

MATERIAL SAFETY DATA SHEET

NUTRIENT TECHNOLOGIES, INC.

P.O. BOX 903 DINUBA, CA 93618

EMERGENCY PHONE: (209) 595-8090

CHEMTREC EMERGENCY PHONE: (800) 424-9300

DATE ISSUED: 1/15/04

DATE REVISED: 1/15/04

TRADE NAME: TECH-FLO® MZ 10-6 (10.0% Mn + 6% Zn)

CHEMICAL FAMILY: Inorganic salts formulated for use as a plant nutrient.

CHEMICAL NAME & SYNONYMS: Basic zinc sulfate, manganese sulfate, phosphate & oxide.

SPECIAL REGULATORY HAZARDS

<u>INGREDIENT</u>	<u>CAS No.</u>	<u>EXPOSURE LIMIT</u>	<u>OSHA (1910.1200)</u>
Manganese compounds	1317-35-7	5 mg/m ³ as Mn, dust (OSHA, ACGIH)	Target organ effects

Transportation: No special DOT requirements.

TYPICAL PROPERTIES

Odor:	Indistinct	Physical Form:	Liquid Suspension
Color:	Brown	Vapor Press.(22 C):	19.8 mm Hg (Methylene Chloride)
Boiling Pt.:	>100 C	Lbs/Gal (68 F):	12.0
Sp. Gr. (18 C):	1.440	Vapor Density (Air=1):	N/A
Solubility in Water:	50%	pH:	Neutral

HAZARD CLASSIFICATION

FIRE- [0] **TOXICITY-** [1] **ODOR-** [1] **REACTIVITY-** [0] **CORROSIVENESS-** [1]
(Hazard Rating Code: 0-None; 1-Slight; 2-Moderate; 3-High)

FIRE & EXPLOSION HAZARD DATA

FLASH POINT (Method): Not applicable.

FLAMMABLE LIMITS (%-by-wt): Product is not flammable.

EXTINGUISHING MEDIA: Foam, CO₂, water, dry chemicals.

SPECIAL FIRE FIGHTING PROCEDURES: None.

UNUSUAL FIRE & EXPLOSION HAZARDS: None.

HEALTH HAZARD DATA

PRIMARY ROUTE OF ENTRY: Ingestion.

SPECIAL HAZARDS: Contact with eyes or skin may cause irritation. Ingestion may cause nausea, vomiting or diarrhea; significant doses may cause CNS disturbances including sleepiness, weakness in legs and spastic gait.

TOXICOLOGY: There is no toxicological data on this material.

EMERGENCY & FIRST AID PROCEDURES: For eye contact, flush with water for 15 minutes. Get medical attention. For skin contact, wash thoroughly with soap and water. If ingested, consult a physician.

REACTIVITY DATA

STABILITY: Highly stable.

CONDITIONS TO AVOID: Not reactive

INCOMPATIBILITY (Materials to Avoid): None known. Compatible with most chemicals.

HAZARDOUS DECOMPOSITION PRODUCTS: None known.

HAZARDOUS POLYMERIZATION: Will not occur.

STORAGE, SPILLS, AND DISPOSAL INFORMATION

SPILL OR LEAK PROCEDURES: (Steps to be taken in case material is released or spilled)

Use scoop, shovel, or vacuum for removal to waste container. Transfer to secure containers for proper disposal. Use personal protective equipment as outlined below.

WASTE DISPOSAL METHOD:

May be disposed of as fertilizer waste or in an approved chemical waste landfill as state or federal regulations permit regarding inorganic waste. Incineration is not practical.

CONTAINER DISPOSAL METHOD:

Triple rinse and dispose of in an approved landfill or incinerate in accordance with all applicable government regulations.

ENVIRONMENTAL: Avoid run-off into water supplies, streams, storm-water discharge, etc.

HANDLING AND STORAGE PRECAUTIONS

SPECIAL PROTECTION INFORMATION:

RESPIRATORY PROTECTION: Not normally required.

PROTECTIVE GLOVES: Should be worn when handling.

EYE PROTECTION: Tight fitting goggles are recommended.

OTHER PROTECTIVE EQUIPMENT: Not normally required.

SPECIAL PRECAUTIONS TO BE TAKEN IN HANDLING: Avoid skin and eye contact. Observe good personal hygiene.

STORAGE PRECAUTIONS: Protect from extreme temperatures, hot or cold. Keep from freezing. Do not store more than two pallets high.

OTHER PRECAUTIONS: Floor spills may be slippery. Observe caution during removal.

SARA TITLE III (40 CFR 372)

SECTION 313 TOXIC CHEMICALS NOTIFICATION

<u>TOXIC CHEMICAL</u>	<u>CAS #</u>	<u>%-BY WEIGHT</u>
------------------------------	---------------------	---------------------------

None

Carcinogenic per NTP ____ IARC ____ OSHA ____ NONE x

Nutrient Technologies makes no representation or warranty with respect to the information in this MSDS. This information is true and accurate to the best of our knowledge as of this date. This information is not intended to be all-inclusive. Actual conditions of use and handling may require information other than, or in addition to, that which is provided here.