

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
CAS number 7761-88-8
Synonyms No information available.

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

Identified uses Laboratory chemicals.

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)

Corrosive to metals (Category 1)
Skin Corrosion/Irritation (Category 2)
Serious Eye Damage/Eye Irritation (Category 2)
Reproductive Toxicity (Category 1B)

2.2 GHS Label elements, including precautionary statements

Pictogram	
Signal Word	Danger
Hazard statements	May be corrosive to metals Causes skin irritation Causes serious eye irritation May damage the unborn child
Precautionary statements	Obtain special instructions before use Do not handle until all safety precautions have been read and understood Use personal protective equipment as required Wash face, hands and any exposed skin thoroughly after handling Wear eye/face protection Keep only in original container IF exposed or concerned: Get medical attention/advice IF ON SKIN: Wash with plenty of soap and water If skin irritation occurs: Get medical advice/attention Take off contaminated clothing and wash before reuse IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing If eye irritation persists: Get medical advice/attention Absorb spillage to prevent material damage Store locked up Store in corrosive resistant polypropylene container with a resistant inliner Dispose of contents/container to an approved waste disposal plant

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

Very 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	H ₂ O	7732-18-5	99.145 - 99.155%
Silver Nitrate	N/A	7761-88-8	0.845 - 0.855%

SECTION 4: First aid measures

4.1 Description of first-aid measures

General advice

If inhaled Remove to fresh air. If not breathing, give artificial respiration. Get medical attention if symptoms occur.

- In case of skin contact** Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a physician.
- In case of eye contact** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.
- If swallowed** Clean mouth with water and drink afterwards plenty of water.

4.2 Most important symptoms and effects, both acute and delayed

None reasonably foreseeable.

4.3 Indication of any immediate medical attention and special treatment needed

Note to Physician: Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

- Suitable extinguishing media** Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- Unsuitable extinguishing media** No information available.

5.2 Specific hazards arising from the substance or mixture

Do not allow run-off from fire-fighting to enter drains or water courses. None reasonably foreseeable.

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.

5.4 Further information

- Flash Point** No information available.
- Autoignition Temperature** No information available.
- Explosion limits**
- Upper** No information available.

Lower No information available.
Sensitivity to Mechanical Impact No information available.
Sensitivity to Static Discharge No information available.

NFPA

Health	Flammability	Instability	Physical hazards
3	1	0	N/A

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Use personal protective equipment as required.

6.2 Environmental precautions

Do not flush into surface water or sanitary sewer system. Do not allow material to contaminate ground water system. Prevent product from entering drains. Local authorities should be advised if significant spillages cannot be contained. Should not be released into the environment.

6.3 Methods and materials for containment and cleaning up

Soak up with inert absorbent material. Keep in suitable, closed container 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

Precautions on safe handling

Wear personal protective equipment/face protection. Do not get in eyes, on skin, or on clothing. Ensure adequate ventilation. Avoid ingestion and inhalation.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

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

Incompatibilities

Combustible material.

SECTION 8: Exposure controls/personal protection

8.1 Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Component	Type	Value
Silver Nitrate	TWA	0.01 mg/m3

US. ACGIH Threshold Limit Values

Component	Type	Value
Silver Nitrate	TWA	0.01 mg/m3

US. NIOSH: Pocket Guide to Chemical Hazards

Component	Type	Value
Silver Nitrate	IDLH	10 mg/m3
	TWA	0.01 mg/m3

Biological occupational exposure limits

No information available.

8.2 Exposure controls

Appropriate engineering controls

Use only under a chemical fume hood. Ensure that eyewash stations and safety showers are close to the workstation location.

Personal protective equipment

Eye/face protection

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin protection

Wear appropriate protective gloves.

Body Protection

Wear appropriate clothing to prevent skin exposure.

Respiratory protection

No protective equipment is needed under normal use conditions.

Control of environmental exposure

Do not let product enter drains.

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 information available.
Lower	No information available.
Vapor Pressure	No information available.
Vapor Density	No information available.
Density	No information available.
Solubility	Miscible.
Partition coefficient; n-octanol/water	No information available.
Autoignition Temp	No information available.
Decomposition Temp	No information available.
Viscosity	No information available.
Molecular Formula	AgNO ₃
Molecular Weight	169.872
VOC Content(%)	No information available.
Oxidizing properties	No information available.

9.2 Other safety information

No information available.

SECTION 10: Stability and reactivity

10.1 Reactivity

None known, based on information available.

10.2 Chemical stability

Light sensitive.

10.3 Possibility of hazardous reactions

None under normal processing.

10.4 Conditions to avoid

Incompatible products. Excess heat. Exposure to light.

10.5 Incompatible materials

Combustible material.

10.6 Hazardous decomposition products

Nitrogen oxides (NO_x), Silver oxides.

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	> 2000 mg/kg (rat)	> 2000 mg/kg (rat)	> 750 µg/m ³ (rat)

Skin corrosion/irritation

No information available.

Serious eye damage/eye irritation

No information available.

Respiratory or skin sensitization

No information available.

Germ cell mutagenicity

No information available.

Carcinogenicity

Component	CAS	IARC	NTP	ACGIH	OSHA	Mexico
Water	7732-18-5	Not listed	Not listed	Not listed	Not listed	Not listed
Silver Nitrate	7761-88-8	Not listed	Not listed	Not listed	Not listed	Not listed

Specific target organ toxicity - single exposure

None known.

Specific target organ toxicity - repeated exposure

None known.

Reproductive toxicity

No information available.

Chronic effects

No information available.

11.2 Additional Information

The toxicological properties have not been fully investigated.

SECTION 12: Ecological information

12.1 Toxicity

Product	Species	Test Results
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Silver Nitrate	LC50	Leuciscus idus	0.029 mg/L	96 h
	EC50	Photobacterium phosphoreum	0.038 mg/L	24 h
	EC50	Photobacterium phosphoreum	0.395 mg/L	15 min
	EC50	Water flea	0.0006 mg/L	48 h

12.2 Persistence and degradability

May persist based on information available.

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. log Pow = 0.19

12.5 Results of PBT and vPvB assessment

No information available.

12.6 Endocrine disrupting properties

No information available.

12.7 Other adverse effects

No information 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-No	UN3264
Proper Shipping Name	Corrosive liquid, acidic, inorganic, n.o.s
Hazard Class	8
Packing Group	III

IMDG

UN-No	UN3264
Proper Shipping Name	Corrosive liquid, acidic, inorganic, n.o.s
Hazard Class	8
Packing Group	III

IATA

UN-No	UN3264
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Proper Shipping Name Corrosive liquid, acidic, inorganic, n.o.s
Hazard Class 8
Packing Group III

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 listed.

CERCLA Hazardous Substance List (40 CFR 302.4)
Listed.
Silver Nitrate. RQ: 1 lb

SARA 304 Emergency release notification
Not listed.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)
Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance
Not listed.

SARA 311/312 Hazardous
See section 2 for more information.

SARA 313 (TRI reporting)
Regulated.
Silver Nitrate. Weight: 0.845 - 0.855% ; Threshold value: 1.0%

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List
Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)
Not regulated.

Safe Drinking Water Act
Not regulated.

FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace
Not listed.

US state regulations

US. Massachusetts RTK - Substance List

Listed (Silver Nitrate).

US. New Jersey Worker and Community Right-to-Know Act

Listed (Silver Nitrate).

US. Pennsylvania Worker and Community Right-to-Know Law

Listed (Silver Nitrate and Water).

California Proposition 65

Not listed.

SECTION 16: Other information

Issue date: 10/18/2024

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.