

Safety Data Sheet
According to the (US) Hazard Communication Standard (29 CFR 1910.1200)

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name Manganous Sulfate Solution
NCL Catalog Number M-20
Product Description Laboratory chemical, APHA for DO.
Supplier
 NCL of Wisconsin, Inc. **Telephone:** 1-800-648-7836 **Fax:** 715-449-2454
 P.O. Box 8 **Emergency Contact:** 1-800-424-9300 (Chemtrec)
 Birnamwood, WI 54414 **Email:** nclabs@nclabs.com

SECTION 2: HAZARDS IDENTIFICATION

GHS Classification

Specific Target Organ Toxicity Repeated Exposure Category 2
 Aquatic Acute Category 2
 Aquatic Chronic Category 2



Signal Word Warning

Hazard Statements

H373 May cause damage to organs through prolonged or repeated exposure.
 H411 Toxic to aquatic life with long lasting effects.

Precautionary Statements

P260 Do not breathe mist/vapors/spray.
 P273 Avoid release to the environment.
 P314 Get medical advice/attention if you feel unwell.
 P391 Collect spillage.
 P501 Dispose of contents/container to comply with local, state and federal regulations.

Other Hazards Not Contributing to the Classification None under normal conditions.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Identity Not applicable

Common Name Not applicable

Mixture

Name	CAS #	Approximate %
Water	7732-18-5	63
Manganese Sulfate Monohydrate	10034-96-5	37

SECTION 4: FIRST AID MEASURES

Description of First Aid Measures

General First Aid Measures Never give anything by mouth to an unconscious person. Seek medical advice if you feel unwell.

If Inhaled Remove person to fresh air and keep comfortable for breathing. Allow victim to rest.

In Case of Skin Contact Remove contaminated clothing and wash exposed skin with mild soap and water. Rinse with warm water.

In Case of Eye Contact

Immediately flush eyes with plenty of water. Remove contact lenses, if present and easy to do. Get medical attention if irritation develops.

If Swallowed

Rinse mouth. Do NOT induce vomiting. Get medical attention if you feel unwell.

Most Important Symptoms/Effects Acute and Delayed

No additional information.

Indication of Immediate Medical Attention and Special Treatment Needed

No additional information available.

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media

Foam. Dry powder. Sand. Carbon dioxide. Water spray.

Unsuitable Extinguishing Media

Do not use high pressure water stream.

Special Hazards Arising from the Chemical

No additional information available.

Special Protective Actions for Fire-Fighters

Wear self-contained breathing apparatus and protective clothing. Keep exposed containers cool with water spray.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

Personal Precautions

Use personal protective equipment (see section 8). Evacuate area of non-essential personnel. Eliminate ignition sources.

Environmental Precautions

Prevent entry to surface and ground waters.

Methods and Materials for Containment and Cleaning Up

Clean up spills with inert solids. Collect spillage. Store away from other materials. Ensure compliance with federal, state and local regulations.

SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling

Avoid contact with eyes and skin. Avoid breathing vapors. 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. Do not handle until all safety precautions have been read and understood.

Conditions for Safe Storage Including any Incompatibilities

Keep in a tightly closed container, stored in a cool, dry, ventilated area. Store away from heat sources, strong oxidizers and metals.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

Not applicable.

Appropriate Engineering Controls

Provide adequate general ventilation. Maintain eye-wash fountain and quick-drench facilities in work area.

Individual Protection Measures

Eye/Face Protection

Use chemical safety goggles and /or a full face shield where splashing is possible. Contact lenses should not be worn when working with this material. Maintain eye-wash fountain and quick-drench facilities in work area.

Skin Protection

Rubber or neoprene gloves and additional protection including impervious boots, apron, or coveralls, as needed in areas of unusual exposure to prevent skin contact.

Respiratory Protection

Wear appropriate mask.

Other Information

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

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical State

Liquid

Color

Clear pink

Odor

Odorless

Odor Threshold

Not determined

pH	Not determined
Melting Point/Freezing Point	Not determined
Initial Boiling Point and Boiling Range	Not determined
Flash Point	Not determined
Evaporation Rate	Not determined
Flammability (Solid, Gas)	Not determined
Upper/Lower Flammability/Explosive Limits	Not determined
Vapor Pressure	Not determined
Vapor Density	Not determined
Relative Density	1.3
Solubility	Soluble in water
Partition Coefficient: n-octanol/water	Not determined
Auto-Ignition Temperature	Not determined
Decomposition Temperature	Not determined
Viscosity	Not determined

SECTION 10: STABILITY AND REACTIVITY

Reactivity	No data available.
Chemical Stability	Stable under ordinary conditions of use and storage.
Possibility of Hazardous Reactions	No data available.
Conditions to Avoid	Extremely high or low temperatures.
Incompatible Materials	Strong oxidizers and metals.
Hazardous Decomposition Products	When heated to decomposition, can emit toxic gases, carbon dioxide and carbon monoxide.

SECTION 11: TOXICOLOGICAL INFORMATION

Acute Toxicity	Not classified
Manganese Sulfate Monohydrate (10034-96-5)	
LD50 oral rat	2150 mg/kg
Water (7732-18-5)	
LD50 oral rat	≥90000 mg/kg
Skin Corrosion/Irritation	Not classified
Serious Eye Damage/Irritation	Not classified
Respiratory or Skin Sensitization	Not classified
Germ Cell Mutagenicity	Not classified
Carcinogenicity	Not classified
Reproductive Toxicity	May damage fertility or the unborn child.
Specific Target Organ Toxicity (Single Exposure)	Not classified
Specific Target Organ Toxicity (Repeated Exposure)	Not classified
Aspiration Hazard	Not classified
Potential Adverse Human Health Effects and Symptoms	No data available
Other Information	Not available

SECTION 12: ECOLOGICAL INFORMATION

Toxicity	Toxic to aquatic life with long lasting effects. No data available.
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Persistence and Degradability	Not applicable
Bioaccumulative Potential	Not applicable
Mobility in Soil	Not applicable
Other Adverse Effects	Not applicable

SECTION 13: DISPOSAL CONSIDERATIONS

Methods of Disposal

Disposal Recommendations	Dispose of contents/containers in accordance with local, state and federal regulations.
Other Information	Avoid release to the surrounding environment.

SECTION 14: TRANSPORT INFORMATION

UN Number	Not applicable
UN Shipping Name	Not applicable
Transport Hazard Class(es)	Not applicable
Packing Group	Not applicable
Environmental Hazards	Not applicable
Transport in Bulk	Not applicable
Other Precautions	Not applicable

SECTION 15: REGULATORY INFORMATION

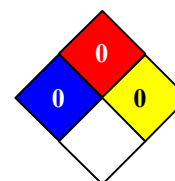
Manganese Sulfate Monohydrate (10034-96-5)
Listed on the United States TSCA (Toxic Substances Control Act) inventory
Water (7732-18-5)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

SECTION 16: OTHER INFORMATION

Revision Date: 04/09/2015

NFPA Hazards

Health Hazard	0: Poses no health hazard.
Fire Hazard	0: Materials that will not burn.
Reactivity/Instability	0: Normally stable, even under fire exposure conditions, and are not reactive with water.



HMIS III Rating

Health	0: No significant risk to health.
Flammability	0: Materials that will not burn.
Physical Hazard	0: Materials that are normally stable.
Personal Protection	B

M-20	
Health	0
Flammability	0
Physical Hazard	0
Personal Protection	B

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END OF SAFETY DATA SHEET