



Safety Data Sheet
According to the (US) Hazard Communication Standard (29 CFR 1910.1200)

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name Silver Nitrate, 0.171 N
NCL Catalog Number S-18
Product Description Laboratory chemical
Supplier
NCL of Wisconsin, Inc. **Telephone:** 1-800-648-7836 **Fax:** 715-449-2454
P.O. Box 8 **Emergency Contact:** 1-800-424-9300 (Chemtrec)
Biramwood, WI 54414 **Email:** nclabs@nclabs.com

SECTION 2: HAZARDS IDENTIFICATION

GHS Classification

Skin Irritation Category 2
Eye Irritation Category 2A
Aquatic Acute Category 3
Aquatic Chronic Category 3



Signal Word Warning

Hazard Statements

H315 Causes skin irritation.
H319 Causes serious eye irritation.
H412 Harmful to aquatic life with long lasting effects.

Precautionary Statements

P264 Wash exposed 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.
P332+P313 If skin irritation occurs: Get medical advice/attention.
P362+P364 Take off contaminated clothing and wash it before reuse.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313 If eye irritation persists: Get medical advice/attention.
P501 Dispose of contents/container to comply with local, state and federal regulations.

Other Hazards Not Contributing to the Classification None under normal conditions.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Identity Not applicable
Common Name Not applicable

Mixture

Name	CAS #	Approximate %
Water	7732-18-5	>97
Silver Nitrate	7761-88-8	<3

SECTION 4: FIRST AID MEASURES

Description of First Aid Measures

General First Aid Measures	Never give anything by mouth to an unconscious person. Seek medical advice if you feel unwell.
If Inhaled	Remove person to fresh air and keep comfortable for breathing. Allow victim to rest. Get medical attention if you feel unwell.
In Case of Skin Contact	Remove contaminated clothing and wash exposed skin with mild soap and water. Rinse with warm water. Get medical attention if irritation develops.
In Case of Eye Contact	Immediately flush eyes with plenty of water. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops.
If Swallowed	Rinse mouth. Do NOT induce vomiting. Get medical attention if you feel unwell.

Most Important Symptoms/Effects Acute and Delayed

After Inhalation	May cause respiratory irritation.
After Skin Contact	Causes skin irritation.
After Eye Contact	Causes serious eye irritation.
After Ingestion	Nausea and vomiting. Diarrhea. Blue/grey discoloration of the skin. Methemoglobinemia. Change in urine output.
Chronic Symptoms	Blue/grey discoloration of the skin. Methemoglobinemia.

Indication of Immediate Medical Attention and Special Treatment Needed

No additional information available.

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media	Foam. Dry powder. Sand. Carbon dioxide. Water spray.
Unsuitable Extinguishing Media	Do not use high pressure water stream.

Special Hazards Arising from the Chemical

No additional information available.

Special Protective Actions for Fire-Fighters

Wear self-contained breathing apparatus and protective clothing. Keep exposed containers cool with water spray.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

Personal Precautions	Wear chemically protective gloves, lab coat, or apron to prevent prolonged or repeated skin contact. Use personal protective equipment (see section 8). Safety glasses, gloves. Evacuate area of non-essential personnel. Eliminate ignition sources.
Environmental Precautions	Prevent entry to surface and ground waters.
Methods and Materials for Containment and Cleaning Up	Clean up spill with inert absorbent material. Collect spillage. Store away from other materials. Ensure compliance with local, state and federal regulations.

SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling	Avoid contact with eyes and skin. Avoid breathing vapors. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor.
Conditions for Safe Storage Including any Incompatibilities	Keep in a tightly closed container, stored in a cool, dry, ventilated area. Store separate from strong reducing agents.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

Silver Nitrate (7761-88-8)		
USA ACGIH	ACGIH TWA (mg/m ³)	0.01 mg/m ³
USA OSHA	OSHA PEL TWA (mg/m ³)	0.01 mg/m ³

Appropriate Engineering Controls

Material should be handled or transferred in a fume hood or with equivalent ventilation. Maintain eye-wash fountain and quick-drench facilities in work area.

Individual Protection Measures

Avoid all unnecessary exposure.

Eye/Face Protection

Use chemical safety goggles and/or a full face shield where splashing is possible. Contact lenses should not be worn when working with this material.

Skin Protection

Rubber or neoprene gloves and additional protection including impervious boots, apron, or coveralls, as needed in areas of unusual exposure to prevent skin contact.

Respiratory Protection

Wear appropriate mask.

Other Information

Do not eat, drink or smoke when using this product.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Liquid
Color	Colorless
Odor	Odorless
Odor Threshold	Not determined
pH	Not determined
Melting Point/Freezing Point	Not determined
Initial Boiling Point and Boiling Range	Not determined
Flash Point	Not determined
Evaporation Rate	Not determined
Flammability (Solid, Gas)	Not determined
Upper/Lower Flammability/Explosive Limits	Not determined
Vapor Pressure	Not determined
Vapor Density	Not determined
Relative Density	Not determined
Solubility	Not determined
Partition Coefficient: n-octanol/water	Not determined
Auto-Ignition Temperature	Not determined
Decomposition Temperature	Not determined
Viscosity	Not determined

SECTION 10: STABILITY AND REACTIVITY

Reactivity	No data available
Chemical Stability	Stable under ordinary conditions of use and storage.
Possibility of Hazardous Reactions	No data available
Conditions to Avoid	No data available
Incompatible Materials	Strong reducing agents
Hazardous Decomposition Products	When heated to decomposition, can emit toxic gases (oxides of nitrogen).

