

Material Safety Data Sheet

Effective Date: 01-OCT-2012
Product: TRACITE LF ROW CROP MIX

I. IDENTIFICATION

Chemical Name: Micronutrient Blend
Chemical Family: Inorganic Metal Salts
Formula: Not applicable, formulated mixture.
Synonyms: None
CAS Number: Not applicable, formulated mixture.
EPA Number: None required

II. PHYSICAL DATA

Boiling Point: 100 Degrees C.
Freezing Point: <-5 Degrees C.
Spec Gravity: 1.229 g/ml
Vapor Pressure: Not determined
Vapor Density: Not determined
Solubility: 99%
Volatiles: <0.5%
Evaporation: Not determined
Melting Point: Not applicable
Appearance: Brown to black clear liquid, ammonia odor.

III. INGREDIENTS

Material	CAS Number	Percent	TLV	Hazard
Ammonium Hydroxide	1336-21-6	30	25 ppm	Corrosive.
Zinc Sulfate Monohydrate	7733-02-0	<12.50	N/E	Skin & eye irritant.
Manganese Sulfate	7785-87-7	<3.50	5 mg/m3	Skin & eye irritant.
Ferrous Sulfate Heptahydrate	7782-63-0	<5.00	1 mg/m3	Skin & eye irritant.
Copper Sulfate Pentahydrate	7758-99-8	1.00	1 mg/m3	Skin & eye irritant.
Inert ingredients and formulation aids, including citric acid.		>48.00	N/E	Skin irritant.

IV. FIRE AND EXPLOSION HAZARD

Flash Point: Non-combustible
Autoignition Temp: Not applicable
Flammable Limit: Not applicable

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Extinguishing Media: Non-combustible liquid. Use extinguishing media suitable for underlying cause of fire.
Special Fire Fight Proc: Wear self-contained breathing apparatus and full protective clothing. Use water spray to keep fire-exposed containers cool.
Fire and Expl Hazard: May emit toxic and irritating fumes under fire conditions.

V. HEALTH HAZARD

Carcinogen Information: None currently known.

ACUTE EFFECTS OF OVER EXPOSURE

Swallowing: Ingestion results in vomiting and abdominal cramps.
Skin Absorption: No hazards anticipated.
Inhalation: Inhalation of spray mists or vapors may cause irritation of the respiratory tract, including the nose and throat.
Skin contact: Prolonged or repeated skin contact may cause irritation.
Eye Contact: Direct contact with eyes may cause eye irritation. Prolonged eye contact may cause damage.
Chronic Effects: None currently known.
Other Hazard: None currently known.

EMERGENCY AND FIRST AID PROCEDURES

Swallowing: If conscious, give milk or water to drink. Induce vomiting. Seek medical attention.
Skin: Wash skin thoroughly with soap and water. Obtain medical attention if irritation develops.
Inhalation: Move to fresh air. Obtain medical attention if irritation develops.
Eyes: Flush eyes with water for at least 15 minutes, holding the eyelids apart. Obtain medical attention if irritation develops.
Notes to Physician: In the event of an adverse response, treatment should be directed toward control of the symptoms and the clinical condition of the patient.

VI. REACTIVITY

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Stability: Stable
Conditions to Avoid: Do not mix with acids or silver compounds.
Polymerization: Will Not Occur
Conditions to Avoid: None currently known.
Incompatibility material: This product may react vigorously with acidic materials.
Hazardous Combustion: Emits ammonia gas and sulfur oxides under fire conditions.

VII. SPILL OR LEAK PROCEDURES

Spill or Leak Proc: 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. Do not contaminate water supplies with spilled product.
Waste Disposal Method: This material must be disposed of according to Federal, State or Local procedures under the Resource Conservation and Recovery Act.

VIII. SPECIAL PROTECTION INFORMATION

Respiration: Use NIOSH-approved full face cartridge type respirator for ammonia.
Ventilation: Local exhaust sufficient.
Gloves: Impervious gloves.
Eyes: Splashproof goggles or face shield.
Other: Emergency shower, eye wash station, impervious apron and footwear.

IX. SPECIAL PRECAUTIONS

Special precaution: Keep out of reach of children. Do not store with food, feed or other material to be used or consumed by humans or animals. Do not contaminate water supplies, lakes, streams, ponds, lakes or drains.
Other precaution: Regulated for transportation in any single package size \geq 97.5 gallons; see note below.

X. SHIPPING INFORMATION

Helena Chemical Company
PH: 901-761-0050
CHEMTREC: 800-424-9300

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Shipping name: Not regulated by DOT in single package sizes < 97.5 gallons.

Hazard Class: None
Identification No: None
Labels Required: None required
Placarding: None
Freight Class: Fertilizing Compound, (Manufactured Fertilizer), Liquid, NOIBN (NMFC Item 68140, Sub 6, Class 70)

Chemical Name	Equivalent R.Q.
Ammonium Hydroxide (CAS No. 1336-21-6)	1,000 lbs/330 gal
Zinc Sulfate Monohydrate (CAS No. 7733-02-0)	1,000 lbs/781 gal
Ferrous Sulfate Heptahydrate (CAS No. 7782-63-0)	1,000 lbs/1,951 gal
Copper Sulfate Pentahydrate (CAS No. 7758-99-8)	10 lbs/97.5 gal

TRANSPORTATION NOTE:

If shipped in single package >= 97.5 gallons, ship as:
RQ, UN3082, Environmentally Hazardous Substance, Liquid, n.o.s. (Cupric Sulfate), 9, PG III "ERG # 171"

XI. GENERAL PRODUCT INFORMATION

National Fire Protection Association Rating:
(Rating level: 4-Extreme, 3-High, 2-Moderate, 1-Slight, 0-Minimum)

Health: 2 Fire: 0 Reactivity: 0

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

Mail inquiries to: 225 Schilling Blvd., Suite 300 Collierville, TN 38017
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