

Section 1: Product and Company Information

Product Name(s) MAN-8™ Product ID # PN-20018
General Use: Liquid Plant Fertilizer.
Manufacturer Biofeed Solutions, Inc., PO Box 3434, Glendale, AZ 85311
O: 623-930-7510 F: 623-930-8598
Emergency Contact: 623-930-7510

Section 2: Hazard Identification

Classification: Physical Hazards: Not classified.
Health Hazards: Not classified
Environmental: Not classified

Signal Word: Warning



Hazard Statements: Physical Hazards: No know hazards.
Health Hazards:
H303: May be harmful if swallowed.
H316: Causes mild skin irritation.
H320: Causes eye irritation.
Environmental hazards: No know hazards.

Precautionary Statements: *Prevention:*
P281: Use personal protective equipment as required.
Response:
P302+P352: IF ON SKIN: wash with plenty of water.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing.
Storage:
P401: Store in accordance with Section 7 instructions.
Disposal:
P501: Dispose of contents/container in accordance with local / regional / nation / international regulations.

Other Hazards No additional information available.

Section 3: Composition/Information on Ingredients

Substance:

Material does not meet the criteria of a substance.

Mixture of substances listed below:

	CAS#	EC#	Component Range
Manganese Sulfate Monohydrate	10034-96-5	600-072-9	12 - 15%
Inert Ingredients:	—	—	88– 85%
Carboxylic Acid	2565-86-5	NA	
Water	7732-18-5		
ACT Proprietary mixture	NA		

Additional information:

The specific chemical identity and/or exact percentages of the ingredients of this mixture are considered to be proprietary and are withheld in accordance with the provisions of paragraph (i) of §1910.1200 of 29 CFR 1910.1200 Trade Secrets.



Section 4: First Aid Measures

- Eye Contact** Flush eyes thoroughly with water for several minutes. Remove contact lenses after the initial 1-2 minutes and continue flushing for several additional minutes. If effects occur, consult a physician, preferably an ophthalmologist.
- Skin Contact** Wash exposed area with soap and plenty of water. Remove contaminated clothing and shoes while washing. Seek medical attention if irritation and persists. Wash clothing before reuse. Discard items that cannot be decontaminated such as shoes, belts or watchbands.
- Ingestion** Do not induce vomiting due to possibility of aspiration into lungs. Drink one quart/liter of water to dilute. Seek medical advice or attention if you feel unwell.
- Inhalation** Not applicable.

Section 5: Firefighting Measures

- Flashpoint and Method:** Product does not burn.
- Extinguishing Media:** Use water spray, dry chemical, foam or CO2 as applicable for burning materials. Use a water spray to cool fire-exposed containers, structures and to protect personnel.
- Fire-Fighting Equipment:** Exposed firefighters should wear MSHA/NIOSH approved self-contained breathing apparatus with full-face mask and full protective equipment.
- Fire-Fighting Hazards:** Not Applicable.

Section 6: Accidental Release Measures

- Personal Precautions:** Isolate release area. Exercise caution regarding personnel safety and exposure.
- Environmental Precautions:** No special requirements.
- Cleaning Up Methods:** Product is biodegradable. Spills can be washed away with water.

Section 7: Handling and Storage

- Handling:** No special precautions are required. Wash hands at end of shift or before eating or using restroom. Wear gloves to avoid prolonged or repeated contact. Use good hygiene practices when handling product, including changing and laundering work clothes after use.
- Storage:** Keep products in labeled and in original container. Store at 50 – 95°F / 10 – 35°C. Do not store in direct sunlight. Product may degrade when held at temperatures above 195 °F / 90 °C. Do not transfer into food or drink containers.

Section 8: Exposure Control and Personal Protection

- Exposure Control** **OSHA PEL:** Not established.
ACGIH TLV-TWA: Not established.
- Engineering Controls:** Not normally required.

