

# Safety Data Sheet

## Chemurgic's 20% Ferrous Sulfate

### 1. Identification

#### 1.1 Product identifier

<b>Product form</b>	Mixture
<b>Product Identity</b>	Chemurgic's 20% Ferrous Sulfate
<b>Alternate Names</b>	None

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

<b>Intended use</b>	See Technical Data Sheet.
<b>Application Method</b>	See Technical Data Sheet.

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

<b>Company Name</b>	Chemurgic Agricultural Chemicals, Inc. P.O. Box 2106 Turlock, CA 95381
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#### EMERGENCY PHONE NUMBERS:

<b>Company Phone Number</b>	DAYS: (209) 634-2951 EVES: (209) 652-7260
<b>24-Hour Emergency Telephone Number</b>	INFOTRAC: 1-800-535-5053 EPA National Response Center: (800) 424-8802

### 2. Hazard(s) identification

#### 2.1. Classification of the substance or mixture

##### GHS-US classification

Acute Toxicity (Oral)	Category 4; H302
Skin Irritation	Category 2; H315
Eye Irritation	Category 2A; H319

#### 2.2. Label elements

##### GHS-US labeling

Hazard pictogram



**Signal Word:** Warning

##### HAZARD STATEMENTS:

- H302: Harmful if swallowed.
- H315: Causes skin irritation.
- H319: Causes serious eye irritation.

##### [Prevention]:

- 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.

##### [Response]:

- P301 + P312: IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell.
- P330: Rinse mouth.

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P302 + P352: IF ON SKIN: Wash with plenty of soap and water.

P332 + P313: If skin irritation occurs, get medical advice/attention.

P362 + P364: Take off contaminated clothing and wash it before reuse.

P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337 + P313: If eye irritation persists: Get medical advice/attention.

P321: Specific treatment (see First Aid Measures on this label).

**[Storage]:**

P405: Store locked up.

**[Disposal]:**

P501: Dispose of contents/container in accordance with local/regional/national/international regulations.

**2.3 Other hazards**

No additional information available.

**2.4 Unknown acute toxicity (GHS-US)**

No data available.

### 3. Composition/information on ingredients

Mixture	CAS Number	%	GHS-US Classification
Iron (II) sulfate, heptahydrate	7782-63-0	50 - 100	Acute Toxicity (Oral) 4, H302 Skin Irritation 2, H315 Eye Irritation 2A, H319

### 4. First aid measures

**4.1. Description of first aid measures**

**General**

In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.

**Inhalation**

Remove to fresh air, keep patient warm and at rest. If breathing is irregular or stopped, give artificial respiration. If unconscious place in the recovery position and obtain immediate medical attention. Give nothing by mouth.

**Eyes**

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical advice/attention.

**Skin**

Remove contaminated clothing. Wash skin thoroughly with soap and water or use a recognized skin cleanser. If skin irritation occurs, get medical advice/attention.

**Ingestion**

Rinse mouth. Do not induce vomiting. Call a physician or Poison Control Center immediately.

**4.2. Most important symptoms and effects, both acute and delayed**

**Overview**

Causes eye and skin irritation. Swallowing a small quantity of this material will result in serious health hazard.

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

No additional information available.

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### 5. Fire-fighting measures

#### 5.1. Extinguishing media

Foam. Dry powder. Carbon dioxide. Water Spray. Sand. Do not use a heavy water stream.

#### 5.2. Special hazards arising from the substance or mixture

Reactivity: Thermal decomposition generates: Corrosive vapours.

#### 5.3. Advice for fire-fighters

Do not enter fire area without proper protective equipment, including respiratory protection. Use water spray or fog for cooling exposed containers. Avoid fire-fighting water to enter environment.

### 6. Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

Put on appropriate personal protective equipment (see Section 8). Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

#### 6.2. Environmental precautions

Do not allow spills to enter drains or waterways. Prevent product spillage from entering drinking water supplies or streams.

#### 6.3. Methods and material for containment and cleaning up

On land, sweep or shovel into suitable containers for disposal. Minimize generation of dust. Store away from other material.

#### 6.4 Reference to other sections

For disposal see Section 13.

### 7. Handling and storage

#### 7.1. Precautions for safe handling

Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Provide good ventilation in process area to prevent formation of vapour. Do not breathe dust/fume/gas/mist/vapours/spray. Avoid contact during pregnancy/while nursing.

#### 7.2. Conditions for safe storage, including any incompatibilities

Store in original container only. Keep container closed when not in use. Store container in a cool, well ventilated place at temperatures above 25° C. Store locked up.

Incompatible product: Strong bases. Strong acids.

Incompatible materials: Sources of ignition. Direct sunlight.

#### 7.3. Specific end use(s)

No data available.

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#### 8. Exposure controls and personal protection

##### 8.1. Control parameters

<b>Iron (II) sulfate, heptahydrate (7782-63-0)</b>		
USA ACGIH	ACGIH TWA (mg/m <sup>3</sup> )	1 mg/m <sup>3</sup>

<b>8.2. Exposure controls</b>	
<b>Respiratory</b>	Wear appropriate mask.
<b>Eyes</b>	Chemical goggles or face shield.
<b>Skin</b>	Wear protective gloves and suitable protective clothing.
<b>Engineering Controls</b>	Provide adequate ventilation. Where reasonably practicable this should be achieved using local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and any vapor below occupational exposure limits suitable respiratory protection must be worn.
<b>Other Work Practices</b>	Use good personal hygiene practices. Do not eat, drink or smoke during use. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

See section 2 for further details. - [Prevention]:

