

# SAFETY DATA SHEET

Preparation Date: 07/09/2015

Revision Date: 11/16/2015

Revision Number: G2

## 1. IDENTIFICATION

### Product identifier

**Product code:** SI115  
**Product Name:** SILVER NITRATE, CRYSTAL, USP

### Other means of identification

**Synonyms:** Argenti nitras  
 Argerol  
 Lunar caustic  
 Nitrate d'argent [French]  
 Nitrato de plata [Spanish]  
 Nitric acid silver(I) salt  
 Nitric acid, silver(1+) salt  
 Silbernitrat  
 Silver mononitrate  
 UN1493

**CAS #:** 7761-88-8  
**RTECS #** VW4725000  
**CI#:** Not available

### Recommended use of the chemical and restrictions on use

**Recommended use:** In photography. Manufacture of mirrors; other silver salts; silver plating; in sympathetic and indelible inks; dyeing hair; coloring porcelain; etching ivory; chemical intermediate for silver halides-eg, silver bromide and chloride, silver oxide and silver cyanide; catalyst-eg, for conversion of methanol to formaldehyde; analytical reagent in volhard titration; static inhibitor for carpets and woven materials; absorber of iodine; waste fission product; water disinfectant in pools; color restorer in metallic hair dyes; agent in manufacture of electronic pastes used in inks; chemical intermediate for silver aluminosilicates; in pencils or cones molded with potassium nitrate; catalyst for ethylene oxide; germicide; fused form to cauterize wounds; strong oxidizing agent; as a bacteriostat to destroy animal pathogenic bacteria; medication; pharmaceutical use for preparation of other therapeutic silver salts.

**Uses advised against** No information available

**Supplier:** Spectrum Chemical Mfg. Corp  
 14422 South San Pedro St.  
 Gardena, CA 90248  
 (310) 516-8000

**Order Online At:** <https://www.spectrumchemical.com>

**Emergency telephone number** Chemtrec 1-800-424-9300  
**Contact Person:** Martin LaBenz (West Coast)  
**Contact Person:** Ibad Tirmiz (East Coast)

## 2. HAZARDS IDENTIFICATION

### Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

|  |                           |
|--|---------------------------|
| Acute toxicity - Oral                              | Category 4                |
| Skin corrosion/irritation                          | Category 1 Sub-category B |
| Serious eye damage/eye irritation                  | Category 1                |
| Specific target organ toxicity (repeated exposure) | Category 1                |
| Oxidizing solids                                   | Category 2                |

### Label elements

#### **Danger**

#### **Hazard statements**

Harmful if swallowed

Causes severe skin burns and eye damage

Causes damage to organs through prolonged or repeated exposure

May intensify fire; oxidizer



#### **Hazards not otherwise classified (HNOC)**

Not Applicable

#### **Other hazards**

Not available

#### **Precautionary Statements - Prevention**

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

Do not breathe dust/fume/gas/mist/vapors/spray

Wear protective gloves/protective clothing/eye protection/face protection

Keep away from heat/sparks/open flames/hot surfaces. — No smoking

Keep/Store away from clothing/ .? /combustible materials

Take any precaution to avoid mixing with combustibles .?

**Precautionary Statements - Response**

Immediately call a POISON CENTER or doctor/physician

Specific treatment (see .? on this label)

IN CASE OF FIRE: Use water to extinguish. Do not use dry chemicals or foams. CO<sub>2</sub> or Halon may provide limited control.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

Wash contaminated clothing before reuse

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

Rinse mouth

Do NOT induce vomiting

**Precautionary Statements - Storage**

Store locked up

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

| Components                  | CAS-No.   | Weight % | Trade Secret |
|-----------------------------|-----------|----------|--------------|
| Silver Nitrate<br>7761-88-8 | 7761-88-8 | 100      | *            |

**4. FIRST AID MEASURES****First aid measures****General Advice:**

Poison information centers in each State capital city can provide additional assistance for scheduled poisons (13 1126). Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

**Skin Contact:**

Wash off immediately with soap and plenty of water. Continue flushing with plenty of water for at least 15 minutes. Remove and wash contaminated clothing before re-use. Immediate medical attention is required. Call a physician or Poison Control Centre immediately.

