

FLINN SCIENTIFIC, INC.

Safety Data Sheet (SDS)

SDS #: 500.00

Revision Date: March 25, 2014

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Mercury(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: Acute toxicity, oral, inhalation, and dermal (Category 2). Fatal if swallowed, inhaled, or in contact with skin (H300+H310+H330). Do not eat, drink or smoke when using this product (P270). Do not breath mist, vapors or spray (P260).

Hazard class: Specific target organ toxicity - repeated exposure (Category 2). May cause damage to the kidneys, nerves, gastrointestinal tract, and blood through prolonged or repeated exposure if inhaled, ingested, or absorbed through the skin (H373).

Hazard class: Oxidizing liquids; Oxidizing solids (Category 2, 3). 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 1). Causes severe skin burns and eye damage (H314).

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).

Avoid contact with acetic acid and readily oxidized substances.

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 |
|---------------------|------------|-----------------------------------|----------------|---------------|
| Mercury(II) nitrate | 7783-34-8 | Hg(NO ₃) ₂ | 342.62 | 3.5% (0.1M) |
| Nitric acid | 7697-37-2 | HNO ₃ | 63.00 | 7% |
| Water | 7732-18-5 | H ₂ O | 18.00 | 89.5% |

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 (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 (or hair): Immediately remove all contaminated clothing. Rinse skin with water (P303+P361+P353).

If swallowed: Rinse mouth. Do NOT induce vomiting (P301+P330+P331).

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

Remove all ignition sources and ventilate area. Restrict unprotected personnel from the area and 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.

SECTION 7 — HANDLING AND STORAGE

Flinn Suggested Chemical Storage Pattern: Inorganic #3. Store with amides, nitrates, nitrites and azides. Never store with acetic acid. Keep and store away from clothing and combustible materials (P220). Take any precautions to avoid mixing with combustibles (P221). Use only in a hood or well-ventilated area (P271).

SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

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

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

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Clear, colorless liquid. Odorless.

SECTION 10 — STABILITY AND REACTIVITY

Shelf life: Good, if stored properly.

SECTION 11 — TOXICOLOGICAL INFORMATION

Acute effects: Highly toxic, corrosive

ORL-RAT LD₅₀: 26 mg/kg as mercury nitrate

Chronic effects: N.A.

IHL-RAT LC₅₀: N.A.

Target organs: N.A.

SKN-RBT LD₅₀: N.A.

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

SECTION 12 — ECOLOGICAL INFORMATION

Very harmful to aquatic life. 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: Mercuric Nitrate; Hazard class: 6.1, Poison; UN number: UN1625

N/A = Not applicable

SECTION 15 — REGULATORY INFORMATION

Not listed.

SECTION 16 — OTHER INFORMATION

This Safety Data Sheet (SDS) is for guidance and is based upon information and tests believed to be reliable. Flinn Scientific, Inc. makes no guarantee of the accuracy or completeness of the data and shall not be liable for any damages relating thereto. The data is offered solely for your consideration, investigation, and verification. The data should not be confused with local, state, federal or insurance mandates, regulations, or requirements and CONSTITUTE NO WARRANTY. Any use of this data and information must be determined by the science instructor to be in accordance with applicable local, state or federal laws and regulations. The conditions or methods of handling, storage, use and disposal of the product(s) described are beyond the control of Flinn Scientific, Inc. and may be beyond our knowledge. FOR THIS AND OTHER REASONS, WE DO NOT ASSUME RESPONSIBILITY AND EXPRESSLY DISCLAIM LIABILITY FOR LOSS, DAMAGE OR EXPENSE ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE HANDLING, STORAGE, USE OR DISPOSAL OF THIS PRODUCT(S).

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

Revision Date: March 25, 2014