

AUSTRALIAN CHEMICAL REAGENTS  
**SAFETY DATA SHEET**

Date Prepared: February 2022  
Version No: 6

---

## 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

---

Product Name: Ferroin Indicator Solution  
Product Code: 0212  
Other Names: Nil  
Uses: Analytical Reagent

Supplier: Australian Chemical Reagents  
38-50 Bedford Street Gillman SA 5013

Contacts: Telephone: 61 08 84402000  
Fax: 61 08 84402001  
Emergency Phone: 61 08 84402000 Mon-Fri 8:30am - 5:00pm

---

## 2. HAZARDS INFORMATION

---

**Hazard classification:** Classified as non-Hazardous according to the Globally Harmonised System of classification and labelling of Chemicals (GHS) including Work, Health and Safety regulations, Australia.

---

## 3. COMPOSITION / INFORMATION ON INGREDIENTS

---

### **Ingredients :**

Chemical Entity	CAS No	Proportion
1,10-Phenanthroline monohydrate	[5144-89-8]	1.5%
Ferrous sulphate heptahydrate	[7782-63-0]	0.7%

---

## 4. FIRST AID MEASURES

---

Safety showers and eye wash facilities should be provided.

### **Swallowed :**

If conscious wash out mouth with water. Seek medical advice. Show this SDS to medical practitioner.

### **Eye :**

Immediately hold eyelids open and flood with water for at least 15 minutes. Obtain medical aid. Show this SDS to medical practitioner.

### **Skin :**

Remove contaminated clothing. Immediately wash skin thoroughly with water and mild soap. Seek medical advice. Show this SDS to medical practitioner. Launder clothing before reuse.

### **Inhaled :**

Remove from contaminated air. Maintain breathing with artificial respiration if necessary. Seek medical assistance. Show this SDS to a doctor.

---

## 5. FIRE FIGHTING MEASURES

---

### **Suitable Extinguishing Media:**

Water spray carbon dioxide, dry chemical powder, or appropriate foam.

### **Hazards From Combustion Products:**

Decomposition products include oxides of carbon.

**Precautions For Fire Fighters and Special Protective Equipment:**

Fire fighters and others who may be exposed to combustion products during fire should wear full protective clothing including positive pressure self-contained breathing apparatus (SCBA). Wear SCBA with full face-piece, operated in positive pressure mode when fighting fires.

---

**6. ACCIDENTAL RELEASE MEASURES**

---

**Emergency procedures:**

Prevent from entering waterways. Restrict access to area. Remove chemicals that can react with the spilled material.

**Methods and materials for containment and clean up:**

Isolate all ignition sources. Ventilate area. Wear protective clothing. Use inert material such as sand or earth to contain spill or leak. Absorb spills with chemical absorber or vermiculite and dispose of in accordance with local regulations.

---

**7. HANDLING AND STORAGE**

---

**Precautions for Safe Handling:**

Do not get in eyes, on skin, on clothing. Avoid all personal exposure. Do not mix with oxidising agents.

**Conditions for Safe Storage:**

Store sealed in original container in a cool well ventilated situation away from foods and other chemicals. Do not store in direct sunlight. Observe good hygiene and housekeeping practices.

---

**8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

---

**National Exposure Standards:**

SWA – iron Salts soluble (as Fe) 1 mg/m<sup>3</sup> TWA

**Biological Limit Values:** No data available.

**Engineering Controls:**

If mists are likely to be generated maintain atmospheric concentrations well below exposure standards with flameproof extraction ventilation.

**Personal Protective Equipment (PPE):**

The use of nitrile or neoprene gloves complying with AS 2161 and the use of faceshield, chemical goggles or safety glasses with side shield protection complying with AS/NZS 1337 is recommended.

---

**9. PHYSICAL AND CHEMICAL PROPERTIES**

---

<b>Appearance :</b>	Dark red liquid
<b>Odour:</b>	NA
<b>pH:</b>	Not applicable
<b>Boiling Point (°C) :</b>	100C
<b>Freezing/melting Point:</b>	0 C
<b>Vapour Pressure (mm of Hg @ 25°C) :</b>	Not known
<b>Vapour Density:</b>	Not known
<b>Specific Gravity :</b>	1
<b>Flash Point (°C) :</b>	Not flammable
<b>Flammability Limits (%) :</b>	Not flammable
<b>Solubility in Water (g/L) :</b>	Soluble

---

**10. STABILITY AND REACTIVITY**

---

**Chemical stability:**

Stable.

**Conditions to avoid:**

Heat. Sunlight

**Incompatible materials:**

Oxidizing / reducing agents.

**Hazardous decomposition products:**

Refer to section 5 (Fire Fighting Measures).

**Hazardous reactions:**

Hazardous polymerization will not occur.

---

## 11. TOXICOLOGICAL INFORMATION

---

**Health Effects:**

**Swallowed :** May be harmful if swallowed. For 1,10-Phenanthroline monohydrate oral rat LD50 132 mg/kg.

**Eye :** May be irritating to eye tissue.

**Skin :** May be irritating to skin tissue.

**Inhaled :** May be harmful if dusts or mists are inhaled.

**Chronic Effects:** None known.

---

## 12. ECOLOGICAL INFORMATION

---

**Ecotoxicity:**

No data available.

**Persistence and degradability:**

No data available.

**Mobility:**

No data available.

---

## 13. DISPOSAL CONSIDERATIONS

---

Contact a licensed professional waste disposal service to dispose of this material and container. Observe all federal, state and local environmental regulations.

---

## 14. TRANSPORT INFORMATION

---

**UN Number:** Not applicable

**UN Proper Shipping Name:** Not applicable

**Class and subsidiary risk(s):** Not applicable

**Packing Group:** Not applicable

**Hazchem Code:** Not applicable

**Special precautions for user :** Nil

---

## 15. REGULATORY INFORMATION

---

**Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP):**

Not Scheduled

---

## 16. OTHER INFORMATION

---

**Disclaimer:**

All information given by the Company is offered in good faith and is believed to the best of our knowledge to be accurate. However this information is offered without warranty representation inducement or licence and the Company does not assume legal responsibility for reliance upon the same.

Every person dealing with the materials referred to herein does so at his or her own risk absolutely and must make independent determinations of suitability and completeness of information from all sources to ensure their proper use.