

Camlab Limited – Material Safety Data Sheet


1. Identification

Product Code CC/1625-AO

Product Name 1,10-PHENANTHROLINE H2O pure

Molecular Formula $C_{12}H_8N_2 \cdot H_2O = 198.22$

CAS Number 5144-89-8

Supplier: **CAMLAB LIMITED**

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2. Composition

Component	CAS No	EEC No	Conc w/w	Classification & Risk Phrases	Exp (See 8.1)
1,10-Phenanthroline	5144-89-8	200-629-2	> 98.0%	T N : R25,R50/53	N/A

3. Hazards Identification



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

4. First Aid Measures

Eyes Irrigate thoroughly with plenty of water for at least 10 minutes, holding the eye open. If discomfort persists OBTAIN MEDICAL ATTENTION.

Skin Wash off skin thoroughly with water. If discomfort persists OBTAIN MEDICAL ATTENTION.

Inhalation Remove from exposure.

Ingestion Wash out the patients mouth thoroughly with water. Do not induce vomiting. OBTAIN MEDICAL ATTENTION.

5. Fire Fighting Measures

Hazards Evacuate area immediately. Keep up wind. Avoid exposure to toxic vapours and fumes. Fire-fighters should wear protective clothing and breathing apparatus. May evolve toxic fumes if involved in a fire.

Extinguishing Media Consider what other flammable materials are present and act accordingly.

Unsuitable Media Nothing specified.

6. Accidental Release Measures

Personal Protection Avoid breathing dust. Use approved personal protective equipment. Evacuate area immediately. Do not allow general use of area until it is safe to do so.

Environmental Notify the Environmental Agency and local Environmental Health Officer if major spillage occurs.

6. Accidental Release Measures (continued)

Major Spillage	Shovel/sweep up into container for removal Wash area down with copious amounts of water.
Minor Spillage	Wash area down with copious amounts of water.

7. Storage & Handling

Handling Precautions	Avoid contact with skin and eyes. Do not breath dust. Do not allow to contaminate clothing. Ensure Local Exhaust Ventilation maintains dust concentrations to a minimum.
Storage Conditions	Well ventilated, cool, dry storage . Protect against moisture to prevent decomposition and corrosion.

8.1 Workplace Exposure Limits

No prescribed exposure limits available

8.2 Personal Protection

Respiratory	If process creates significant amounts of dust use L.E.V. or wear suitable dust mask.
Hands	Wear gloves.
Eyes	Use chemical splash proof glasses or goggles.
Skin	Avoid contact with skin. If skin contact or contamination of clothing is likely, protective clothing must be worn.

9. Physical & Chemical Properties

Appearance	White crystalline powder.
Odour	No specific odour.
pH	Not available
Boiling point	Not available
Melting point	101.0 °C
Flash point	Not available
Upper Flammable Limit	Not available
Lower Flammable Limit	Not available
Auto Ignition	Not available
Explosive properties	No.
Oxidising Properties	No.
Vapour Pressure	Not available
Relative Density	Not available
Water Solubility	0.3%

10. Stability & Reactivity

Chemical Stability	Stable under normal conditions
Conditions to Avoid	Hot surfaces and naked flames.
Materials to Avoid	Strong oxidising agents.
Hazardous Decomposition Products	May produce hazardous fumes if involved in a fire.

11. Toxicological Information

Eyes	Contact with the solid or dust may cause conjunctival irritation and corneal damage.
Skin	Contact with the solid or dust may be irritating to the skin. Repeated exposure may cause dermatitis.
LD50 Skin	Not available
Ingest	Toxic if swallowed.
LD50 Ingest	Oral Rat 132mg/Kg

11. Toxicological Information (continued)

Inhalation	Prolonged exposure to dust or fume concentrations above the occupational exposure limits will produce irritation of the eyes and respiratory tract.
Carcinogenicity	Not considered to be a carcinogen.
Mutagenicity	Not considered to be a mutagen.
Reproductive Effects	None identified.

12. Ecological

Toxic to fish-LC50 (Foldorfen test) <10ppm. Very Toxic to aquatic organisms and may cause long term adverse effects in the aquatic environment.

13. Disposal Considerations

Disposal Methods	Dispose of in a licensed incinerator.
Contaminated Packaging	Wash out containers with water. Use a licensed waste disposer.

14. Transport Information

Proper Shipping Name	Toxic solid, organic, n.o.s.
UN Number	2811
UN Classification	6.1 Toxic
Subsidiary Risk	None
Flash Point	Not available
Packing Group	II
Transport Category	2
Marine pollutant	No
ADR Hazard ID	60

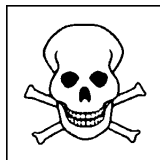


15. Regulatory Information

Labelling	Toxic, Dangerous for the Environment.
Classification	

Label Symbols

T



N



Risk & safety Phrases	Toxic if swallowed. Very Toxic to aquatic organisms and may cause long term adverse effects in the aquatic environment. Keep locked up and out of reach of children. In case of accident or if you feel unwell, seek medical advice immediately (show the label). This material and/or its container must be disposed of as hazardous waste. Avoid release to the environment, refer to special instructions/safety data sheet.
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EEC Number	200-629-2
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16. Other Information

Document Information	This document has been prepared in accordance with directive 88/379/EEC. The information contained in this document only covers the hazards presented by this material, it DOES NOT constitute a workplace risk assessment. Revision Date: 20/11/03. Data reviewed and PDF file generated: 17/03/10. Copyright 2010 Camlab Limited.
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