

# FLINN SCIENTIFIC, INC.

## Material Safety Data Sheet (MSDS)

MSDS #: 499.00

Revision Date: December 14, 2011

### SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

#### Mercury(II) Nitrate

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

CHEMTREC Emergency Phone Number: (800) 424-9300

### SECTION 2 — COMPOSITION, INFORMATION ON INGREDIENTS

Mercury(II) nitrate, monohydrate

Synonym: mercury perntrate, mercuric nitrate, mercury dinitrate

CAS#: 7783-34-8

### SECTION 3 — HAZARDS IDENTIFICATION

Colorless crystals or powder. Faint nitric acid odor.

Highly toxic by ingestion, inhalation, and skin absorption. May be fatal. Corrosive to body tissues.

Avoid all body contact. Strong oxidizing agent. Avoid contact with organic materials.

#### FLINN AT-A-GLANCE

Health-3

Flammability-0

Reactivity-3

Exposure-3

Storage-3

0 is low hazard, 3 is high hazard

### SECTION 4 — FIRST AID MEASURES

Call a physician and seek medical attention for further treatment, observation, and support after first aid.

Inhalation: Remove to fresh air at once. If breathing has stopped, give artificial respiration immediately.

Eye or External: Immediately flush with fresh water for at least 15 minutes.

Internal: Rinse mouth. Give large quantities of water for dilution. Induce vomiting. Call a physician or poison control at once.

### SECTION 5 — FIRE FIGHTING MEASURES

Nonflammable solid.

Strong oxidizer; fire hazard when in contact with combustible materials.

**Fire Fighting Instructions:** Use a triclass, dry chemical fire extinguisher. Firefighters should wear PPE and SCBA with full facepiece operated in positive pressure mode.

#### NFPA CODE

None

established

### SECTION 6 — ACCIDENTAL RELEASE MEASURES

Restrict unprotected personnel from the area. Sweep up the spill, place in a sealed bag or container, and dispose. Ventilate area and wash spill site after material pickup is complete. See Sections 8 and 13 for further information.

### SECTION 7 — HANDLING AND STORAGE

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

Keep container tightly closed. Deliquescent; store in Flinn Chem-Saf Bag. Store in a poisons cabinet.

Use and dispense in a hood.

### SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

Avoid contact with eyes, skin, and clothing. Wear chemical splash goggles, chemical-resistant gloves, and a chemical-resistant apron. Use ventilation to keep airborne concentrations below exposure limits. Always wear a NIOSH-approved respirator with proper cartridges or a positive pressure, air-supplied respirator when handling this material in emergency situations (spill or fire).

Exposure guidelines: TWA 0.1 mg/m<sup>3</sup> (as Hg) (ACGIH)

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**SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES**

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Colorless crystals or powder. Odor of nitric acid.  
Solubility: Soluble in water and nitric acid. Insoluble in alcohol.  
Formula:  $\text{Hg}(\text{NO}_3)_2 \cdot \text{H}_2\text{O}$   
Formula weight: 342.63

Melting point: 79 °C  
Specific gravity: 4.3

Discontinued product

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**SECTION 10 — STABILITY AND REACTIVITY**

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Avoid contact with acetylene, ethyl alcohol, sulfur, and sodium carbonate. Avoid contact with organic materials.  
Shelf life: Poor, deliquescent.

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**SECTION 11 — TOXICOLOGICAL INFORMATION**

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Acute effects: Highly toxic, corrosive  
Chronic effects: Neurotoxic effects, neurological hazard  
Target organs: Kidneys, GI system, nerves, blood

ORL-RAT LD<sub>50</sub>: 26 mg/kg  
IHL-RAT LC<sub>50</sub>: N.A.  
SKN-RAT LD<sub>50</sub>: 75 mg/kg

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: Mercuric Nitrate  
Hazard class: 6.1, Poison  
UN number: UN1625  
N/A = Not applicable

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**SECTION 15 — REGULATORY INFORMATION**

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TSCA-listed, EINECS-listed (233-152-3), RCRA code D001, D009.

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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.**