



Safety Data Sheet

Biomim[®] Manganese

SECTION 1: Product and Company Identification

Product name: Biomim Manganese
Product code:
Product use: Plant fertilizer
Product type: Solid, powder

Importer & Distributor:

Roots, Shoots & Fruits Ltd.
PO Box 72, Waiheke Island
Auckland, New Zealand 1840
Ph: (09) 372 9155
Fax: (09) 372 9156

Manufacturer:

JH Biotech, Inc.
4951 Olivas Park Drive, Ventura, CA 93030
Ph: (805)650-8933
Fax: (805)650-8942

24 hour emergency contact within NZ is 0800 764 766 (0800 POISON)
Emergency telephone: (800)428-3493 (within the United States)

SECTION 2: Hazards Identification

Contact with eyes may cause irritation. Inhalation of dust may cause nose, throat, or respiratory irritation. May be harmful if swallowed.

SECTION 3: Composition/Information on Ingredients

Component	CAS No.
Manganese sulfate	7785-87-7
Hydrolysed protein	N/A

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

Not available

Protection for firefighters

Wear protective clothing and equipment



Safety Data Sheet

Biomim[®] Manganese

SECTION 6: Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Wear protective clothing, gloves, and safety eye goggles.

Environmental precautions

Not available

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

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.

Specific end use(s)

Not available

SECTION 8: Exposure Controls/Personal Protection

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

SECTION 9: Physical and Chemical Properties

Information on basic physical and chemical properties

Appearance	Light pink powder
Odor	No offensive odor
pH	3 – 5
Melting point/freezing point	Not available
Boiling point	100°C/212°F
Flash point	Not available
Evaporation rate	Not available
Flammability	Not available
Explosive limits	Not available
Vapor pressure	Not available



Safety Data Sheet

Biomim[®] Manganese

Vapor density	Not available
Relative density	1 g/cc
Solubility	Soluble in water
Partition coefficient	Not available
Auto-ignition temperature	Not available
Decomposition temperature	Not available
Viscosity	Not available
Explosive properties	Non explosive
Oxidizing properties	Not available

SECTION 10: Stability and Reactivity

Reactivity

Not available

Chemical stability

Product is stable.

Possibility of hazardous reactions

Under normal conditions, hazardous reaction will not occur.

Conditions to avoid

Avoid heat

Incompatible materials

Alkaline solution of pH 10 or higher

Hazardous decomposition products

No known hazardous decomposition products.

SECTION 11: Toxicological Information

Information on toxicological effects

Acute toxicity:	Not available
Irritation:	Not available
Corrosivity:	Not available
Sensitization:	Not available
Dose toxicity:	Not available
Carcinogenicity:	Not available
Mutagenicity:	Not available
Reproductive toxicity:	Not available

SECTION 12: Ecological Information

Ecotoxicity

Not available

Persistence and degradability



Safety Data Sheet

Biomin[®] Manganese

Not available

Bioaccumulative potential

Not available

Mobility in soil

Not available

SECTION 13: Disposal Considerations

Waste treatment methods

Not hazardous waste. Dispose of product in accordance with regulations.

SECTION 14: Transport Information

UN number: Not available

UN proper shipping name: Not available

Transport hazard class(es): Not available

Packing group: Not available

Environmental hazards: Not available

Special precautions for user: Not available

SECTION 15: Regulatory Information

Safety, health and environmental regulations/legislation specific for the product

Not available

SECTION 16: Other Information

Issued: 04/01/2019

Neither this data sheet nor any statement contained herein grants or extends any license, expressed or implied, in connection with patents issued or pending which may be the property of the manufacturer or others. The information in this sheet has been assembled by the manufacturer based on its own studies and on the work of others. The manufacturer makes no warranties, expressed or implied, as to the accuracy, completeness, or adequacy of the information contained herein. The manufacturer shall not be liable to the vendee, the vendee's employees, or anyone for any direct, special or consequential damages arising out of or in connection with the accuracy, completeness, adequacy, or furnishing of such information.