#### 9. Physical and chemical properties

<b>Physical state</b> <b>Color</b> <b>Odor</b> <b>Odor threshold</b> <b>pH</b> <b>Melting point</b> <b>Freezing point</b> <b>Initial boiling point and boiling range</b> <b>Flash point</b> <b>Evaporation rate (Butyl Acetate = 1)</b> <b>Flammability (solid, gas)</b> <b>Upper/lower flammability or explosive limits</b>  <b>Vapor pressure</b> <b>Vapor density</b> <b>Relative density</b> <b>Specific gravity</b> <b>Solubility in water</b> <b>Partition coefficient n-octanol/water (Log Pow)</b> <b>Auto-ignition temperature</b> <b>Decomposition temperature</b> <b>Viscosity</b>	Solid Green Characteristic odor Not data available ≤ 2 No data available ≤ 0° C >100° C (212° F) None No data available No data available Lower Explosive Limit: Not applicable Upper Explosive Limit: Not applicable No data available No data available ≥ 55 Pounds per Cubic Feet – Bulk Density No data available Soluble No data available No data available No data available No data available
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##### 9.2 Other information

VOC Content ≤ 10 g/l

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### 10. Stability and reactivity

<p><b>10.1. Reactivity</b></p> <p><b>10.2. Chemical stability</b></p> <p><b>10.3. Possibility of hazardous reactions</b></p> <p><b>10.4. Conditions to avoid</b></p> <p><b>10.5. Incompatible materials</b></p> <p><b>10.6. Hazardous decomposition products</b></p>	<p>Thermal decomposition generates corrosive vapours.</p> <p>Not established.</p> <p>Not established.</p> <p>Direct sunlight. Extremely high or low temperatures.</p> <p>Strong acids. Strong bases.</p> <p>Carbon monoxide. Carbon dioxide. Thermal decomposition generates corrosive vapours.</p>
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### 11. Toxicological information

**Acute toxicity:** Harmful if swallowed.

Iron (II) sulfate, heptahydrate (7782-63-0)	
LD50 oral rat	1480 mg/kg (Rat)

**Skin corrosion/irritation:** Contact with skin will result in irritation.

**Serious eye damage/irritation:** An eye irritant.

**Respiratory or skin sensitization:** Not classified.

**Germ cell mutagenicity:** Not classified.

**Carcinogenicity:** Not classified.

**Reproductive toxicity:** Not classified.

**Specific target organ toxicity (single and repeated exposure):** Not classified.

**Aspiration hazard:** Not classified.

**Potential adverse human health effects and symptoms:** Based on available data, the classification criteria are not met. Harmful if swallowed.

**Symptoms/injuries after ingestion:** Swallowing a small quantity of this material will result in serious health hazard.

### 12. Ecological information

**12.1. Toxicity:** Toxic to aquatic life.

Iron (II) sulfate, heptahydrate (7782-63-0)	
LC50 fishes 1	925 mg/l (96 h; Poecilia reticulata)
EC50 Daphnia 1	7.2 mg/l (48 h; Daphnia magna; Metal ion)
LC50 fish 2	>200 mg/l (48 h; Leuciscus idus)
EC50 Daphnia 2	152 mg/l (48 h; Daphnia magna; Anhydrous form)

**12.2. Persistence and degradability:**

<b>Chemurgic's 20% Ferrous Sulfate</b>	Not established.
<b>Iron (II) sulfate, heptahydrate (7782-63-0)</b>	No data available. Adsorbs into the soil.

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**12.3. Bioaccumulative potential:**

<b>Chemurgic's 20% Ferrous Sulfate</b>	Not established.
<b>Iron (II) sulfate, heptahydrate (7782-63-0)</b>	Not bioaccumulative.

**12.4. Mobility in soil:**

No data available.

**12.5. Other adverse effects:**

Avoid release to the environment.

## 13. Disposal considerations

**13.1. Waste treatment methods**

Observe all federal, state and local regulations when disposing of this substance. Avoid release to the environment.

## 14. Transport information

**Not regulated by US DOT for ground transport.**
**Transport by sea:** No additional information available.

**Air transport:** No additional information available.

## 15. Regulatory information

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

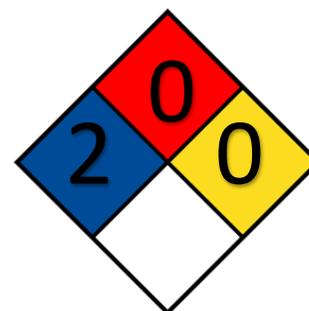
CAS #	Chemical Name	S. 302 (EHS)	S. 304 RQ	S. 313 (TRI)
7782-63-0	Iron (II) sulfate, heptahydrate	No	Yes 1000 LB	No

**This material meets the EPA "Hazard Categories" defined for SARA Title III Sections 311/312 as indicated:**

Acute (immediate) Health Hazard: Yes  
 Chronic (delayed) Health Hazard: No  
 Fire Hazard : No  
 Sudden Release of Pressure Hazard: No  
 Reactive Hazard: No

## 16. Other information

NFPA health hazard	2	Intense or continued exposure could cause temporary incapacitation or possible residual injury unless prompt medical attention is given.
NFPA fire hazard	0	Materials that will not burn.
NFPA reactivity	0	Normally stable, even under fire exposure conditions.
NFPA specific hazard	None	


**HMIS III Rating**

Health	2	Moderate hazard. Temporary or minor injury may
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		occur.
Flammability	0	Minimal hazard
Physical	0	Minimal hazard.

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**This is the first version in the GHS SDS format. Listings of changes from previous versions in other formats are not applicable.**

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