

SAFETY DATA SHEET FOR: 4Mn/2Fe

Section 1 - Chemical Product and Company Identification

Product Name:	4Mn/2Fe (55-MI-E/M013)	
Common Name:	Liquid Fertilizer Compound	
Chemical Description:	Liquid Fertilizer Compound	
Manufacturer's Name:	Supplier's Name:	SDS Revision Date:
Jay-Mar, Inc. 2130 Jay-Mar Road Plover, WI 54481 1-800-236-2436 1-715-341-4106 (fax)	Carlin Sales 8170 N. Granville Woods Road Milwaukee, WI 53223 1-800-657-0745	4/9/2013 Emergency Phone Numbers: 1-800-236-2436 1-800-657-0745

Section 2 - Hazards Identification

Emergency Overview: Product may irritate the respiratory tract, skin, and eyes.	
CAUTION: Keep out of reach of children.	
Route(s) or Entry: Eyes, Inhalation, Skin, and Ingestion.	
Health Hazards (Acute and Chronic):	
Inhalation:	Inhalation of mist may cause irritation of the upper respiratory tract
Eyes:	Irritation of eyes.
Skin:	Contact may cause irritation. Prolonged or repeated exposure may lead to reddening of skin, dermatitis, or other skin reactions.
Ingestion:	Harmful if swallowed.
Medical Conditions Generally Aggravated by Exposure:	
None Known. Preexisting respiratory conditions may be aggravated by exposure to mists.	

Section 3 - Composition Information on Ingredients

Ingredient	CAS reg. #
Manganese EDTA	0
Iron HEDTA	0

NFPA HAZARD RATING:

0	Least		
1	Slight	1	Health
2	Moderate	0	Flammability
3	High	0	Reactivity
4	Severe		

*Ingredients not specifically listed are considered to be non-hazardous

Section 4 - First Aid Measures

Inhalation:	Remove person to fresh air and assist breathing as needed. Seek medical attention if irritation persists.
Ingestion:	Seek medical attention or call a poison control center immediately. If conscious, have victim drink large amounts of water or milk. DO NOT induce vomiting. Never give anything to a person who is unconscious.
Eyes:	Flush with clean water for at least 15 minutes. Lift eyelids to facilitate irrigation. Seek medical attention if eye irritation persists.
Skin:	Remove contaminated clothing and wash before re-using. Flush skin with water, and then wash with soap and water. Seek medical attention if skin becomes irritated.

After first aid, get appropriate in-plant, paramedic, or community medical support.

Section 5 - Fire and Explosion Hazard Data

Extinguishing Media: Materials suitable to surrounding fire.
Special Fire Fighting Procedures: Wear self-contained breathing apparatus and full bunker gear. Smoke and fumes from fire may contain hazardous components.
Hazardous Combustion Products: Oxides of nitrogen and other toxic gases may be formed in a fire situation. Carbon monoxide and other asphyxiates may form as well.
Unusual Fire and Explosion Hazards: Closed containers may explode from vapor expansion in high heat. Contain run-off by diking to prevent contamination of water supplies.

Section 6 - Accidental Release Measures

Small Spills: Clean-up personnel should protect against mist inhalation and skin contact. Avoid generating mists. Spills should be cleaned up immediately to prevent spreading.

Large Spills: Clean-up personnel should protect against mist inhalation and skin contact. Avoid generating mist.

Containment: Do not release into sewers or waterways. Dike spills to prevent contamination to water supplies. Contain spills and absorb liquids by covering with clay or other absorbent material. Vacuum, scoop, or sweep up waste and place in a container for disposal.

Section 7 - Precautions for Safe Handling and Use

Precautions to Be Taken in Handling and Storage: Store in cool, dry areas away from children, feed and food products and sources of heat. Immediately clean up spills that occur during handling or storage. Protect from freezing. Keep containers closed when not in use. Do not store in aluminum or metal vessels.

Other Precautions: Consult Local, State, and Federal regulations pertaining to storage and disposal.

Section 8 - Control Measures/Personal Protection

Respiratory Protection: Seek professional advice prior to respirator selection and use. Follow OSHA respirator regulations (29 CFR 1910.134) and, if necessary, wear a properly FIT TESTED MSHA/NIOSH-approved respirator.

Ventilation: Local Exhaust: Provide general or local exhaust ventilation systems to maintain airborne concentrations below OSHA PELs. Local exhaust ventilation is preferred.

Protective Gloves: Wear chemically protective gloves.

Eye Protection: Wear protective eyeglasses or chemical safety goggles. Contact lenses are not eye protective devices.

Other Protective Clothing or Equipment: Wear chemically protective boots, aprons, and gauntlets to prevent prolonged or repeated skin contact.

Work/Hygienic Practices: Never eat, drink, nor smoke in work areas. Practice good hygiene after using this material, especially before eating, drinking, smoking, using the toilet, or applying cosmetics.

Section - 9 Physical/Chemical Characteristics

Physical State:	Liquid	Specific Gravity:	1.29
Vapor Pressure (mm Hg):	Not determined	Freezing Point:	Not determined
Vapor Density (Air = 1):	Not determined	Boiling Point:	>200° F
Solubility in Water (wt.%):	Miscible	pH:	Not determined
Appearance and Odor:	Red liquid, no odor	Flash Point:	Non-combustible

Note: The physical characteristics are typical values based on material tested but may vary from sample to sample. Typical values should not be construed as a guaranteed analysis of any specific lot or as specification terms.

Section 10 - Reactivity Data

Stability: Product stable at room temperature in closed containers under normal storage and handling conditions.

Chemical Incompatibilities: Strong oxidizing agents

Conditions to Avoid: Avoid excessive heat.

Hazardous Decomposition Products: None known

Hazardous Polymerization: Will not occur.

Section 11 - Toxicological Information

Eye Effects:	Irritation		
Skin Effects:	May cause irritation		
Acute inhalation Effects:	Not determined		
Acute Oral Effects:	Not determined		
Mutagenicity:	Not determined		
Teratogenicity:	Not determined		
Carcinogenicity:	NTP: Not Listed	IARC: Not Listed	OSHA: Not Listed

Section 12 - Ecological Information

Soil Absorption/Mobility: Mobile in soil profile.

May be toxic to aquatic organisms. Do not contaminate water when disposing of equipment wash waters. Do not apply to areas where surface water is present or to areas directly adjacent to potable water supplies.

Section 13 - Disposal Considerations

Waste: Dispose of in accordance with applicable Federal, state and local laws and regulations.

Container: Triple rinse (or equivalent) the empty containers. Then offer for recycling or reconditioning.

RCRA Characteristic: None

Section 14 - Transport Information

Not regulated by the U.S. DOT as a hazardous material in any package size.

Section 15 - Regulatory Information

SARA Hazard Notification/Reporting

Immediate:	Yes
Delayed:	No
Fire:	No
Reactive:	No
Sudden Release of Pressure:	No

Section 302-304 (30 CFR 350): None

Agrisolutions Extremely Hazardous Substance (EHS):	None
SARA/OSHA Hazardous chemical reporting quantity:	None
RCRA Hazardous waste:	None

Section 16 - Other

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This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all of the information required by CPR.