

FLINN SCIENTIFIC, INC.

Safety Data Sheet (SDS)

SDS #: 491.00

Revision Date: December 17, 2013

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Manganese(II) Nitrate Solution

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

CHEMTREC Emergency Phone Number: (800) 424-9300

Signal Word **DANGER**

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.

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

NFPA CODE

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 in a well-ventilated area (P271).

SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

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

Exposure guidelines: 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.

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

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.

N/A = Not applicable

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