

Material Safety Data Sheet

Emergency Phone Number: 314-982-5000

CMS provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. Individuals receiving this information must exercise their independent judgment in determining its appropriateness for a particular purpose.

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Manufactured for
 Curtin Matheson Scientific, Inc.
9999 Veterans Memorial Drive
P.O. Box 1546, Houston, Texas 77251
We keep the best company.

SILVER NITRATE

PRODUCT IDENTIFICATION:

Synonyms: Lunar caustic; silver nitrate toughened

Formula CAS No.: 7761-88-8

Molecular Weight: 169.87

Chemical Formula: AgNO₃

Hazardous Ingredients: Silver Nitrate.

PRECAUTIONARY MEASURES

DANGER! MAY BE FATAL IF SWALLOWED.
HARMFUL IF INHALED.

CORROSIVE. CAUSES SEVERE BURNS.

Do not get in eyes, on skin, or on clothing.
Avoid breathing dust.

Keep container closed.

Use with adequate ventilation.

Wash thoroughly after handling.

This substance is classified as a POISON under the Federal Caustic Poison Act.

EMERGENCY/FIRST AID

If swallowed, DO NOT INDUCE VOMITING! Give large quantities of water. Never give anything by mouth to an unconscious person. If inhaled, remove to fresh air. Get medical attention for any breathing difficulty. In case of contact, immediately flush skin or eyes with plenty of water for at least 15 minutes. In all cases call a physician.
SEE SECTION 5.

DOT Hazard Class: Oxidizer

SECTION 1 Physical Data

Appearance: Colorless transparent crystals.

Odor: Odorless.

Solubility: 219g/100g water @ 20°C (68°F).

Boiling Point: 444°C (831°F) decomposes.

Melting Point: 212°C (441°F)

Specific Gravity: 4.352

Vapor Density (Air = 1): 4.4

Vapor Pressure (mm Hg): Very low.

Evaporation Rate: No information found.

SECTION 2 Fire and Explosion Information

Fire:

This oxidizing material can increase the flammability of adjacent combustible materials.

Explosion:

Many reactions may cause explosion. Reacts with ammonia to form compounds that are sensitive to mechanical shock.

Fire Extinguishing Media:

Use any means suitable for extinguishing surrounding fire.

Special Information:

In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

SECTION 3 Reactivity Data

Stability:

Stable at room temperature in sealed containers. Discolors on exposure to light.

Hazardous Decomposition Products:

Oxides of nitrogen upon heating to decomposition.

Hazardous Polymerization:

This substance does not polymerize.

Incompatibilities:

Ammonia, alkalies, antimony salts, arsenites, bromides, carbonates, chlorides, iodides, thiocyanates, ferrous salts, phosphates, tannic acid and tartrates.

SECTION 4 Leak/Spill Disposal Information

Ventilate area of leak or spill. Clean-up personnel require protective clothing and respiratory protection from dust.

Spills: Pick up and place in a suitable container for reclamation or disposal in a method that does not generate dust.

Disposal: Whatever cannot be saved for reclamation may be disposed in a RCRA approved hazardous waste facility.

Reportable Quantity (RQ)(CWA/CERCLA) : 1 lb.

Ensure compliance with local, state and federal regulations.

NFPA Ratings: Health: 1 Flammability: 0 Reactivity: 0 Other: Oxidizer

SECTION 5 Health Hazard Information

A. EXPOSURE / HEALTH EFFECTS

Inhalation:

An irritant to respiratory tract. May cause sore throat, coughing, shortness of breath. Dust deposits in the lungs may resemble a form of pneumoconiosis.

Ingestion:

Poison. Symptoms include pain and burning in the mouth, blackening of the skin and mucous membranes, throat, and abdomen, salivation, vomiting of black material, diarrhea, collapse, shock, coma and death.

Skin Contact:

May cause local corrosive effects, including skin irritation and pain.

