



AquaPhoenix Scientific  
9 Barnhart Drive, Hanover, PA 17331 (717) 632-1291  
Emergency Telephone No.: 800-535-5053

APT55T33002

## **Material Safety Data Sheet**

### **Section 1 – Chemical Product and Company Identification**

Catalog Numbers: FE3144-A, FE3144-B, FE3144-C, FE3144-D, FE3144-P, FE3144-Q, FE3144-G, FE3144-T

Product Identity: Ferroin Indicator

**Chemical Family:** No information available

**Synonyms:** None

**Recommended Use:** Laboratory chemicals

Manufacturer's Name: AquaPhoenix Scientific, Inc., 9 Barnhart Dr., Hanover, PA 17331, (866) 632-1291  
Emergency Contact Number (24hr): InfoTrac (800) 535-5053

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### **Section 2 – Hazard Identification**

#### **Emergency Overview**

**Warning.** May be harmful if swallowed. Handle with care. If ingested, dilute with water and induce vomiting. Wash areas of contact with water. Get medical attention.

**Appearance:** Clear, dark red liquid

**Odor:** Odorless

**Target Organs:** Eyes, skin, liver.

**Potential Health Effects/ Routes of Exposure:**

**Eyes:** May cause slight irritation.

**Skin:** May cause slight irritation.

**Ingestion:** Large doses may cause upset stomach

**Inhalation:** Not likely to be a hazard by inhalation.

**Chronic Effect / Carcinogenicity:** None(IARC, NTP, OSHA)

**Aggravated Medical Conditions** No information available

These chemicals are not considered hazardous by OSHA.

See section 11 for toxicological information. See section 12 for potential environmental effects.

### **Section 3 – Composition, Information on Ingredients**

1,10-Phenanthroline Monohydrate, CAS# 5144-89-8, 0.7% w/v

Ferrous Sulfate Heptahydrate, CAS# 7782-63-0, <0.4% w/v

Water, purified, CAS# 7732-18-5, >98% w/v

### **Section 4 – First Aid**

**Eyes:** Immediately flush eyes with water for at least 15 minutes. Immediately get medical assistance.

**Skin:** Flush with water for 15 minutes. Get medical assistance if irritation develops.

**Ingestion:** Induce vomiting. Dilute with water or milk. Get medical assistance.

**Inhalation:** Remove to fresh air. Give artificial respiration if necessary. If breathing is difficult, give oxygen.

**Notes to Physician** Treat symptomatically.

### **Section 5 – Fire Fighting Measures**

**Flash Point:** Not Applicable **Autoignition Temperature** No information available.

**Explosion Limits Upper** No data available

**Lower** No data available

**Extinguishing Media:** Use means suitable to extinguishing surrounding fire.  
**Unsuitable Extinguishing Media:** No information available  
**Fire & Explosion Hazards:** Not considered to be a fire or explosion hazard.  
**Fire Fighting Instructions / Equipment:** Use normal procedures. Toxic gas may be produced in fire. Use protective clothing. Use NIOSH-approved breathing equipment.  
**Hazardous Combustion Products:** No information Available  
**Sensitivity to mechanical impact** No information available.  
**Sensitivity to static discharge** No information available.  
**Specific Hazards Arising from the Chemical:** No information available.  
**NFPA Rating:** (estimated) Health: 1; Flammable: 0; Reactivity: 0

#### **Section 6 – Accidental Release Measures**

**Personal Precautions** Use personal protective equipment. Avoid contact with skin, eyes and clothing.  
**Environmental Precautions** No information Available.  
**Methods for Containment and Clean Up** Soak up with inert absorbent material

#### **Section 7 – Handling and Storage**

**Handling:** Wash hands after handling. Avoid contact with skin and eyes.  
**Storage:** Keep Protect from freezing and physical damage.

