



Safety Data Sheet

Biomin[®] Manganese

SECTION 1: Product and Company Identification

Product name: Biomin[®] Manganese
Product code: 0305 / 051012
Product use: Plant fertilizer
Product type: Liquid
Manufacturer: JH Biotech, Inc.
4951 Olivas Park Drive, Ventura, CA 93003
Tel: (805) 650-8933 Fax: (805) 650-8942
info@jhbiotech.com

24-Hour Emergency tel: (800) 633-8253 (United States & Canada) (801) 629-0667 (International)

SECTION 2: Hazards Identification

Signal word: None
Label element: None
Hazard statement: Not hazardous
Precautionary statement: Do not swallow. Wash hands thoroughly after handling.
First Aid: If swallowed: Seek medical attention if feeling unwell. Rinse mouth.
Storage & Disposal: Store in a safe manner. Dispose product/container in accordance with federal, state, and local regulations.

SECTION 3: Composition/Information on Ingredients

| Component | CAS No. | % |
|-------------------------|------------|-----|
| Manganese sulfate | 10034-96-5 | n/a |
| Soy protein hydrolysate | 68607-88-5 | n/a |

The specific identity and/or exact percentage of composition is not provided because it is a trade secret. Product is not considered hazardous under OSHA Hazard Communication Standard (29 CFR 1910.1200).

SECTION 4: First Aid Measures

Inhalation: Remove from source of exposure. Get medical attention if necessary.
Skin contact: Wash thoroughly with soap and water. Get medical attention if necessary.
Eye contact: Wash eyes with plenty of water for at least 15 minutes. Be sure to remove contact lenses. Get medical attention if necessary.
Ingestion: Wash out mouth with plenty of water. Do not induce vomiting. Get medical attention if necessary.

SECTION 5: Firefighting Measures

Suitable extinguishing media

Water spray, dry chemical, carbon dioxide, foam

Special hazards arising from the substance or mixture

None

Protection for firefighters

Wear protective clothing and equipment

SECTION 6: Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Wear protective clothing, gloves, and safety eye goggles.

Environmental precautions

Avoid discharge into environment

Methods and material for containment and cleaning up

Contain all spills and leaks to prevent discharge into the environment. Use appropriate tools to transfer spill material to proper disposal container. Or recover material and use it for its intended purpose.

SECTION 7: Handling and Storage

Precautions for safe handling

Avoid overheating or freezing



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Conditions for safe storage, including any incompatibilities

Store in a cool, dry, well-ventilated area away from direct sunlight. Keep containers tightly closed when not in use.

SECTION 8: Exposure Controls/Personal Protection

Exposure controls

Product has no occupational exposure limits. Avoid inhaling dusts or vapors. Practice good industrial hygiene and safety.

Personal protection

Eye protection: Eye protection is not required. To avoid contact with eyes, use safety eye goggles.
Skin protection: Wear protective clothing as necessary to minimize contact. Use chemical resistant gloves.
Respiratory protection: Not required. Wear approved respiratory equipment if necessary.

SECTION 9: Physical and Chemical Properties

| | | | |
|---------------------------------------|---------------------------|----------------------------------|------------------|
| Appearance | Light to dark brown color | Vapor pressure | Not applicable |
| Odor | No offensive odor | Vapor density | Not applicable |
| pH | 3 – 5 | Relative density | 1.20 g/ml |
| Physical state | Liquid | Solubility | Soluble in water |
| Melting point / Freezing point | 0°C / 32°F | Partition coefficient | Not applicable |
| Boiling point | 100°C/212°F | Auto-ignition temperature | Not applicable |
| Flash point | Not applicable | Decomposition temperature | Not applicable |
| Evaporation rate | Not applicable | Viscosity | Not viscous |
| Flammability | Non-flammable | Explosive properties | Non-explosive |
| Explosive limits | Not applicable | Oxidizing properties | Non-oxidizer |

SECTION 10: Stability and Reactivity

Reactivity

None

Chemical stability

Product is stable.

Possibility of hazardous reactions

Under normal conditions, hazardous reaction will not occur.

Conditions to avoid

Avoid heat

Incompatible materials

High pH chemicals

Hazardous decomposition products

No known hazardous decomposition products.

SECTION 11: Toxicological Information

Information on toxicological effects

Acute toxicity: May be harmful if swallowed
Irritation: May cause eye irritation
Corrosivity: Not known to be corrosive
Sensitization: May cause skin irritation
Dose toxicity: Not known to be toxic
Carcinogenicity: Not known to be carcinogenic
Mutagenicity: Not known to be mutagenic
Reproductive toxicity: Not known to cause reproductive harm

SECTION 12: Ecological Information

Ecotoxicity

Not considered hazardous

Persistence and degradability

Not available



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Bioaccumulative potential

Not available

Mobility in soil

Soluble in water and may disperse in soil

SECTION 13: Disposal Considerations

Waste treatment methods

Not hazardous waste. Dispose of product in accordance with federal, state, and local regulations. Consult with qualified representative for proper disposal or treatment.

SECTION 14: Transport Information

DOT

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

IATA

Not dangerous goods

IMDG

Not dangerous goods

SECTION 15: Regulatory Information

CERCLA

This product contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302).

Manganese sulfate (CAS# 10034-96-5)

California Prop 65

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

SARA 311/312 Hazards

| | |
|------------------------------------|----|
| Acute Health Hazard: | No |
| Chronic Health Hazard: | No |
| Fire Hazard: | No |
| Sudden Release of Pressure Hazard: | No |
| Reactive Hazard: | No |

SARA 313

Manganese sulfate (CAS# 10034-96-5) is subject to reporting levels established by SARA Title III, Section 313.

Subject to "Right-To-Know" legislation in the following states

This product contains one or more substances subject to Right To Know.

Massachusetts:

None

New Jersey:

Manganese sulfate (CAS# 10034-96-5)

Pennsylvania:

Manganese sulfate (CAS# 10034-96-5)

SECTION 16: Other Information

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