

MATERIAL SAFETY DATA SHEET

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TRADE NAME: TECH-FLO® ZM 13½-5 (13½% Zn + 5% Mn)

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

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

		<u>SPECIAL REGULATORY HAZARDS</u>	
<u>INGREDIENT</u>	<u>CAS No.</u>	<u>EXPOSURE LIMIT</u>	<u>OSHA (1910.1200)</u>
Manganese compounds	1317-35-7	5 mg/m³ as Mn, dust (OSHA, ACGIH)	Target organ effects

Transportation: No special DOT requirements.

TYPICAL PROPERTIES

Odor:	Indistinct	Physical Form:	Liquid Suspension
Color:	Light brown/gray	Vapor Press.(22 C):	19.8 mm Hg (<i>Methylene Chloride</i>)
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 are 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 to 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___

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