**Eye Contact:**

Flush eyes with water for 15 minutes. Immediate medical attention is required. Call a physician immediately.

**Inhalation:**

Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. WARNING! It may be hazardous to the person providing aid to give mouth-to-mouth resuscitation when the inhaled or ingested material is toxic, infectious or corrosive. Immediate medical attention is required.

**Ingestion:**

Harmful if swallowed. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Call a physician immediately.

**Most important symptoms and effects, both acute and delayed****Symptoms**

Severe skin irritation. Causes severe skin burns. Skin contact can produce inflammation and blistering. Severe eye irritation. Causes serious eye damage. May cause corneal injury. May cause blindness. Inhalation of dust will produce irritation to gastrointestinal or respiratory tract, characterized by burning, sneezing, and coughing. Severe over-exposure can produce lung damage, choking, unconsciousness or death. Over-exposure by inhalation may cause respiratory irritation.

**Indication of any immediate medical attention and special treatment needed****Notes to Physician:**

Treat symptomatically

### **Protection of first-aiders**

First-Aid Providers: Avoid exposure to blood or body fluids. Wear gloves and other necessary protective clothing. Dispose of contaminated clothing and equipment as bio-hazardous waste

## **5. FIRE-FIGHTING MEASURES**

### **Extinguishing Media**

#### **Suitable Extinguishing Media:**

Water. CO2 may be of no value in extinguishing fires involving oxidizers and may only provide limited control.

#### **Unsuitable Extinguishing Media:**

Dry chemical. Foam. Halons.

### **Specific hazards arising from the chemical**

#### **Hazardous Combustion Products:**

Silver oxides. Nitrogen oxides

#### **Specific hazards:**

Oxidizer. Keep away from combustible materials (wood, paper, oil, clothing, etc.)  
The product is not flammable, but it may cause fire when in contact with other material  
Contact with combustible or organic materials may cause fire  
Will accelerate burning when involved in a fire  
Container explosion may occur under fire conditions or when heated  
Silver nitrate mixed with dry powdered magnesium may ignite explosively on contact with a drop of water.  
An explosive fulminate may be formed if silver nitrate is mixed with alcohols.  
Highly explosive is formed by the addition of calcium carbide to silver nitrate solution

### **Special Protective Actions for Firefighters**

#### **Specific Methods:**

For larger fires, use water spray or fog. Cool containers with flooding quantities of water until well after fire is out. DO NOT use combustible materials such as sawdust.

#### **Special Protective Equipment for Firefighters:**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

## 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions, protective equipment and emergency procedures

**Personal Precautions:** Keep people away from and upwind of spill/leak. Ensure adequate ventilation. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Avoid contact with skin, eyes and clothing. Use personal protective equipment. Avoid dust formation. Remove all sources of ignition. Keep combustibles (wood, paper, oil, clothing, etc.) away from spilled material.

**Environmental precautions** Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Prevent entry into waterways, sewers, basements or confined areas.

### Methods and material for containment and cleaning up

**Methods for containment** Stop leak if you can do it without risk. Cover with plastic sheet to prevent spreading.

**Methods for cleaning up** Sweep up and shovel into suitable containers for disposal. Do not use combustible materials such as paper towels, sawdust, clothing, etc. to clean up spill. Clean contaminated surface thoroughly.

## 7. HANDLING AND STORAGE

### Precautions for safe handling

**Technical Measures/Precautions:**

Provide sufficient air exchange and/or exhaust in work rooms. Avoid dust formation. Keep away from incompatible materials.

**Safe Handling Advice**

Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Avoid dust formation. Do not breathe vapours/dust. Do not ingest. Do not smoke. Keep away from combustible material. Keep away from heat and sources of ignition. Handle in accordance with good industrial hygiene and safety practice.

### Conditions for safe storage, including any incompatibilities

**Technical Measures/Storage Conditions:**

Sensitive to light. Store in light-resistant containers. Keep container tightly closed in a dry and well-ventilated place. Store away from incompatible materials. Do not store near combustible materials. Store in a segregated and approved area.

