

Safety Data Sheet

5% Manganese Glucoheptonate

SDS Prepared: 10/23/2025

SDS Version: 1.0

Version Date: 10/23/2025

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: 5% Manganese Glucoheptonate

CHEMICAL FAMILY: Complexed Manganese Glucoheptonate

EPA REGISTRATION NUMBER: Not Regulated

Manufactured by:

Reliant Ag Solutions, LLC
2230 Carolina Leaf Road
Greenville, NC 27834
Phone: 1-833-618-9691

Emergency Telephone Numbers

Chemtrec (24 hours)
1-800-424-9300
Reliant Ag Solutions, LLC (Weekdays – Eastern Standard Time)
1-833-618-9691

2. HAZARDS IDENTIFICATION SUMMARY

CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

GHS-US Classification

Acute Toxicity - Oral 5	H303
Specific Target Organ Toxicity - Repeated or Prolonged Exposure (STOT-RE) 2	H373
Eye Irritant 2B	H320

LABEL ELEMENTS

GHS-US Labeling

Hazard Pictogram (GHS-US)



GHS08

SIGNAL WORD (GHS-US)

WARNING

HAZARD STATEMENTS (GHS-US)

H303 - May be harmful if swallowed

H373 - May cause damage to organs through prolonged or repeated exposure.

H320 - Causes eye irritation.

PRECAUTIONARY STATEMENTS (GHS-US)

P102 - Keep out of reach of children.

P202 - Do not handle until all safety precautions have been read and understood.

P260 - Do not breathe mist/vapors/spray.

P264 - Wash hands, forearms, and other exposed areas thoroughly after handling.

P270 - Do not eat, drink, or smoke when using this product.

P271 - Use only outdoors or in a well-ventilated area.

P280 - Wear protective gloves/protective clothing/ eye protection/ face protection.

P301+P312 - IF SWALLOWED: Immediately call a POISON CENTER/doctor if you feel unwell.

P330+P331 - Rinse mouth. Do NOT induce vomiting.

P362+P364 - Take off contaminated clothing and wash it before reuse.
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.
P337+P313 - If eye irritation persists: Get medical advice/attention.
P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations.

3. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Chemical Ingredients:</u>	<u>Percentage by Weight:</u>	<u>CAS No.</u>	<u>GHS-US Classification</u>
Manganese Sulfate	Proprietary	7785-87-7	Acute Oral 5 & STOT-RE 2
Sodium Glucoheptonate	Proprietary	Proprietary	Acute Oral 5 & Eye Irritation 2B

4. FIRST AID MEASURES

EYES: Immediately flush eyes with plenty of water for at least fifteen minutes, holding eyelids apart to ensure flushing of the entire eye surface. Do not let victim rub eyes. Seek medical attention.

SKIN: Remove contaminated clothing and wash with large amounts of soap and water. If irritation develops, contact a physician.

INGESTION: Call a physician immediately. Only induce vomiting at the instruction of a physician. Never give anything by mouth to an unconscious person.

INHALATION: Remove person from area of exposure. Give artificial respiration if necessary. If breathing is difficult, give oxygen if a qualified operator is available. Seek immediate medical attention.

5. FIRE FIGHTING MEASURES

FLASH POINT (°F/Test Method): Not available

FLAMMABLE LIMITS (LFL & UFL): Not determined

EXTINGUISHING MEDIA: Foam, dry chemical, CO₂, water, or chemical foam. Water jet may spread fire.

HAZARDOUS COMBUSTION PRODUCTS: This product is a sugar complex and will not be flammable or combustible unless completely dehydrated at elevated temperatures.

SPECIAL FIRE FIGHTING PROCEDURES: Self-contained positive-pressure breathing apparatus and protective clothing should be worn in fighting fires involving chemicals. Clear fire area of unprotected personnel. Cool fire-exposed containers with water. Attack from upwind.

UNUSUAL FIRE AND EXPLOSION HAZARDS: None known

6. ACCIDENTAL RELEASE MEASURES

SMALL SPILLS: Soak up with absorbent and sweep or shovel into a suitable container for recovery or disposal.

LARGE SPILLS: Control and contain. Dike the spill to minimize contaminated area and facilitate salvage or disposal. Recover material for use, reprocessing, or disposal.

7. HANDLING AND STORAGE

HANDLING: Keep containers tightly closed. Use with adequate ventilation. Avoid prolonged or repeated contact with skin or eyes. Wash thoroughly with soap and water after handling. Wash hands before breaks and at the end of work.

STORAGE: Keep container tightly closed in a dry, cool place when not in use. Keep from freezing.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

PERMISSIBLE EXPOSURE LIMIT: NOL

SIGNS AND SYMPTOMS OF EXPOSURE: Eye and oral irritant. Contact with eyes is painful and irritating. May cause damage to organs through repeated or prolonged exposure.