Eye Contact:

May cause corrosive effects, pain, irritation, and possibly eye damage.

Chronic Exposure:

Repeated application or ingestion causes a permanent bluish discoloration of the skin, conjunctiva, and mucous membranes. Repeated inhalation may cause lung disease.

Aggravation of Pre-existing Conditions:

Persons with pre-existing skin disorders or eye problems or impaired respiratory function may be more susceptible to the effects of the substance.

B. FIRST AID

Inhalation:

Remove to fresh air. Get medical attention for any breathing difficulty.

Ingestion:

If swallowed, do NOT induce vomiting. Give large quantities of water. Never give anything by mouth to an unconscious person. Call a physician immediately.

Skin Exposure:

Remove any contaminated clothing. Wipe off excess from skin. Wash skin with soap and water for at least 15 minutes. Get medical attention if irritation develops or persists.

Eye Exposure:

Wash eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

C. TOXICITY DATA

(RTECS, 1986)

Oral mouse LD50: 50 mg/kg. Irritation data: eye rabbit 1 mg severe. Mutation references cited. Reproductive effects references cited.

SECTION 6 Occupational Control Measures

Airborne Exposure Limits:

-OSHA Permissible Exposure Limit (PEL):

10 ug (Ag)/m³ (TWA).

-ACGIH Threshold Limit Value (TLV):

10 ug (Ag)/m³ (TWA).

Ventilation System:

A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, "Industrial Ventilation, A Manual of Recommended Practices", most recent edition, for details.

Personal Respirators: (NIOSH Approved)

If the TLV is exceeded, a dust/mist respirator with chemical goggles may be worn, in general, up to ten times the TLV. Consult respirator supplier for limitations. Alternatively, a supplied air full facepiece respirator or airlined hood may be worn.

Skin Protection:

Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls to prevent skin contact.

Eye Protection:

Use chemical safety goggles and/or full face shield where dusting or splashing of solutions is possible. Contact lenses should not be worn when working with this material. Maintain eye wash fountain and quick-drench facilities in work area.

SECTION 7 Storage and Special Information

Keep in a tightly closed container. Protect from

physical damage. Store in a cool, dry, ventilated area away from sources of heat, moisture and incompatibilities. Protect from light.

SIVNI

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Addendum to Material Safety Data Sheet

REGULATORY STATUS

This Addendum Must Not Be

Detached from the MSDS

Identifies SARA 313 substance(s)

Any copying or redistribution of the MSDS
must include a copy of this addendum

(Chem.Key: SIVNI)

Hazard Categories for SARA
Section 311/312 Reporting
Acute Chronic Fire Pressure Reactive

X ----- X

Product or Components
of Product:

SILVER NITRATE (7761-88-8)

SARA EHS Sect. 302 RQ (lbs.)	SARA Section 313 Chemicals Name List	CERCLA Sec.103 RQ (lbs.)	RCRA Sec. 261.33
No	No	1	No
No	No	1	No

SARA Section 302 EHS RQ: Reportable Quantity of Extremely Hazardous Substance, listed at 40 CFR 355.
SARA Section 302 EHS TPO: Threshold Planning Quantity of Extremely Hazardous Substance. An asterisk (*) following a Threshold Planning Quantity signifies that if the material is a solid and has a particle size equal to or larger than 100 micrometers, the Threshold Planning Quantity = 10,000 LBS.
SARA Section 313 Chemicals: Toxic Substances subject to annual release reporting requirements listed at 40 CFR 372.65.
CERCLA Sec. 103: Comprehensive Environmental Response, Compensation and Liability Act (Superfund). Releases to air, land or water of these hazardous substances which exceed the Reportable Quantity (RQ) must be reported to the National Response Center, (800-424-8802); Listed at 40 CFR 302.4
RCRA: Resource Conservation and Reclamation Act. Commercial chemical product wastes designated as acute hazards and toxic under 40 CFR 261.33