

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name	Manganese Sulfate
Chemical Name	Manganese (II) Sulfate Monohydrate
Recommended use	Fertilizer
Uses advised against	None Non-hazardous
Company	Southern Agricultural Insecticides, Inc. P.O. Box 218 Palmetto, FL 34220
Company Telephone/Fax	(941) 722-3285/(941) 723-2974
Emergency Telephone Number	For Chemical Emergency, Spill, Leak, Fire, Exposure, or Accident, Call CHEMTREC Day or Night: 1-800-424-9300

SECTION 2: HAZARD IDENTIFICATION

Classification of the substance or mixture	Specific target organ toxicity - repeated exposure (Category 2) Chronic aquatic toxicity (Category 2)
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GHS label elements**Hazard pictograms****Signal word****Warning****Hazard statements**

May cause damage to organs through prolonged or repeated exposure, category 2
Eye damage, category 1
Toxic to aquatic life with long lasting effects. Category 2

Precautionary statements**General**

Wear eye/face protection.
Do not breathe dust, fume, gas, mist, vapors, spray.
Do not eat, drink or smoke when using this product.
Get Medical Advice / Attention if you feel unwell.
Avoid release to the environment.
Collect Spillage.
Store locked up.
Dispose in accordance with local, state and federal regulations.

SECTION 3: COMPOSITION INFORMATION ON INGREDIENTS

INGREDIENT	CAS NO.	% WT
Manganous Sulfate, Monohydrate	10034-96-5	95-100%

SECTION 4: FIRST AID MEASURES

General Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice(show the label where possible).

Skin Remove affected clothing and immediately wash all exposed skin area with mild soap and water, followed by warm water rinse.

Eyes	Rinse eyes cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists get medical advice/attention.
Inhalation	Remove victim to fresh air. Clean nasal cavity with water. Seek medical attention if discomfort or irritation persists.
Ingestion	Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.
Symptoms:	Chills, fever, nausea, vomiting, coughing, weakness and headaches, skin irritation

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing Media	Foam. Dry powder. Carbon dioxide. Water spray. Sand.
Special Fire Fighting Procedures	Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent firefighting water from entering environment.
Advice for Firefighters	Use NIOSH-approved respiratory protection/breathing apparatus with full face shield. Wear suitable protective clothing.
Hazardous combustion and Decomposition products:	None

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions:	Wear suitable gloves and eye/face protection. Avoid dust creation.
Environmental precautions:	Avoid allowing product to enter drains, sewage system, ground water.
Methods for cleaning up:	Sweep up and shovel into suitable containers for disposal. Reuse or recycle waste.

SECTION 7: HANDLING AND STORAGE:

Handling:	Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor. Avoid breathing dust. Avoid moisture
Storage:	Store in a cool location. Provide ventilation for containers. Store away from foodstuffs.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION INFORMATION

Control Parameters	USA ACGIH ACGIH TWA (mg/m ³) 0.2 mg/m ³ USA OSHA OSHA PEL (Ceiling) (mg/m ³) 5 mg/m ³
Engineering Controls	Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation.
Respiratory Protection	Wear appropriate mask.
Eye Protection	Chemical goggles or safety glasses.
Hand Protection:	Wear protective gloves.
Protective Equipment:	Avoid all unnecessary exposure.
Other information:	Do not eat, drink or smoke during use.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Form:	Solid granular powder(fine)
Melting Point:	700 degrees celcius.
Solubility in water:	Soluble
Odor:	None
Density:	2.95 g/cm ³
Specific Gravity:	3:25

SECTION 10: STABILITY AND REACTIVITY DATA

Stability	Stable under normal conditions of storage
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Hazardous reactions	Hazardous decomposition products formed under fire conditions,- Sulphur oxides, Manganese/manganese oxides
Incompatible materials	Strong oxidizing agents. Avoid moisture

SECTION 11: TOXICOLOGICAL INFORMATION

LD50 oral rat	2150 mg/kg
Target Organs	May cause damage to organs through prolonged or repeated exposure
Acute Toxicity	
Skin	May cause skin irritation
Eyes	Causes serious eye irritation
Inhalation	May be harmful if inhaled. May cause respiratory tract irritation.
Ingestion	Harmful if swallowed. Danger of serious damage to health.
Carcinogenicity:	No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
Mutagenicity:	Not available.
Reproductive toxicity:	No additional information

SECTION 12: ECOLOGICAL INFORMATION

Persistence and degradability:	Not applicable.
Bioaccumulative potential:	Not applicable.
Ecotoxicity:	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Mobility:	Not applicable.

SECTION 13: DISPOSAL INFORMATION

Waste Disposal Method	Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to comply with local, state and federal regulations. Avoid release to the environment. See information on label.
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SECTION 14: TRANSPORT INFORMATION

U.S. DEPARTMENT OF TRANSPORTATION

DOT	Not Regulated
IMDG	UN-Number: 3077, Class: 9 ,Packing group: III EMS-No: F-A, S-F Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Manganese Sulfate monohydrate) Marine pollutant: Yes
IATA	UN-Number: 3077, Class: 9 , Packing group: III Proper shipping name: Environmentally hazardous substance, solid, N.O.S. (Manganese Sulfate monohydrate)

SECTION 15: REGULATORY INFORMATION

US federal regulations

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

SARA 304 Emergency release notification

Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories	Immediate Hazard - No
	Delayed Hazard - No
	Fire Hazard - No
	Pressure Hazard - No
	Reactivity Hazard - No
SARA 302 Extremely hazardous substance	No
SARA 311/312 Hazardous chemical	No

SECTION 16: OTHER INFORMATION

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