

Safety Data Sheet

SILVER NITRATE, 1% AQUEOUS

Section 1 - Chemical Product and Company Identification

SDS Name: Silver Nitrate, 1% Aqueous

Catalog Numbers: SO-619, A-115-2, A-116-2, SO-607, SO-612

Company Identification: Transene Company, Inc., DBA ROWLEY BIOCHEMICAL, Inc.
10 ELECTRONICS AVENUE
DANVERS, MA 01923

For information, call: 978-739-4883

Emergency Number: 800-424-9300

For CHEMTREC assistance, call: 800-424-9300

Section 2 - Hazards Identification

GHS Classifications

H272-Oxidizing liquids: 3

H302-Acute toxicity, oral: 4

H312-Acute toxicity, dermal: 4

H315-Skin corrosion/irritation: 2

H319-Serious eye damage/eye irritation: 2A

H373-Specific target organ toxicity, repeated exposure: 2

Pictograms or Hazard symbols and Hazard statement(s):



Signal word: Warning

Hazard Statements:

H272-May intensify fire; oxidizer
H302-Harmful if swallowed
H312-Harmful in contact with skin
H315-Causes skin irritation
H319-Causes serious eye irritation
H373-May cause damage to organs through prolonged or repeated exposure (target organs: kidney and liver.)

Precautionary Statements:

P210-Keep away from heat.
P220-Keep/Store away from clothing/combustible materials.
P221-Take any precaution to avoid mixing with combustibles.
P260-Do not breathe dust/fume/gas/mist/vapours/spray.
P264-Wash thoroughly after handling.
P270-Do not eat, drink, or smoke when using this product.
P280-Wear protective gloves/protective clothing/eye protection/face protection.
P301+P312-If swallowed: Call a Poison Center or doctor/physician if you feel unwell.
P302+P352-If on skin: Wash with plenty of soap and water.
P305+P351+P338-If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312-Call a Poison Center or doctor/physician if you feel unwell.
P314-Get medical advice/attention if you feel unwell.
P330-Rinse mouth.
P332+P313-If skin irritation occurs: Get medical advice/attention.
P337+P313-If eye irritation persists: Get medical advice/attention.
P362-Take off contaminated clothing and wash before reuse.
P363-Wash contaminated clothing before reuse.
P370+P378-In case of fire: Use dry chemical, dry sand, water spray or alcohol-resistant foam to extinguish.
P501-Dispose of contents/container in accordance with local/regional/national/international regulations.

Section 3 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent
7761-88-8	Silver Nitrate	1 w/v
7732-18-5	Water	balance

Section 4 - First Aid Measures

Eye Exposure: In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

Dermal Exposure: In case of skin contact, flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. Seek immediate medical attention.

Oral Exposure: If swallowed, seek immediate medical advice. Do not induce vomiting. Drink water.

Inhalation Exposure: If inhaled, remove to fresh air. If breathing becomes difficult, call a physician.

Section 5 - Fire Fighting Measures

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating gases may be generated by thermal decomposition or combustion.

Extinguishing Media: Use dry chemical, dry sand, water spray, or alcohol-resistant foam.

Hazardous Combustion Products: Nitrogen oxides, silver oxides.

Flash Point: Not available

Autoignition Temperature: Not available

Explosion Limits, Lower: Not available

Upper: Not available

NFPA Rating: (estimated) Health: 1; Flammability: 0; Instability: 0

Section 6 - Accidental Release Measures

Procedure(s) of Personal Precaution(s):

Wear personal protective equipment. Do not ingest or inhale. Do not get on skin or clothing. Do not get in eyes. Ensure adequate ventilation.

Methods for Cleaning up: Absorb with sand, earth, or vermiculite. Carefully sweep up and containerize for proper disposal. Do not release to the environment. Do not release to drains.

Section 7 - Handling and Storage

Use care when handling. Wear personal protective equipment. Wash thoroughly after handling. Use with adequate ventilation. Avoid contact with skin, eyes, and clothing. Avoid ingestion and inhalation. Store in a cool, dry, and well-ventilated area. Keep away from direct sunlight. Light sensitive. Keep in a tightly closed and non-metal container. Keep away from incompatible materials. Do not store near combustible materials.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls: Use explosion-proof ventilation equipment. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

Personal Protective Equipment

Eyes: 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: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

Respirators: A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant a respirator's use.

Exposure Limits:

Chemical Name	ACGIH	NIOSH	OSHA – Vacated PELs
Silver Nitrate CAS#7761-88-8	0.01 mg/m ³ TWA	0.01 mg/m ³ TWA 10 mg/m ³ IDLH	0.01 mg/m ³ TWA

Section 9 - Physical and Chemical Properties

Physical State: Liquid

Appearance: Clear

Odor: Odorless

Vapor Pressure: Not available

Odor threshold: Not available

Vapor Density: Not available

pH: 4.5-5.6

Relative density: Not available

Melting point/freezing point: Not available

Solubility: Soluble in water

Boiling Point: Not available

Flash point: Not available

Evaporation Rate: Not available

Flammability (solid, gas): Not available

Partition coefficient: n-octanol/water: Not available

Auto-ignition temperature: Not available

Decomposition temperature: Not available

Viscosity: Not available

Specific Gravity/Density: Not available

Section 10 - Stability and Reactivity

Chemical Stability: Stable under normal temperatures and pressures. Light sensitive.

Conditions to Avoid: Incompatible materials, ignition sources, excess heat, freezing, combustible material, and exposure to light.

Incompatibilities with Other Materials: Strong oxidizing agents, strong reducing agents, combustible material, metals, amines, aluminum, alkalis, metals, and halogenated compounds.

Hazardous Decomposition Products: Nitrogen oxides, silver oxides.

Section 11 - Toxicological Information

CAS#7761-88-8 Silver Nitrate: RTECS#: VW4725000

LD50 Oral: >2000 mg/kg (rat)

LD50 Dermal: >2000 mg/kg (rat)

LC50 Inhalation: >750 µg/m³ 4h (rat)

Carcinogenicity: Silver Nitrate CAS#7761-88-8 is not listed by IARC, NTP, ACGIH, OSHA, or California Prop 65.

Epidemiology: Not available

Teratogenicity: Not available

Reproductive Effects: Not available

Developmental Effects: Not available

Neurotoxicity: Not available

Mutagenicity: Not available

Specific Organ Toxicity, Single Exposure: Not available

Specific Organ Toxicity, Repeated Exposure: Kidney and liver.

The toxicological properties of this material have not been thoroughly investigated.

Section 12 - Ecological Information

Ecotoxicity: Do not release to the environment. Do not release to drains. Very toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

CAS#7761-88-8 Silver Nitrate:

LC50, freshwater fish: 0.029 mg/L 96h (leuciscus idus)

EC50, water flea: 0.0006 mg/L 48h

EC50, microtox: 0.038 mg/L 24h (photobacterium phosphoreum)

EC50, microtox: 0.395 mg/L 15min (photobacterium phosphoreum)

Persistence and degradability: Not available

Bio-accumulative potential: Not available

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

Section 13 - Disposal Considerations

DISPOSAL: Dispose of in accordance with all federal, state, and local regulations.

Section 14 - Transport Information

DOT

Non-regulated

Section 15 - Regulatory Information

Canada Regulatory Information

WHMIS Classification: This product has been classified in accordance with the hazard criteria of the CPR, and the SDS contains all the information required by the CPR.

Section 16 - Additional Information

SDS Creation Date: 1-22-04

Revision #1 7-18-14 YM

Revision #2 12-14-18

Revision #3 3-3-22

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