



## Section 1 - Product and Company Identification

<b>Product Name</b>	Huma-MnFe		
<b>Manufacturer or Supplier</b>	3 Tier Technologies 413 W. 13 <sup>th</sup> St Sanford, Florida 32771	<b>Phone</b>	877-226-7498
		<b>Emergency Phone</b>	407-808-4653
<b>Product Use</b>	Manganese/Iron Supplement		

## Section 2 - Hazard Identification

### Potential Health Effects

This material is not a "health hazard" or "physical hazard" as determined when reviewed according to the requirements of the Occupational Safety and Health Administration Hazard Communication Standard, 20 CFR 1910.1200

Classification of the substance or mixture

Classification according to 29 CFR 1910.1200

Eye Irritation Category 2B

Label Elements



Signal Word:	WARNING
Hazard Statement:	H320 - Causes eye irritation H313 - May be harmful in contact with skin H302 - Harmful if swallowed
Precautionary Statement: (General)	P101 - If medical advice is needed, have product container or label at hand. P102 - Keep out of reach of children. P103 - Read label before use.
Precautionary Statement: (Prevention)	P261 - Avoid breathing dust/fume/gas/mist/vapors/spray. P262 - Do not get in eyes, on skin, or on clothing. P281 - Use personal protective equipment as required P235 + P410 - Keep cool. Protect from sunlight.
Precautionary Statement: (Response)	P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for 15 to 20 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337 + P313 - If eye irritation persists: Get medical advice/attention. P302 + P352 - IF ON SKIN: Wash with plenty of soap and water for 15 to 20 minutes.

## Section 3 - Composition and Information on Ingredients

Component Ingredients	Hazardous Percent	CAS Number	Threshold Limit Values			
			OSHA		ACGIH	
			PEL	STEL	TLV	STEL
Sodium Glucoheponate	No	31138-65-5	-NONE ESTABLISHED-			
Ferrous Sulfate Heptahydrate	No	7782-63-0	-NONE ESTABLISHED-			
Manganese Sulfate Monohydrate	No	10034-99-8	-NONE ESTABLISHED-			
Brown Coal	No	68525-81-5	-NONE ESTABLISHED-			

## Section 4 - First Aid Measures

- Skin Contact       Skin Absorption       Eye Contact       Inhalation       Ingestion

**Skin Contact** Dry and/or red itchy skin - Flush with water for 15 minutes. Remove contaminated clothing and shoes. Get medical attention if irritation persists.

**Skin Absorption** Dry and/or red itchy skin - Flush with water for 15 minutes. Get medical attention if irritation persists.

**Eye Contact** Eye irritation - Flush with water for 15 minutes. Get medical attention if irritation persists.

**Inhalation** Generally not considered an inhalation hazard.

**Ingestion** Do not induce vomiting, contact a physician or poison control center.

## Section 5 - Fire Fighting Measures

### Flammable

**Flammable Conditions** None

**Methods of Extinguishing** Use media suitable to extinguish source of fire. Water fog or spray, foam, carbon dioxide, or dry chemical.

**Flashpoint degrees (c)** N/A

**Flashpoint Method** N/A

**Auto Ignition Temp (c)** N/A

**Upper Flammable Limit (% by volume)** N/A

**Lower Flammable Limit (% by volume)** N/A

### **Explosion - Sensitivity to Impact**

N/A

### **Explosion - Sensitivity to Static Discharge**

N/A

### **Protection and Procedures for FireFighters**

Use water fog or spray, foam, carbon dioxide, or dry chemical to control fire.

### **Protective Equipment for Firefighters**

Use approved self-contained breathing apparatus and full protective gear. Avoid smoke inhalation.

## Section 6 - Accidental Release Measures

### **Leak and Spill Procedures**

Environmental Precautions: Keep out of water supplies, lakes, ponds, streams, and rivers. Material Released or Spilled: Promptly mop up or pump up material and place in suitable container for use as a fertilizer or for proper disposal in accordance with local, state and federal regulations.

## Section 7 - Handling and Storage

### **Handling Procedures and Equipment**

Avoid contact with eyes. Use only in well ventilated areas. Wash thoroughly after handling. Avoid prolonged or repeated contact with the skin. Keep Out Of Reach Of Children. Other Precautions: Transfer using chemical-resistant plastic or stainless steel tanks, pumps, and valves.

