OFI TESTING EQUIPMENT INC.

MATERIAL SAFETY DATA SHEET

SECTION I - PRODUCT AND COMPANY IDENTIFICATION

Chemical Name:	SILVER NITRATE
Trade Name:	SILVER NITRATE CRYSTALS
OFI Part No.	265-15
Chemical Family:	Lunar caustic; silver nitrate toughened; Nitric Acid, Silver (1) Salt
Formula:	$AgNO_3$
Manufacturer:	OFI Testing Equipment, Inc. 11302 Steeplecrest Drive Houston, TX 77065 U.S.A. (832) 320-7300
In Case of Emergency 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

SECTION II - COMPOSITION/INFORMATION ON INGREDIENTS

CAS #:	**CHEMICAL NAME**	
7761-88-8	Silver Nitrate	99 to 100%

SECTION III - HAZARD IDENTIFICATION

Emergency Overview: Poison! Danger! Corrosive. Causes Burns To Any Area Of Contact. May Be Fatal If Swallowed. Harmful If Inhaled. Strong Oxidizer. Contact With Other Material May Cause Fire.

Inhalation: Extremely Destructive to Tissues of the Mucous Membranes and Upper Respiratory Tract. Symptoms may Include Burning Sensation, Coughing, Wheezing, Laryngitis, Shortness of Breath, Headache, Nausea and Vomiting. May be Absorbed into the Body Following Inhalation with Symptoms Paralleling Those from Ingestion Exposure.

Ingestion: Corrosive! Swallowing can Cause Severe Burns of the Mouth, Throat, and Stomach. Can Cause Sore Throat, Vomiting, Diarrhea. Poison. Symptoms Include Pain and Burning in the Mouth, Blackening of the Skin and Mucous Membranes, Throat, and Abdomen, Salvation, Vomiting of Black Material, Diarrhea, Collapse, Shock, Coma and Death.

Skin: Corrosive! Symptoms of Redness, Pain, and Severe Burn can Occur.

Eye Contact: Corrosive! Can Cause Blurred Vision, Redness, Pain, Severe Tissue Burns and Eye Damage.

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

Aggravated by Exposure: Persons with Pre-Existing skin Disorders or Eye Disease or Impaired Respiratory Function May be more Susceptible to the Effects to this Substance.

SECTION IV - FIRST AID MEASURES

Inhalation: Remove to Fresh Air. If not Breathing, Give Artificial Respiration. If Breathing is Difficult, Give Oxygen. Get Medical Attention.

Ingestion: If Swallowed Do Not Induce Vomiting. Give Large Quantities of Water. 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 V - FIRE FIGHTING MEASURES

Fire:	This Oxidizing Material can Increase the Flammability of Adjacent Combustible Materials.
Explosion:	Many Reactions may Cause Explosion. Reacts with Ammonia to Form Compounds that are Sensitive to Mechanical Shock.
Fire Extinguishing Media:	Use Flooding Amounts of Water. Do Not Use Dry Chemical, Carbon Dioxide or Halon. Do Not Allow Water Runoff to Enter Sewers or Waterways.
Special Information:	In the Event of Fire, Wear Full Protective Clothing and NIOSH-Approved Self-Contained Breathing Apparatus with Full Facepiece Operated in the Pressure Demand or Other Positive Pressure Mode.

SECTION VI - ACCIDENTAL RELEASE MEASURES

Remove all Sources of Ignition. Ventilate Area of Leak or Spill. Wear Appropriate Personal Protective Equipment as Specified in Section 8. Spill: Clean Up Spills in a Manner that Does Not Disperse Dust into the Air. Use Non-Sparking Tools and Equipment. Reduce Airborne Dust and Prevent Scattering by Moistening with Water. Pick up Spill for Recovery or Disposal and Place in a Closed Container.US Regulations (CERCLA) Require Reporting Spills and Releases to Soil, Water and Air in Excess of Reportable Quantities.

SECTION VII - 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 or Ignition. Avoid Storage on Wood Floors. Separate from Incompatibles, Combustibles, Organic or Other Readily Oxidizable Materials. Protect from Light. Containers of this Material may be Hazardous when Empty since they Retain Product Residues (Vapors, Liquid).

