

AgXplore International LLC

PMB#166
2128 William Street
Cape Girardeau, MO 63703

MATERIAL SAFETY DATA SHEET

SECTION I – PRODUCT DESCRIPTION

Trade Name (Common Name):

Lignin Manganese 5%

Chemical Name:

Lignosulfonic Acid Sodium Salt with Manganese Sulfate Water Solution

AGRICULTURAL DESIGNATION:

4% Manganese Micronutrient Solution

SECTION II – HAZARDOUS INGREDIENTS (MIXTURE)

CHEMICAL & CAS NO.	% PERCENT PROPRIETARY	TLV OR PEL N/A
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SECTION III – PHYSICAL DATA

Boiling Point: 2120	Specific Gravity: 1.17
Water Solubility: Soluble	Ph of Solution: 4.0-4.5
Appearance: Black Liquid	Odor: Mild
Salting-Out Temperature: N/A	Vapor Pressure: N/A

SECTION IV – FIRE AND EXPLOSION HAZARD DATA

Flash Point: N/A

Flammable Limit-LEL: Water Solution

Extinguishing Media: Dry Chemical, Carbon Dioxide, Water

Special Fire Fighting Procedures: Avoid Breathing Fumes from Fire

Wear Positive Pressure Self-Contained Breathing Apparatus

Unusual Fire and Explosion Hazards: None

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SECTION V – HEALTH AND FIRST AID DATA

Effects of Over Exposure: Liquid contact may cause slight eye irritation and repeated skin exposure may cause some skin irritation.

Emergency and First Aid Procedure:

Skin: Wash off in flowing water or shower

Eyes: Irrigate immediately with water for at least 5 minutes

Inhalation: No adverse effects anticipated by this route of exposure incident or proper industrial handling

SECTION VI – REACTIVITY DATA

Stability: Stable
Conditions to Avoid if Unstable: N/A
Incompatibility with Other Materials:
Hazardous Decomposition Products:
Hazardous Polymerization: Will not occur
Conditions to Avoid Uncontrolled Polymerization: N/A

SECTION VII – SPILL & DISPOSAL PROCEDURES

Steps to be taken to handle spills or releases:

- Contain spill by diking with dirt, sand or other absorbent materials.
- Rope off contaminated area.
- Workers performing clean-up should wear protective clothing.

Waste disposal procedures:

- Excess product that cannot be used according to label instructions must be disposed of according to federal, state, and/or local procedures.

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SECTION VIII – SPECIAL PROTECTION INFORMATION

Respiratory Protection: Not normally needed if respiratory irritation is experienced. Use a respirator approved by NIOSH.
Ventilation: Good general ventilation should be sufficient for most conditions.
Protective Gloves: Wear impervious gloves
Eye Protection: Chemical safety goggles with side shields. As a general rule, do this when handling all chemicals.
Other Protective Equipment: Wear impervious clothing.

SECTION IX – SPECIAL PRECAUTIONS IN HANDLING IN STORAGE

Store and use away from all sources direct heat and ignition. Keep containers as a general rule. Do not store in aluminum or copper containing metal containers.

SECTION X – REGULATORY COMMENTS AND OTHER EFFECTS

Not Applicable

** NOTICE **

Seller warrants that this product conforms to the specifications stated here associated with the possession, use, mixing, blending, treatment, storage, disposal, transportation, and handling of the product, whether alone or in combination with other substances. SELLER MAKES NO OTHER WARRANTY OF ANY KIND WHATEVER, EXPRESSED AND/OR IMPLIED AND ALL OTHER WARRANTIES, INCLUDING WARRANTIES OF QUALITY, MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE DISCLAIMED. Seller's liability is limited to the product price.

NFPA HAZARDOUS RATING	SCALE
Health 1	0 Least
Flammability 0	1 Slight
Reactivity 0	2 Moderate
	3 High
	4 Severe