

MATERIAL SAFETY DATA SHEET

S
CAROLINA BIOLOGICAL

Revised: 09/05/00
Replaces: None
Printed: 25/08/00

1. PRODUCT DESCRIPTION

Product Name: Silver Nitrate
Product Code(s): 88-7791, 88-7793, 88-7795, 88-7810, 84-0910
Size: 30g, 125g, 500g, 1 oz
Chemical Name: Silver Nitrate
CAS Number: 7761-88-8
Formula: AgNO₃
Synonyms: Lunar Caustic; Nitric Acid, Silver (1+) Salt
Distributor: Carolina Biological Supply Company
2700 York Road
Burlington, NC 27215

Chemical Information: 800-227-1150 (8am-5pm (ET) M-F)
Chemtrec (Transportation Spill Response 24 hours): 800-424-9300

2. COMPOSITION/INFORMATION ON INGREDIENTS

Principle Hazardous Components: Silver Nitrate (7761-88-8) 100%
TLV and PEL units: ACGIH-TLV: 0.01 mg(Ag)/m³ (TWA)
OSHA-PEL: 0.01 mg(Ag)/m³ (TWA)

3. HAZARD IDENTIFICATION

Emergency Overview: May be fatal if swallowed. Causes burns.
Powerful oxidizer.
Potential Health Effects:
Eyes: May cause irritation.
Skin: May cause irritation.
Ingestion: May cause gastrointestinal discomfort.
Inhalation: May cause irritation to respiratory tract.

4. FIRST AID MEASURES

Emergency and First Aid Procedures:
Eyes - Flush with water for at least 15 minutes, raising and lowering eyelids occasionally. Get medical attention if irritation persists.
Skin - Thoroughly wash exposed area for at least 15 minutes. Remove contaminated clothing. Launder contaminated clothing before reuse. Get medical attention if irritation persists.
Ingestion - If swallowed, if conscious, give plenty of water. Immediately call a physician or poison control center. Never give anything by mouth to an unconscious person.
Inhalation - Remove to fresh air. Give oxygen if breathing is difficult; give artificial respiration if breathing has stopped. Keep person warm, quiet, and get medical attention.

5. FIREFIGHTING PROCEDURES

Flash Point (Method Used): N/A
NFPA Rating: Health: 1
Fire: 0
Reactivity: 0

Extinguisher Media:
Flammable Limits in Air % by Volume: N/A
Autoignition Temperature: N/A
Special Firefighting Procedures:

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Firefighters should wear full protective equipment and NIOSH approved self-contained breathing apparatus.

Unusual Fire and Explosion Hazards:

Strong oxidizer. Contact with combustible materials causes fire or intensification of existing fire. Increases flammability of combustible or readily oxidizable materials.

6. SPILL OR LEAK PROCEDURES

Steps to be Taken in Case Material is Released or Spilled:

Ventilate area of spill. Clean-up personnel should wear proper protective equipment. Avoid creating dust. Sweep or scoop up and containerize for disposal.

7. SPECIAL PRECAUTIONS

Precautions to be Taken in Handling or Storing: Store in a cool, dry, well-ventilated area away from combustible or readily oxidizable material.

8. SPECIAL PROTECTION INFORMATION

Respiratory Protection(Specify Type):

None needed under normal conditions of use with adequate ventilation.

NIOSH approved equipment should be worn if PELs are exceeded.

Ventilation:

Local Exhaust:	Yes
Mechanical(General):	Yes
Special:	No
Other:	No

Protective Gloves:

Rubber, neoprene, PVC, or equivalent.

Eye Protection:

Splash proof chemical safety goggles should be worn at all times.

Other Protective Clothing or Equipment:

Lab coat, eye wash, and safety shower.

9. PHYSICAL DATA

Molecular Weight:	169.87
Melting Point:	212 C
Boiling Point:	440 C decomposes
Vapor Pressure:	N/A
Specific Gravity(H ₂ O=1):	4.35
Percent Volatile by Volume:	N/A
Evaporation Rate(H ₂ O=1):	N/A
Solubility in Water:	71%
Appearance and Odor:	White or colorless, odorless crystals.

10. REACTIVITY DATA

Stability:

Conditions to Avoid: Exposure to air and light, heat.

Incompatibility(Materials to Avoid): Alkalies, antimony salts, arsenites, bromides, carbonates, chlorides, iodides, thiocyanates, ferrous salts, hypophosphites, morphine salts, oils, creosote, phosphates, tannic acid, ethanol, tartrates, vegetable decoctions, and

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extracts, combustible matter, reducing agents.

Hazardous Decomposition Products: NOx, Silver

Hazardous Polymerization: Will not occur

11. TOXICITY DATA

Toxicity Data: ipr-mus LD50: 34,500 mg/kg; orl-mus LD50: 50 mg/kg;

unr-man LDLo: 29 mg/kg

Effects of Overexposure:

Acute: See section 3

Chronic: Material is not listed (NTP, IARC, OSHA) as causing cancer agents.

Conditions Aggravated by Overexposure: N/A

Target Organs: Behavioral, lungs, thorax or respiration, gastrointestinal, paternal effect (Spermatogenesis, Testes, Epididymis, Sperm duct), effects on Fertility (Male Fertility index)

Primary Route(s) of Entry: Inhalation, ingestion, eyes, skin

12. ECOLOGICAL DATA

EPA Waste Numbers: D001, D011

13. DISPOSAL INFORMATION

Waste Disposal Methods: Dispose in accordance with all applicable Federal, State and Local regulations.

Always contact a permitted waste disposer (TSD) to assure compliance.

14. TRANSPORT INFORMATION

Description: Silver Nitrate, 5.1, UN1493, II

15. REGULATORY INFORMATION

EPA TSCA Status: On TSCA Inventory

Hazard Category for SARA Section 311/312 Reporting: Acute, Chronic, Fire

	SARA EHS	SARA Sec. 313		
	Sec. 302	Chemicals	CERCLA	RCRA
Product or		Name	Sec. 103	Sec.
Components	TPQ	List	RQ lbs.	
261.33		Category		

Silver Nitrate	No	No	Silver	1	No
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16. ADDITIONAL INFORMATION

The information provided in this Material Safety Data Sheet represents a compilation of data drawn directly from various sources available to us. Carolina Biological Supply makes no representation or guarantee as to the suitability of this information to a particular application of the substance covered in the Material Safety Data Sheet. Any employer must carefully assess the applicability of any information contained herein in regards to the particular use to which the employer puts the material.

Glossary

ACGIH.....American Conference of Governmental Industrial Hygienists

CAS Number..Chemical Services Abstract Number

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CERCLA.....Comprehensive Environmental Response, Compensation, and Liability Act
DOT.....U.S. Department of Transportation
IARC.....International Agency of Research on Cancer
N/A.....Not Available
NTP.....National Toxicology Program
OSHA.....Occupational Safety and Health Administration
PEL.....Permissible Exposure Limit
ppm.....parts per million
RCRA.....Resource Conservation and Recovery Act
SARA.....Superfund Amendments and Reauthorization Act
TLV.....Threshold Limit Value
TSCA.....Toxic Substances Control Act