

# SAFETY DATA SHEET

## Ferrous Sulfate Heptahydrate

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Printed: 09/19/2023

Revision: 09/19/2023

Supersedes Revision: 06/01/2023

### 1. Product and Company Identification

**Product Code:** FSH  
**Product Name:** Ferrous Sulfate Heptahydrate  
**Trade Name:** copperas, green vitriol  
**Company Name:** CROWN TECHNOLOGY, INC  
7513 E. 96TH STREET  
Indianapolis, IN 46256  
**Phone Number:** (317)845-0045  
**Web site address:** crowntech.com  
**Emergency Contact:** PERS (800)633-8253  
**Intended Use:** Iron Source

### 2. Hazards Identification

**Acute Toxicity: Oral, Category 4**  
**Skin Corrosion/Irritation, Category 2**  
**Serious Eye Damage/Eye Irritation, Category 2**



**GHS Signal Word:** **Warning**  
**GHS Hazard Phrases:** H302 - Harmful if swallowed.  
H315 - Causes skin irritation.  
H319 - Causes serious eye irritation.  
**GHS Precautionary Phrases:** P264 - Wash hands thoroughly after handling.  
P270 - Do not eat, drink or smoke when using this product.  
P280 - Wear protective gloves/protective clothing/eye protection/face protection.  
P362+364 - Take off contaminated clothing and wash it before reuse.  
**GHS Response Phrases:** P301+312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.  
P330 - Rinse mouth.  
P302+352 - IF ON SKIN: Wash with plenty of soap and water.  
P332+313 - If skin irritation occurs, get medical advice/attention.  
P305+351+338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P337+313 - If eye irritation persists, get medical advice/attention.  
**GHS Storage and Disposal Phrases:**

### 3. Composition/Information on Ingredients

CAS #	Components (Chemical Name)	Concentration
7782-63-0	Ferrous sulfate	100.0 %

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### 4. First Aid Measures

#### Emergency and First Aid

##### Procedures:

- In Case of Inhalation:** If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention. Never give anything by mouth to an unconscious person.
- In Case of Skin Contact:** Wash skin with soap and water.
- In Case of Eye Contact:** Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. If eye irritation persists, get medical advice/attention.
- In Case of Ingestion:** If swallowed, induce vomiting immediately as directed by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.

### 5. Fire Fighting Measures

#### Flash Pt:

**Explosive Limits:** LEL: UEL:

#### Autoignition Pt:

**Suitable Extinguishing Media:** Use water spray, dry chemical, carbon dioxide, or alcohol-resistant foam.

**Unsuitable Extinguishing Media:** Substance is noncombustible; use agent most appropriate to extinguish surrounding fire.

**Fire Fighting Instructions:** Substance is noncombustible.

**Flammable Properties and Hazards:** Non Combustible.

**Hazardous Combustion Products:** sulfur oxides.

### 6. Accidental Release Measures

**Protective Precautions, Protective Equipment and Emergency Procedures:** Not available.

#### Environmental Precautions:

Reportable Quantity: 1000 lbs.

**Steps To Be Taken In Case Material Is Released Or Spilled:** Clean up spills immediately, observing precautions in Protective Equipment section.

### 7. Handling and Storage

**Precautions To Be Taken in Handling:** Store in a cool dry place.

**Precautions To Be Taken in Storing:** Keep container closed when not in use.

**Other Precautions:** None.

### 8. Exposure Controls/Personal Protection

CAS #	Partial Chemical Name	OSHA TWA	ACGIH TWA	Other Limits
7782-63-0	Ferrous sulfate			

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<b>Recommended Exposure Limits:</b>	Not available.
<b>Respiratory Equipment (Specify Type):</b>	ANSI approved respirator.
<b>Eye Protection:</b>	Goggles.
<b>Protective Gloves:</b>	Wear appropriate protective gloves to prevent skin exposure.
<b>Other Protective Clothing:</b>	Wear appropriate protective clothing to prevent skin exposure.
<b>Engineering Controls (Ventilation etc.):</b>	If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.
<b>Work/Hygienic/Maintenance Practices:</b>	Wash thoroughly after handling.