#### **Section 8 – Exposure Controls, Personal Protection**

1,10-Phenanthroline Monohydrate, CAS# 5144-89-8, ACGIH TLV: NA, OSHA PEL: NA  
Ferrous Sulfate Heptahydrate, CAS# 7782-63-0, ACGIH TLV 1 mg/m3, OSHA PEL: NA  
Water, purified, CAS# 7732-18-5, ACGIH TLV: NA, OSHA PEL: NA  
**Engineering Measures/ General Hygiene:** Normal ventilation is adequate. Ensure eyewash and safety showers are available.  
**Personal Protection Equipment:** **Skin Protection:** Chemical resistant gloves.  
**Eye/Face Protection:** Safety Glasses or goggles. **Respiratory Protection:** Normal ventilation is adequate

#### **Section 9 – Physical and Chemical Properties**

<b>Appearance/Physical State:</b> Clear, dark red liquid	
<b>Odor:</b> Odorless	<b>% Volatility:</b> No Information Available
<b>Boiling Point:</b> Approx 100C	<b>Specific Gravity:</b> Approx 1
<b>Melting Point:</b> Approx 0C	<b>Vapor Pressure:</b> No information Available
<b>Vapor Density:</b> No Information Available	<b>Flash Point:</b> Not Applicable
<b>Evaporation Rate:</b> No information Available	<b>Coefficient of water/oil distribution:</b> Not Available
<b>pH:</b> No information Available	<b>Odor Threshold:</b> Not Available
<b>Flammability:</b> No Information Available	<b>Decomposition Temperature:</b> No Information Available
<b>Solubility:</b> Infinite	<b>Partition Coefficient n-octanol/water:</b> No data
available	
<b>Relative Density:</b> No Information Available	<b>Molecular Weight:</b> Not available

#### **Section 10 – Stability and Reactivity**

**Chemical Stability:** Stable under normal conditions of use and storage.  
**Incompatible Materials:** Alkalis, oxidizing agent.  
**Conditions to Avoid:** No information Available  
**Hazardous Decomposition Products:** Oxides of sulfur, carbon, and nitrogen.  
**Hazardous Polymerization:** Does not occur  
**Hazardous Reactions:** Not available.

#### **Section 11 – Toxicological Information**

**Routes of Exposure/Symptoms/Corrosiveness –** See Section 2  
LD50 orl-rat: 319 mg/kg (Ferrous Sulfate)      LC50 inhalation-rat: Not available  
**Irritation:** No Information Available

**Toxicologically Synergistic:** No Information Available

**Chronic Exposure**

**Carcinogenicity** There are no known carcinogenic chemicals in this product

**Sensitization** No information available.

**Mutagenic Effects** No information available.

**Reproductive Effects** No information available.

**Developmental Effects (Immediate/Delayed)** No information available.

**Teratogenicity** No information available.

**Other Adverse Effects** No information available.

**Endocrine Disruptor Information** No information available

**Section 12 – Ecological Information**

**Ecotoxicity:** No information available

**Persistence and Degradability:** No Information Available

**Mobility:** No Information Available

**Bioaccumulation/ Accumulation:** No Information Available

**Section 13 – Disposal Considerations**

Dilute with water.

**Waste Disposal/Waste Disposal of Packaging:** All chemical waster generators must determine whether a discarded chemical is classified as hazardous waste. Comply with all local, state, and federal regulations.

**Section 14 – Transport Information**

**DOT - Not Regulated**

**Section 15 – Regulatory Information (not meant to be all inclusive)**

**OSHA Status:** These chemicals are not considered hazardous by OSHA.

**Canada DSL:** These chemicals are listed on Canada's DSL list.

**TSCA:** The components of this solution are listed on the TSCA Inventory

**SARA Title III Section 313:** Not Applicable

**RCRA Status:** Not Applicable

**CERCLA Reportable Quantity:** Ferrous Sulfate Heptahydrate – 1000 lbs.

**WHMIS: -2B:** Poisonous and infectious Material: Materials causing other toxic effects – Toxic material

This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

**Section 16 – Additional Information**

**Disclaimer:** The information on this MSDS applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. It is the user's responsibility to determine the suitability and completeness of this information for his own particular use. No warranty is implied regarding the accuracy of the data or the results to be obtained from the products use.