**MEDICAL CONDITIONS
GENERALLY AGGRAVATED BY
EXPOSURE:****PRIMARY ROUTES OF ENTRY:****ENGINEERING CONTROLS:****RESPIRATORY PROTECTION:****EYE PROTECTION:****SKIN PROTECTION:**

Preexisting eye, skin, and respiratory disorders may be aggravated by exposure to this product. Unnecessary exposure to this product or any chemical should be avoided.

Dermal and oral.

Use adequate exhaust ventilation to prevent inhalation of product vapors.

None required with adequate ventilation. Use NIOSH-approved respiratory protection equipment if misty conditions exist.

Avoid contact with eyes. Wear full-face shield or chemical safety goggles when handling. Do not wear contact lenses.

Avoid contact with skin. USDA-accepted nitrile or neoprene rubber gloves are recommended. Wear appropriate clothing to prevent repeated or prolonged skin contact.

9. PHYSICAL AND CHEMICAL PROPERTIES

COLOR AND PHYSICAL STATE:

Dark red liquid

ODOR:

Slight odor

SPECIFIC GRAVITY (Water=1):

1.23 - 1.26

VAPOR PRESSURE:

No data available

VAPOR DENSITY (Air = 1):

No data available

% VOLATILITY (V/V):

No data available

BOILING POINT:

No data available

MELTING POINT:

No data available

SOLUBILITY:

Completely miscible in water, fluid fertilizers, and alkaline nitrogen solutions.

pH:

3.5 - 4.5

VISCOSITY @ 77°F (25°C):

No data available

Note: These physical data are typical values based on material tested, but may vary from sample to sample. Typical values should not be construed as a guaranteed analysis of any specific lot or as specification items.

10. STABILITY AND REACTIVITY

STABILITY:

Stable

CONDITIONS TO AVOID:

Extreme temperatures

INCOMPATIBILITY:

Strong organic acids, oxidizing agents, and precipitates may form upon interaction with phosphate fertilizers.

**HAZARDOUS DECOMPOSITION
PRODUCTS:**

May form nitrogen oxides.

HAZARDOUS POLYMERIZATION:

Will not occur.

11. TOXICOLOGICAL INFORMATION

ACUTE ORAL LD₅₀:

ATE = 2150 mg/kg body weight

ACUTE DERMAL LD₅₀:

Not classified

ACUTE INHALATION LC₅₀:

Not classified

EYE IRRITATION:

Causes eye irritation.

CARCINOGENIC POTENTIAL:

This product is not carcinogenic, teratogenic, or mutagenic as determined by OSHA, NTP, or IARC.

SKIN IRRITATION/SENSITIZATION:

Not classified.

SPECIFIC TARGET ORGAN

May cause damage to organs through prolonged or repeated exposure.

TOXICITY, REPEATED EXPOSURE:

12. ECOLOGICAL INFORMATION

No data available.

13. DISPOSAL CONSIDERATIONS

Do not reuse container. Place in trash or offer for recycling. Incinerate contaminated solids in accordance with local, state, and federal regulations.

Waste Disposal Methods: Dispose of in accordance with local, state, and federal regulations. Incineration in an authorized and permitted thermal treatment facility or chemical or biological treatment in authorized and permitted treatment facilities is recommended. Material collected with absorbent may be disposed of in a permitted landfill in accordance with federal, state, and local regulations. Triple rinse container and dispose of it in accordance with all local, state, and federal regulations or offer for recycling.

14. TRANSPORTATION INFORMATION

IN ACCORDANCE WITH DOT, IMDG, IATA: Not regulated for transport by USDOT as a hazardous material.
FREIGHT CLASSIFICATION: Liquid Fertilizer NOIBN
NMFC No. 68100 Class 50

15. REGULATORY INFORMATION

NFPA & HMIS Hazard Ratings:

NFPA
2 Health
1 Flammability
0 Reactivity

HMIS
2 Health
1 Flammability
0 Reactivity
C PPE

SARA Hazard Notification/Reporting

SARA Title III Hazard Category: Immediate: Y Fire: N Sudden Release of Pressure: N
Delayed: N Reactive: N
None

Reportable Quantity (RQ) under U.S. CERCLA:

SARA, Title III, Section 313:

Contains no chemical subject to SARA 313.

SARA, Title III, Section 302:

EHS: None
TPQ: 10,000 lbs.

RCRA Waste Code:

Not listed

CA Proposition 65:

Not listed

16. OTHER INFORMATION

SDS STATUS: New
REASON FOR CHANGE: New Product
PREPARED BY: Emma Simpson, Chemist

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