

## SAFETY DATA SHEET

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1 Product identifiers

Product name           Ferroin Indicator

CAS number           Mixture

Synonyms           N/A

#### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses           Laboratory Chemicals

#### 1.3 Details of the supplier of the safety data sheet

Company                   Lab Alley, LLC  
12501 Pauls Valley Road  
Austin, Texas 78737  
U.S.A.

Telephone               512-668-9918

Fax                       512-886-4008

#### 1.4 Emergency telephone

Emergency Phone #	US & Canada: 1-800-535-5053	INFOTRAC
	International 1-352-323-3500	INFOTRAC

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

**GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**

Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)

## 2.2 GHS Label elements, including precautionary statements

Pictogram

Not classified

Signal Word

none

Hazard statements

Not Applicable

Precautionary  
statements

Not available

## 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

### SECTION 3: Composition/information on ingredients

#### 3.1 Components

Chemical name	Common name and synonyms	CAS number	Concentration
Water	H <sub>2</sub> O; Aqua	7732-18-5	97.8%
1,10-Phenanthroline, Monohydrate	1,10-fenantrolina	5144-89-8	1.5%
Ferrous Sulfate, Heptahydrate	Iron(II) sulfate heptahydrate	7782-63-0	0.7%

### SECTION 4: First aid measures

#### 4.1 Description of first-aid measures

**General advice**

National Capital Poison Center in the United States can provide assistance if you have a poison emergency and need to talk to a poison specialist. Call 1-800-222-1222.

**If inhaled**

Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

<b>In case of skin contact</b>	Wash off immediately with soap and plenty of water removing all contaminated clothing and shoes. Get medical attention if irritation develops. Consult a physician if necessary.
<b>In case of eye contact</b>	Flush eyes with water for 15 minutes. Get medical attention if irritation occurs. If symptoms persist, call a physician.
<b>If swallowed</b>	Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Consult a physician if necessary.

#### 4.2 Most important symptoms and effects, both acute and delayed

Health injuries are not known or expected under normal use. May cause eye irritation. May cause skin irritation.

#### 4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

### SECTION 5: Firefighting measures

#### 5.1 Extinguishing media

<b>Suitable extinguishing media</b>	The product is not flammable. If it is involved in a fire, extinguish the fire using an agent suitable for the type of surrounding fire.
<b>Unsuitable extinguishing media</b>	No information available.

#### 5.2 Specific hazards arising from the substance or mixture

No information available.

#### 5.3 Special protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

#### 5.4 Further information

<b>Flash Point</b>	No information available.
<b>Autoignition Temperature</b>	No information available.
<b>Explosion limits</b>	
<b>Upper</b>	No information available.
<b>Lower</b>	No information available.
<b>Sensitivity to Mechanical Impact</b>	No information available.
<b>Sensitivity to Static Discharge</b>	No information available.

**NFPA**

Health	Flammability	Instability	Physical hazards
2	0	0	N/A

**SECTION 6: Accidental release measures****6.1 Personal precautions, protective equipment and emergency procedures**

Avoid contact with skin, eyes and clothing. Wear personal protective equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.

**6.2 Environmental precautions**

Prevent further leakage or spillage. Prevent product from entering drains.

**6.3 Methods and materials for containment and cleaning up**

**Methods for containment:** Prevent further leakage or spillage if safe to do so. Absorb spill with inert material (e.g. vermiculite, dry sand or earth).

**Methods for cleaning up:** Sweep up and shovel into suitable containers for disposal. Clean contaminated surface thoroughly.

**6.4 Reference to other sections**

No information available.

**SECTION 7: Handling and storage****7.1 Precautions for safe handling**

Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Do not breathe vapors or spray mist. Do not smoke. Do not ingest. Handle in accordance with good industrial hygiene and safety practice.

**Hygiene measures**

Avoid contact with skin, eyes and clothing. When using, do not eat, drink or smoke. Wash hands before breaks and immediately after handling the product.

**7.2 Conditions for safe storage, including any incompatibilities****Storage conditions**

Keep in a dry, well-ventilated place. Store at room temperature in the original container. Store away from incompatible materials.

**Incompatibilities**

Oxidizing agents

**SECTION 8: Exposure controls/personal protection****8.1 Occupational exposure limits**

**US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)**

No information available.

**US. ACGIH Threshold Limit Values**

Component	Type	Value
Ferrous Sulfate, Heptahydrate	TWA(as Fe) (iron soluble salts)	1 mg/m3

**US. NIOSH: Pocket Guide to Chemical Hazards**

Component	Type	Value
Ferrous Sulfate, Heptahydrate	TWA(as Fe) (iron soluble salts)	1 mg/m3

**Biological occupational exposure limits**

No information available.

## 8.2 Exposure controls

**Appropriate engineering controls**

Ensure adequate ventilation, especially in confined areas. Use process enclosures, local exhaust

**Personal protective equipment****Eye/face protection**

Goggles or Safety glasses with side-shields

**Skin protection**

Chemical resistant apron. Gloves. Long sleeved clothing.

**Body Protection**

Chemical resistant apron. Gloves. Long sleeved clothing.

