

Safety Data Sheet (SDS)

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Manganese(II) Nitrate Solution

Signal Word
DANGER

Flinn Scientific, Inc. P.O. Box 219, Batavia, IL 60510 (800) 452-1261

Chemtrec Emergency Phone Number: (800) 424-9983

Pictograms

SECTION 2 — HAZARDS IDENTIFICATION

Hazard class: Oxidizing liquids (Category 2). May intensify fire; oxidizer (H272). Keep away from heat, sparks, open flames, and hot surfaces. No smoking (P210).



Hazard class: Skin corrosion or irritation (Category 2). Causes skin irritation (H315).



Hazard class: Serious eye damage or irritation (Category 1). Causes serious eye damage (H318).



Hazard class: Acute toxicity, inhalation (Category 3). Toxic if inhaled (H331). Avoid breathing vapors.

SECTION 3 — COMPOSITION, INFORMATION ON INGREDIENTS

Component Name	CAS Number	Formula	Formula Weight	Concentration
Manganese(II) nitrate	10377-66-9	Mn(NO ₃) ₂	178.94	45-50%
Nitric acid	7697-37-2	HNO ₃	63.01	5%
Water	7732-18-5	H ₂ O	18.00	45-50%
Synonyms: 3.9M - 4.3M molar solution, Manganous nitrate solution				

SECTION 4 — FIRST AID MEASURES

Immediately call a POISON CENTER or physician (P310).

If inhaled: Remove victim to fresh air in a position comfortable for breathing (P304+P340).

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so. Continue rinsing (P305+P351+P338).

If on skin: Rinse cautiously with water for several minutes (P351).

If swallowed: Rinse mouth. Call a POISON CENTER or physician if you feel unwell.

SECTION 5 — FIRE FIGHTING MEASURES

Nonflammable, noncombustible solution.

NFPA Code

In case of fire: Use a tri-class dry chemical fire extinguisher.

None established

SECTION 6 — ACCIDENTAL RELEASE MEASURES

Remove all ignition sources and ventilate area. Contain the spill with sand or absorbent material, neutralize with sodium bicarbonate or calcium hydroxide, and deposit in a sealed bag or container. See Sections 8 and 13 for further information.

SECTION 7 — HANDLING AND STORAGE

Flinn Suggested Chemical Storage Pattern: Inorganic #3. Store with amides, nitrates, nitrites and azides.

Store in a dedicated acid cabinet or in a Flinn Saf-Cube™. Never store with acetic acid. Keep away from combustible materials (P220). Take any precautions to avoid mixing with combustibles (P221). Keep container tightly closed (P233). Use only in a hood or well-ventilated area (P271).

SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

Wear protective gloves, protective clothing, eye protection, and face protection (P280). Wash hands thoroughly after handling (P264). Use only in a hood or well-ventilated area (P271). Wear respiratory protection (P284).

Exposure guidelines: (as manganese nitrate) Ceiling 5 mg/m³ (OSHA); 0.1 mg/m³ (inhalable fraction) (ACGIH)

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Clear, pink liquid. Faint acrid odor.

Boiling point: >100 °C

pH <1>

Specific gravity: 1.54

SECTION 10 — STABILITY AND REACTIVITY

Avoid contact with bases, reactive metals, organic materials, acetic acid, and other readily oxidized substances.

Shelf life: Indefinite, if stored properly.

SECTION 11 — TOXICOLOGICAL INFORMATION

Acute effects: Corrosive, respiratory disorders

ORL-RAT LD₅₀: N.A.

Chronic effects: Lung damage, CNS

IHL-RAT LC₅₀: N.A.

Target organs: Respiratory system, CNS, blood, kidneys

SKN-RBT LD₅₀: N.A.

SECTION 12 — ECOLOGICAL INFORMATION

Data not yet available.

SECTION 13 — DISPOSAL CONSIDERATIONS

Please review all federal, state and local regulations that may apply before proceeding.

Flinn Suggested Disposal Method #27f is one option.

SECTION 14 — TRANSPORT INFORMATION

Shipping name: Corrosive liquid, acidic, inorganic, N.O.S. (nitric acid). Hazard class: 8, Corrosive. UN number: 3264.

SECTION 15 — REGULATORY INFORMATION

Nitric acid: TSCA-listed, EINECS-listed (231-714-2), RCRA code D001, D002, D003.

SECTION 16 — OTHER INFORMATION

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OTHER REASONS, WE DO NOT ASSUME RESPONSIBILITY AND EXPRESSLY DISCLAIM LIABILITY FOR LOSS, DAMAGE OR EXPENSE ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE HANDLING, STORAGE, USE OR DISPOSAL OF THIS PRODUCT(S).

N.A. = Not available, not all health aspects of this substance have been fully investigated.

N/A = Not applicable

Consult your copy of the Flinn Science Catalog/Reference Manual for additional information about laboratory chemicals.

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