

# Safety Data Sheet

According to Canadian Hazardous Products Regulations and WHMIS 2015

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**Silver Nitrate, ACS**

## SECTION 1: Identification

### Product identifier

**Product name:** Silver Nitrate, ACS

**Product code:** SN1005

### Recommended use of the product and restriction on use

**Relevant identified uses:** Laboratory chemicals

**Uses advised against:** Not determined or not applicable.

**Reasons why uses advised against:** Not determined or not applicable.

### Manufacturer or supplier details

#### Manufacturer:

#### United States

AquaPhoenix Scientific, Inc.

860 Gitts Run Road

Hanover, PA 17331

1-717-632-1291

### Emergency telephone number:

#### United States

#### ChemTel Inc

+1(800)255-3924

+1(813)248-0585

## SECTION 2: Hazard identification

### GHS classification:

Oxidizing liquids, category 2

Corrosive to metals, category 1

Skin corrosion, category 1B

Serious eye damage, category 1

Acute aquatic hazard, category 1

Chronic aquatic hazard, category 1

### Label elements

#### Hazard pictograms:



**Signal word:** Danger

### Hazard statements:

H272 May intensify fire; oxidizer

H290 May be corrosive to metals

H314 Causes severe skin burns and eye damage

H318 Causes serious eye damage

H400 Very toxic to aquatic life

H410 Very toxic to aquatic life with long lasting effects

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#### Precautionary statements:

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking  
P220 Keep/Store away from clothing/combustible materials  
P221 Take any precaution to avoid mixing with combustibles  
P280 Wear protective gloves/protective clothing/eye protection/face protection  
P234 Keep only in original container  
P260 Do not breathe dust/fume/gas/mist/vapors/spray  
P264 Wash skin thoroughly after handling  
P273 Avoid release to the environment  
P370+P378 In case of fire: Use agents recommended in section 5 for extinction  
P390 Absorb spillage to prevent material damage  
P321 Specific treatment (see supplemental first aid instructions on this label).  
P363 Wash contaminated clothing before reuse  
P304+P340+P310 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  
P301+P330+P331+P310 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician.  
P303+P361+P353+P310 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a POISON CENTER or doctor/physician.  
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 or doctor/physician.  
P391 Collect spillage  
P406 Store in corrosive resistant stainless steel container with a resistant inner liner  
P405 Store locked up  
P501 Dispose of contents and container as instructed in Section 13

**Hazards not otherwise classified:** None

### SECTION 3: Composition/information on ingredients

Identification	Name	Weight %
CAS number: 7761-88-8	Silver Nitrate, ACS	100

**Additional Information:** None

### SECTION 4: First-aid measures

#### Description of first-aid measures

##### General notes:

Not determined or not available.

##### After inhalation:

Loosen clothing as necessary and position individual in a comfortable position  
Maintain an unobstructed airway  
Move exposed individual to fresh air  
Immediately call a POISON CONTROL CENTER or seek medical attention

##### After skin contact:

Rinse affected area with soap and water  
If symptoms develop or persist, seek medical attention  
Immediately remove all contaminated clothing

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Wash affected area with soap and water

Immediately call a POISON CONTROL CENTER or seek medical attention

#### After eye contact:

Rinse/flush exposed eye(s) gently using water for 15-20 minutes

If symptoms develop or persist, seek medical attention

Remove contact lens(es) if able to do so during rinsing

Immediately call a POISON CONTROL CENTER or seek medical attention

#### After ingestion:

Rinse mouth thoroughly

Seek medical attention if irritation, discomfort, or vomiting persists

Immediately call a POISON CONTROL CENTER or seek medical attention

Do not induce vomiting

Rinse mouth and then drink plenty of water

#### Most important symptoms and effects, both acute and delayed

##### Acute symptoms and effects:

Not determined or not available.

##### Delayed symptoms and effects:

Not determined or not available.

#### Immediate medical attention and special treatment

##### Specific treatment:

Not determined or not available.

##### Notes for the doctor:

Not determined or not available.

### SECTION 5: Fire-fighting measures

#### Extinguishing media

##### Suitable extinguishing media:

Use appropriate fire suppression agents for adjacent combustible materials or sources of ignition

##### Unsuitable extinguishing media:

Not determined or not applicable.

#### Specific hazards during fire-fighting:

Thermal decomposition can lead to release of irritating gases and vapors

#### Special protective equipment for firefighters:

Wear protective eye wear, gloves and clothing

Refer to Section 8

#### Special precautions:

Avoid inhaling gases, fumes, dust, mist, vapor and aerosols

Avoid contact with skin, eyes and clothing

### SECTION 6: Accidental release measures

#### Personal precautions, protective equipment and emergency procedures:

Ensure adequate ventilation

Ensure air handling systems are operational

Wear protective eye wear, gloves and clothing

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#### Environmental precautions:

Should not be released into the environment  
Prevent from reaching drains, sewer or waterway

#### Methods and material for containment and cleaning up:

Wear protective eye wear, gloves and clothing

#### Reference to other sections:

Not determined or not applicable.

