

MATERIAL SAFETY DATA SHEET

Date issued : 28/04/2026

Revision : 01

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME : **0.282 N SILVER NITRATE**

CHEMICAL DESCRIPTION : **AQUEOUS SILVER NITRATE TITRANT**

COMPANY : ImproChem (Pty) Ltd T/A AECI Water
1 Wharhirst Road.
Umbogintwini.
Durban , 4126.

EMERGENCY TELEPHONE NUMBER **0800 SPILLS OR 0800 774557**

TELEPHONE NUMBERS **+27 11 971 0400**

FAX NUMBERS **+27 11 394 3436**

2. COMPOSITION/INFORMATION ON INGREDIENTS

Our hazard evaluation has identified the following chemical substance(s) as hazardous

Hazardous Substance(s)	CAS NO	% (w/w)
Silver Nitrate	7761-88-8	1.0 - 5.0

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

DANGER

Corrosive. May cause tissue damage.

Do not get in eyes, on skin, on clothing. Do not take internally. Use with adequate ventilation. Keep container tightly closed and in a well-ventilated place. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. After contact with skin, wash immediately with plenty of water.

Wear a face shield. Wear chemical resistant apron, chemical splash goggles, impervious gloves and boots.

Not flammable or combustible. May evolve oxides of nitrogen (NOx) under fire conditions.

PRIMARY ROUTES OF EXPOSURE :

Eye, Skin

HUMAN HEALTH HAZARDS - ACUTE :

EYE CONTACT :

May cause severe irritation or tissue damage depending on the length of exposure and the type of first aid administered.

SKIN CONTACT :

May cause severe irritation or tissue damage depending on the length of exposure and the type of first aid administered.

INGESTION :

Not a likely route of exposure. There may be irritation to the gastro-intestinal tract with nausea and vomiting.

INHALATION :

Not a likely route of exposure. Irritating, in high concentrations, to the eyes, nose, throat and lungs.

SYMPTOMS OF EXPOSURE :

Acute :

A review of available data does not identify any symptoms from exposure not previously mentioned.

AGGRAVATION OF EXISTING CONDITIONS :

A review of available data does not identify any worsening of existing conditions.

4.	FIRST AID MEASURES
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EYE CONTACT :

PROMPT ACTION IS ESSENTIAL IN CASE OF CONTACT. Immediately flush eye with water for at least 15 minutes while holding eyelids open. Get immediate medical attention.

SKIN CONTACT :

Immediately flush with plenty of water for at least 15 minutes. For a large splash, flood body under a shower. Remove contaminated clothing. Wash off affected area immediately with plenty of water. Get immediate medical attention. Contaminated clothing, shoes, and leather goods must be discarded or cleaned before re-use.

INGESTION :

DO NOT INDUCE VOMITING. If conscious, washout mouth and give water to drink. Get immediate medical attention.

INHALATION :

Remove to fresh air, treat symptomatically. Get medical attention.

NOTE TO PHYSICIAN :

Probable mucosal damage may contraindicate the use of gastric lavage. Based on the individual reactions of the patient, the physician's judgement should be used to control symptoms and clinical condition.

5.	FIRE FIGHTING MEASURES
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FLASH POINT : None

EXTINGUISHING MEDIA :

Not expected to burn. Use extinguishing media appropriate for surrounding fire.

FIRE AND EXPLOSION HAZARD :

Not flammable or combustible. May evolve oxides of nitrogen (NO_x) under fire conditions.

SPECIAL PROTECTIVE EQUIPMENT FOR FIRE FIGHTING :

In case of fire, wear a full face positive-pressure self contained breathing apparatus and protective suit.

6.	ACCIDENTAL RELEASE MEASURES
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PERSONAL PRECAUTIONS :

Restrict access to area as appropriate until clean-up operations are complete. Ensure clean-up is conducted by trained personnel only. Do not touch spilled material. Stop or reduce any leaks if it is safe to do so. Use personal protective equipment recommended in Section 8 (Exposure Controls/Personal Protection). Notify appropriate government, occupational health and safety and environmental authorities.

METHODS FOR CLEANING UP :

SMALL SPILLS: Soak up spill with absorbent material. Place residues in a suitable, covered, properly labeled container. Wash affected area. Dispose of material in compliance with regulations indicated in Section 13 (Disposal Considerations).

ENVIRONMENTAL PRECAUTIONS :

Do not contaminate surface water.

7.	HANDLING AND STORAGE
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HANDLING :

Do not get in eyes, on skin, on clothing. Do not take internally. Use with adequate ventilation. Avoid generating aerosols and mists. Keep the containers closed when not in use. Have emergency equipment (for fires, spills, leaks, etc.) readily available.

STORAGE CONDITIONS :

Store the containers tightly closed. Store in suitable labelled containers.

8.	EXPOSURE CONTROLS/PERSONAL PROTECTION
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OCCUPATIONAL EXPOSURE LIMITS :

This product does not contain any substance that has an established exposure limit.

