

### Elimination information (persistence and degradability)

no data available

### Ecotoxicity effects

no data available

### Further information on ecology

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

## 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: III

Proper shipping name: TOXIC SOLID, ORGANIC, N.O.S. (1,10-Phenanthroline chloride monohydrate)

### IMDG

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

Proper shipping name: TOXIC SOLID, ORGANIC, N.O.S. (1,10-Phenanthroline chloride monohydrate)

Marine pollutant: No

### IATA

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

Proper shipping name: Toxic solid, organic n.o.s. (1,10-Phenanthroline chloride monohydrate)

## Section 15 - Regulatory Information

### Labelling according to EC Directives

Hazard symbols

T Toxic

N Dangerous for the environment

R-phrase(s)

R25 Toxic if swallowed.

R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S-phrase(s)

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.

Caution - substance not yet tested completely.

## Section 16 - Additional Information

Not Available