### SECTION 7: Handling and storage

#### Precautions for safe handling:

Do not eat, drink, smoke or use personal products when handling chemical substances.  
Avoid breathing mist or vapor.

#### Conditions for safe storage, including any incompatibilities:

Store in a cool, well-ventilated area.

### SECTION 8: Exposure controls/personal protection

Only those substances with limit values have been included below.

#### Occupational Exposure limit values:

Country (Legal Basis)	Substance	Identifier	Permissible concentration
Canada	Silver Nitrate, ACS	7761-88-8	Alberta OELs - 8-Hour TWA Exposure Limit: 0.01 mg/m <sup>3</sup>
	Silver Nitrate, ACS	7761-88-8	British Columbia OELs - 8-Hour TWA Exposure Value: 0.01 mg/m <sup>3</sup>
	Silver Nitrate, ACS	7761-88-8	British Columbia OELs - 15-minute STEL: 0.03 mg/m <sup>3</sup>
	Silver Nitrate, ACS	7761-88-8	Manitoba OELs - 8-Hour Exposure Limit (TLV-TWA): 0.01 mg/m <sup>3</sup>
	Silver Nitrate, ACS	7761-88-8	Ontario OELs - 8-Hour TWA Exposure Value (TWA): 0.01 mg/m <sup>3</sup>
	Silver Nitrate, ACS	7761-88-8	Quebec OELs - 8-Hour TWA Exposure Value: 0.01 mg/m <sup>3</sup>
	Silver Nitrate, ACS	7761-88-8	Saskatchewan OELs - 8 hour average contamination limit: 0.01 mg/m <sup>3</sup>
	Silver Nitrate, ACS	7761-88-8	Saskatchewan OELs - 15 minute average contamination limit: 0.03 mg/m <sup>3</sup>

#### Biological limit values:

No biological exposure limits noted for the ingredient(s).

#### Information on monitoring procedures:

Not determined or not applicable.

#### Appropriate engineering controls:

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use or handling.

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#### Personal protection equipment

##### Eye and face protection:

Safety goggles or glasses, or appropriate eye protection.

##### Skin and body protection:

Select glove material impermeable and resistant to the substance.

##### Respiratory protection:

When necessary, use NIOSH-approved breathing equipment.

#### General hygienic measures:

Wash hands before breaks and at the end of work.

Avoid contact with skin, eyes and clothing.

### SECTION 9: Physical and chemical properties

#### Information on basic physical and chemical properties

<b>Appearance (physical state, color):</b>	Solid
<b>Odor:</b>	Odorless
<b>Odor threshold:</b>	Not determined or not available.
<b>pH-value:</b>	~6 (1% aq. sol.)
<b>Melting/Freezing point:</b>	212°C
<b>Boiling point/range:</b>	433°C
<b>Flash point:</b>	Not applicable
<b>Evaporation rate:</b>	Not determined or not available.
<b>Flammability (solid, gaseous):</b>	Not applicable
<b>Explosion limit upper:</b>	Not determined or not available.
<b>Explosion limit lower:</b>	Not determined or not available.
<b>Vapor pressure:</b>	Not determined or not available.
<b>Vapor density:</b>	Not determined or not available.
<b>Density:</b>	Not determined or not available.
<b>Relative density:</b>	4.35 g/cm <sup>3</sup>
<b>Solubilities:</b>	Soluble in water.
<b>Partition coefficient (n-octanol/water):</b>	Not determined or not available.
<b>Auto/Self-ignition temperature:</b>	Not determined or not available.
<b>Decomposition temperature:</b>	Not determined or not available.
<b>Dynamic viscosity:</b>	Not determined or not available.
<b>Kinematic viscosity:</b>	Not determined or not available.
<b>Explosive properties</b>	Not determined or not available.
<b>Oxidizing properties</b>	Not determined or not available.

#### Other information

<b>Molecular weight</b>	169.87 g/mol
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### SECTION 10: Stability and reactivity

#### Reactivity:

No decomposition if used and stored according to specifications. Becomes gray or grayish-black on exposure to light in the presence of organic matter.

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#### Chemical stability:

Stable under normal conditions of use and storage.

#### Possibility of hazardous reactions:

Material can react violently with combustible materials, reducing agents, aqueous ammonia. Hazardous reactions or instability may occur under certain conditions of storage or use, such as contact with combustible materials resulting in causing or intensifying fire. Reacts with alcohol to form explosive fulminate.