ACGIH/TLV :

Substance(s)

Silver Soluble Compounds (as Ag)	TWA: 0.01 mg/m ³
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OSHA/PEL :

Substance(s)

Silver Soluble Compounds (as Ag)	TWA: 0.01 mg/m ³
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ENGINEERING MEASURES :

General ventilation is recommended. Use local exhaust ventilation if necessary to control airborne mist and vapor.

RESPIRATORY PROTECTION :

If significant mists, vapors or aerosols are generated an approved respirator is recommended. A dust, mist, fume cartridge may be used. In event of emergency or planned entry into unknown concentrations a positive pressure, full-facepiece SCBA should be used. If respiratory protection is required, institute a complete respiratory protection program including selection, fit testing, training, maintenance and inspection.

HAND PROTECTION :

PVC GLOVES, Rubber gloves, Neoprene gloves

SKIN PROTECTION :

Wear standard protective clothing.

EYE PROTECTION :

Wear chemical splash goggles.

HYGIENE RECOMMENDATIONS :

Eye wash station and safety shower are necessary. If clothing is contaminated, remove clothing and thoroughly wash the affected area. Launder contaminated clothing before reuse.

Based on our recommended product application and personal protective equipment, the potential human exposure is: Low

9.	PHYSICAL AND CHEMICAL PROPERTIES
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PHYSICAL STATE	Liquid
APPEARANCE	Colourless
ODOR	None
SOLUBILITY IN WATER	Complete
pH (100 %)	7

10.	STABILITY AND REACTIVITY
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STABILITY :

Stable under normal conditions.

HAZARDOUS POLYMERIZATION :

Hazardous polymerization will not occur.

CONDITIONS TO AVOID :

Freezing temperatures.

MATERIALS TO AVOID :

None known.

HAZARDOUS DECOMPOSITION PRODUCTS :

Under fire conditions: Oxides of nitrogen

11.	TOXICOLOGICAL INFORMATION
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No toxicity studies have been conducted on this product.

SENSITIZATION :

This product is not expected to be a sensitizer.

CARCINOGENICITY :

None of the substances in this product are listed as carcinogens by the International Agency for Research on Cancer (IARC), or the American Conference of Governmental Industrial Hygienists (ACGIH).

Based on our hazard characterization, the potential human hazard is: Low

12.	ECOLOGICAL INFORMATION
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ECOTOXICOLOGICAL EFFECTS :

No toxicity studies have been conducted on this product.

Based on our hazard characterization, the potential environmental hazard is: High

13.	DISPOSAL CONSIDERATIONS
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Hazardous wastes must be transported by a licensed hazardous waste transporter and disposed of or treated in a properly licensed hazardous waste treatment, storage, disposal or recycling facility. Consult local, state, and federal regulations for specific requirements.

14.	TRANSPORT INFORMATION
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LAND TRANSPORT :

Proper Shipping Name :

PRODUCT IS NOT REGULATED DURING
TRANSPORTATION

AIR TRANSPORT (ICAO/IATA) :

Proper Shipping Name :

PRODUCT IS NOT REGULATED DURING
TRANSPORTATION

MARINE TRANSPORT (IMDG/IMO) :

Proper Shipping Name :

PRODUCT IS NOT REGULATED DURING
TRANSPORTATION

15.	REGULATORY INFORMATION
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NATIONAL REGULATIONS, USA :

OSHA HAZARD COMMUNICATION RULE, 29 CFR 1910.1200 :

Based on our hazard evaluation, the following substance(s) in this product is/are hazardous and the reason(s) is/are shown below., Based on our hazard evaluation, none of the substances in this product are hazardous.

Silver Nitrate : Irritant

SARA/SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 (TITLE III) - SECTIONS 302, 311, 312, AND 313 :

SECTIONS 311 AND 312 - MATERIAL SAFETY DATA SHEET REQUIREMENTS (40 CFR 370) :

Our hazard evaluation has found this product to be hazardous.

X	Immediate (Acute) Health Hazard
	Delayed (Chronic) Health Hazard
-	Fire Hazard
-	Sudden Release of Pressure Hazard
-	Reactive Hazard

SECTION 313 - LIST OF TOXIC CHEMICALS (40 CFR 372) :

This product contains the following substance(s), (with CAS # and % range) which appear(s) on the List of Toxic Chemicals

<u>Hazardous Substance(s)</u>	<u>CAS NO</u>	<u>% (w/w)</u>
Silver Nitrate	7761-88-8	-

TOXIC SUBSTANCES CONTROL ACT (TSCA) :

The chemical substances in this product are on the TSCA 8(b) Inventory (40 CFR 710) or are sold commercially under the polymer exemption (40 CFR 723.250).

FEDERAL WATER POLLUTION CONTROL ACT, CLEAN WATER ACT, 40 CFR 401.15 / formerly Sec. 307, 40 CFR / formerly Sec. 311 :

This product contains the following substances listed in the regulation:

<u>Substance(s)</u>	<u>Citations</u>
Silver Nitrate :	Sec. 307, Sec. 311

CALIFORNIA PROPOSITION 65 :

This product does not contain substances which require warning under California Proposition 65.

16.	OTHER INFORMATION
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