**Incompatible Materials:**

Acetylene. Ammonia. Combustible materials. Chlorosulfonic acid. Hydrochloric acid. Sulfuric acid. Nitric acid. Metals. Reducing agents. Ethylene oxide. Charcoal. ammonium hydroxide. Ethanol. Arsenic. Sulfur. Alkalis. Organic materials.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

#### National occupational exposure limits

**United States**

| Components                  | OSHA | NIOSH | ACGIH | AIHA WHEEL |
|-----------------------------|------|-------|-------|------------|
| Silver Nitrate<br>7761-88-8 | None | None  | None  | None       |

**Canada**

| Components                  | Alberta                            | British Columbia  | Ontario                            | Quebec                               |
|-----------------------------|------------------------------------|---|------------------------------------|--------------------------------------|
| Silver Nitrate<br>7761-88-8 | 0.01 mg/m <sup>3</sup> TWA (as Ag) | 0.01 mg/m <sup>3</sup> TWA (as Ag)<br>0.03 mg/m <sup>3</sup> STEL (as Ag) | 0.01 mg/m <sup>3</sup> TWA (as Ag) | 0.01 mg/m <sup>3</sup> TWAEV (as Ag) |

## Australia and Mexico

| Components                  | Australia                          | Mexico |
|-----------------------------|------------------------------------|--------|
| Silver Nitrate<br>7761-88-8 | 0.01 mg/m <sup>3</sup> TWA (as Ag) | None   |

### Appropriate engineering controls

**Engineering measures to reduce exposure:** Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

### Individual protection measures, such as personal protective equipment

#### Personal Protective Equipment

- Eye protection:** Goggles.
- Skin and body protection:** Chemical resistant apron. Long sleeved clothing. Gloves.
- Respiratory protection:** Wear respirator with dust filter.
- Hygiene measures:** Avoid contact with skin, eyes and clothing. When using, do not eat, drink or smoke. Wash hands before breaks and immediately after handling the product.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

## 9. PHYSICAL AND CHEMICAL PROPERTIES

|   |  |   |
|---|--|---|
| <b>Physical state:</b><br>Solid.                                | <b>Appearance:</b><br>Crystals.                                | <b>Color:</b><br>Colorless. White.  |
| <b>Odor:</b><br>Odorless.                                       | <b>Taste</b><br>Bitter. Metallic.                              | <b>Formula:</b><br>AgNO <sub>3</sub>  |
| <b>Molecular/Formula weight:</b><br>169.87                      | <b>Flammability:</b><br>Oxidizer                               | <b>Flash point (°C):</b><br>No data available   |
| <b>Flashpoint (°C/°F):</b><br>No information available.         | <b>Flash Point Tested according to:</b><br>Not available       | <b>Autoignition Temperature (°C/°F):</b><br>No information available  |
| <b>Lower Explosion Limit (%):</b><br>No information available   | <b>Upper Explosion Limit (%):</b><br>No information available  | <b>pH:</b><br>6-7   |
| <b>Melting point/range(°C/°F):</b><br>212°C/ 413.6°F            | <b>Boiling point/range(°C/°F):</b><br>440°C/ 824°F             | <b>Decomposition temperature(°C/°F):</b><br>No information available  |
| <b>Bulk density:</b><br>No information available                | <b>Density (g/cm<sup>3</sup>):</b><br>No information available | <b>Specific gravity:</b><br>4.35  |
| <b>Vapor pressure @ 20°C (kPa):</b><br>No information available | <b>Evaporation rate:</b><br>No information available           | <b>Vapor density:</b><br>5.8  |
| <b>VOC content (g/L):</b><br>No information available           | <b>Odor threshold (ppm):</b><br>No information available       | <b>Partition coefficient (n-octanol/water):</b><br>No information available   |
| <b>Viscosity:</b><br>No information available                   | <b>Miscibility:</b><br>No information available                | <b>Solubility:</b><br>Easily soluble in cold water<br>Easily soluble in hot water<br>Soluble in diethyl ether<br>Very slightly soluble in acetone<br>Solubility in water: 122 g/100 ml water @ 0°C<br>Solubility in water: 952 g/100 ml water @ 190°C<br>Solubility in alcohol: 1 g/30 ml alcohol; 1g/6.5 ml boiling alcohol<br>Solubility in acetone: 1 g/253 ml acetone |

