

ULTRA GRO LLC
Safety Data Sheet
Multi-Action™ Manganese



SECTION 1: Identification

- 1.1 GHS Product identifier**
Product name Multi-Action™ Manganese
- 1.2 Other means of identification**
UG Manganese 3% Acid
Ultra Gro Man Acid 3%
- 1.3 Recommended use of the chemical and restrictions on use**
Agricultural/ Horticultural Use- Micronutrient Fertilizer-
- 1.4 Supplier's details**
Name Ultra Gro LLC
Address 1043 S Granada Ave
Madera CA 93637 USA
Telephone (559) 661-0977
email office@ultragro.com
- 1.5 Emergency phone number** 1-800-424-9300 - CHEMTREC - U.S. Canada, Puerto Rico - 24 Hrs
-

SECTION 2: Hazard identification

- General hazard statement**
The mixture does not meet the criteria for classification.
- 2.1 Classification of the substance or mixture**
GHS classification by OSHA (29 CFR 1910.1200, 2012)
Not a hazardous substance or mixture.
- 2.2 GHS label elements, including precautionary statements**
Not a hazardous substance or mixture.
- 2.3 Other hazards which do not result in classification**
Not a hazardous substance or mixture.
-

SECTION 3: Composition/information on ingredients

- 3.2 Mixtures**
Hazardous components
1. UG Proprietary Blend of Non-Hazardous Ingredients
Concentration 80 - 100 % (weight)
- 2. MANGANESE (II) SULFATE MONOHYDRATE**
Concentration 1 - 5 % (weight)
CAS no. 10034-96-5
- Trade secret statement (OSHA 1910.1200(i))**
Designates that a specific chemical identity and/or composition percentage has been withheld as a trade secret.
-

SECTION 4: First-aid Measures

- 4.1 Description of necessary first-aid measures**
General advice: Treat symptomatically.
If inhaled, Move to fresh air. Call a physician if symptoms develop or persist.
In case of skin contact, wash it off with soap and water. Get medical attention if irritation develops and persists.
Direct contact with the eyes may cause temporary irritation.
In case of eye contact, rinse it with water. Get medical attention if irritation develops and persists.
Direct contact with the eyes may cause temporary irritation. It may cause redness.
If swallowed, Rinse mouth. Get medical attention if symptoms occur.

Safety Data Sheet

Multi-Action™ Manganese

4.2 Most important symptoms/effects, acute and delayed

Treat symptomatically.

4.3 Indication of immediate medical attention and special treatment needed, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1 Suitable extinguishing media

Water fog. Foam. Dry chemical powder. Carbon dioxide (CO₂).
Do not use a water jet as an extinguisher, which will spread the fire.

5.2 Specific hazards arising from the chemical

Hazardous decomposition: Thermal degradation at temperatures above 575° C (1067° F) may produce sulfur trioxide.

5.3 Special protective actions for fire-fighters

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Further information

Use standard firefighting procedures and consider the hazards of other involved materials. No unusual fire or explosion hazards were noted.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment, and emergency procedures

Ensure adequate ventilation. Use personal protective equipment. For personal protection, see section 8.

6.2 Environmental precautions

Avoid discharge into drains, water courses, or onto the ground.

6.3 Methods and materials for containment and cleaning up

Large Spills: Stop the material flow if this is done without risk. Dike the spilled material, where this is possible. Cover with a plastic sheet to prevent spreading. Absorb in vermiculite, dry sand, or earth and place into containers. Following product recovery, flush the area with water.
Small Spills: Wipe with absorbent material (e.g., cloth, fleece). Clean the surface thoroughly to remove residual contamination.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Observe good industrial hygiene practices.

7.2 Conditions for safe storage, including any incompatibilities

Store in the original tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

1. UG Proprietary Blend of Non-Hazardous Ingredients

2. MANGANESE (II) SULFATE MONOHYDRATE (CAS: 10034-96-5)

8.2 Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. Use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

8.3 Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection

Wear safety glasses with side shields (or goggles).

Skin protection

Wear appropriate chemical-resistant gloves. Wear suitable protective clothing.

Body protection

Wear suitable protective clothing, such as an appropriate chemical-resistant apron and boots.

Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment. Respiratory protection is not required.

Thermal hazards

Wear appropriate thermal protective clothing when necessary.

Safety Data Sheet

Multi-Action™ Manganese

Environmental exposure controls

Prevent further leakage or spillage if it is safe to do so. Do not let the product enter drains. Discharge into the environment must be avoided.

