

Signal Word

DANGER

Pictograms

NFPA Code

None established

2/10/2025: File reviewed, more currrent MSDS/SDS not available. CAS

Safety Data Sheet (SDS)

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Silver Nitrate

Flinn Scientific, Inc. P.O. Box 219, Batavia, IL 60510 (800) 452-1261 Chemtrec Emergency Phone Number: (800) 424-10253

SECTION 2 — HAZARDS IDENTIFICATION Hazard class: Oxidizing solids (Category 2). May intensify fire; oxidizer (H272). Keep away from heat, sparks, open flames, and hot surfaces. No smoking (P210). Hazard class: Acute toxicity, oral (Category 4). Harmful if swallowed (H302). Do not eat, drink or smoke when using this product (P270). Hazard class: Skin corrosion or irritation (Category 1). Causes severe skin burns and eye damage (H314).

SECTION 3 — COMPOSITION, INFORMATION ON INGREDIENTS

Component Name	CAS Number	Formula	Formula Weight	Concentration
Silver nitrate	7761-88-8	AgNO ₃	169.87	

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:** Immediately remove all contaminated clothing. Rinse skin with water (P303+P361+P353). Wash contaminated clothing before reuse (P363).

If swallowed: Rinse mouth. Do NOT induce vomiting (P301+P330+P331). Call a physician or poison control IMMEDIATELY.

SECTION 5 — FIRE FIGHTING MEASURES

Nonflammable solid. Oxidizer.

When heated to decomposition, may emit toxic fumes. Reacts with NH₃ to form shock sensitive compounds

In case of fire: Flood with water. Do NOT use a tri-class dry chemical, carbon dioxide or halon fire extinguisher.

SECTION 6 — ACCIDENTAL RELEASE MEASURES

Do not allow solid to become airborne. Ventilate area and wipe up with wet toweling. Place in sealed bag or container and dispose. 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, nitrites and azides.

Light sensitive. Store in a Flinn Chem-SafTM bag, and lock up in a poison cabinet.

Keep away from combustible materials (P220). Take any precautions to avoid mixing with combustibles (P221).

SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

Wear protective gloves, protective clothing, and eye protection (P280). Wash hands thoroughly after handling (P264). Exposure guidelines: PEL/TLV 0.01 mg/m³ (OSHA, ACGIH)

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Colorless, transparent, rhombic crystals; turns color on	Boiling point: 440 °C (decomposes)	
exposure to light in presence of organic materials. Faint	Melting point: 210 °C	
nitric acid odor.	pH: 6	
Soluble: Water and hot alcohol	Specific gravity: 4.35	

SECTION 10 — STABILITY AND REACTIVITY

Oxidizer. Avoid contact with strong reducers, ammonia, strong bases, alcohols, magnesium. Shelf life: Indefinite, but light sensitive.

SECTION 11 — TOXICOLOGICAL INFORMATION

Acute effects: Diarrhea, cyanosis Chronic effects: Argyrosis Target organs: N.A. ORL-RAT LD₅₀: 1173 mg/kg IHL-RAT LC₅₀: N.A. SKN-RBT LD₅₀: N.A.

SECTION 12 — ECOLOGICAL INFORMATION

Toxic to aquatic species.

SECTION 13 — DISPOSAL CONSIDERATIONS

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

Flinn Suggested Disposal Method #11 is one option.

SECTION 14 — TRANSPORT INFORMATION

Shipping name: Silver nitrate. Hazard class: 5.1, Oxidizer. UN number: UN1493.

SECTION 15 — REGULATORY INFORMATION

TSCA-listed, EINECS-listed (231-853-9), RCRA code D001, D011.

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).

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

N/A = Not applicable

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

Revision Date: March 21, 2014