

# FLINN SCIENTIFIC, INC.

## Safety Data Sheet (SDS)

SDS #: 341.50

Revision Date: April 25, 2014

### SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

#### Acidified Iron(III) Nitrate Solution

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

CHEMTREC Emergency Phone Number: (800) 424-9300

Signal Word **WARNING**

Pictograms



### SECTION 2 — HAZARDS IDENTIFICATION

Hazard class: Skin and serious eye damage, corrosion or irritation (Category 2, 2A). Causes skin and serious eye irritation (H315+H319).

Hazard class: Oxidizing liquids (Category 3). May intensify fire; oxidizer (H272). Keep away from heat, sparks, open flames, and hot surfaces. No smoking (P210).

Industrial exposure to nitric acid vapors and mists is listed as a known human carcinogen by IARC (IARC-1).

### SECTION 3 — COMPOSITION, INFORMATION ON INGREDIENTS

| Component Name    | CAS Number | Formula  | Formula Weight | Concentration |
|-------------------|------------|--|----------------|---------------|
| Iron(III) nitrate | 7782-61-8  | Fe(NO <sub>3</sub> ) <sub>3</sub> ·9H <sub>2</sub> O | 404.00         | 8%            |
| Nitric acid       | 7697-37-2  | HNO <sub>3</sub>                                     | 63.01          | 6%            |
| Water             | 7732-18-5  | H <sub>2</sub> O                                     | 18.00          | 86%           |

Synonym: Ferric nitrate solution

### SECTION 4 — FIRST AID MEASURES

Call a POISON CENTER or physician if you feel unwell.

**If inhaled:** Remove victim to fresh air and keep at rest in a position comfortable for breathing.

**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 eye irritation persists:** Get medical advice or attention (P337+P313).

**If on skin:** Wash with plenty of water (P302+P352). **If skin irritation occurs:** Get medical advice or attention (P332+P313).

**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

H-3

F-0

R-0

### SECTION 6 — ACCIDENTAL RELEASE MEASURES

Ventilate area. Contain the spill with sand or absorbent material 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.

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

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Wear protective gloves, protective clothing, and eye protection (P280). Wash hands thoroughly after handling (P264).  
Exposure guidelines: (as nitric acid) PEL 5 mg/m<sup>3</sup> (OSHA), TLV 5.2 mg/m<sup>3</sup> STEL 10 mg/m<sup>3</sup> (ACGIH)

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**SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES**

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Pale yellow to colorless liquid. Odorless.

pH: acidic

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**SECTION 10 — STABILITY AND REACTIVITY**

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Avoid contact with oxidizers and organic material.

Shelf life: Good, if stored properly.

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**SECTION 11 — TOXICOLOGICAL INFORMATION**

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Acute effects: Corrosive.

Chronic effects: N.A.

Target organs: N.A.

ORL-HUM LDL<sub>0</sub>: 430 mg/kg (as nitric acid)

IHL-RAT LC<sub>50</sub>: 244 ppm/0.5 hr (as nitric acid)

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 #24b is one option.

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**SECTION 14 — TRANSPORT INFORMATION**

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Shipping name: Not regulated. Hazard class: N/A. UN number: N/A.

N/A = Not applicable

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**SECTION 15 — REGULATORY INFORMATION**

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Not listed.

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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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