SECTION 9: Physical and chemical properties

Basic physical and chemical properties

Physical state	Liquid
Appearance	Clear
Color	Tan to Brown
Odor	Earthy. Musky.
Odor threshold	Not available.
Melting point/freezing point	Not available.
The boiling point or initial boiling point and boiling range	Not available.
Flammability	Not Flammable
Lower and upper explosion limit/flammability limit	Not available.
Flash point	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
pH	4.1-4.8
Kinematic viscosity	Not available.
Solubility	Soluble
Partition coefficient n-octanol/water (log value)	Not available.
Vapor pressure	>1
Evaporation rate	Not available.
Density and/or relative density	1.2
Relative vapor density	Not available.

SECTION 10: Stability and reactivity

10.1 Reactivity

The product is stable and non-reactive under normal use, storage, and transport conditions.

10.2 Chemical stability

Material is stable under normal conditions.

10.3 Possibility of Hazardous Reactions

Hazardous polymerization does not occur.

10.4 Conditions to avoid

Contact with incompatible materials.

10.5 Incompatible materials

Strong oxidizing agents.

10.6 Hazardous decomposition products

No hazardous decomposition products are known.

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity

Manganese sulfate (CAS No. 10034-96-5)

Oral LD50: 2150 mg/kg (Rat)

Skin LD50: No data available

Inhalation LC50: >4.45 mg/l (Rat)

Skin corrosion/irritation

No adverse effects due to skin contact are expected.

Severe eye damage/irritation

Direct contact with the eyes may cause temporary irritation.

Respiratory or skin sensitization

No adverse effects due to inhalation are expected.

Not a respiratory sensitizer.

Germ cell mutagenicity

No data indicates that the product or any components present at greater than 0.1% are mutagenic or genotoxic.

Safety Data Sheet

Multi-Action™ Manganese

Carcinogenicity

IARC, ACGIH, NTP, or OSHA do not consider this product a carcinogen.

Reproductive toxicity

This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity (STOT) - single exposure

Not classified.

Specific target organ toxicity (STOT) - repeated exposure

Not classified.

Aspiration hazard

Based on available data, classification data are not met.

SECTION 12: Ecological information

Toxicity

Harmful to aquatic life with long-lasting effects.

UG 3% Manganese Acid + (CAS Mixture)

96 hr LC50 fish: 2350 mg/l

48 hr EC50 crustacea: 7.09-9.36 mg/l Species: Water flea

Persistence and degradability

No data on the degradability of this product is available.

Bioaccumulative potential

No data on the degradability of this product is available.

Mobility in soil

No data on the degradability of this product is available.

Other adverse effects

No other adverse environmental effects (e.g., ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

SECTION 13: Disposal considerations

Disposal methods

Product disposal

Collect, reclaim, or dispose of in sealed containers at licensed waste disposal sites.

Packaging disposal

Dispose of by local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of safely (see Disposal instructions).

Waste treatment

Do not allow spills to enter drains or waterways. Prevent product spillage from entering drinking water supplies or streams.

Sewage disposal

Do not allow products to enter sewage systems.

Other disposal recommendations

Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after the container is emptied.

SECTION 14: Transport information

DOT (US)

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

Safety Data Sheet

Multi-Action™ Manganese

SECTION 15: Regulatory information

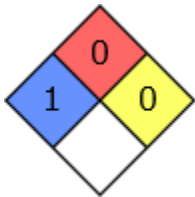
15.2 Chemical Safety Assessment

Toxic Substance Control Act (TSCA): All components of this material are either listed or exempt from listing on the TSCA Inventory.
CERCLA Hazardous Substance List: Manganese Sulfate (CAS No. 10034-96-5) – Listed.
SARA 304 Emergency Release Notification: Not regulated.
OSHA Specifically Regulated Substances: Not regulated.
SARA Title III Classification
Section 302 – Extremely hazardous substance: Not listed.
Section 311/312 – Hazardous chemical: No. Section 313: Manganese Sulfate (CAS # 10034-96-5)
Section 313: Manganese Sulfate (CAS # 10034-96-5)

HMIS Rating

Multi-Action Manganese	
HEALTH	2
FLAMMABILITY	0
PHYSICAL HAZARD	0
PERSONAL PROTECTION	A

NFPA Rating



SECTION 16: Other information

16.1 Further information/disclaimer

The information and data contained herein are based upon facts considered to be correct as of the date hereof. Information is supplied upon the condition that the persons receiving same will determine its suitability for their purposes prior to use. In no event will Ultra Gro, LLC be responsible for damages resulting from the use or reliance upon this information. No representations or warranties, expressed or implied, of merchantability, fitness for a particular purpose, or of any other nature are made hereunder concerning information or the product to which this information refers.