

# SAFETY DATA SHEET

## SILVER NITRATE

### SECTION 1: CHEMICAL AND COMPANY IDENTIFICATION

**BioShop Canada Inc.**  
**5480 Mainway**  
**Burlington, Ontario L7L 6A4**  
**1-800-234-1179**  
**Emergency Telephone No.: CANUTEC 1-888-226-8832**  
**Chemical Name:** Silver nitrate  
**Catalog Number:** SIL222

### SECTION 2 HAZARDS IDENTIFICATION

#### GHS Classification:

Oxidizing solids (Category 2)  
Corrosive to Metals (Category 1)  
Skin corrosion (Category 1B)  
Serious eye damage (Category 1)

#### Pictogram:



**Signal word:** Danger

#### Hazard statement:

H272 May intensify fire; oxidizer.  
H290 May be corrosive to metals.  
H314 Causes severe skin burns and eye damage

#### Precautionary statements:

P260 Do not breathe dust or mist.  
P264 Wash skin thoroughly after handling.  
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.  
P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.  
P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.  
P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor.  
P305 + P351 + P338 + P310 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/doctor.  
P305+P351+P338 IF IN EYES: rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

**Target Organs:** None known.  
**Eyes:** Causes eye burns.  
**Skin:** Causes skin irritation. May cause burns.  
**Inhalation:** Causes irritation. May cause burns.  
**Ingestion:** Harmful if swallowed. May cause burns and vomiting.

#### CHRONIC HEALTH HAZARDS:

Corrosive. Harmful If swallowed. Causes severe eye and skin irritation. May cause burns.

### SECTION 3 COMPOSITION/ INGREDIENTS

	CAS #	%
Silver nitrate	7761-88-8	>99%

Molecular Formula: AgNO<sub>3</sub>  
Molecular Weight: 169.87

### SECTION 4 FIRST AID MEASURES

**Eyes:** Flush eyes with water for at least 15 minutes, occasionally lifting the upper and lower eyelids. GET MEDICAL ATTENTION  
**Skin:** In case of contact, flush area immediately with soap and water while removing contaminated clothing and shoes. Wash clothing before reuse. Discard contaminated clothing in a manner which limits further exposure. GET MEDICAL ATTENTION.  
**Inhalation:** GET MEDICAL ATTENTION IMMEDIATELY. Remove from exposure to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen.  
**Ingestion:** If swallowed wash mouth out with water if person is conscious. GET MEDICAL ATTENTION. > Do Not induce vomiting.

### SECTION 5 FIRE FIGHTING MEASURES

**Flammable:** No  
**Flash Point:** N/A  
**Autoignition Temperature:** N/A  
**Extinguishing Media:** Use water spray, foam, dry chemical or carbon dioxide.  
**Explosion Data:** Not available  
Hazards arising from substance:  
Nitrogen oxides (NO<sub>x</sub>) Silver/silver oxides Container explosion may occur under fire conditions. Not combustible. Has a fire-promoting effect due to release of oxygen. Ambient fire may liberate hazardous vapours.

### SECTION 6 ACCIDENTAL RELEASE MEASURES

Ventilate the area. Wear appropriate protective equipment. Sweep and place in a closed container. In the event of a fire always wear self-contained breathing apparatus, NIOSH/MSHA approved or equivalent.  
**Leak and Spill Procedures:** Ventilate the area. Wear appropriate protective equipment. Cover with dry lime or soda. Sweep and place in a closed container

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### SECTION 7 HANDLING AND STORAGE

Keep away from open flames, hot surfaces and sources of ignition  
**Handling:** Avoid contact. Do not get in eyes, on skin, or clothing. Wash thoroughly after handling. Wash contaminated clothing before reuse. Minimize dust generation.  
**Storage Conditions:** Do not store in metal containers. Do not store near combustible materials.

### SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure limits:  
TWA 0.1mg/m3, Canada  
Use adequate ventilation. AVOID DUST GENERATION.  
Wear appropriate protective equipment to prevent eye and skin exposure.  
Wear appropriate respirator to prevent lung irritation.  
**Personal Protection:** Lab coat, safety goggles, rubber gloves.  
**Ventilation:** Local exhaust systems. Use fume hood  
**Respiratory protection:** use OSHA/MSHA approved respirator.

### SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

**Physical State:** solid  
**Appearance/odor:** white. Odorless  
**pH:** approx. 6 (5% aq soln.)  
**Vapor density:** N/A  
**Vapor pressure:** N/A  
**Viscosity:** N/A  
**Freezing /Melting pt.:** 212C  
**Boiling pt.:** 433C  
**Decomposition temp:** 440C  
**Solubility:** soluble in water.  
**Specific Gravity:** 4.35

### SECTION 10 STABILITY AND REACTIVITY:

**Stability:** Stable under normal temperatures and pressure  
**Conditions to avoid:** dust generation, heat and ignition sources. Protect from light.  
**Incompatibility:** Strong oxidizing agents and magnesium metals.  
**Hazardous Decomposition Products:** Nitrogen oxides, silver oxides.,  
**Hazardous Polymerization:** Will not occur

### SECTION 11 TOXICOLOGICAL PROPERTIES

**Exposure Limits:**  
LD50 Oral rat - 3,804 mg/kg

**Serious eye damage/eye irritation:**  
Eyes, rabbit, severe eye irritation

**Epidemiology:** No data available  
**Teratogenicity:** No data available  
**Reproductive Effects:** No data available  
**Neurotoxicity:** No data available  
**Mutagenicity:** No data available  
**Carcinogenicity:** Not listed by ACGIH, IARC, NTP, or OSHA

### SECTION 12 ECOLOGICAL INFORMATION

**Toxicity:**  
No data available.

### SECTION 13 DISPOSAL CONSIDERATION

**Waste Disposal:** Burn in chemical incinerator. Observe all Federal, provincial and local regulations.

### SECTION 14 TRANSPORT INFORMATION

**TDG Canada**  
UN number: 1493 Class: 5.1 Packing group: II  
Proper shipping name: SILVER NITRATE  
Poison Inhalation Hazard: No

**IMDG**  
UN number: 1493 Class: 5.1 Packing group: II EMS-No: F-A, S-Q  
Proper shipping name: SILVER NITRATE

**IATA**  
UN number: 1493 Class: 5.1 Packing group: II  
Proper shipping name: SILVER NITRATE

### SECTION 15 REGULATORY INFORMATION

**US:** TSCA: listed  
**European/International:** N/A

### SECTION 16 ADDITIONAL INFORMATION

Prepared By: M.Kierdelewicz (President)  
Date Prepared: Jan 1/2025  
Phone: (800) 234-1179  
Material Safety Data Sheet is furnished in good faith and without warranty of any kind. The above information is believed to be correct and should be used only as a guide. BioShop Canada Inc. shall not be held liable for any damage resulting from the handling or from the contact with the above product.  
Observe all federal, provincial and state laws concerning health, safety and pollution.