## 10. STABILITY AND REACTIVITY

### Reactivity

Strong oxidizer. Reactive with reducing agent, combustible materials, organic materials, metals, acids, alkalis  
Incompatible with antimony salts, arsenites, bromides, carbonates, chlorides, iodides, thiocyanates, ferrous salts, hypophosphites, morphine salts, oils, creosote, phosphates, tannic acid, tartrates, vegetable decoctions, and extracts, sodium hydroxide, charcoal, thimerosal, benzalkonium chloride, halogenated acids and their salts. alcohols.

Silver nitrate reacts with acetylene in presence of ammonia to form silver acetylide, a sensitive powerful detonator when dry.

Reaction between silver nitrate and chlorosulfonic acid is violent.

Silver nitrate is reduced by hydrogen sulfide in the dark.

Silver nitrate is easily reduced to metallic silver by ferrous salts, arsenites, hypophosphites, tartrates, sugars, tannins, volatile oils

Silver nitrate mixed with dry powdered magnesium may ignite explosively on contact with a drop of water.

An explosive fulminate may be formed if silver nitrate is mixed with alcohols.

Highly explosive is formed by the addition of calcium carbide to silver nitrate solution

**Chemical stability**

**Stability:** Sensitive to light. Exposure to light accelerates decomposition. Stable under recommended storage conditions.

**Possibility of Hazardous Reactions:** Hazardous polymerization does not occur

**Conditions to avoid:** Incompatible materials. Exposure to light.

**Incompatible Materials:** Acetylene. Ammonia. Combustible materials. Chlorosulfonic acid. Hydrochloric acid. Sulfuric acid. Nitric acid. Metals. Reducing agents. Ethylene oxide. Charcoal. ammonium hydroxide. Ethanol. Arsenic. Sulfur. Alkalis. Organic materials.

**Hazardous decomposition products:** Silver oxides. Nitrogen oxides (NOx).

**Other Information**

**Corrosivity:** No information available

**Special Remarks on Corrosivity:** No information available

**11. TOXICOLOGICAL INFORMATION****Information on likely routes of exposure****Principal Routes of Exposure:**

Skin. Eyes. Inhalation. Ingestion.

**Acute Toxicity****Component Information**

*Silver Nitrate - 7761-88-8*

**LD50/oral/rat** = 1173 mg/kg Oral LD50 Rat

**LD50/oral/mouse** = 50 mg/kg oral LD50 mouse

**LD50/dermal/rat** = No information available

**LD50/dermal/rabbit** = No information available

**LC50/inhalation/rat** = No information available

**LC50/inhalation/mouse** = No information available

**Other LD50 or LC50 information** = No information available

**Product Information**

**LD50/oral/rat** =

**VALUE- Acute Tox Oral** = 1173mg/kg

**LD50/oral/mouse** =

**Value - Acute Tox Oral** = 50mg/kg

**LD50/dermal/rabbit**

**VALUE-Acute Tox Dermal** = No information available

**LD50/dermal/rat**

**VALUE -Acute Tox Dermal** = No information available

**LC50/inhalation/rat**

**VALUE-Vapor** = No information available

**VALUE-Gas** = No information available

**Product code:** SI115

**Product name:** SILVER NITRATE,  
CRYSTAL, USP

8 / 15



VALUE-Dust/Mist = No information available

**LC50/Inhalation/mouse**

VALUE-Vapor = No information available

VALUE - Gas = No information available

VALUE - Dust/Mist = No information available

**Symptoms**

**Skin Contact:** Contact causes severe skin irritation and possible burns. It may cause dermatitis. It can be absorbed through the skin.

**Eye Contact:** Causes severe irritation and burns. Causes corneal opacification, bleeding conjunctiva, burns of conjunctiva, blindness.

