Material Safety Data Sheet

Trade Name: VERSA MAX Manganese Registration No: None

Section 1 Product and Manufacturer Information

Name: VersaMax Manganese Synonyms: Chelated Manganese, Manganese Fertilizer, etc. Manufacturer: Rosens's Inc; P.O. Box 933, Fairmont, MN 56031. Phone: 800-792-2000 For Transportation Emergencies call Chemtrec at 800-424-9300 For Other Emergencies call 911 and/or Appropriate Regulatory Agencies

Section 2 Composition / Information on Ingredients

Component	CAS #
Manganese Sulfate Monohydrate	10034-96-5
Citric Acid	77-92-9
Carpramid	34345-47-6

Section 3 Health Hazard Identification

KEEP OUT OF REACH OF CHILDREN

Skin Contact: Irritation, redness, and possibly burns.

Eye Contact: Severe irritation, redness, burns, and blurred vision.

<u>Respiration</u>: If breathed as a mist, severe irritation, burns, coughing, shortness of breath, and possible edema.

<u>Ingestion</u>: Burning pain, violent vomiting, severe diarrhea, liver and kidney damage, collapse, and convulsions.

Chronic Exposure: has not been linked to any long term effects.

Section 4 First Aid Measures

Skin Contact: Rinse thoroughly with water. Seek immediate medical attention.

Eye Contact: Rinse thoroughly with water for 15 minutes. Seek immediate medical attention.

Respiration: Seek immediate medical attention.

Ingestion: Give large quantities of water and seek immediate medical attention.

Section 5 Fire Fighting Measures

Flash point: non-flammable

Extinguishing Materials: All standard agents are acceptable to fight surrounding fires.

Special Hazards and Precautions: Thermal decomposition may evolve oxides of Manganese and Sulfur, and drive off ammonia vapor.

Section 6 Accidental Release Measures

Do not allow to enter drains waterways, etc. Contain large spills by diking with soil or other material. Small spills may be covered with an absorbent material. Do not dilute with water or use water to flush material to another location. For uncontrolled or major releases, response by trained personnel using preplanned procedures is recommended. Refer to Exposure Controls / Personal protection to determine proper PPE. Consult applicable regulatory agencies for spill reporting and disposal.

Section 7 Handling and Storage

Standard conditions are generally acceptable. Long term storage may result in settling of solids and/or formation of crystals. Avoid storage or transfer using copper bearing or aluminum vessels or equipment.

Section 8 Exposure Controls / Personal Protection

Skin exposure should be kept minimal by wearing gloves, long pants, and long sleeved shirts. Wear protective goggles. Emergency showers should be available nearby. Ingestion and respiration of the material are unusual occurrences under typical conditions of use.

Section 9 Physical and Chemical Properties

Appearance: clear, dark brown liquid Odor: slight to strong ammonia pH: 2.0 - 2.5Freezing Point: < 32F Boiling Point: not determined Solubility in Water: complete Density: 1.175 g/ml

Section 10 Stability and Reactivity

This product is stable under normal use and storage conditions. This product is not a reactivity or polymerization hazard.

Avoid contact with strong oxidizers.

Section 11 Toxicological Information

This material is not known to be a toxicity hazard to humans.

Section 12 Ecological Information

Ecotoxicity for this product is low. It contains plant nutrients. It incorporates into biological processes.

Section 13 Disposal Considerations

This product is not defined as a hazardous waste by the U.S.E.P.A. Dispose of this product as recommended by federal, state, and local regulations.

Section 14 Transport Information

This material is not regulated as a hazardous material by the U.S.D.O.T. Use normal transportation safety precautions.

Section 15 Regulatory Information

SARA Title III Hazard Class: acute, chronic CERCLA Reportable Quantity: not regulated TSCA: Manganese compounds are regulated RCRA Hazardous Waste Classification: not regulated

Section 16 Other Information

Disclaimer: This information relates to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is to the best of our knowledge and belief, accurate and reliable as of the date compiled. However, no representation, warranty or guarantee is made as to its accuracy, reliability or completeness. NO WARRANTY OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED, IS MADE CONCERNING THE INFORMATION HEREIN PROVIDED. It is the user's responsibility to satisfy themselves as to the suitability and completeness of such information for their own particular use. We do not accept liability for any loss or damage that may occur from the use of this information not do we offer warranty against patent infringement.