

## SAFETY DATA SHEET

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1 Product identifiers

Product name	Silver Nitrate 0.05M Solution
CAS number	7761-88-8
Synonyms	Not available

#### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses	Laboratory chemical
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#### 1.3 Details of the supplier of the safety data sheet

Company	Lab Alley, LLC 12501 Pauls Valley Road Austin, Texas 78737 U.S.A.
Telephone	512-668-9918
Fax	512-886-4008

#### 1.4 Emergency telephone

Emergency Phone #	US & Canada: 1-800-535-5053	INFOTRAC
	International 1-352-323-3500	INFOTRAC

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

##### GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Skin Corrosion/Irritation Category 1 B  
Serious Eye Damage/Eye Irritation Category 1  
Specific target organ toxicity (single exposure) Category 3 .Target Organs - Respiratory system.

#### 2.2 GHS Label elements, including precautionary statements

Pictogram



Signal Word

DANGER

Hazard statements

Causes severe skin burns and eye damage  
May cause respiratory irritation

Precautionary statements	<p>Prevention</p> <p>Do not breathe dust/fume/gas/mist/vapors/spray</p> <p>Wash face, hands and any exposed skin thoroughly after handling</p> <p>Wear protective gloves/protective clothing/eye protection/face protection</p> <p>Use only outdoors or in a well-ventilated area</p> <p>Response</p> <p>Immediately call a POISON CENTER or doctor/physician</p> <p>Inhalation</p> <p>IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing</p> <p>Skin</p> <p>IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower</p> <p>Wash contaminated clothing before reuse</p> <p>Eyes</p> <p>IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing</p> <p>Ingestion</p> <p>IF SWALLOWED: Rinse mouth. DO NOT induce vomiting</p> <p>Storage</p> <p>Store locked up</p> <p>Store in a well-ventilated place. Keep container tightly closed</p> <p>Disposal</p> <p>Dispose of contents/container to an approved waste disposal plant</p>
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### 2.3 Hazards not otherwise classified (HNO) or not covered by GHS

Toxic to aquatic life with long lasting effects

## SECTION 3: Composition/information on ingredients

### 3.1 Components

Chemical name	Common name and synonyms	CAS number	Concentration
Water	-	7732-18-5	99-99.5%
Silver Nitrate	-	7761-88-8	0.5-1%

## SECTION 4: First aid measures

### 4.1 Description of first-aid measures

<b>General advice</b>	Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.
<b>If inhaled</b>	If not breathing, give artificial respiration. Remove from exposure, lie down. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Call a physician immediately.
<b>In case of skin contact :</b>	Wash off immediately with plenty of water for at least 15 minutes. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Call a physician immediately.
<b>In case of eye contact:</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Immediate medical attention is required.
<b>If swallowed</b>	Do NOT induce vomiting. Clean mouth with water. Never give anything by mouth to an unconscious person. Call a physician immediately.

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

Causes burns by all exposure routes. Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated: Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation.

### 4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician : Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

<b>Suitable extinguishing media</b>	Not combustible. CO 2, dry chemical, dry sand, alcohol-resistant foam.
<b>Unsuitable extinguishing media</b>	No information available

### 5.2 Specific hazards arising from the substance or mixture

Thermal decomposition can lead to release of irritating gases and vapors. The product causes burns of eyes, skin and mucous membranes

### 5.3 Special protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Thermal decomposition can lead to release of irritating gases and vapors.

**Specific hazards during fire fighting** No information available

### 5.4 Further information

Suppress (knock down) gases/vapors/mists with a water spray jet.  
Prevent fire extinguishing water from contaminating surface water or the ground water system.

### 5.5 Hazardous Combustion products

Nitrogen oxides (NO<sub>x</sub>), Silver/silver oxides

## SECTION 6: Accidental release measures

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

Ensure adequate ventilation. Use personal protective equipment as required. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

### 6.2 Environmental precautions

Do not flush into surface water or sanitary sewer system. Should not be released into the environment. Do not allow material to contaminate ground water system.

### 6.3 Methods and materials for containment and cleaning up

Soak up with inert absorbent material. Keep in suitable, closed containers for disposal.

### 6.4 Reference to other sections

See Section 2 for full list of hazard and precaution statements.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

#### Handling

Wear personal protective equipment/face protection. Do not get in eyes, on skin, or on clothing. Use only under a chemical fume hood. Do not breathe mist/vapors/spray. Do not ingest. If swallowed then seek immediate medical assistance.

#### Storage

Corrosives area. Keep containers tightly closed in a dry, cool and well-ventilated place.

## SECTION 8: Exposure controls/personal protection

### 8.1 Occupational exposure limits

#### US. OSHA PEL

Component	Type	Value
Silver Nitrate	TWA	0.01 mg/m <sup>3</sup> (Silver)

#### US. ACGIH Threshold Limit Values

Component	Type	Value
Silver Nitrate	TWA	0.01 mg/m <sup>3</sup> (Silver)

#### US. NIOSH: Pocket Guide to Chemical Hazards

Component	Type	Value
Silver Nitrate	TWA	0.01 mg/m <sup>3</sup> (Silver)

#### Biological occupational exposure limits

Not available

### 8.2 Exposure controls

#### Appropriate engineering controls

Ensure that eyewash stations and safety showers are close to the workstation location.

#### Personal protective equipment

##### Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU). Tightly fitting safety goggles

##### Skin protection

Wear appropriate protective gloves and clothing to prevent skin exposure

**Body Protection**

Wear appropriate protective gloves and clothing to prevent skin exposure

**Respiratory protection**

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

**Hygiene measures**

Handle in accordance with good industrial hygiene.

