



SAFETY DATA SHEET

Date: 08/17/23

Revision: N/A

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: BLUEGOLD® MANGANESE™

Chemical Name: N/A Organic Chemistry Formula Use: Mixture of
Liquid/Solids Agricultural
Commodities

Trade Name – Bio-Surfactant Based Manganese Formula

Company Identification:
EDEN SOLUTIONS LLC
109 E 17th Street, Suite 4564
Cheyenne, WY 82001
(307) 275-7010

NFPA HAZARD CLASS: (0) Health, (0) Flammability, (0) and Reactivity

2. COMPOSITION, INFORMATION ON INGREDIENTS

Component*	CAS Registry No.	%(Approx.)	ACGIH TLV-TWA
Saponins*	Proprietary	8.70%	No data
Manganese Sulfate Monohydrate	7785-87-7	4.00%	No data
Water	7732-18-5	87.30%	No data

*Trade secret as allowed by 29 CFR §1910.1200-48.

**All ingredients are exempt from requirements of tolerance (40 CFR §180.1001)

3. HAZARDS IDENTIFICATION

Potential Health Effects

Eyes: Contact may cause mild irritant of stinging, watering and redness.

Skin: Contact may cause mild irritant of redness and burning.

Inhalation: No information available. Could maybe be an irritant to respiratory tract. Insufficient oxygen may be present in vessels containing the product due to the generation of carbon monoxide during fermentation

Ingestion: No information available. Studies would suggest gastrointestinal irritation; nausea, vomiting and diarrhea may be possible.

Potential Chronic Health Effects: No Potential chronic effects known.

Cancer: No known contributing evidence available at this time.

4. FIRST AID MEASURES

Eyes: Flush eyes for 15 minutes.

Skin: Wash with soap and water.

Ingestion: No data

5. FIRE FIGHTING MEASURES

Flashpoint (Method used)	Flammable Limits in Air
Non-flammable Non-combustible	Non-flammable Non-combustible
Extinguishing	Agents - NA

Unusual Fire and Explosion Hazards – None known. If fermentation occurs with water and is accelerated by heat, carbon monoxide with possible traces of ethanol or volatile fatty acids (e.g., acetic, propionic, lactic, or butyric) could be given off, which produces inhalation hazards and possible explosion hazards.

6. ACCIDENTAL RELEASE MEASURES

Small Spills: Absorb with commercial or other absorbent and dispose into a container for proper disposal.

Large Spill: Stop the source of the spill. Dike up with absorbent material for containment. Prevent the release from entering a waterway or sewer. Recover useable product. Mop up or pump material into a container (metal/plastic bin) for proper disposition at an approved facility such as a municipal landfill or land application site. If solids form as the material cools, add water to help clean up.

Release Notes: If spill could potentially enter any waterway such as small creeks, contact local authorities. Product contains natural ingredients, but which can be harmful to aquatic ecosystems if large spills occur. For navigable waterways contact the US Coast Guard National Response Center 800-424-8802. Notify as appropriate federal, state and local agencies. Clean up any spills immediately.

7. HANDLING AND STORAGE

This material should be stored in a vented tank designed to contain a material with a specific gravity of 1.3 or greater. Material can ferment if excessive moisture contamination and heat is allowed. Fermentation could yield carbon dioxide with possible traces of ethanol or volatile fatty acids (e.g. acetic, propionic, lactic, or butyric) and if exposed to a spark or flame may result in an explosion. These conditions should be avoided.

If maintenance of tank requires entry by personnel, OSHA's Confined Space standard (29CFR1910.146) should be complied with. If welding is to be performed, the tank should be gas freed and only certified welders should perform welding operations.

Handling: Avoid contact with eyes or prolonged skin contact.

Storage: Protect against physical or chemical contamination. Protect

against radiation, extreme heat, and extreme cold exposure.

8. EXPOSURE CONTROLS, PERSONAL PROTECTION

Respiratory Protection - None

Ventilation - Provide adequate ventilation to prevent accumulation of vapors.

Skin Protection - Rubber gloves

Eye Protection - Safety glasses

Hygiene - Wash any exposed area promptly with soap and water. Launder contaminated clothing

Other Control Measures - None

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Dark black/green liquid

Odor

Mild Soap/Clay Odor

Physical State

Liquid

Specific Gravity

0.90 to 0.99

Boiling Point

> 220 F

Freezing/Melting Point

Varies

Vapor Pressure

Low

% Volatile, by Volume

No data

Evaporation Rate

No data

Vapor Density in Air

Water vapor only

Solubility in Water

Soluble

pH

6.0 to 7.0

10. STABILITY AND REACTIVITY

Chemical Stability - Stable

Conditions to Avoid - Excess moisture or heat. Unventilated containers.

Incompatibility with Other Materials -

No known reactions with other materials. Ferments when diluted with water and under heat conditions.

Hazard Decomposition Products - None known.

Hazardous Polymerization - NA

11. TOXICOLOGICAL INFORMATION

None

12. ECOLOGICAL INFORMATION

Prevent moderate to large releases to land or water. This product in moderate to large concentrations released to land or directly to water has the potential to result in high Biological Oxygen Demand (BOD) and potential oxygen depletion of aquatic systems. Application rates for fertilizer or soil amendment are not considered as moderate or excessive.

13. DISPOSAL CONSIDERATIONS

Dispose of waste material at an approved municipal landfill or land application site.

14. TRANSPORT INFORMATION

Hazardous Materials Description/ Proper Shipping Name - NA
DOT Hazard Class - NA

DOT Identification Number - NA

This product is not a DOT hazardous material.

15. REGULATORY INFORMATION

Discharges to a water of the U.S. are regulated by the Environmental Protection Agency.

16. OTHER INFORMATION

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