



Safety Data Sheet
According to the (US) Hazard Communication Standard (29 CFR 1910.1200)

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name Phenanthroline Solution
NCL Catalog Numbers P-5
Product Description Laboratory chemical, APHA for Iron
Supplier
NCL of Wisconsin, Inc. **Telephone:** 1-800-648-7836 **Fax:** 715-449-2454
P.O. Box 8 **Emergency Contact:** 1-800-424-9300 (Chemtrec)
Biramwood, WI 54414 **Email:** nclabs@nclabs.com

SECTION 2: HAZARDS IDENTIFICATION

GHS Classification Not classified
Signal Word Not applicable
Pictograms None
Hazard Statements Not applicable
Precautionary Statements Not applicable
Other Hazards Not Contributing to the Classification None under normal conditions.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Identity Not applicable
Common Name Not applicable

Mixture

Name	CAS #	Approximate %
Water	7732-18-5	>99.8
1, 10-Phenanthroline Monohydrate	5144-89-8	0.1
Hydrochloric Acid	7647-01-0	<0.1

SECTION 4: FIRST AID MEASURES

Description of First Aid Measures

General First Aid Measures Never give anything by mouth to an unconscious person. Seek medical advice if you feel unwell.
If Inhaled Remove person to fresh air and keep comfortable for breathing. Allow victim to rest.
In Case of Skin Contact Remove contaminated clothing and wash exposed skin with mild soap and water. Rinse with warm water.
In Case of Eye Contact Immediately flush eyes with plenty of water. Remove contact lenses, if present and easy to do. Get medical attention if irritation develops.
If Swallowed Rinse mouth. Do NOT induce vomiting. Get medical attention if you feel unwell.

Most Important Symptoms/Effects Acute and Delayed

Not expected to present a significant hazard under normal use.

Indication of Immediate Medical Attention and Special Treatment Needed

No additional information available.

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media

Foam. Dry powder. Sand. Carbon dioxide. Water spray.

Unsuitable Extinguishing Media

Do not use high pressure water stream.

Special Hazards Arising from the Chemical

No additional information available.

Special Protective Actions for Fire-Fighters

Wear self-contained breathing apparatus and protective clothing. Keep exposed containers cool with water spray.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

Personal Precautions

Use personal protective equipment (see section 8). Evacuate area of non-essential personnel. Eliminate ignition sources.

Environmental Precautions

Prevent entry to surface and ground waters.

Methods and Materials for Containment and Cleaning Up

Stop leak if safe to do so. Clean up spills with inert absorbent material. Collect spillage. Store away from other materials. Ensure compliance with local, state and federal regulations.

SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling

Avoid contact with eyes and skin. Avoid breathing vapors. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor.

Conditions for Safe Storage Including any Incompatibilities

Keep in a tightly closed container, stored in a cool, dry, ventilated area.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

Not applicable.

Appropriate Engineering Controls

Provide adequate general ventilation. Maintain eye-wash fountain and quick-drench facilities in work area.

Individual Protection Measures

Eye/Face Protection

Avoid all unnecessary exposure.

Use chemical safety goggles and/or a full face shield where splashing is possible. Contact lenses should not be worn when working with this material. Maintain eye-wash fountain and quick-drench facilities in work area.

Skin Protection

Rubber or neoprene gloves and additional protection including impervious boots, apron, or coveralls, as needed in areas of unusual exposure to prevent skin contact.

Respiratory Protection

Wear appropriate mask.

Other Information

Do not eat, drink or smoke when using this product.

SECTION 9: PHYSICAL AND CHEMICAL PROPER

Physical State

Liquid

Color

Colorless

Odor

Odorless

Odor Threshold

Not determined

pH

Not determined

Melting Point/Freezing Point

Not determined

Initial Boiling Point and Boiling Range

Not determined

Flash Point

Not determined

Evaporation Rate

Not determined

Flammability (Solid, Gas)

Not determined

Upper/Lower Flammability/Explosive Limits

Not determined

Vapor Pressure	Not determined
Vapor Density	Not determined
Relative Density	1.00
Solubility	Soluble in water
Partition Coefficient: n-octanol/water	Not determined
Auto-Ignition Temperature	Not determined
Decomposition Temperature	Not determined
Viscosity	Not determined

SECTION 10: STABILITY AND REACTIVITY

Reactivity	No data available
Chemical Stability	Stable under ordinary conditions of use and storage.
Possibility of Hazardous Reactions	No data available
Conditions to Avoid	No data available
Incompatible Materials	Strong bases, metals, metal oxides, hydroxides, amines, alkaline materials, cyanides, sulfides, sulfites, and formaldehyde
Hazardous Decomposition Products	When heated to decomposition, can emit toxic fumes.

SECTION 11: TOXICOLOGICAL INFORMATION

Acute Toxicity	Not classified
Hydrochloric Acid (7647-01-0)	
LD50 oral rabbit	900 mg/kg
Water (7732-18-5)	
LD50 oral rat	≥ 90000 mg/kg
Skin Corrosion/Irritation	Not classified
Serious Eye Damage/Irritation	Not classified
Respiratory or Skin Sensitization	Not classified
Germ Cell Mutagenicity	Not classified
Carcinogenicity	Not classified
Reproductive Toxicity	Not classified
Specific Target Organ Toxicity (Single Exposure)	Not classified
Specific Target Organ Toxicity (Repeated Exposure)	Not classified
Aspiration Hazard	Not classified
Potential Adverse Human Health Effects and Symptoms	No data available
Other Information	Not available

SECTION 12: ECOLOGICAL INFORMATION

Toxicity	Not applicable
Persistence and Degradability	Not applicable
Bioaccumulative Potential	Not applicable
Mobility in Soil	Not applicable
Other Adverse Effects	Not applicable

SECTION 13: DISPOSAL CONSIDERATIONS

Methods of Disposal

Disposal Recommendations Dispose of contents/containers in accordance with local, state and federal regulations.

Other Information Avoid release to the surrounding environment.

SECTION 14: TRANSPORT INFORMATION

UN Number Not applicable

UN Shipping Name Not applicable

Transport Hazard Class(es) Not applicable

Packing Group Not applicable

Environmental Hazards Not applicable

Transport in Bulk Not applicable

Other Precautions Not applicable

SECTION 15: REGULATORY INFORMATION

Water (7732-18-5)
Listed on the United States TSCA (Toxic Substances Control Act) inventory
1, 10-Phenanthroline Monohydrate (5144-89-8)
Listed on the United States TSCA (Toxic Substances Control Act) inventory
Hydrochloric Acid (7647-01-0)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

SECTION 16: OTHER INFORMATION

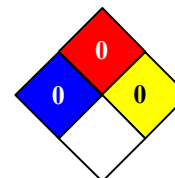
Revision Date: 04/07/2015

NFPA Hazards

Health Hazard 0: Poses no health hazard, no precautions necessary and would offer no hazard beyond that of ordinary combustible material.

Fire Hazard 0: Materials that will not burn.

Instability/Reactivity 0: Normally stable, even under fire exposure conditions, and are not reactive with water.



HMIS III Rating

Health 0: No significant risk to health.

Flammability 0: Materials that will not burn.

Physical Hazard 0: Materials that are normally stable.

Personal Protection A

P-5	
Health	0
Flammability	0
Physical Hazard	0
Personal Protection	A

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END OF SAFETY DATA SHEET