

CATALYTIC INNOVATIONS



SAFETY DATA SHEET

1. PRODUCT IDENTIFICATION

Product Name: *Manganese Sulfate Solution (7% Mn)*

CAS #: 10034-96-5

Trade Names/Synonyms: Manganese Sulfate, Monohydrate

EPA Reg. No.: Not applicable

Manufacturer: Catalytic Innovations, LLC
10027 County Road 2020
Rolla, MO 65401

Emergency Contact Number: **573-578-1368**

SDS CREATION DATE: April 17th, 2023

SDS REVISION DATE: N/A

2. HAZARD IDENTIFICATION

GHS CLASSIFICATION: Specific target organ toxicity - repeated exposure (Category 2); Hazardous to the Aquatic Environment – Chronic Hazard (Category 2).

SIGNAL WORD: Warning!

HAZARD STATEMENTS:

H373: May cause damage to organs (central nervous system) through prolonged or repeated exposure (inhalation).

H411: Toxic to aquatic life with long lasting effects

PRECAUTIONARY STATEMENTS:

Prevention Measures:

P260: Do not breathe mist.

P273: Avoid release to the environment.

P391: Collect spillage.

P501: Dispose of contents/container to comply with local, state, and federal regulations.

Response Measures:

P314: Get medical advice/attention if you feel unwell.

HEALTH COMMENTS: Read all precautions of products being handled and follow the most restrictive language for all products to provide the safest work environment.

COMMENTS: KEEP OUT OF REACH OF CHILDREN

3. COMPOSITION

Chemical Ingredients:

Water
Manganese Sulfate
(Monohydrate)

Percentage by Weight

<90%
>5%

CAS No.

7732-18-5
10034-96-5

GHS-US

Not Classified
STOT RE 2, H373
Aquatic Chronic 2, H411

4. FIRST AID MEASURES

EYES: Hold eyes open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first minutes then continue rinsing eyes. Call a poison control center or doctor for treatment advice if pain, blinking, or redness persists.

SKIN: Take off contaminated clothing. Rinse skin immediately with plenty of water and mild soap for 15-20 minutes followed by a rinse with warm water. Call a poison control center or doctor for treatment advice.

INGESTION: Immediately call a poison control center or doctor. Rinse the mouth. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

INHALATION: Move person to fresh air. Allow the victim to rest. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.

NOTES TO PHYSICIAN: All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

Symptoms: Causes damage to organs (central nervous system) (inhalation).

Chronic Symptoms: Disturbed motor response, emotional instability, feeling of weakness and fatigue.

5. FIRE FIGHTING MEASURES

Flash Point (°F/Test Method):	Data unavailable.
Flammable Limits (LFL & UFL):	Not flammable.

Extinguishing MEDIA: Foam. Dry Powder. Carbon Dioxide. Water spray. Sand. **DO NOT** use heavy water stream.

Specific Hazards Arising from Chemical: Contains substances that are oxidizers when in solid form. May cause fire or explosion if allowed to dry. May be explosive in contact with flammable or organize substances and confinement during fire.

Hazardous Combustion Products: May include but are not limited to oxides of carbon. Manganese, and nitrogen.

Precautionary Measures for Fire-Fighters: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water that may be contaminated by chemical from entering the environment. Do not enter without personal protective equipment, including respiratory protection.

6. ACCIDENTAL RELEASE MEASURES

Steps to be taken in case material is released or spilled: Soak up the spills with inactive solids, such as clay or diatomaceous earth as soon as possible. Collect the spillage and store away from other materials and chemicals.

Caution: Keep spills and cleaning runoff out of municipal sewers and open bodies of water. Notify the authorities if liquid enters the sewers or public waters.

7. HANDLING/STORAGE INFORMATION

Handling: Use in a well-ventilated area. Avoid eye and skin contact and do not breathe in vapor or mist.

Storage: Store in a dry, cool, and well-ventilated places. Keep the container tightly closed when in use. Keep the materials away from other incompatible materials (see section 10).

Other Comments: No information available.