SECTION 11: TOXICOLOGICAL INFORMATION

Acute Toxicity	Not classified
Silver Nitrate (7761-88-8)	
LD50 oral rat	1173 mg/kg
Water (7732-18-5)	
LD50 oral rat	>90000 mg/kg
Skin Corrosion/Irritation	Causes skin irritation.
Serious Eye Damage/Irritation	Causes serious eye irritation.
Respiratory or Skin Sensitization	Not classified
Germ Cell Mutagenicity	Not classified
Carcinogenicity	Not classified
Reproductive Toxicity	Not classified
Specific Target Organ Toxicity (Single Exposure)	Not classified
Specific Target Organ Toxicity (Repeated Exposure)	Not classified
Aspiration Hazard	Not classified
Potential Adverse Human Health Effects and Symptoms	No data available
Symptoms/Injuries After Inhalation	Not classified
Symptoms/Injuries After Skin Contact	Causes skin irritation
Symptoms/Injuries After Eye Contact	Causes serious eye irritation
Symptoms/Injuries After Ingestion	Nausea and vomiting. Diarrhea. Blue/grey discoloration of the skin. Methemoglobinemia. Change in the urine output.
Chronic Symptoms	Discoloration of the skin. Methemoglobinemia.
Likely Routes of Exposure	Inhalation. Skin and eye contact
Other Information	Not available

SECTION 12: ECOLOGICAL INFORMATION

Ecology – Water Toxicity Harmful to aquatic life with long lasting effects.

Silver Nitrate (7761-88-8)	
LC50 Fish 1	0.0039 mg/l (96 h; Pimephales promelas; Flow-through systems)
EC50 Daphnia 1	0.0006 mg/l (48 h; Daphnia magna; LOCOMOTOR EFFECT)
LC50 Fish 2	0.006 mg/l (96 h; Salmo gairdneri (Oncorhynchus mykiss))
EC50 Daphnia 2	0.006 mg/l (48 h; Crangon sp.)
Threshold Limit Other Aquatic Organisms 1	0.006 mg/l (Pseudomonas putida; TOXICITY TEST)
Threshold Limit Algae 1	0.0007 mg/l (Microcystis aeruginosa; TOXICITY TEST)
Threshold Limit Algae 2	0.0095 mg/l (Scenedesmus quadricauda; TOXICITY TEST)

Persistence and Degradability Not applicable.

Bioaccumulative Potential: Silver Nitrate (7761-88-8)	
BCF Fish 1	11-19 (Micropterus salmoides; CHRONIC)
BCF Fish 2	15-150 (Lepomis macrochirus; CHRONIC)
Log Pow	0.19 (Estimated value)
Bioaccumulative Potential	Low potential for bioaccumulation (BCF < 500)

Mobility in Soil Not established

Other Adverse Effects Avoid release to the environment

SECTION 13: DISPOSAL CONSIDERATIONS

Methods of Disposal

Disposal Recommendations Dispose of contents/containers in accordance with local, state and federal regulations.

Other Information Avoid release to the surrounding environment.

SECTION 14: TRANSPORT INFORMATION

UN Number Not applicable

UN Shipping Name Not applicable

Transport Hazard Class(es) Not applicable

Packing Group Not applicable

Environmental Hazards Not applicable

Transport in Bulk Not applicable

Other Precautions Not applicable

SECTION 15: REGULATORY INFORMATION

Silver Nitrate (7761-88-8)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
RQ (Reportable quantity)	1 lb
Water (7732-18-5)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	

SECTION 16: OTHER INFORMATION

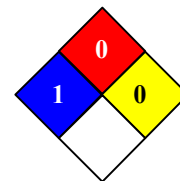
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NFPA Hazards

Health Hazard 1: Exposure could cause irritation, but only minor residual injury even if no treatment is given.

Fire Hazard 0: Materials that will not burn.

Reactivity/Instability 0: Normally stable, even under fire exposure conditions, and are not reactive with water.



HMIS III Rating

Health 1: Irritation or minor reversible injury possible

Flammability 0: Materials that will not burn.

Physical Hazard 0: Materials that are normally stable.

Personal Protection B

S-18	
Health	1
Flammability	0
Physical Hazard	0
Personal Protection	B

The information contained herein is provided in good faith and is believed to be correct as of the date hereof. However, NCL of Wisconsin, Inc. makes no representation as to the comprehensiveness or accuracy of the information. It is expected that individuals receiving the information will exercise their independent judgment in determining its appropriateness for their conditions of use. Accordingly, NCL of Wisconsin, Inc. will not be responsible for damages of any kind resulting from the use of or reliance upon such information.

END OF SAFETY DATA SHEET