

FLINN SCIENTIFIC, INC.

Safety Data Sheet (SDS)

SDS #: 505.00

Revision Date: December 18, 2013

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Mercury(I) Nitrate

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: Acute toxicity, oral and inhalation (Category 2). Fatal if swallowed or inhaled (H300+H330). Do not eat, drink or smoke when using this product (P270). Do not breathe dust or fumes (P260).

Hazard class: Acute toxicity, dermal (Category 1). Fatal in contact with skin (H310).

Hazard class: Specific target organ toxicity - repeated exposure (Category 1). May cause damage to the kidneys, nerves, gastrointestinal tract, blood, and liver through prolonged or repeated exposure if inhaled, ingested, or absorbed through the skin (H373).

Hazard class: Hazardous to the aquatic environment, acute and chronic toxicity (Category 1). Very toxic to aquatic life with long lasting effects (H410). Avoid release to the environment (P273).

SECTION 3 — COMPOSITION, INFORMATION ON INGREDIENTS

Component Name	CAS Number	Formula	Formula Weight	Concentration
Mercury(I) nitrate dihydrate	14836-60-3	$\text{Hg}_2(\text{NO}_3)_2 \cdot 2\text{H}_2\text{O}$	561.22	
Synonym: Mercurous nitrate				

SECTION 4 — FIRST AID MEASURES

Immediately call a POISON CENTER or physician (P310).

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. Continue rinsing.

If on skin: Gently wash with plenty of soap and water (P302 + P350).

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

SECTION 5 — FIRE FIGHTING MEASURES

Nonflammable solid.

Strong oxidant. May explode if heated. Fire hazard when in contact with combustible materials.

When heated to decomposition, may emit toxic fumes.

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

NFPA CODE

H - 4

F - 0

R - 0

SECTION 6 — ACCIDENTAL RELEASE MEASURES

Restrict unprotected personnel from the area. Remove all ignition sources and water. Do not allow solid to become airborne.

Ventilate area. Sweep up the spill, place in a sealed bag or container, and dispose. Wash spill site after material pickup is complete.

Do not let product enter drains. 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 poisons cabinet. Deliquescent. Store in a cool, dry place within a Flinn Chem-Saf™ bag. 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, and eye protection (P280). Wash thoroughly after handling (P264). Use only in a hood or in a well ventilated area (P271).

Exposure guidelines: PEL 0.1 mg/m³ (OSHA), TLV 0.025 mg/m³ (ACGIH) Readily absorbed through the skin.

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Small colorless crystals. Odorless.

Melting point: 70 °C

Soluble: Small quantities of warm water.

Specific gravity: 4.785

SECTION 10 — STABILITY AND REACTIVITY

Avoid contact with ammonia and other alkali, strong reducing agents such as metals, and combustible organic materials.

Material will sublime and release mercury vapor and toxic fumes of NO_x when heated to decomposition.

Shelf life: Keep well-closed and protected from light. See Section 7 for further information.

SECTION 11 — TOXICOLOGICAL INFORMATION

Acute effects: Highly toxic, irritant, sensitizer

ORL-RAT LD₅₀: 170 mg/kg

Chronic effects: Neurotoxic effects, neurological hazards

IHL-RAT LC₅₀: N.A.

Target organs: Kidneys, nerves, GI system, blood

SKN-RAT LD₅₀: 2330 mg/kg

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

SECTION 12 — ECOLOGICAL INFORMATION

Very toxic to aquatic life with long lasting effects. Avoid release into the environment.

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: Mercurous nitrate; Hazard class: 6.1, Poison; UN number: UN1627

N/A = Not applicable

SECTION 15 — REGULATORY INFORMATION

TSCA-listed, RCRA code D001, D009.

SECTION 16 — OTHER INFORMATION

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