Material Safety Data Sheet

Silver Nitrate

SECTION 1

Manufacturer's Name: Peacock Laboratories, Inc.
Address: 1901 S. 54th Street
City, State, and Zip: Phila., PA 19143
Date Prepared: 2/2000
24 Hour Emergency Number: CHEMTREC (800)424-9300
National Response Center (800)424-8802
Chemical Name and Synonyms: Silver Nitrate, Lunar Caustic, Nitrite Acid, Silver (I) Salt
Chemical Family: Inorganic Salt
Formula: AgNO₃
Formula Wt: 169.87
NIOSH/RTECS No.: VW4725000

SECTION 2

Hazardous Ingredients/Identity
Hazardous Component: Silver Nitrate 99-100% by weight
OSHA PEL: 0.01 Mg/M³
ACGIH TLV: 0.01 mg/m³
CAS NO.: 7761-88-8

TLV is for silver, soluble compounds, as Ag. PEL is for silver, metal, dust and fume, as Ag.

SECTION 3

PHYSICAL & CHEMICAL CHARACTERISTICS
Boiling Point: 440°C (824°F)
Specific Gravity (water=1): 4.35
Vapor Pressure (mm Hg): very low
Vapor Density (Air=1): 5.8
Solubility in Water: 219g/100g water @ 20°C
Reactivity in Water: None
Appearance and Odor: Clear, colorless crystals, odorless.
Melting Point: 212°C (413°F)

SECTION 4: FIRE & EXPLOSION DATA
Flash Point: N/A
Method Used: N/A
Flammable Limits in Air% by Volume:
LEL N/A
UEL N/A

Auto-Ignition Temperatures: N/A
Extinguisher Media: Water spray.
Special Fire Fighting Procedures: Firefighters should wear proper protective equipment and self-contained breathing apparatus with full facepiece operated in positive pressure mode. Use water to keep fire exposed containers cool.
Unusual Fire and Explosive Hazards: Oxidizing material increases flammability of combustible, organic or other readily oxidizable materials. Explosion: Reacts with Ammonia to form compounds if mixed with concentrated caustic material.
Toxic Gases Produced: Nitrogen oxides.

SECTION 5

PHYSICAL HAZARDS (REACTION DATA)
Stability: Stable
Conditions to Avoid: Heat, light.
Incompatibility (Materials to Avoid): Organic materials, combustible materials, strong reducing agents, strong bases, alkalies, halides.
Hazardous Decomposition Products: Oxides of Nitrogen.
Hazardous Polymerization: Will not occur.
Conditions to Avoid:

SECTION 6
HEALTH HAZARDS
Toxity:
Oral mouse LD50 for silver nitrate 50 mg/kg
Intraperitoneal mouse LD50 for silver nitrate 22 mg/kg
Acute:
Chronic: Repeated inhalation may cause lung disease.
Signs and Symptoms of Exposure:
Medical Conditions Generally Aggravated by Exposure: Respiratory, skin or eye problems may cause greater susceptibility to effects of exposure. Silver compounds can be absorbed into the circulation through breaks in the skin.
Chemical Listed as Carcinogen or Potential Carcinogen:
National Toxicology Program: No
I.A.R.C. Monographs: No
OSHA: No
Routes of Entry: Inhalation: Irritation of upper respiratory tract.
Eyes: Severe irritation or burns.
Skin: Severe irritations or burns.
Ingestion: Irritation or burns to mouth and stomach, may be fatal.
Emergency and First Aid Procedures:
Ingestion: If conscious, give salt water, induce vomiting. Highly toxic via oral route. Call physician.
Inhalation: remove to fresh air. Give Oxygen. Skin contact: Immediately flush skin with water for 15 minutes. Eye contact: Immediately flush with water for 15 minutes. Note: Once deposited (at site of injury) through breaks in skin, there is no known method by which the silver can be eliminated. The pigment is permanent. Handle with care.

SECTION 7
SPECIAL PRECAUTIONS AND SPILL/LEAK PROCEDURES
Precautions to be Taken in Handling and Storage: Keep container tightly closed. Store away from flammable and combustible materials. Store in light resistant containers. Isolate from incompatible materials.
Other Precautions:
Steps to be Taken in Case Material is Released or Spilled: Wearing self-contained breathing apparatus and full protective clothing, sweep up spill and remove. Flush area with water. Send dry material to silver refiner.
Waste Disposal Methods: (Consult federal, state, and local regulations):
EPA Hazardous Waste Number: D001, D002 (Ignitable, corrosive waste).

SECTION 8
SPECIAL PROTECTION INFORMATION/CONTROL MEASURES
Respiratory Protection (specify type): None required where adequate ventilation exists. If airborne concentration exceeds TLV, a high-efficiency particle respirator is recommended.
Ventilation: Use general or local exhaust ventilation to meet TLV requirements.
Protective Gloves: Rubber or neoprene.
Eye Protection: Safety Goggles.
Other Protective Clothing or Equipment: Protective apron or overalls.
Work/Hygienic Practices: Do not breath dust. Avoid contact with skin and eyes. Keep container of crystals closed.
SECTION 9
TRANSPORTATION DATA AND OTHER INFORMATION
Proper Shipping Name: Silver Nitrate
Hazard Class: Oxidizer
UN/NA: UN 1493
Reportable Quantity: 1 LB.
Labels: Oxidizer
Regulatory references: 49 CFR 172.101; 173.182
This material is subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372 et. seq. if present at greater than 1%.

SECTION 10
DISCLAIMER

The above information in this M.S.D.S. was obtained from sources which we believe are reliable and correct, but does not purport to be inclusive and shall be used only as a guide. The information is provided without any representation or warranty expressed or implied regarding accuracy or correctness. The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, Peacock Laboratories, Inc. and its employees do not assume responsibility and expressly disclaim liability for loss, damage, or expense arising out of, or in any way connected with, the handling, storage, use or disposal of the product.