## SECTION 9: Physical and chemical properties

**9.1 Information on basic physical and chemical properties**

Physical State	Liquid
Appearance	Colorless
Odor	No information available
Odor Threshold	No information available
pH	No information available
Melting Point/Range	No information available
Boiling Point/Range	No information available
Evaporation Rate	No information available
Flammability (solid)	Not applicable
Flammability or explosive limit	
Upper	No data available
Lower	No data available
Vapor Pressure	23 hPa @ 20 °C
Vapor Density	No data available
Density	No data available
Solubility	Not applicable
Partition coefficient; n-octanol/water	No data available
Autoignition Temp	No data available
Decomposition Temp	No data available
Viscosity	No data available
Molecular Formula	AgNO <sub>3</sub>
Molecular Weight	169.87 g/mol
VOC Content(%)	No data available
Oxidizing properties	No data available

**9.2 Other safety information**

Not available

## SECTION 10: Stability and reactivity

**10.1 Reactivity**

None known, based on information available

**10.2 Chemical stability**

The product is chemically stable under standard ambient conditions (room temperature) .

**10.3 Possibility of hazardous reactions**

Decomposes on exposure to light. None under normal processing.

**10.4 Conditions to avoid**

Light. Incompatible products.

**10.5 Incompatible materials**

Strong oxidizing agents

**10.6 Hazardous decomposition products**

Nitrogen oxides (NO<sub>x</sub>), Metal oxides

**10.7 Hazardous Polymerization**

Hazardous polymerization does not occur.

## SECTION 11: Toxicological information

**11.1 Information on toxicological effects****Product Information, Component Information****Acute toxicity**

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Silver Nitrate	No data available	No data available	No data available

**Skin corrosion/irritation**

No information available

**Serious eye damage/eye irritation**

No information available

**Respiratory or skin sensitization**

No data available

**Germ cell mutagenicity**

No information available

**Carcinogenicity**

Component	CAS	IARC	NTP	ACGIH	OSHA	Mexico
Silver Nitrate	7761-88-8	0.10%	0.10%	-	0.10%	-

No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC, NTP, OSHA.

**Specific target organ toxicity - single exposure**

Respiratory system

**Specific target organ toxicity - repeated exposure**

No data available

**Reproductive toxicity**

May damage the unborn child.

**Chronic effects**

No data available

**11.2 Additional Information**

The toxicological properties have not been fully investigated.

**SECTION 12: Ecological information****12.1 Toxicity****Toxicity to fish**

Not available

**Toxicity to daphnia and other aquatic invertebrates**

Not available

**Toxicity to algae/aquatic plants**

Not available

**M-Factor (Acute aquatic toxicity)**

Not available

**Toxicity to fish (Chronic toxicity)**

Not available

**Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)**

Not available

**M-Factor (Chronic aquatic toxicity)**

Not available

**12.2 Persistence and degradability**

Remarks: The methods for determining the biological degradability are not applicable to inorganic substances.

**12.3 Bio accumulative potential**

No information available.

**12.4 Mobility in soil**

Will likely be mobile in the environment due to its water solubility.

**12.5 Results of PBT and vPvB assessment**

No data available

**12.6 Endocrine disrupting properties**

No data available

**12.7 Other adverse effects**

Not available

**SECTION 13: Disposal considerations****13.1 Waste Disposal Methods**

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

#### SECTION 14: Transport information

##### DOT (US)

UN/ID/NA number : UN 3264  
Proper shipping name : Corrosive liquid, acidic, inorganic, n.o.s.  
Class : 8  
Packing group : III  
Technical name: Silver Nitrate Solution

##### IMDG

UN/ID/NA number : UN 3264  
Proper shipping name : Corrosive liquid, acidic, inorganic, n.o.s.  
Class : 8  
Packing group : III  
Technical name: Silver Nitrate Solution

##### IATA

UN/ID/NA number : UN 3264  
Proper shipping name : Corrosive liquid, acidic, inorganic, n.o.s.  
Class : 8  
Packing group : III  
Technical name: Silver Nitrate Solution

#### SECTION 15: Regulatory information

**US federal regulations** This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

##### **TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

Not applicable

##### **CERCLA Hazardous Substance List (40 CFR 302.4)**

Component RQ (lbs) 1

##### **OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)**

Not applicable

##### **Superfund Amendments and Reauthorization Act of 1986 (SARA)**

###### **SARA 302 Extremely hazardous substance**

Not applicable

###### **SARA 311/312 Hazardous**

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

###### **SARA 313 (TRI reporting)**

The following components are subject to reporting levels established by SARA Title III, Section 313: Silver nitrate 7761-88-8, 16-18 %

##### **Other federal regulations**

###### **Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Not applicable

###### **Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

Not applicable

###### **Safe Drinking Water Act**

Not applicable

###### **FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace**

Not applicable

##### **Reach links**

<https://echa.europa.eu/substances-restricted-under-reach>

##### **Clean Water Act**

Silver Nitrate, RQ: 1lbs

##### **U.S. State Right-to-Know Regulations**

###### **Massachusetts**

Silver nitrate 7761-88-8

**US. New Jersey**  
Silver nitrate 7761-88-8

**Pennsylvania**  
Silver nitrate 7761-88-8

**Illinois**  
Silver nitrate 7761-88-8

**Rhode Island**  
Silver nitrate 7761-88-8

**The ingredients of this product are reported in the following inventories: TSCA :**  
All substances listed as active on the TSCA inventory

**California Proposition 65**  
Not listed.

#### SECTION 16: Other information

Issue date: 4/16/2025

#### SECTION 17: Disclaimer

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.