

# SAFETY DATA SHEET

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## SECTION 1. IDENTIFICATION

**Product Identifier:** (4N) 99.99% Silver Chloride

**Product Code:** AG-CL-04

**CAS Number:** 7783-90-6

**Relevant identified uses of the substance:** Scientific research and development

Supplier details:

American Elements  
10884 Weyburn Ave.  
Los Angeles, CA 90024  
Tel: +1 310-208-0551  
Fax: +1 310-208-0351  
Emergency telephone number:  
+1 800-424-9300

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## SECTION 2. HAZARDS IDENTIFICATION

Harmful by ingestion, inhalation and skin contact. Prolonged exposure may result in argyria, a bluish discolouration of the skin. Irritating to eyes and may irritate skin.

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## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

COMPONENT NAME	CAS No.	% CLASS	HEALTH RISK	UN No.
Silver Chloride	7783-90-6	100%	N.R. N.R.	22/24-25 -

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## SECTION 4. FIRST AID MEASURES

GENERAL: Consult a Physician for specific advice

EYES: Irrigate thoroughly with water for at least 10 minutes. Obtain medical attention.

SKIN: Wash off thoroughly with water. Remove contaminated clothing and wash before re-use. In severe cases obtain medical attention.

INHALATION: Remove from exposure, rest and keep warm. In severe cases seek medical attention.

INGESTION: Wash out mouth thoroughly with water and give plenty to drink. Obtain medical attention.

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## **SECTION 5. FIREFIGHTING MEASURES**

FLASH POINT: Not Ignitable. Not Applicable

UNUSUAL FIRE HAZARDS: May evolve toxic fumes in a fire.

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## **SECTION 6. ACCIDENTAL RELEASE MEASURES**

CONTAMINATION CLEANUP: Wear suitable protective clothing & equipment as listed under Exposure / Personal protection. Mix with sand, transfer carefully to container and arrange removal by disposal company. Wash site of spillage thoroughly with water and detergent. For large spillages liquids should be contained with sand or earth and both liquids and solids transferred to salvage containers. Any residues should be treated as for small spillages.

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## **SECTION 7. HANDLING AND STORAGE**

USAGE PRECAUTIONS: Wash hands and face thoroughly after working with material. Protect from light.

STORAGE PRECAUTIONS: Store at room temperature (15 to 25oC recommended). Keep well closed and protected from direct sunlight and moisture.

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## **SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

Protective gloves made of polyvinyl alcohol (PVA) are required. Use of a laboratory coat is suggested. Safety goggles or safety glasses with side shields are required if there is any possibility of chipping or dust creation. Respirators must be worn when the threshold limit is exceeded. Provide adequate general mechanical ventilation, and local exhaust ventilation. When handling quantities of this material, be sure to wear appropriate protective equipment as described. Eye wash should be readily available.

Wash thoroughly after handling. Do not take internally. Avoid breathing dust when generated. For persons with sensitive existing medical conditions, medical advice should be sought before employing on tasks involving exposure to this material.

EXPOSURE LIMITS: OES Silver Compounds 0.01mg/m<sup>3</sup> (Long term, 8 hour TWA)

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## **SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

APPEARANCE : Clear white/grey crystals or powder

pH IN AQUEOUS SOLUTION: No data available

BOILING POINT (760mm Hg) 1550oC

MELTING POINT: 457°C

FLASH POINT: Not Applicable

FLAMMABILITY: Not Applicable

EXPLOSIVE PROPERTIES: Not Applicable

SPECIFIC GRAVITY: 5.59

Vapor PRESSURE: Not Applicable

SOLUBILITY IN WATER: 52 x 10<sup>-6</sup> g/100g water

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**SECTION 10. STABILITY:** Darkens on exposure to light  
**HAZARDOUS DECOMPOSITION:** May evolve toxic fumes in fire  
**MATERIALS TO AVOID:** Aluminum, Ammonia, Alkali metals, Peroxy compounds, Sulfoxides.**STABILITY AND REACTIVITY**

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## **SECTION 11. TOXICOLOGICAL INFORMATION**

TOXIC DOSE - LD50 >10g/kg oral, mouse

CARCINOGENICITY No evidence of carcinogenic properties.

MUTAGENICITY/TERATOGENICITY No evidence of mutagenic or teratogenic effects.

TOXICOLOGICAL FINDINGS Harmful by ingestion, inhalation and skin contact. Prolonged exposure may result in argyria, a bluish discolouration of the skin. Irritating to eyes and may irritate skin

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## **SECTION 12. ECOLOGICAL INFORMATION**

The following applies to silver compounds in general: biological effects: silver ions toxic for aquatic organisms; bacteria: *Ps. putida* toxic from 0.006 mg/l up; protozoa:

*U. parduczi* toxic from 0.1 mg/l up; arthropods: *D. daphnia* LC50: 0.5 mg/l; algae: *M. aeruginosa* toxic from 0.0007 mg/l up; *Sc. quadricauda* toxic from 0.009 mg/l up

Due to the poor solubility of the product, no harmful effects on aquatic organisms are to be expected when the product is handled and used with due care and attention.

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## **SECTION 13. DISPOSAL CONSIDERATIONS**

DISPOSAL METHODS: Chemical residues are generally classified as special waste, and as such are covered by regulations which vary according to location.

Contact your local waste disposal authority for advice, or pass to a chemical disposal company.

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## **SECTION 14. TRANSPORT INFORMATION**

Not subject to transport regulations

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## **SECTION 15. REGULATORY INFORMATION**

CLASSIFICATION: Not classified as dangerous according to EC Directives. EC-No.: 232-033-3

LABEL FOR SUPPLY: None

RISK PHRASES: R22 Harmful if swallowed.

SAFETY PHRASES: S24/25 Avoid contact with skin and eyes.

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## 16. OTHER INFORMATION

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH). The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. American Elements shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. COPYRIGHT 1997-2022 AMERICAN ELEMENTS. LICENSED GRANTED TO MAKE UNLIMITED PAPER COPIES FOR INTERNAL USE ONLY.