



# Safety Data Sheet

Report Date 31-May-15

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## 1. Identification

**Product Name** : PRO-MATE IRON 5%  
**Synonyms** : None  
**Product Use** : Chelated micronutrient - Iron  
**Manufacturer/Supplier** : Helena Chemical Company  
**Address** : 225 Schilling Blvd. Collierville, TN 38017  
**General Information** : 901-761-0050  
**Transportation Emergency Number** : CHEMTREC:800-424-9300

## 2. Hazard Identification



**Signal Word** : Danger  
**Skin Irritation** : Corrosive to skin (based on pH).  
**Eye Irritation** : Corrosive to eyes (based on pH).  
**Acute Toxicity Oral** : LD50 1,520 mg/kg (ferrous sulfate heptahydrate component).  
**Acute Toxicity Dermal** : No data available

**Hazard Categories** : Oral/Dermal/Inhalation Toxicity-4/5/5; Eye/Skin Irritation-1/1C

**Hazard Statement** : Harmful if swallowed  
May be harmful in contact with skin  
Causes severe skin burns and eye damage  
May be harmful if inhaled

## 3. Composition / Information on Ingredients

Component	CAS Number	Weight %
Blend of plant nutrients derived from ferrous sulfate. The chelating agent is citric acid.	Proprietary	100.00
GUARANTEED ANALYSIS:		
Sulfur (S): 3.00%		
Iron (Fe): 5.00%		

## 4. First Aid Measures

**Eye** : Hold eyes open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for further treatment advice.  
**Skin** : Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 to 20 minutes. Call a poison control center or doctor for treatment advice.  
**Inhalation** : Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.  
**Ingestion** : Call a poison control center or doctor immediately for treatment advice. Rinse mouth with water. Do not induce vomiting. Do not give anything by mouth if unconscious.

**Indication of Immediate Medical Attention and Special Treatment Needed** : In the event of an adverse response, treatment should be directed toward control of the symptoms.

## 5. Fire Fighting Measures



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- Extinguishing Media** : Non-combustible liquid. Use extinguishing media suitable for underlying cause of fire.
- Specific Hazards Arising from the Chemical** : Product may emit toxic fumes under fire conditions.
- Special Fire Fight Proc** : Wear self-contained breathing apparatus and full protective clothing. Use water spray to keep fire-exposed containers cool.

### 6. Accidental Release Measures

- Personal Precautions** : Keep unprotected and unnecessary personnel out of spill area.
- Protective Equipment** : Splashproof goggles or face shield, impervious gloves, impervious apron and footwear. Respiratory protection only needed if misted or dried. Eyewash should be available in work area.
- Emergency Procedures** : Do not contaminate water supplies with spilled product.
- Methods and Materials for Containment and Cleanup** : Contain spilled product and reuse if uncontaminated. If contaminated, absorb with an inert material, such as clay, sand or sawdust. Collect and place in suitable container for proper disposal.

### 7. Handling and Storage

- Precautions for Safe Handling** : Keep locked up and out of reach of children. Do not contaminate water, food or feed by storage, handling or disposal. Keep container tightly closed.
- Conditions for Safe Storage** : Store in original container only. Do not allow water to be introduced into the contents of the container.

### 8. Exposure Controls / Personal Protection

- TLV/PEL** : Ferrous sulfate heptahydrate: TLV = 1 mg/m<sup>3</sup>.
- Appropriate Engineering Controls** : Local exhaust is sufficient.
- Personal Protective Equipment** : Splashproof goggles or face shield, impervious gloves, impervious apron and footwear. Respiratory protection only needed if misted or dried. Eyewash should be available in work area.

### 9. Physical and Chemical Properties

- Odor/Appearance** : Clear colorless to very pale blue liquid.
- Flash Point, °F** : Non-combustible
- Boiling Point, °F** : >100 Degrees C.
- Melting Point(Freezing point), °C** : Not applicable
- Vapor Pressure, mm Hg @ 20 °C** : Not determined
- Vapor Density** : Not determined
- Solubility in Water** : Soluble
- Molecular Formula** : Not applicable, formulated mixture.
- Density, g/mL @ 25 °C** : 1.190-1.220
- Evaporation Rate(Butyl Acetate = 1)** : Not determined
- Octanol/Water Partition Coefficient** : No information found
- pH** : 2.0 to 3.0 (1%)
- Flammable Limits (approximate volume % in air)** : Not applicable
- Auto-ignition Temperature** : Not applicable



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**Decomposition temperature** : No information found

### 10. Stability and Reactivity

**Reactivity** : No information found  
**Chemical Stability** : Stable  
**Hazardous Decomposition** : May produce sulfur dioxide under fire conditions.  
**Products**  
**Hazardous Polymerization** : Will not occur  
**Conditions to Avoid** : None currently known.  
**Incompatible Materials** : Product may react vigorously with alkaline materials.

### 11. Toxicological Information

**Acute Toxicity (Oral LD50)** : No LD50 available. May be harmful if swallowed.  
**Acute Toxicity (Dermal LD50)** : No LD50 available. May be harmful in contact with skin.  
**Acute Toxicity Inhalation LC50** : No LC50 available. May be harmful if inhaled.  
**Likely Routes of Exposure** : Skin, eyes, ingestion, inhalation  
**Skin Irritation** : Causes severe skin burns. (Corrosive based on pH)  
**Eye Irritation** : Causes serious eye damage. (Corrosive based on pH)  
**Skin Sensitization** : Not a skin sensitizer.  
**Carcinogenic** : None currently known.  
**Chronic Effects** : None currently known.  
**Other Hazards** : None currently known.

### 12. Ecological Information

**Ecotoxicity** : No information found  
**Persistence and Degradability** : No information found  
**Bioaccumulative Potential** : No information found  
**Mobility in Soil** : No information found  
**Other Adverse Effects** : No information found

### 13. Disposal Considerations

**Waste Disposal Method** : This material must be disposed of according to Federal, State or Local procedures under the Resource Conservation and Recovery Act.

### 14. Transport Information

**UN Proper Shipping Name** : Not regulated by DOT in single containers  $\leq$ 412.3 gallons.  
**Transport Hazard Class** : None  
**UN Identification Number** : None  
**Packaging Group** : None  
**Environmental Hazards** : No information found  
**Transport in Bulk** : If shipped in single package  $>$ 412.3 gallons, ship as: RQ, UN3082, Environmentally Hazardous Substance, Liquid, n.o.s., (Ferrous Sulfate Heptahydrate), 9, PG III "ERG # 171"  
**Special Precautions for Transportation** : No information found



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**Freight Classification** : Fertilizing Compound, (Manufactured Fertilizer), Liquid, NOIBN (NMFC Item 68140, Sub 6, Class 70)

## 15. Regulatory Information

**National Fire Protection Association Rating** :

Health: 2      Fire: 0      Reactivity: 0  
Rating Level: (4-Extreme, 3-High, 2-Moderate, 1-Slight, 0-Minimum)

**S.A.R.A Title III Hazard Classification (Yes/No)** :

Immediate( Acute) Health: Y  
Delayed (Chronic) Health: N  
Sudden Release of Pressure: N  
Fire: N  
Reactive: N

## 16. Other Information

**Data of Preparation/Revision** : 31-May-2015