

# MATERIAL SAFETY DATA SHEET

1,10-Phenanthroline

## SECTION 1 . Product and Company Identification

Product Name and Synonym: 1,10-Phenanthroline  
Product Code: 6620  
Material Uses:  
Manufacturer: Aqua Solutions, Inc  
6913 Hwy 225  
Deer Park, TX 77536  
(281) 479-2569  
Entry Date : 12/1/2014  
Print Date: 12/1/2014  
24 Hour Emergency Assistance : Chemtrec 800-424-9300  
Canutec 613-996-6666

Health:	1
Flammability:	0
Reactivity:	0
Hazard Rating: Least Slight Moderate High Extreme 0 1 2 3 4	
NA=Not Applicable NE=Not Established	

## SECTION 2 HAZARD IDENTIFICATION

Harmful if swallowed. May cause irritation. Avoid breathing vapors, or dusts. Use with adequate ventilation. Avoid contact with eyes, skin, and clothes. Wash thoroughly after handling. Keep container closed.

## SECTION 3 MIXTURE COMPONENTS

SARA 313	Component	CAS Number	Percent Comp.	Dimension	Exposure Limits
<input type="checkbox"/>	1,10-Phenanthroline, Monohydrate	CAS# 5144-89-8	0.1%	W/V	
<input checked="" type="checkbox"/>	Hydrochloric Acid	CAS# 7647-01-0	0.1%	V/V	OSHA PEL (C) 5 ppm, (C) 7 mg/m <sup>f</sup>
<input type="checkbox"/>	Water, Deionized ASTM Type II	CAS# 7732-18-5	Balance	V/V	None Established

## SECTION 4 FIRST AID MEASURES

Harmful if swallowed. May cause irritation. Avoid breathing vapors, or dusts. Use with adequate ventilation. Avoid contact with eyes, skin, and clothes. Wash thoroughly after handling. Keep container closed.

FIRST AID: SKIN: Wash exposed area with soap and water. If irritation persists, seek medical attention.

EYES: Wash eyes with plenty of water for at least 15 minutes, lifting lids occasionally. Seek Medical Aid. INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen

INGESTION: If swallowed, induce vomiting immediately after giving two glasses of water. Never give anything by mouth to an unconscious person.

## SECTION 5 FIRE FIGHTING MEASURES

Fire Extinguisher Type: Any means suitable for extinguishing surrounding fire

1,10-Phenanthroline

Fire / Explosion Hazards: None Known.  
Fire Fighting Procedure: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and clothing.

**SECTION 6 ACCIDENTAL RELEASE MEASURES**

Absorb spill with inert material. Flush excess down drain.

**SECTION 7 HANDLING AND STORAGE**

Store in a cool dry place. Do not get in eyes, on skin, on clothing. Wash thoroughly after handling

**SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION**

Respiratory Protection: None required  
Ventilation  
Local Exhaust   
Mechanical   
Protective Gloves: Gloves to prevent skin exposure as rubber or vinyl  
Eye Protection: Splash Goggles  
Other Protective Equipment: Wear appropriate clothing to prevent skin exposure

**SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES**

Melting Point:	~0° C	Percent Volatile by Volume:	>99%
Boiling Point:	~100° C	Evaporation Rate	not available
Vapor Pressure:	not available	Evaporation Standard	
Vapor Density:	not available	Auto Ignition Temp	Not applicable
Solubility in Water:	Soluble	Lower Flamm. Limit in Air	Not applicable
Appearance /Odors:	Colorless, odorless liquid	Upper Flamm. Limit in Air	Not applicable
Flash Point:	not flammable		
Specific Gravity:	~1.0		

**SECTION 10 STABILITY AND REACTIVITY INFORMATION**

Stability: Stable  
Conditions to Avoid: Protect from freezing, avoid light  
Materials to Avoid: none known  
Hazardous Decomposition Products: none known  
Hazardous polymerization: not expected to occur  
Conditions to Avoid: None known

**SECTION 11 Toxicological Information**

**SECTION 12 Ecological Information**

1,10-Phenanthroline

**SECTION 13 Disposal Considerations**

**SECTION 14 Transport Information**

DOT Classification: Not Regulated

DOT Regulations may change from time to time. Please consult the most recent D.O.T. regulations.

**SECTION 15 Regulatory Information**

**SECTION 16 Additional Information**

Conditions aggravated/Target organs: None known. Acute: slight irritation possible to skin, eyes, lungs, mucous membranes and GI tract. Chronic: none known.

Flammability

Health

Reactivity

Revisions

NFPA

0.1

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