**Respiratory protection**

Respiratory protection is not necessary for normal handling. Good room ventilation or use of

**Control of environmental exposure**

No information available.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Physical State

Liquid

Appearance	Clear and Colorless
Odor	No information available.
Odor Threshold	No information available.
pH	No information available.
Melting Point/Range	0°C/32°F (water)
Boiling Point/Range	100°C/212°F (water)
Evaporation Rate	No information available.
Flammability (solid)	No information available.
Flammability or explosive limit	
Upper	No information available.
Lower	No information available.
Vapor Pressure	2.3 kPa
Vapor Density	0.62
Density	0.99 g/cm <sup>3</sup>
Solubility	Soluble in Water
Partition coefficient;	No information available.
Autoignition Temp	No information available.
Decomposition Temp	No information available.
Viscosity	No information available.
Molecular Formula	C <sub>36</sub> H <sub>24</sub> FeN <sub>6</sub> O <sub>4</sub> S
Molecular Weight	692.52 g/mol
VOC Content(%)	No information available.
Oxidizing properties	No information available.

## 9.2 Other safety information

No information available.

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

Reactive with oxidizing agents

### 10.2 Chemical stability

Stable under recommended storage conditions.

### 10.3 Possibility of hazardous reactions

Hazardous polymerization does not occur

### 10.4 Conditions to avoid

Heat. Incompatible materials.

### 10.5 Incompatible materials

Oxidizing agents

## 10.6 Hazardous decomposition products

No information available.

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Product Information, Component Information

##### Acute toxicity

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Water	> 90 mL/kg (Rat)	Not listed	Not listed
1,10-Phenanthroline, Monohydrate	132 mg/kg (Rat)	Not listed	Not listed
Ferrous Sulfate, Heptahydrate	1520 mg/kg (Mouse)	Not listed	Not listed

##### Skin corrosion/irritation

May cause skin irritation.

##### Serious eye damage/eye irritation

May cause eye irritation.

##### Respiratory or skin sensitization

May cause irritation of respiratory tract. It can irritate the lungs.

##### Germ cell mutagenicity

No information available

##### Carcinogenicity

Component	CAS	IARC	NTP	ACGIH	OSHA	Mexico
Water	7732-18-5	Not listed	Not listed	Not listed	Not listed	Not listed
1,10-Phenanthroline, Monohydrate	5144-89-8	Not listed	Not listed	Not listed	Not listed	Not listed
Ferrous Sulfate, Heptahydrate	7782-63-0	Not listed	Not listed	Not listed	Not listed	Not listed

##### Specific target organ toxicity - single exposure

No information available

##### Specific target organ toxicity - repeated exposure

No information available

**Reproductive toxicity**

No data is available

**Chronic effects**

Prolonged or repeated ingestion may affect the liver.

**11.2 Additional Information**

No information available.

**SECTION 12: Ecological information****12.1 Toxicity**

No data available.

**12.2 Persistence and degradability**

No information available.

**12.3 Bio accumulative potential**

No information available.

**12.4 Mobility in soil**

No information available.

**12.5 Results of PBT and vPvB assessment**

No information available.

**12.6 Endocrine disrupting properties**

No information available.

**12.7 Other adverse effects**

No information available.

**SECTION 13: Disposal considerations****13.1 Waste Disposal Methods**

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

**SECTION 14: Transport information****DOT (US)**

UN Number

Not Regulated

Proper Shipping name	No information available
Hazard Class	No information available
Packaging Group	No information available
Technical name	Ferroid Indicator

### **IMDG**

UN Number	Not Regulated
Proper Shipping name	No information available
Hazard Class	No information available
Packaging Group	No information available
Technical name	Ferroid Indicator

### **IATA**

UN Number	Not Regulated
Proper Shipping name	No information available
Hazard Class	No information available
Packaging Group	No information available
Technical name	Ferroid Indicator

## **SECTION 15: Regulatory information**

### **US federal**

#### **TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

Not Listed

#### **CERCLA Hazardous Substance List (40 CFR 302.4)**

Listed, Ferrous Sulfate, Heptahydrate (CAS# 7782-63-0), RQ: 1000 lb.

#### **SARA 304 Emergency release notification**

Not Listed

#### **OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)**

Not Listed

### **Superfund Amendments and Reauthorization Act of 1986 (SARA)**

#### **SARA 302 Extremely hazardous substance**

Not Listed

#### **SARA 311/312 Hazardous**

Not Listed

#### **SARA 313 (TRI reporting)**

Not Listed

**Other federal regulations**

**Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Not Listed

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

Not Listed

**Safe Drinking Water Act**

Not Listed

**FEMA Priority Substances Respiratory Health and Safety in the Flavor**

Not Listed

**US state regulations**

**US. Massachusetts RTK - Substance List**

Listed, Ferrous Sulfate, Heptahydrate (CAS# 7782-63-0)

**US. New Jersey Worker and Community Right-to-Know Act**

Not Listed

**US. Pennsylvania Worker and Community Right-to-Know Law**

Listed, Ferrous Sulfate, Heptahydrate (CAS# 7782-63-0)

**California Proposition 65**

This product does not contain a chemical requiring a warning under California Prop. 65.

**SECTION 16: Other information**

Date of Issue: 10/2/2025

**SECTION 17: Disclaimer**

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.