### 9. Physical and Chemical Properties

<b>Physical States:</b>	[ ] Gas [ ] Liquid [X] Solid
<b>Appearance and Odor:</b>	Appearance: Bluish green to brown crystals. Odor: metal odor. Odor Threshold: N/A.
<b>pH:</b>	5% Sol 2.5 - 5
<b>Melting Point:</b>	149.00 F
<b>Boiling Point:</b>	572.00 F
<b>Flash Pt:</b>	
<b>Evaporation Rate:</b>	
<b>Flammability (solid, gas):</b>	
<b>Explosive Limits:</b>	LEL: UEL:
<b>Vapor Pressure (vs. Air or mm Hg):</b>	
<b>Vapor Density (vs. Air = 1):</b>	
<b>Specific Gravity (Water = 1):</b>	
<b>Density:</b>	55 LB/CF
<b>Solubility in Water:</b>	46.8g/100g
<b>Saturated Vapor Concentration:</b>	
<b>Octanol/Water Partition Coefficient:</b>	N/A
<b>Autoignition Pt:</b>	
<b>Decomposition Temperature:</b>	572.00 F
<b>Viscosity:</b>	Not established
<b>Molecular Formula &amp; Weight:</b>	FeSO <sub>4</sub> *7H <sub>2</sub> O 278.0

Information with regard to primary physical hazard:

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### 10. Stability and Reactivity

**Stability:** Unstable [ ] Stable [ X ]

**Conditions To Avoid - Instability:**

**Incompatibility - Materials To Avoid:**

**Hazardous Decomposition or Byproducts:**

**Possibility of Hazardous Reactions:** Will occur [ X ] Will not occur [ ]

**Conditions To Avoid - Hazardous Reactions:**

### 11. Toxicological Information

**Toxicological Information:** CAS# 7782-63-0: Acute toxicity, LD50, Oral, Mouse, 1520. MG/KG. Result: Sense Organs and Special Senses (Nose, Eye, Ear, and Taste):Eye:Mydriasis (pupillary dilation). Behavioral: Convulsions or effect on seizure threshold. Gastrointestinal:Nausea or vomiting. ; American Journal of the Medical Sciences., Slack Inc., 6900 Grove Rd., Thorofare, NJ 08086, Vol/p/yr: 230,491, 1955

**Carcinogenicity:** NTP? No IARC Monographs? No OSHA Regulated? No

### 12. Ecological Information

**General Ecological Information:** No data available.  
CAS# 7782-63-0: LC50, Bluegill (Lepomis macrochirus), 51.20 PPM, 96 H, Mortality. Result: Morphological changes. ; Pesticide Ecotoxicity Database (Formerly: Environmental Effects Database (EEDB)), Office of Pesticide Programs, 2000  
LC50, Rainbow Trout (Oncorhynchus mykiss), 20.80 PPM, 96 H, Mortality. Result: Affected fish stopped schooling behavior. Affected fish became hypoactive. ; Pesticide Ecotoxicity Database (Formerly: Environmental Effects Database (EEDB)), Office of Pesticide Programs, 2000  
Effective concentration to 50% of test organisms., Water Flea (Daphnia pulex), 7.100 PPM, 48 H, Intoxication,. Result: No loss of equilibrium observed. ; Pesticide Ecotoxicity Database (Formerly: Environmental Effects Database (EEDB)), Office of Pesticide Programs, 2000

**Results of PBT and vPvB assessment:** No data available.

### 13. Disposal Considerations

**Waste Disposal Method:** Observe all federal, state, and local environmental regulations.

### 14. Transport Information

**LAND TRANSPORT (US DOT):**

**DOT Proper Shipping Name:** Not regulated as a hazardous material.

**DOT Hazard Class:**

**UN/NA Number:**

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**15. Regulatory Information**

**EPA SARA (Superfund Amendments and Reauthorization Act of 1986) Lists**

<b>CAS #</b>	<b>Components (Chemical Name)</b>	<b>S. 302 (EHS)</b>	<b>S. 304 RQ</b>	<b>S. 313 (TRI)</b>
7782-63-0	Ferrous sulfate	No	Yes NA	No

**16. Other Information**

**Revision Date:** 09/19/2023      **Previous revision:** 06/01/2023

**Additional Information About  
This Product:**