

Safety Data Sheet

Review Date: 4-Oct-2023

Section 1 - Chemical Product and Company Identification

Product Name 1,10-Phenanthroline Monohydrate extrapure AR, 99.5%

Product Code 65898 **CAS No** 5144-89-8

Use for Laboratory Chemicals.

Company Name Sisco Research Laboratories Pvt. Ltd.

Address 608, B Wing, Satellite Gazebo, Andheri Ghatkopar Link Road,

Andheri (E), Mumbai - 400 099, India

Section 2 - Composition/Information on Ingredients

CAS#, Chemical Name:, %, EINECS Phrases: 5144-89-8, 1,10-Phenanthroline monohydrate, <=100 Unlisted

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

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

Potential Health Effects

Eye:, May cause eye irritation.

Skin:, May cause skin irritation. May be harmful if absorbed through the skin.

Ingestion:, May cause irritation of the digestive tract. Toxic if swallowed.

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

Chronic:,

Section 4 - First Aid Measures

Eyes:, Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.

Skin:, Get medical aid immediately. Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.

Ingestion:, Get medical aid immediately. Wash mouth out with water.

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

Notes to Physician:,

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.

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:, Vacuum or sweep up material and place into a suitable disposal container. Wear a self contained breathing apparatus and appropriate personal protection. (See Exposure Controls, Personal Protection section). Do not let this chemical enter the environment.

Section 7 - Handling and Storage



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Handling:, Do not breathe dust, vapor, mist, or gas. Do not get in eyes, on skin, or on clothing. Do not ingest or inhale. Use only in a chemical fume hood.

Storage:, Store in a cool, dry place. Store in a tightly closed container.

Section 8 - Exposure Control / Personal Protection

Engineering Controls:

, Use adequate ventilation to keep airborne concentrations low.

Exposure Limits,

- , CAS# 66-71-7:
- , CAS# 5144-89-8:

Personal Protective Equipment

Eyes:, Wear chemical splash 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. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Section 9 - Physical and Chemical Properties

Physical State:, Crystalline powder

Color:, off-white

Odor:, odorless

Freezing/Melting Point:, 97 - 101 deg C Solubility in water:, Slightly soluble

Specific Gravity/Density:,

Molecular Formula:, C12H8N2.H2O

Molecular Weight:, 198.23

Section 10 - Stability and Reactivity

Chemical Stability:, Stable under normal temperatures and pressures.

Conditions to Avoid:, Incompatible materials, exposure to moist air or water.

Incompatibilities with Other Materials, Strong oxidizing agents, strong acids.

 $\textbf{Hazardous Decomposition Products,} \ \ \text{Nitrogen oxides, carbon monoxide, carbon dioxide.}$

Hazardous Polymerization, Has not been reported.

Section 11 - Toxicological Information

RTECS#:, CAS# 66-71-7: SF8300000

CAS# 5144-89-8: SF8437000

LD50/LC50:, RTECS: Not available. RTECS: Not available. Other: Oral, rat LD50: 132 mg/kg

Carcinogenicity:, 1,10-phenanthroline - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.

1,10-Phenanthroline monohydrate - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.

Other:, See actual entry in RTECS for complete information. The toxicological properties have not been fully investigated.

Section 12 - Ecological Information

Other:, Do not empty into drains.



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Section 13 - Disposal Considerations

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

Section 14 - Transport Information

IATA IMO RID/ADR

Shipping Name: toxic solid, organic, n.o.s. toxic solid, organic, n.o.s. toxic solid, organic, n.o.s.

Hazard Class: 6.1 6.1

UN Number: 2811 2811 2811

Packing Group: III III III

Section 15 - Regulatory Information

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

Section 16 - Other Information

Sisco Research Laboratories Pvt. Ltd. provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose.