



Safety Data Sheet

Report Date 02-Jun-15

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1. Identification

Product Name : TRACITE LF ROW CROP MIX
Synonyms : None
Product Use : Micronutrient Fertilizer Mix
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 : Warning
Skin Irritation : Causes skin irritation.
Eye Irritation : Causes serious eye irritation.
Acute Toxicity Oral : Harmful if swallowed.
Acute Toxicity Dermal : No hazard anticipated due to skin absorption.

Hazard Categories : Oral/Dermal/Inhalation Toxicity-4/5/5; Eye/Skin Irritation-2A/2; STOT Repeated Exposure-2

Hazard Statement : Harmful if swallowed
May be harmful in contact with skin
Causes serious eye irritation
Causes skin irritation
May be harmful if inhaled
May cause damage to organs (central nervous system) through prolonged or repeated exposure (via inhalation)

3. Composition / Information on Ingredients

Component	CAS Number	Weight %
Ammonium Hydroxide	1336-21-6	30
Zinc Sulfate Monohydrate	7733-02-0	<12.50
Manganese Sulfate	7785-87-7	<3.50
Ferrous Sulfate Heptahydrate	7782-63-0	<5.00
Copper Sulfate Pentahydrate	7758-99-8	1.00



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Inert ingredients and formulation aids, including citric acid. See label for Guaranteed Analysis.

Proprietary

>48.00

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 emit toxic and irritating 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** : Do not contaminate water supplies with spilled product.
- Methods and Materials for Containment and Cleanup** : Contain product and reuse, if uncontaminated. If contaminated, absorb with inert absorbent, such as clay or sand. Collect and place in suitable labeled-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.



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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 : Manganese Sulfate (manganese compounds as Mn)-TLV/PEL=0.2 mg/m³ and 5 mg/m³. Copper Sulfate-TLV/PEL=1 mg/m³ and 1 mg/m³. Ferrous Sulfate (as Iron salts)-TLV/PEL=1 mg/m³ and 1 mg/m³. Ammonium Hydroxide-PEL=35 mg/m³.

Appropriate Engineering Controls : Local exhaust is 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 dark brown to black liquid; ammonia odor.

Flash Point, °F : Non-combustible

Boiling Point, °F : 100 Degrees C.

Melting Point(Freezing point), °C : <-5 Degrees C.

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 : 1.219-1.229

Evaporation Rate(Butyl Acetate = 1) : Not determined

Octanol/Water Partition Coefficient : No information found

pH : 7.0 to 8.0

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 : Emits ammonia gas and sulfur oxides under fire conditions.

Hazardous Polymerization : Will not occur

Conditions to Avoid : Do not mix with acids or silver compounds.



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Incompatible Materials : This product may react vigorously with acids or silver compounds.

11. Toxicological Information

Acute Toxicity (Oral LD50) : No LD50 available. 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, inhalation.

Skin Irritation : Causes skin irritation.

Eye Irritation : Causes serious eye irritation.

Skin Sensitization : Not listed as a sensitizer.

Carcinogenic : None currently known.

Chronic Effects : May cause damage to organs (central nervous system) through prolonged or repeated exposure (via inhalation) (manganese sulfate).

Other Hazards : None currently known.

12. Ecological Information

Ecotoxicity : Copper sulfate is a Marine Pollutant.

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 package sizes < 97.5 gallons.

Transport Hazard Class : None

UN Identification Number : None

Packaging Group : None

Environmental Hazards : Marine Pollutant (ground (DOT) bulk only)

Transport in Bulk : If shipped in single container \geq 97.5 gallons, ship as: RQ, UN3082, Environmentally Hazardous Substance, Liquid, n.o.s., (Cupric Sulfate), 9, PG III, Marine Pollutant "ERG # 171"



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Special Precautions for Transportation : Reportable quantity (RQ) exceeded for cupric sulfate (10 pounds/97.5 gallons), ammonium hydroxide (1,000 pounds/330 gallons), zinc sulfate monohydrate (1,000 pounds/781 gallons), ferrous sulfate heptahydrate (1,000 gallons/1,951 gallons).

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 N Pressure:
Fire: N
Reactive: N

16. Other Information

Data of Preparation/Revision : 02-June-2015