

Deluxe Testing Equipment Inc.

MATERIAL SAFETY DATA SHEET

SECTION 1 - PRODUCT IDENTIFICATION

Chemical Name: SILVER NITRATE SOLUTION
Trade Name: SILVER NITRATE SOLUTION 0.282N & 0.0282N
DTE Part No.: C26402, C26408, C26416, C26432, C26508, C26512, C26513, C26516, C26532
Chemical Family: SILVER NITRATE
Formula: AgNO₃ : H₂O

SECTION 2 - HAZARDOUS CONSTITUENTS

<u>CAS #</u>	<u>CHEMICAL NAME</u>
7761-88-8	Silver Nitrate (0.24 to 20%)

SECTION 3 - PHYSICAL PROPERTIES

Appearance / Odor: Clear Colorless Liquid / Odorless
Solubility: Miscible in Water
Specific Gravity: Approx. 1.04
pH: 6.0
% Volatiles by Vol.: ca. 98
Melting Point: 30 ° F (-1 °C)
Boiling Point: 212 ° F (100 °C)
Vapor Density (Air=1) No Information Found
Vapor Pressure (mmHg) No Information Found

SECTION 4 - FIRE, EXPLOSION AND REACTIVITY

Fire: Silver Nitrate is not Combustible, but Many Reactions may Cause Fire.

Explosion: Silver Nitrate Reactions may Cause Explosions.

Fire Extinguishing Media: Use any means Suitable for Extinguishing Surrounding Fire.

Special Information: Concentrated Solutions are Oxidizing Materials and can Increase the Flammability of Adjacent Combustible Materials. In the Event of Fire, Wear Full Protective Clothing and NIOSH Approved Self-Contained Breathing Apparatus with Full Face piece Operated in the Pressure Demand or Other Positive Pressure Mode.

General Reactivity: Stable at Room Temperature in Sealed Containers. Light Sensitive.

Hazardous Decomposition: Oxides of Nitrogen.

Incompatibilities: Reducing Agents, Ammonia, Alkalis, Antimony Salts, Arsenates, Bromides, Carbonates, Chlorides, Iodides, Thiocyanates, Ferrous Salts, Phosphates, Tannic Acid and Tartrates.

Hazardous Polymerization: Will Not Occur.

SECTION 5 - HEALTH HAZARD INFORMATION

Inhalation: Effects are Expected to be Less Severe than for Exposure to Higher Concentrations where Symptoms Include Irritation to the Respiratory Tract with Coughing and Shortness of Breath.

Ingestion: Effects should be Less Severe than Through Exposure to Higher Concentrations of Silver Nitrate which may Include Symptoms of Pain and Burning in Mouth, Blackening of the Skin and Mucous Membranes, Throat and Abdomen, Diarrhea and Shock. A Poison in Higher Concentrations.

Skin: Effects are Expected to be Less Severe than from Exposure to Higher Concentrations where Symptoms Include Irritation to the Skin with Redness, Itching and Pain. May Cause Bluish Discoloration of Skin.

Eye Contact: **CORROSIVE!** Effects should be Less Severe than from Exposure to Higher Concentrations where Symptoms Include Blurred Vision, Redness, Pain and Burns to Eye Tissue and Possible

Chronic Exposure: Permanent Eye Damage.
Repeated Application, Inhalation, or Ingestion of Silver Nitrate can Cause Permanent Bluish Discoloration of the Skin, Conjunctiva and Mucous Membrane.

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SECTION 5 - HEALTH, HAZARD INFORMATION (cont.)

Carcinogenic References: NTP Carcinogen - Known: No, IARC Category- None
Aggravated by Exposure: Persons with Pre-Existing skin Disorders or Eye Disease May be more Susceptible to the effects of this Substance.

SECTION 6 - EMERGENCY & FIRST AID PROCEDURES

Inhalation: Remove to Fresh Air. If not Breathing, Give Artificial Respiration. If Breathing is Difficult, Give Oxygen. Get Medical Attention.
Ingestion: Induce Vomiting Immediately as Directed by Medical Personnel. Never Give Anything by Mouth to an Unconscious Person. Get Medical Attention.
Skin: In Case of Contact, Immediately Flush Skin with Plenty of Water for at Least 15 Minutes while Removing Contaminated Clothing and Shoes. Wash Clothing and Shoes Before Reuse.
Eyes: Immediately Flush Eyes with Plenty of Water for at Least 15 Minutes, Lifting Lower and Upper Eyelids Occasionally. Get Medical Attention Immediately.

SECTION 7 - HANDLING AND STORAGE

Ventilation System: Not Expected to Require any Special Ventilation.
Airborne Exposure Limits: OSHA Permissible Exposure (PEL) 0.01 mg/m³ (TWA) for Silver Metal Dust and Fume as Ag
ACGIH Threshold Limit Value (TLV) 0.01 mg/m³ (TWA) for Soluble Silver Compounds as Ag
**Personal Respirators:
(NIOSH APPROVED)** Not Expected to Require Personal Respirator Usage.
Skin Protection: Wear Impervious Protective Clothing, Including Boots, Gloves, Lab Coat, Apron or Coveralls, as Appropriate, to Prevent Skin Contact.
Eye Protection: Use Safety Goggles and/or Full Face Shield where Splashing is Possible. Maintain Eye Wash Fountain and Quick-Drench Facilities in Work Area.

SECTION 8 - INDUSTRIAL HYGIENE MEASURES

Accidental Release: Ventilate area of Leak or Spill. Wear Appropriate Personal Protective Equipment as Specified in Section 7. Contain and Recover Liquid when Possible. Collect Liquid in an Appropriate Container or Absorb with an Inert Material (e.g., Vermiculite, Dry Sand, Earth), and Place in a in a Chemical Waste Container. Do Not Use Combustible Materials, such as Saw Dust.
Disposal: Do Not Flush to Sewer! S Regulations (CERCLA) Require Reporting Spills and Releases to Soil, Water and Air in Excess of Reportable Quantities.
Environmental Fate: No Information Found.

SECTION 9 - SPECIAL PRECAUTIONS

Handling and Storage: Keep in a Tightly Closed Container. Protect from Physical Damage. Store in a Cool, Dry, Ventilated Area away from Sources of Heat, Moisture and Incompatibilities. Protect from Light. Protect from Freezing. Containers of this Material may be Hazardous when Empty since they Retain Product Residues (Vapors, Liquid).

SECTION 10 - DOT SHIPPING REQUIREMENTS

Shipping Name:
Hazard Class: NOT REGULATED
Identification No.: NOT REGULATED
NFPA Rating: HEALTH-2, FLAMMABILITY-0, REACTIVITY-1

SECTION 11 - IN CASE OF EMERGENCY

**For Spills, Leaks, Fire,
Exposure or Accident:** In the USA, Call INFOTRAC at 1-800-535-5053 Day or Night
Outside the USA, Call Collect, (352) 323-3500