SECTION VIII – EXPOSURE CONTROL/ PERSONAL PROTECTION

Ventilation System:	A System of Local and/or General Exhaust is Recommended to Keep Employee Exposures Below the Airborne Exposure Limits. Local Exhaust Ventilation is Generally Preferred Because it can Control the Emissions of the Contaminant at its Source, Preventing Dispersion of it into the General Work Area.
Airborne Exposure Limits:	OSHA Permissible Exposure (PEL) 0.01 mg/m^3 (TWA) for Silver Metal Dust and Fume as Ag ACGIH Threshold Limit Value (TLV) 0.01 mg/m^3 (TWA) for Soluble Silver Compounds as Ag
Personal Respirators: (NIOSH APPROVED)	If the Exposure Limit is Exceeded, a Full Facepiece Respirator with Dust/Mist Filter may be Worn up to 50 Times the Exposure Limit or the Maximum use Concentration Specified by the Appropriate Regulatory Agency or Respirator Supplier, Whichever is Lowest. For Emergencies or Instances Where the Exposure Limit are Not Known, Use a Full-Facepiece Positive-Pressure, Air-Supplied Respirator.
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 IX - PHYSICAL AND CHEMICAL PROPERTIES

Appearance / Odor:	Transparent, Colorless Crystals / Odorless
Solubility:	219g/100g Water @ 68 ^{0}F (20 ^{0}C)
Specific Gravity:	4.352
pH:	ca. 6 (neutral to litmus)
% Volatiles by Vol.:	0
Melting Point:	414 ^{0} F (212 ^{0}C)
Boiling Point:	831 ^{0} F (444 ^{0}C)
Vapor Density (Air=1):	4.4
Vapor Pressure (mmHg):	Very Low

SECTION X -STABILITY AND REACTIVITY

General Reactivity: Stable at Room Temperature in Sealed Containers. Discolors on Exposure to Light.

Hazardous Decomposition: Oxides of Nitrogen.

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

Hazardous Polymerization: Will Not Occur.

SECTION XI - TOXICOLOGICAL INFORMATION

Carcinogenic References: NTP Carcinogen - Known: No, IARC Category- None

SECTION XII - ECOLOGICAL INFORMATION

Environmental Fate: No information found

Environmental Toxicity: No information found

SECTION XIII -DISPOSAL CONSIDERATIONS

Whatever cannot be saved for recovery or recycling should be handled as hazardous waste and sent to a RCRA approved waste facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

SECTION XIV -TRANSPORT INFORMATION

Shipping Name: SILVER NITRATE

Hazard Class: 5.1

Identification No.: UN1493, Packing Group II

SECTION XV - REGULATORY INFORMATION

Chemical Inventory Status – Part 1:

Ingredient	TSCA	EC	Japan	Australia
Silver Nitrate (7761-88-8)	Yes	Yes	Yes	Yes

Chemical Inventory Status – Part 2:

Ingredient	Korea	Canada—DSL	Canada—NDSL	Phil.
Silver Nitrate (7761-88-8)	Yes	Yes	No	Yes

Federal, State & International Regulations – Part 1:

Ingredient	-SARA 302- RQ	-SARA 302- TPQ	SARA 313 List	SARA 313 Chemical Catg.
Silver Nitrate (7761-88-8)	No	No	No	Silver Cmpd

Federal, State & International Regulations – Part 2:

Ingredient	CERCLA	RCRA- 261.33	TSCA 8(d)
Silver Nitrate (7761-88-8)	1	No	No

Chemical Weapons Convention: No

TSCA 12 (b): No

CDTA: No

SARA 311/312: Acute: Yes Chronic: Yes Fire: No Pressure: No Reactivity: Yes (Pure/Solid)

Australian Hazchem Code: 2X

Poison Schedule: S6

SECTION XVI - OTHER INFORMATION

NFPA Rating: HEALTH-3, FLAMMABILITY-0, REACTIVITY-1

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