

**SARGENT-WELCH**  
VWR SCIENTIFIC

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**24 HOUR EMERGENCY ASSISTANCE**  
**CHEMTREC 800-424-9300**  
**HAZARD RATING**

4-EXTREME	Health Hazard	3
3-SEVERE	Flammability	0
2-MODERATE	Reactivity	3
1-SLIGHT		
0-MINIMAL		

SECTION I	NAME
Chemical Synonyms	Lunar Caustic
Formula	AgNO <sub>3</sub>
C.A.S. No.	7761-88-8

**IMPORTANT**  
**MATERIAL SAFETY DATA SHEET**

READ CAREFULLY BEFORE USING CHEMICAL  
OSHA requires that this form be kept on file.

Product No. C4579R  
Product Name SILVER NITRATE

**SECTION II HAZARDOUS INGREDIENTS OF MIXTURES**

Principal Hazardous Component(s)	%	P.E.L.	TLV Units
Silver * CAS# 7440-22-4	63.5%	0.01 mg/m <sup>3</sup>	0.01 mg/m <sup>3</sup>

**SECTION III PHYSICAL DATA**

Melting Point (°F)	212°C	Specific Gravity (H <sub>2</sub> O=1)	4.35
Boiling Point (°F)	212°C	Percent Volatile by Volume (%)	N/A
Vapor Pressure (mm Hg)	N/A	Evaporation Rate (-----=1)	N/A
Vapor Density (Air=1)	N/A		
Solubility in Water	952 gr/100 ml water at 100°C		
Appearance & Odor	Colorless or white odorless crystals.		

**SECTION IV FIRE AND EXPLOSION HAZARD DATA**

Flash Point (Method Used)	Not Flammable	Flammable Limits in Air % by Volume	Lower	Upper
			N/A	N/A
Extinguisher Media	Proper to the primary cause of fire.			

Special Firefighting Procedures  
None known.

Unusual Fire and Explosion Hazards  
Oxidizer. Reacts with organics to produce flammable products. Reacts with reducing agents. Decomposes at 444°C to emit NO<sub>x</sub>.

D.O.T. Silver nitrate, 5.1, UN1493, PGII

**SECTION V HEALTH HAZARD DATA**

Threshold Limit Value  
0.01 mg/m<sup>3</sup> See Section II

Effects of Overexposure  
Argyria, a blue-grey discoloration of the skin, mucous membranes and eyes may result from inhalation of silver. Caustic and irritating to skin, mucous membranes and eyes. Can cause burns, causing skin to darken and/or peel.

**Emergency and First Aid Procedures**

**Inhalation:** Excessive exposure (inhalation) can cause cosmetic discoloration (argyria). **Eyes:** Wash well with water, 6% common salt solution if available. **Skin:** Wash well with water. **Ingestion:** Poisonous. Fatal if swallowed. If victim is conscious, induce vomiting. Call physician.

**SECTION VI REACTIVITY DATA**

Stability	Conditions to Avoid
Stable <input checked="" type="checkbox"/> Unstable <input type="checkbox"/>	N/A
Incompatibility (Materials to Avoid)	Organics, reducing agents, excessive temperatures.
Hazardous Decomposition Products	None
Hazardous Polymerization	Conditions to Avoid
May Occur <input type="checkbox"/> Will Not Occur <input checked="" type="checkbox"/>	N/A

**SECTION VII SPILL OR LEAK PROCEDURES**

Steps to be Taken in Case Material is Released or Spilled  
Vacuum up solid, soak up solution, to plastic bottle or bag.

**Waste Disposal Method**

Discharge, treatment, or disposal may be subject to Federal, State or Local laws. These disposal guidelines are intended for the disposal of catalog-size quantities only.  
Send to refiner for silver recovery.

**SECTION VIII SPECIAL PROTECTION INFORMATION**

Respiration Protection (Specify Type)	R57A (American Optical) HEPA type.		
Ventilation	Local Exhaust	X	Special -----
	Mechanical (General)	-----	Other -----
Protective Gloves	Elbow length neoprene	Eye Protection	Safety goggles
Other Protective Equipment	Rubber or plastic apron. Lab coat.		

**SECTION IX SPECIAL PRECAUTIONS**

Precautions to be Taken in Handling & Storing  
Keep container tightly closed when not in use.  
Store in a safe, dry place. Avoid contact with organics. Do not store in wooden, cardboard or paper container.

**Other Precautions**

Read label on container before using. Do not wear contact lenses when working with chemicals.  
None

Approved by Steven C. Quandt Effective Date 10/24/2000 For laboratory use only. Not for drug, food or household use. Keep out of reach of children.

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