**Inhalation** Causes severe irritation of the respiratory tract and mucous membranes with possible chemical burns. Symptoms may include burning sensation, coughing, wheezing, laryngitis, shortness of breath. May cause nausea and headache. May cause vomiting.

**Ingestion** Causes severe digestive/gastrointestinal tract irritation and can cause burns. Symptoms may include pain and burning in the mouth, violent abdominal pain, a blackening of the skin and mucous membranes, salivation, vomiting of black material, diarrhea, hypermotility, ulcerative gingivitis . May affect kidneys (lesions of kidneys, anuria, ), lungs (lesions of lungs). Other symptoms of acute silver poisoning may include shock, dizziness, tetany, somnolence, vertigo, coma, convulsions), cardiovascular (fall in blood pressure), respiration (decreased respiration, cyanosis) [Silver Nitrate].

**Aspiration hazard** No information available

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Chronic Toxicity** Chronic exposure to Silver nitrate dust or fumes can gradually cause the eyes, nails, inner nose, throat, body organs and skin to bluish-grayish color. This usually takes 2 to 20 years to develop and is permanent.  
Systemic absorption of the nitrate and reduction to nitrite may cause rare methemoglobinemia which is characterized by chocolate -brown colored blood, headache, weakness, dizziness, shortness of breath, cyanosis (bluish skin due to deficient oxygenation of blood), rapid heart rate. Eyes and Skin: Repeated or prolonged application on the skin or eyes causes argyria, a bluish-grayish discoloration of the skin and eyes.  
Ingestion: Prolonged or repeated ingestion causes argyria characterized by a permanent blue-slate gray discoloration of the skin, eyes, mucous membranes, and internal organs. Prolonged or repeated ingestion may also affect the liver (hepatitis), kidneys (nephritis), cardiovascular system, behavior/central nervous system (symptoms similar to acute ingestion), and metabolism (weight loss)  
Inhalation: Prolonged or repeated inhalation can cause bronchitis. It can also cause argyrosis of the respiratory tract, bluish-grayish/blackening of the mucous membranes of the respiratory tract with nasal mucosa showing impregnation of silver nitrate. It may also affect the cardiovascular system, and blood.

**Sensitization:** No information available

**Mutagenic Effects:** May affect genetic material

**Carcinogenic effects:** IARC group 2A - Listed under Nitrate or Nitrite (ingested) under conditions that result in endogenous nitrosation.

| Components     | IARC  | ACGIH - Carcinogens | NTP        | OSHA HCS - Carcinogens | Australia - Notifiable Carcinogenic Substances | Australia - Prohibited Carcinogenic Substances |
|----------------|---|---------------------|------------|------------------------|--|--|
| Silver Nitrate | Group 2A - Probably Carcinogenic to Humans (nitrate compounds; covers ingested nitrates under conditions that result in endogenous nitrosation) | Not listed          | Not listed | Not listed             | Not listed                                     | Not listed                                     |

**Reproductive toxicity** No data is available

**Reproductive Effects:** May cause adverse reproductive effects  
**Developmental Effects:** No information available  
**Teratogenic Effects:** No information available

**Specific Target Organ Toxicity**

**STOT - single exposure** No information available  
**STOT - repeated exposure** Causes damage to organs through prolonged or repeated exposure.  
**Target Organs:** Mucous membrane. Skin. Eyes. Lungs.

**12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

**Ecotoxicity effects:**

*Silver Nitrate - 7761-88-8*

**Freshwater Fish Species Data:** 0.001339 - 0.001637 mg/L LC50 Oncorhynchus mykiss 96 h flow-through 1  
0.00181 - 0.00214 mg/L LC50 Pimephales promelas 96 h static 1  
0.00452 - 0.00638 mg/L LC50 Pimephales promelas 96 h flow-through 1  
0.00512 - 0.00787 mg/L LC50 Poecilia reticulata 96 h semi-static 1  
0.0064 - 0.0106 mg/L LC50 Pimephales promelas 96 h semi-static 1  
0.00839 - 0.1802 mg/L LC50 Oncorhynchus mykiss 96 h static 1  
0.009 - 0.02 mg/L LC50 Lepomis macrochirus 96 h flow-through 1  
0.0242 - 0.0484 mg/L LC50 Lepomis macrochirus 96 h semi-static 1  
0.05 - 0.07 mg/L LC50 Lepomis macrochirus 96 h static 1  
0.0027 mg/L LC50 Cyprinus carpio 96 h semi-static 1  
0.0075 mg/L LC50 Oncorhynchus mykiss 96 h semi-static 1  
0.009 mg/L LC50 Pimephales promelas 96 h 1