Observe all federal, state and local regulations when storing this product. It is recommended that storage and transfers of this product be done on an impervious surface to prevent contamination of waterways.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines:

Component: Manganese Sulfate, Monohydrate, ACS		
Agency	Parameters	Values
ACGIH	TWA	0.2 mg/m ³
OSHA	PEL	5 mg/m ³
IDLH	US	500 mg/m ³ As Mn
NIOSH	TWA	1 mg/m ³
NIOSH	STEL	3 mg/m ³

Engineering Controls: Emergency eye wash fountains and showers should be made available in the immediate vicinity of the chemical or where exposure can occur. Ensure adequate ventilation. Gas detectors should also be available when toxic gases may be released.

Hygiene Measures: Wash hands and other exposed areas with mild soap and water before eating, drinking, smoking, or when leaving work.

Respiratory Protection: If exposure limits are exceeded or irritation is experienced, wear approved respiratory protection.

Skin/Body Protection: Wear chemically protective gloves. Wear chemically protective boots, aprons, and gauntlets to prevent prolonged or repeated contact with skin.

Eye/Face Protection: Wear safety goggles when handling this product. Use a face shield for additional protection. Contact lenses are not eye protective devices.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid

Appearance: Pink

Odor: None

pH: No data available.

Evaporation Rate: No data available.

Melting Point: No data available.

Freezing Point: No data available.

Boiling Point: No data available.

Relative Density: No data available.

Water Solubility: Soluble in water.

Specific Gravity (water = 1.0): 1.27 g/ml

Percent Volatile (by volume): No data available.

Vapor Pressure: No data available

Vapor Density: No data available

Viscosity: No data available.

Partition Coefficient: N-Octanol/Water : No data available.

10. STABILITY AND REACTIVITY

Reactivity: No information available

Stability: Stable under normal temperatures and pressures.

Conditions to Avoid: Direct sunlight. Extremely low or high temperatures.

Incompatible Materials: Strong bases.

Hazardous Decomposition Products: Sulfur Compounds.

11. TOXICOLOGICAL INFORMATION

Toxicity Effects:

Component: Manganese Sulfate, Monohydrate	
Test	Result
LD50 Oral Rat	2150 mg/kg

Sensitization: No information available.

Eye Irritation: No information available.

Skin Irritation: No information available.

Respiratory Irritation: No information available.

Reproductive Toxicity: No information available.

Developmental Toxicity: No information available.

STOT Single Exposure: No information available.

STOT Repeated Exposure: May cause damage to organs (central nervous system) through prolonged or repeated exposure.

Carcinogenicity: No information available.

Chronic Effects: Disturbed motor response. Emotional Instability. Feeling of weakness.

12. ECOLOGICAL INFORMATION

AQUATIC TOXICITY EFFECTS: Toxic to aquatic life with long lasting effects.

PERSISTANCE AND DEGRADABILITY: May cause long-term adverse effects in the environment.

BIOACCUMULATIVE POTENTIAL: Not established.

Do not contaminate water supplies. Avoid release to the environment.

13. DISPOSAL CONSIDERATIONS

Evaluation is required by the user at the time of disposal. In all cases, disposal should be in accordance with all local, state, and federal laws and regulations. For recycling options please contact product manufacturer.

14. TRANSPORTATION INFORMATION

Not Regulated under DOT - 49 CFR 172.101

15. REGULATORY INFORMATION

US FEDERAL REGULATIONS

Product: Manganese Sulfate Solution	
Statue	Status
SARA Section 311/312 Hazard Classes	Delayed (chronic) health hazard

Component: Manganese Sulfate, Monohydrate	
Statue	Status
SARA Section 311/312 Hazard Classes	Delayed (chronic) health hazard
SARA Section 313	YES
TSCA	YES

16. OTHER INFORMATION

Prepared by: ESH Department
 SDS Preparation Date: April 11th, 2023
 Last Revision Date: April 11th, 2023

NFPA CODES



FOR ADDITIONAL NON-EMERGENCY INFORMATION CONTACT:

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 573-578-1368

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