PERSONAL PROTECTIVE EQUIPMENT

- Respirator:** Not required.
- Eyes:** Wear goggles as a safety measure when working with material; use a face shield if splashing is likely.
- Gloves:** Wear gloves to avoid skin contact for prolonged periods.
- Clothing:** Wear protective clothing to avoid skin contact.

Section 9: Physical and Chemical Properties

- Appearance/Physical State: Brown liquid
- Upper/Lower Flammability: Not Applicable
- Odor: Odorless
- Vapor Pressure: Not Determined
- Odor Threshold: Not Determined



Safety Data Sheet MAN-8™

Number: SDS-019
Revision: 2

Vapor Density (Air=1):	Not Determined
pH:	pH range 5.0 – 6.0
Relative Density:	10.3 lbs per gallon
Melting/Freezing Point:	19°F / -7°C
Solubility:	Soluble in water
Initial Boiling Point:	220°F / 105°C
Boiling Range:	Not Applicable
Flash Point:	Not Applicable
Evaporation Rate:	Not Determined
Flammability (solid, gas):	Not Applicable
Partition Coefficient (n-octanol/water):	Not Determined
Auto-ignition Temperature:	Not Applicable
Decomposition Temperature:	Not Determined
Viscosity (cSt, 40° C):	Not Determined

Section 10: Stability and Reactivity

Chemical Stability:	Stable
Other:	
Hazardous Reactions:	None known
Conditions to Avoid:	High temperature
Hazardous Decomposition:	None known
Hazardous Polymerization:	Will not occur

Section 11: Toxicological Information

Components:	Manganese Sulfate Monohydrate
Acute Toxicity:	Not Classified
Eye Contact:	May cause redness or mild irritation.
Skin Contact:	None
Ingestion:	Potential for discomfort if over 0.5 oz/10 ml of concentrate ingested.
Inhalation:	Not Applicable
Target Organ Effects:	None known
Chronic Effects:	Any acute symptoms may be aggravated. Refer to Sections 2 and 4 for recommended actions.
Carcinogenicity:	Not Applicable

Section 12: Ecological Information

Ecotoxicity:	Not Applicable
Mobility:	Not Determined
Degradability:	Not Determined
Bioaccumulation:	Not Determined

Section 13: Disposal Consideration

Triple rinse when empty for recycling.
Always dispose of container in accordance with local, state, and/or federal regulations.
Empty containers may contain residues.



Section 14: Transport Information

DOT: Not regulated by U.S. DOT as hazardous material.

UN number: Not applicable
UN proper shipping name: Not applicable
Transport hazard class(es): Not applicable
Packing group: Not applicable
Environmental hazards: Not applicable
Special precautions for user: Not applicable
IATA: Not dangerous goods

IMDG: Not dangerous goods

Section 15: Regulatory Information

Toxic Substances Control Act (TSCA): All ingredients of this product are listed on TSCA.

Superfund Amendments and Reauthorization Act Title III Information:

SARA 311/312 (40 CFR 370) Hazard Categories:

Acute Hazard: None

Chronic Health Hazard: None

Fire Hazard: None

Sudden Release Hazard: None

Reactive Hazard: None

SARA 313: This product does not contain any material that is subject to reporting levels established by SARA Title III, Section 313.

State Regulations:

California Prop 65: This product does not contain any chemical known to the State of California to cause cancer or birth defects or other reproductive harm.

Not subject to *Right-to-Know* legislation in the following states: Massachusetts, New Jersey, Pennsylvania

International Regulations:

Canadian Environmental Protection Act: All of the components of this product are included on the Canadian Domestic Substances List (DSL).

Section 16: Other Information

Department Issuing SDS Health and Safety

Condition of Sale:

The information herein is believed to be accurate and reliable. Buyer and user assume all liability from use of this material. Follow label directions carefully. Timing, method of application, weather, plant, crop or turf conditions and other factors are beyond the control of the seller.