**Water Flea Data:** 0.0008 - 0.001 mg/L EC50 Daphnia magna 48 h  
0.0008 - 0.0011 mg/L EC50 Daphnia magna 48 h  
0.0006 mg/L EC50 Daphnia magna 48 h

**Persistence and degradability:** No information available

**Bioaccumulative potential:** No information available

**Mobility:** No information available

## 13. DISPOSAL CONSIDERATIONS

### Disposal Methods

**Waste from residues / unused products:**

Waste must be disposed of in accordance with Federal, State and Local regulation.

**Contaminated packaging:**

Empty containers should be taken for local recycling, recovery or waste disposal

| Components     | RCRA - F Series Wastes | RCRA - K Series Wastes | RCRA - P Series Wastes | RCRA - U Series Wastes |
|----------------|------------------------|------------------------|------------------------|------------------------|
| Silver Nitrate | None                   | None                   | None                   | None                   |

## 14. TRANSPORT INFORMATION

**DOT**

**UN-No:** UN1493  
**Proper Shipping Name:** Silver nitrate  
**Hazard Class:** 5.1  
**Subsidiary Risk:** No information available  
**Packing Group:** II  
**ERG No:** 140  
**Marine Pollutant:** No data available  
**DOT RQ (lbs):** No information available  
**Symbol(s):** R1

**TDG (Canada)**

**UN-No:** UN1493  
**Proper Shipping Name:** Silver nitrate  
**Hazard Class:** 5.1  
**Subsidiary Risk:** No information available  
**Packing Group:** II  
**Description:** No information available

**ADR**

**UN-No:** UN1493  
**Proper Shipping Name:** Silver nitrate  
**Hazard Class:** 5.1  
**Packing Group:** II  
**Subsidiary Risk:** No information available  
**Classification Code:** No information available  
**Description:** No information available  
**CEFIC Tremcard No:** No information available

**IMO / IMDG**

**UN-No:** UN1493  
**Proper Shipping Name:** Silver nitrate  
**Hazard Class:** 5.1  
**Subsidiary Risk:** No information available  
**Packing Group:** II  
**Description:** No information available  
**IMDG Page:** No information available  
**Marine Pollutant:** No information available

## 14. TRANSPORT INFORMATION

**EMS:** F-A  
**MFAG:** No information available  
**Maximum Quantity:** No information available

### RID

**UN-No:** UN1493  
**Proper Shipping Name:** Silver nitrate  
**Hazard Class:** 5.1  
**Subsidiary Risk:** No information available  
**Packing Group:** II  
**Classification Code:** No information available  
**Description:** No information available

### ICAO

**UN-No:** UN1493  
**Proper Shipping Name:** Silver nitrate  
**Hazard Class:** 5.1  
**Subsidiary Risk:** No information available  
**Packing Group:** II  
**Description:** No information available

### IATA

**UN-No:** UN1493  
**Proper Shipping Name:** Silver nitrate  
**Hazard Class:** 5.1  
**Subsidiary Risk:** No information available  
**Packing Group:** II  
**ERG Code:** 5L  
**Description:** No information available

## 15. REGULATORY INFORMATION

### International Inventories

| Components            | U.S. TSCA | KOREA KECL       | Philippines (PICCS) | Japan ENCS    | CHINA   | Australia (AICS) | EINECS-No.        |
|-----------------------|-----------|------------------|---------------------|---------------|---------|------------------|-------------------|
| <i>Silver Nitrate</i> | Present   | Present KE-31281 | Present             | Present (1)-8 | Present | Present          | Present 231-853-9 |