#### Conditions to avoid:

Dust. Excess heat. Incompatible materials. Combustible materials. Ignition sources. Excess light. Contamination. Heating to decomposition.

#### Incompatible materials:

Ammonia. Organic matter. Alcohols. Charcoal. Acetylene. Hydrogen peroxide. Strong bases. Reducing agents.

#### Hazardous decomposition products:

Nitrogen oxides (NOx). Silver oxides. Oxygen.

### SECTION 11: Toxicological information

#### Acute toxicity

**Assessment:** Based on available data, the classification criteria are not met.

**Product data:** No data available.

**Substance data:** No data available.

#### Skin corrosion/irritation

**Assessment:** Causes severe skin burns and eye damage

**Product data:** No data available.

**Substance data:**

Name	Result
Silver Nitrate, ACS	Causes severe skin burns.

#### Serious eye damage/irritation

**Assessment:** Causes serious eye damage

**Product data:** No data available.

**Substance data:** No data available.

#### Respiratory or skin sensitization

**Assessment:** Based on available data, the classification criteria are not met.

**Product data:** No data available.

**Substance data:** No data available.

#### Carcinogenicity

**Assessment:** Based on available data, the classification criteria are not met.

**Product data:** No data available.

**Substance data:** No data available.

**International Agency for Research on Cancer (IARC):** None of the ingredients are listed.

**National Toxicology Program (NTP):** None of the ingredients are listed.

#### Germ cell mutagenicity

**Assessment:** Based on available data, the classification criteria are not met.

**Product data:** No data available.

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### Silver Nitrate, ACS

**Substance data:** No data available.

#### Reproductive toxicity

**Assessment:** Based on available data, the classification criteria are not met.

**Product data:** No data available.

**Substance data:** No data available.

#### Specific target organ toxicity (single exposure)

**Assessment:** Based on available data, the classification criteria are not met.

**Product data:** No data available.

**Substance data:** No data available.

#### Specific target organ toxicity (repeated exposure)

**Assessment:** Based on available data, the classification criteria are not met.

**Product data:** No data available.

**Substance data:** No data available.

#### Aspiration toxicity

**Assessment:** Based on available data, the classification criteria are not met.

**Product data:** No data available.

**Substance data:** No data available.

**Information on likely routes of exposure:** No data available.

**Symptoms related to the physical, chemical and toxicological characteristics:** No data available.

**Other information:** No data available.

### SECTION 12: Ecological information

#### Acute (short-term) toxicity

**Assessment:** Very toxic to aquatic life

**Product data:** No data available.

**Substance data:**

Name	Result
Silver Nitrate, ACS	LC50 - Pimephales promelas - 0.0012 mg/L - 96 h
	NOEC - Isonychia bicolor - 0.00031 mg/L - 20 d

#### Chronic (long-term) toxicity

**Product data:** No data available.

**Substance data:** No data available.

#### Persistence and degradability

**Product data:** No data available.

**Substance data:** No data available.

#### Bioaccumulative potential

**Product data:** No data available.

**Substance data:** No data available.

#### Mobility in soil

**Product data:** No data available.

**Substance data:** No data available.

**Other adverse effects:** No data available.

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### SECTION 13: Disposal considerations

#### Disposal methods:



It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities (US 40CFR262.11)

### SECTION 14: Transport information



#### Canadian Transportation of Dangerous Goods (TDG)

UN number	UN1493
UN proper shipping name	Silver Nitrate
UN transport hazard class(es)	5.1  
Packing group	II
Environmental hazards	Marine Pollutant
Special precautions for user	None

#### International Maritime Dangerous Goods (IMDG)

UN number	UN1493
UN proper shipping name	Silver Nitrate
UN transport hazard class(es)	5.1  
Packing group	II
Environmental hazards	Marine Pollutant
Special precautions for user	None

#### International Air Transport Association Dangerous Goods Regulations (IATA-DGR)

UN number	UN1493
UN proper shipping name	Silver Nitrate
UN transport hazard class(es)	5.1  
Packing group	II
Environmental hazards	Marine Pollutant
Special precautions for user	None

### SECTION 15: Regulatory information

#### Canada regulations

##### Domestic substances list (DSL):

7761-88-8	Silver Nitrate, ACS	Listed
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**Silver Nitrate, ACS**

**Non-domestic substances list (NDSL):** Not determined.

### SECTION 16: Other information

**Abbreviations and Acronyms:** None

**Disclaimer:**

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations. The responsibility to provide a safe workplace remains with the user. The user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment. The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by the use of this material. It is the responsibility of the user to comply with all applicable laws and regulations applicable to this material.

**NFPA:** 3-0-2-ox

**HMIS:** 3-0-2-X

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**End of Safety Data Sheet**