

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Silver Nitrate Solution, 5%

SYNONYMS: Silver nitrate solution

CATALOG CODES: VSN-100

MANUFACTURER: Volu-Sol

ADDRESS: 5095 West 2100 South
Salt Lake City, UT 84120

EMERGENCY PHONE: (800) 535-5053

OTHER CALLS: (801) 974-9474

FAX: (801) 974-9553

CHEMICAL FAMILY: -

CHEMICAL FORMULA: -

PREPARED BY: Volu-Sol

RECOMMENDED USE: Laboratory chemicals

RESTRICTIONS ON USE: Use as recommended

SECTION 2: HAZARD(S) IDENTIFICATION

EMERGENCY OVERVIEW:

GHS Classification: Skin irritation (Category 2)
Eye irritation (Category 2A)
Acute aquatic toxicity (Category 1)
Chronic aquatic toxicity (Category 1)

GHS LABEL ELEMENTS:

Pictogram:



Signal Word:

Warning

Hazard Statement(s):

H315 Causes skin irritation

H319 Causes serious eye irritation

H410 Very toxic to aquatic life with long lasting effects

Precautionary Statement(s):

P264 Wash skin thoroughly after handling

P273 Avoid release to the environment

P280 Wear protective gloves/eye protection/ face protection

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

P321 Specific treatment (see supplemental first aid instructions on this label)

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

P391 Collect spillage

P501 Dispose of contents/ container to an approved waste disposal plant

OTHER HAZARDS: None

HMIS Classification:

Health hazard: 3

Chronic health hazard: -

Flammability: 0

Physical hazards: 3

NFPA Rating:

Health hazard: 3

Fire: 0

Reactivity Hazard: 0

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT	CAS NO. EC-NO. Index-NO.
Silver nitrate (1-5%)	7761-88-8 231-853-9 047-001-00-2

SECTION 4: FIRST AID MEASURES

INHALATION: If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician

INGESTION: Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician

SKIN: Wash off with soap and plenty of water. Consult a physician

EYE: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. Continue rinsing eyes during transport to hospital

SECTION 5: FIRE-FIGHTING MEASURES

FLAMMABLE LIMITS IN AIR: Percentage by Volume
Upper: %
Lower: %

FLASH POINT: -

AUTOIGNITION TEMPERATURE: -

EXTINGUISHING MEDIA: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide

FIRE FIGHTING PROCEDURES: In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full face piece operated in the pressure demand or other positive pressure mode

FIRE AND EXPLOSION HAZARDS: No data available

SECTION 6: ACCIDENTAL RELEASE MEASURES

ACCIDENTAL RELEASE MEASURES: Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided. Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal

SECTION 7: HANDLING AND STORAGE

HANDLING AND STORAGE: Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Recommended storage temperature 2 - 8 °C. Light sensitive. Store under inert gas.

INCOMPATIBILITIES: Magnesium, Strong bases, Strong reducing agents

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

EXPOSURE LIMITS: Reported in a time-weighted average (TWA)

Component	CAS-No.	OSHA		ACGIH	
		ppm	mg/m ³	ppm	mg/m ³
Silver nitrate	7761-88-8		0.01 PEL		0.01 TLV

VENTILATION SYSTEM: Local and/or general exhaust is recommended to keep exposure below limits. Local exhaust ventilation is preferred for control of the emissions at its source, preventing dispersion into the general work area. Please refer to the ACGIH document, *Industrial Ventilation: A Manual of Recommended Practices*, for details

PERSONAL RESPIRATORS: Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multipurpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

SKIN PROTECTION: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

EYE PROTECTION: Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU)

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: liquid
ODOR: -
SOLUBILITY: -
pH: -
BOILING POINT: -
MELTING POINT: -
VAPOR PRESSURE: -
DENSITY: -
VISCOSITY: -
REFRACTIVE INDEX: -

SECTION 10: STABILITY AND REACTIVITY

CHEMICAL STABILITY: Stable under recommended conditions of use and storage

CONDITIONS TO AVOID: No data available

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: No data available

SECTION 11: TOXICOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION:

Acute Toxicity: No data available

Skin/Eye Irritation: No data available

Carcinogenicity:

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by IARC.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by OSHA.

SECTION 12: ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION: PBT/vPvB assessment not available as chemical safety assessment not required/not conducted. An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Very toxic to aquatic life

Toxicity: No data available

Persistence and degradability: No data available

Mobility in soil: No data available

PBT/vPvB Results: No data available

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Dispose of as unused product

SECTION 14: TRANSPORT INFORMATION

US DOT	IATA	IMDG/IMO
Shipping Name: Not dangerous goods	Shipping Name: Environmentally hazardous substance, liquid, n.o.s. (Silver nitrate)	Shipping Name: Environmentally hazardous substance, liquid, n.o.s. (Silver nitrate)
Hazard Class: Not dangerous goods	Hazard Class: 9	Hazard Class: 9
UN Number: Not dangerous goods	UN Number: 3082	UN Number: 3082
Packing Group: Not dangerous goods	Packing Group: III	Packing Group: III

SECTION 15: REGULATORY INFORMATION

SARA 302	-
SARA 313	7761-88-8
SARA 311/312 Hazards	Acute Health Hazard
State	Right to know lists: MA: 7761-88-8 PA: 7732-18-5, 7761-88-8 NJ: 7732-18-5, 7761-88-8 California Prop. 65 Components:

SECTION 16: OTHER INFORMATION

Disclaimer: The information is provided without any representation or warranty, express or implied, regarding the accuracy or correctness. The conditions or methods of handling, storage, use, and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage, or expense arising out of or in any way connected with the handling, storage, use, or disposal of the product.