### U.S. Regulations

#### *Silver Nitrate*

**Massachusetts RTK:** Present  
**New Jersey RTK Hazardous Substance List:** 1672  
**New Jersey - Discharge Prevention - List of Hazardous Substances:** Present  
**Pennsylvania RTK:** Environmental hazard  
**Pennsylvania RTK - Environmental Hazard List:** Present  
**New York Release Reporting - List of Hazardous Substances:**  
 1 lb RQ  
**Louisiana Reportable Quantity List for Pollutants:** 1lbfinal RQ  
 0.454kgfinal RQ  
**California Directors List of Hazardous Substances:** Present

#### California Prop. 65: Safe Drinking Water and Toxic Enforcement Act of 1986.

#### Chemicals Known to the State of California to Cause Cancer:

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

#### Chemicals Known to the State of California to Cause Reproductive Toxicity:

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

| Components     | Carcinogen | Developmental Toxicity | Male Reproductive Toxicity | Female Reproductive Toxicity: |
|----------------|------------|------------------------|----------------------------|-------------------------------|
| Silver Nitrate | Not Listed | Not Listed             | Not Listed                 | Not Listed                    |

#### CERCLA/SARA

| Components     | CERCLA - Hazardous Substances and their Reportable Quantities | Section 302 Extremely Hazardous Substances and TPQs | Section 302 Extremely Hazardous Substances and RQs | Section 313 - Chemical Category | Section 313 - Reporting <i>de minimis</i> |
|----------------|---|---|--|---------------------------------|---|
| Silver Nitrate | 1 lb final RQ<br>0.454 kg final RQ                            | None  | None   | None                            | None                                      |

#### U.S. TSCA

| Components     | TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS) | TSCA 8(d) -Health and Safety Reporting |
|----------------|---|--|
| Silver Nitrate | Not Applicable  | Not Applicable                         |

#### Canada

##### WHMIS hazard class:

- C Oxidizing materials
- E Corrosive material

##### Silver Nitrate

- C E
- E 1.7% (0.1N), 3.4% (0.2 N)

##### Canada Controlled Products Regulation:

This product has been classified according to the hazard criteria of the CPR (Controlled Products Regulation) and the MSDS contains all of the information required by the CPR.

| Components     | WHMIS Ingredient Disclosure List - |
|----------------|------------------------------------|
| Silver Nitrate | 1 %                                |

#### Inventory

| Components     | Canada (DSL) | Canada (NDSL) |
|----------------|--------------|---------------|
| Silver Nitrate | Present      | Not Listed    |

| Components     | CEPA Schedule I - Toxic Substances | CEPA - 2010 Greenhouse Gases Subject to Mandatory Reporting |
|----------------|------------------------------------|---|
| Silver Nitrate | Not listed                         | Not listed  |

#### EU Classification

##### R-phrases(s)

- R 8 - Contact with combustible material may cause fire.
- R34 - Causes burns.
- R50 - Very toxic to aquatic organisms.
- R53 - May cause long-term adverse effects in the aquatic environment.

**S -phrase(s)**

S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S45 - In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

S60 - This material and its container must be disposed of as hazardous waste.

S61 - Avoid release to the environment. Refer to special instructions/safety data sheets.

S 1/2 - Keep locked up and out of the reach of children.

S36/37/39 - Wear suitable protective clothing, gloves and eye/face protection.

| Components     | Classification               | Concentration Limits: | Safety Phrases                    |
|----------------|------------------------------|-----------------------|-----------------------------------|
| Silver Nitrate | C; R34<br>N; R50-53<br>O; R8 | No information        | S1/2 S26 S36/37/39 S45<br>S60 S61 |

The product is classified in accordance with Annex VI to Directive 67/548/EEC

**Indication of danger:**

C - Corrosive.

N - Dangerous for the environment.

O - Oxidising.

**C****O****N****16. OTHER INFORMATION**

## 16. OTHER INFORMATION

**Preparation Date:** 07/09/2015  
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**Prepared by:** Sonia Owen

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**End of Safety Data Sheet**