Safety Data Sheet

1. Identification

Product Name : TRACITE IRON 5% (CITRIC)
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 : Causes severe skin burns due to low pH.
Eye Irritation : Causes serious eye damage due to low pH.
Acute Toxicity Oral : LD50 1,520 mg/kg (mouse) for iron sulfate heptahydrate.
Acute Toxicity Dermal : No LD50 available. May be harmful in contact with skin.

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 (CAS No. 7720-78-7). The chelating agent is citric acid. GUARANTEED ANALYSIS: Sulfur (S): 2.80% Iron (Fe): 5.00%		100.00

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

Extinguishing Media	: Non-combustible liquid. Use extinguishing media suitable for underlying cause of fire.
Specific Hazards Arising from the Chemical	: May produce 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 not normally needed. Eyewash and emergency shower should be available in work area.
Emergency Procedures	: Contain spilled product. Do not contaminate water supplies, drains or sewers with spilled product.
Methods and Materials for Containment and Cleanup	: If uncontaminated, collect and reuse as intended. If contaminated, absorb with an inert material, such as clay, sand or sawdust. Collect and place in suitable containers 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. Do not allow water to be introduced into the contents of the container.
Conditions for Safe Storage	: Store in original container only. Do not store near heat or open flame. Do not store with oxidizing agents or ammonium nitrate.

8. Exposure Controls / Personal Protection

TLV/PEL	: TLV - 1 mg/m3 (Iron salts, soluble (as Fe)).
Appropriate Engineering Controls	: Local exhaust should be sufficient.
Personal Protective Equipment	: Splashproof goggles or face shield, impervious gloves, impervious apron and footwear. Respiratory protection not normally needed. Eyewash and emergency shower should be available in work area.

9. Physical and Chemical Properties

Odor/Appearance	: Clear, brownish green liquid. Unspecified odor.
Flash Point, ^{0}F	: Non-combustible
Boiling Point, ^{0}F	: >100 Degrees C.
Melting Point(Freezing point), ^{0}C	: <0 Degrees C.
Vapor Pressure, mm Hg @ 20 ^{0}C	: Not determined
Vapor Density	: Not determined
Solubility in Water	: Soluble
Molecular Formula	: Not applicable, formulated mixture.
Density, g/mL @ 25 ^{0}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% aqueous solution)

Flammable Limits (approximate volume % in air)	: Not applicable
Auto-ignition Temperature	: Not applicable
Decomposition temperature	: No information found

10. Stability and Reactivity

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

11. Toxicological Information

Acute Toxicity (Oral LD50)	: 1,520 mg/kg (mouse). 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 cause irritation of the respiratory tract. May be harmful if inhaled.
Likely Routes of Exposure	: Eyes, skin, ingestion
Skin Irritation	: Causes severe skin burns.
Eye Irritation	: Causes serious eye damage.
Skin Sensitization	: Not listed as 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, IATA or IMDG in current package sizes.
Transport Hazard Class	: None
UN Identification Number	: None
Packaging Group	: None
Environmental Hazards	: Reportable quantity (RQ) is 412 gallons (1,000 lbs for ferrous sulfate).

Transport in Bulk : If shipped in single package >/= 412 gallons, ship as: RQ, UN3082, Environmentally Hazardous Substance, Liquid, n.o.s., (Ferrous Sulfate), 9, PG III "ERG # 171"

Special Precautions for Transportation : No information found

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 : 06-October-2016