

# FLINN SCIENTIFIC, INC.

## Safety Data Sheet (SDS)

SDS #: 491.00

Revision Date: March 25, 2014

### 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 <sub>3</sub> ) <sub>2</sub>	178.94	45-50%
Nitric acid	7697-37-2	HNO <sub>3</sub>	63.01	5%
Water	7732-18-5	H <sub>2</sub> 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.

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**SECTION 7 — HANDLING AND STORAGE**

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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).

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**SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION**

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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/m<sup>3</sup> (OSHA); 0.1 mg/m<sup>3</sup> (inhalable fraction) (ACGIH)

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**SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES**

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Clear, pink liquid. Faint acrid odor.

Boiling point: >100 °C

pH <1

Specific gravity: 1.54

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**SECTION 10 — STABILITY AND REACTIVITY**

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

Shelf life: Indefinite, if stored properly.

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**SECTION 11 — TOXICOLOGICAL INFORMATION**

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Acute effects: Corrosive, respiratory disorders

ORL-RAT LD<sub>50</sub>: N.A.

Chronic effects: Lung damage, CNS

IHL-RAT LC<sub>50</sub>: N.A.

Target organs: Respiratory system, CNS, blood, kidneys

SKN-RBT LD<sub>50</sub>: N.A.

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

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**SECTION 12 — ECOLOGICAL INFORMATION**

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Data not yet available.

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**SECTION 13 — DISPOSAL CONSIDERATIONS**

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

Flinn Suggested Disposal Method #27f is one option.

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**SECTION 14 — TRANSPORT INFORMATION**

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

N/A = Not applicable

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**SECTION 15 — REGULATORY INFORMATION**

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

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**SECTION 16 — OTHER INFORMATION**

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

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