

Material Safety Data Sheet

Product: **Threshold MnZ - Nitrate**

May be used to comply with OSHA's Hazard Communication Standard 29CFR 1910. Standard must be consulted for specific requirements.

QUICK IDENTIFIER
Common Name: Chelated Manganese & Zinc Nutritional

SECTION 1 - COMPANY INFORMATION

Manufactured For: Agri-Business Technologies, Inc. Emergency Telephone Number: 1-800-424-9300
Address: 1102 Third Avenue Other Information Call: 1-229-436-4677
City, State, and Zip Albany, GA 31707 Date Prepared: 5/1/2011

SECTION 2 - HAZARDOUS INGREDIENTS/IDENTITY

Hazardous Component(s) (chemical & common name(s))	OSHA PEL	ACGIH TLV	EXPOSURE LIMITS	CAS NO.
Manganese sulfate	5 mg/M3	5 mg/M3		7785-87-7
Zinc sulfate	N/A	N/A		7446-19-7

SECTION 3- PHYSICAL & CHEMICAL CHARACTERISTICS

Boiling Point: N/A °F Specific Gravity: 1.272 Vapor Pressure: N/A

Vapor Pressure: N/A Reactivity in Water: Soluble Melting Point: N/A

Appearance and Odor: dark opaque - sweet smell

SECTION 4- FIRE & EXPLOSION DATA

Flash Point: N/A °F Method Used: N/A

Flammable Limits in Air: N/A LEL Lower: UEL Upper:
Auto-Ignition Temp: N/A Extinguisher Media: Non flammable if involved in fire, can extinguish with dry chemical; CO₂, water spray or foam.

Special Fire Fighting Procedures: This product is non-flammable, and does not support combustion. If heated to decomposition sulfur dioxide may be released. Use of SCBA is recommended. Fire run-off water should be contained to prevent environmental contamination.

Unusual Fire and Explosion Hazards: If this product is heated to an anhydrous state it could emit sulfur dioxide fumes, which may be toxic. Exposure to high heat can emit toxic vapors.

SECTION 5- PHYSICAL HAZARDS (REACTIVITY DATA)

Stability: Stable Unstable Conditions to Avoid: Excessive heat

Incompatibility

Materials to Avoid!: Avoid mixtures containing calcium, which will result in the formation of insoluble Calcium Sulfates. Phosphoric acid could cause the formation of insoluble metal phosphates.

SECTION 5- PHYSICAL HAZARDS (REACTIVITY DATA)..Continued

Hazardous Decomposition Products: _____

Hazardous Polymerization: May Occur: Will Not Occur:

Conditions to Avoid: Extreme Heat.

SECTION 6- HEALTH HAZARDS

ACUTE: Mild skin irritant, conjunctivitis, upset stomach and/or gastrointestinal symptoms are temporary.

CHRONIC: Prolonged skin contact may result in dermatitis (drying) or eczema (itching)

CARCINOGEN _____ NTP _____ OSHA _____
LISTED IN: _____ IARC MONOGRAPH X NOT LISTED

ROUTES OF ENTRY AND EMERGENCY FIRST AID PROCEDURES

- 1. **Inhalation:** No hazard under normal conditions. If necessary move victim to fresh air. If symptoms persist call a physician. Administer CPR if necessary.
- 2. **Eyes:** Flush eyes with running water for 15 minutes. If redness persists, seek medical attention.
- 3. **Skin:** Remove contaminated clothing, wash with clean water and soap. Put on clean clothes.
- 4. **Ingestion:** Give large amounts of water. **DO NOT INDUCE VOMITING.** Call physician immediately.

SECTION 7- SPECIAL PRECAUTIONS AND SPILL/LEAK PROCEDURES

Precautions to be Taken

Handling and Storage: Store in cool ventilated place away from fire hazards, excessive heat, flammable or easily oxidizable materials. Do not allow product to dry out.

Other Precautions: Do not allow product to go below 35 degrees. Apply product in open areas. Keep away from children and pets. Do not contaminate feed, seed or any water sources.

Steps to be taken in case of Release or Spill: Dike area and maximize recovery. Pump into a tank or absorb with diatomaceous earth or sand. Sweep up and place into containers for land application at recommended rates. Prevent entry into sewers or waterways. Clean up at once; do not allow dry product to come in contact with heat or ignition sources.

Environmental

Precautions: Relatively low toxicity to fish and aquatic organisms. Do not contaminate any waterway, lakes, streams or estuary by direct application of cleaning of equipment or disposal. Triple rinse empty containers and offer for recycling or dispose of in an approved landfill. Consult federal, state and local rules and regulations for proper disposal.

SECTION 8- CONTROL AND PROTECTIVE MEASURES

Respiratory Protection: None required if used in open under normal conditions. Respiratory protection may be required in the event of a spill in an enclosed area. Use SCBA when fighting fires.

Protective Gloves: Impervious gloves from rubber, neoprene or nitrile.

Eye Protection: Side-shielded safety glasses or chemical splash-proof goggles.

Other Protective

Clothing or equipment: Eye wash station with safety shower. Use of a chemically resistant apron may be required for some activities.

Hygienic Work Practice Bathe and change clothes daily. Wash contaminated clothing separate from other laundry.

SECTION 9- TRANSPORT AND REGULATORY INFORMATION

MATERIAL IS NOT HAZARDOUS AS DEFINED BY 49 CFR 172.101 BY THE U.S. DEPARTMENT OF TRANSPORTATION

Proper Shipping Name: None

Hazard Class Number: None

Description: None

UN Identification

Number: None

Packing Group: None

DOT Label(s) Required: None

NFPA CODE: Health = 1 Flammability = 0 Reactivity = 0

Toxicity:

Notes: This product is not regulated by EPCRA or any of the provisions of SARA Title III.