### **Storage Requirements**

Store in cool, dry area. Keep container closed when not in use. Keep Out Of Reach Of Children. Store in temperatures between 40 and 78 degrees F.

## Section 8 - Exposure Controls - Personal Protection

### Specific Engineering Controls

Adequate ventilation required to maintain a fresh airflow.

Gloves       Respirator       Eye       Footwear       Clothing       Other

### Personal Protective Equipment

Respiratory Protection: If mist or dust conditions should be present use respirator approved by NIOSH. Eye Protection: Goggles or face shield. Skin Protection: Adequate clothing should be worn to prevent skin contact. Other Protective Clothing or Equipment: Eye bath, safety shower. Work Hygienic Practices: Wash all clothing before wearing. Wash all exposed skin surfaces with soap and water after using this product.

## Section 9 - Physical and Chemical Properties

Physical State	Liquid
Odor and Appearance	Dark Brownish Green Liquid, Sweet Odor
Solubility in Water	Complete
Specific Gravity	1.316
Vapor Density (air = 1)	N/A
Vapor Pressure (mmHg)	N/A
Evaporation Rate	N/A
Boiling Point (° C)	212 F (F) 100 C (C)
Freezing Point (°C)	32 F (F) 0 C (C)
pH @ 20 Celsius	3.87 @ 25.1°C
Coefficient of Water/Oil Distribution	N/A

## Section 10 - Stability and Reactivity

### Chemical Stability

#### Stability Conditions

Product is stable.

### Incompatibility with Other Substance

#### Incompatibility conditions

Oxidants and acids may cause degradation

#### Reactivity Conditions

Extremely high temperatures.

#### Hazardous Decomposition Products

Burning may results in carbon monoxide fumes

## Section 11 - Toxicological Information

### Effects of Acute Exposure

Eye contact may cause irritation and redness.

### Effects of Chronic Exposure

Prolonged contact with skin may cause irritation or dermatitis in sensitive individuals.

**Irritancy** Slight

**Skin Sensitization** Redness

**Carcinogenicity - IARC** No

**Reproductive** No

**Embrototoxicity** No

**Respiratory Sensitize** Mild

**Carcinogenicity - ACGIH** No

**Teratogenicity** No

**Mutagenicity** No

## Section 12 - Ecological Information

### Ecological Information

Not Known

## Section 13 - Disposal Considerations

### Waste Disposal

If product cannot be disposed of according to use directions on label. Dispose of in accordance with federal, state, and local environmental laws and regulations.

## Section 14 - Transportation Information

**U.S. DOT** Not Regulated

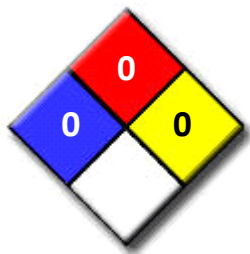
**IMDG** Not Regulated

**ICAO/IATA** Not Regulated

### Transport Information

Other Shipping Description: Fertilizing Compounds (Manufactured), Liquid. NMFC Item 6810 Sub 6, LTL Class 70

## Section 15 - Regulatory Information



**Health Hazard** 0

Exposure under fire conditions would offer no hazard beyond that of ordinary combustible materials.

**Fire Hazard** 0

Materials that will not burn.

**Instability** 0

Exposure under fire conditions would offer no hazard beyond that of ordinary combustible materials.

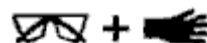
**Special Hazard**

## Section 16 - Other Information / Warranty / Disclaimer

Revised 05/01/2021

Prepared By Lisa

Health	0
Flammability	0
Reactivity	0
Personal Protection	B



**Health Hazard** 0 No significant risk to health

**Flammability** 0 Materials that will not burn

**Reactivity** 0 Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives.

**Personal Protection** B Safety Glasses + Gloves

### Disclaimer

HMIS Ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS ratings are not required on MSDS's by OSHA's CFR 1910.1200, we choose to provide them as a service to our customers using HMIS. These ratings are to be used only with a fully implemented HMIS program. To deal adequately with the safe handling of this material, all the information contained in this MSDS must be considered.

NPCA recommends that employers must determine appropriate PPE for the actual conditions under which this product is used in their workplace. For information on PPE codes, consult the HMIS Implementation Manual.

When two ratings are provided for Health, the first represents the material 'as supplied,' and the second represents the material 'in use.'

### Other Information

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