1 - Product Identification
Synonyms: Nitric Silver Salt, Lunar Caustic
CAS: 7761-88-8
Formula Weight: 169.87 (63.5% Silver metal by weight)
Chemical Formula: AgNO₃
Reportable Quantity: 50, 125, 455, 1000 grams
Supplier: Lessit Komet Chemi; www.silvernitrate.org 1(318)480-0084
Distributed by: Thesetmaster Fulfillment LLC, P.O.Box 286165, Chicago IL 60628
Emergency Tel.# CHEMTREC, USA: 800-424-9300

2 - Hazards
Health Rating: Skin Irritation Cat.1, Serious Eye damage Cat.1
Target Organs: Respiratory System Cat.3, Liver and Kidney Cat.2
Oxidizer: Solids Cat.2, Corrosive to metals Cat.1
Labeling:
   Signal Word: Warning
   Hazard Statement: Can intensify fire
   Lab Protective Equip: Safety goggles and/or face shield and mask, Nitrile gloves, Good ventilation.
   Storage Color Code: Yellow (Reactive), Keep container tightly closed

3 - Composition
Silver Nitrate: 99.9% min..
Moisture: relative

4 - First Aid Measures
Inhalation: Remove to fresh air. Crystals will sting the nasal passages. Get medical attention as soon as possible.
Ingestion: If swallowed, Do not induce vomiting. Give a quantity of milk or water containing table salt water. Get medical attention immediately if the quantity ingested is more than a gram.
Skin Contact: Wash immediately with soap and water for at least 15 minutes. Stains on skin usually vanish within a week. Stains on finger nails can be buffed away.
Eye Contact: Immediately flush eyes with plenty of water for at least 20 minutes. Tears will cause a film to form on the eye. Get medical attention immediately.

5 - Fire Fighting Measures
Fire: Use an extinguishing agent suitable for surrounding fires.
Heating: Wear SCBA (self-contained breathing apparatus) and protective gear as decomposition products are toxic and corrosive.
Explosion: Reaction with ammonia will form explosive Fulminating Silver.

6 - Accidental Release Measures
Wear protective equipment. Clean up in a way that doesn't disperse the crystals into the air. If it is released into water, add table salt.
Special Note: Disposal of even small quantities of silver nitrate in waste systems connected to a septic tank is will to destroy septic enzymes which would require, flushing out and seeding with fresh enzymes.

7 - Handling and Storage
Wear protective equipment, nitrile gloves, goggles, and protect clothing from accidental spills.
Do not store near combustible materials.
Store in a closed container, keep in a dark and damp-free ventilated area.
Silver Nitrate is not light sensitive although impurities in air will make cause sensitivity to light. Pure Silver Nitrate does not absorb moisture.

8 - Exposure Limits; Airborne
OSHA Permissible Exposure Limit (PEL): 0.01 mg/m³ (TWA) as silver metal dust
ACGIH Threshold Limit Value (TLV): 0.01 mg /m³ (TWA) as soluble silver compounds
NIOSH IDLH 10mg/m³

9 - Physical and Chemical Properties
Appearance: Transparent white colored crystals.
Odor: Odorless.
Solubility: 2190g/1000ml water @ 20°C (70°F).
Specific Gravity: 4.35g/cc
pH: ~6
Boiling Point: 441°C (824°F) Decomposes.
Melting Point: 212°C (414°F).
Vapor Density (Air=1): 4.4
Vapor Pressure (mm Hg): Not available.

10 - Stability and Reactivity
Stability: Stable at room temperature in sealed containers.
Hazardous Decomposition Products: Oxides of nitrogen.
Incompatibilities: Ammonia, reducing agents, alkali and alkaline metals
Conditions to Avoid: Do not allow solutions of Silver Nitrate and Ammonia to mix.

11 - Toxicological Information
CAS# 7761-88-8: Oral, mouse: LD50 = 50mg/kg

14 - Transport Information
Domestic (Land, DOT)
Hazard Class: 5.1
Packing Group: II
UN number: UN1493
ORM-D: USPS can ship within United States only.
ORM-D Packaging instruction 5A: Consumer Commodity ORM-D AIR - the weight of the contents of the primary packing container cannot exceed 1 kg. USPS publication 52, Appendix C, 1999 page 291.
Outer Packaging: A strong outer packaging that is capable of firmly and securely holding the primary receptacle and cushioning material is required.
Mailability:
International Mail: Prohibited.
Domestic Mail: Permitted via air or surface transportation.

16 – Additional Information
MSDS Creation Date: 4/05/1997 Simplified version from the original MSDS Latest revision: 1/17/2023. Updated (GHS) conformity.
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