

**MATERIAL SAFETY DATA SHEET**  
**Part#ISE-8755-S1**

**SECTION I: GENERAL INFORMATION**

**PRODUCT NAME:** 0.1M Silver Standard

**CHEMICAL NAME:** Silver Nitrate in Water

**CHEMICAL FAMILY:** salt solution

**DOT SHIPPING INFO:** Testing by Bureau of Explosives has indicated that this is not an oxidizer.

**IATA SHIPPING INFO:** Testing by Bureau of Explosives has indicated that this is not an oxidizer.

**SECTION II: INGREDIENTS**

CAS NO.	%	CHEMICAL NAME(S)	LD50 (mg/kg) oral-rat	OSHA/PEL ACGIH TLV
7761-88-8	1.7%	Silver Nitrate	341	0.01 mg/m <sup>3</sup>
7732-18-5	98.3%	Water	-	none

**SECTION III: PHYSICAL DATA**

**BOILING POINT:** 100°C

**SPECIFIC GRAVITY:** 1.02

**VAPOR PRESSURE:** N/A

**FREEZING POINT:** 0°C

**VAPOR DENSITY:** N/A

**pH:** 4-6.5

**WATER SOLUBILITY:** Soluble

**APPEARANCE & ODOR:** Colorless, odorless liquid

**SECTION IV: FIRE & EXPLOSION HAZARD DATA**

**FLASHPOINT:** Not flammable

**AUTOIGNITION TEMPERATURE:** N/A

**EXTINGUISHING MEDIA:** Any

**SPECIAL FIRE FIGHTING PROCEDURES:** N/A

**UNUSUAL FIRE & EXPLOSION HAZARDS:** May oxidize and render other materials more combustible if allowed to dry out upon them.

## **SECTION V: HEALTH HAZARD DATA**

**EFFECTS OF OVEREXPOSURE:** Metallic taste in mouth, anxiety, constipation, nausea, pallor, weakness, insomnia, headache, muscle pain, and possible severe abdominal pain.

**EMERGENCY & FIRST AID:** Wash off contact area with water.

**EYES & SKIN:** Wash off skin with plenty of water. Irrigate eyes for at least 10 minutes.

**INGESTION/INHALATION:** Induce vomiting with tablespoonful of sodium chloride (table salt) in glass of warm water. Repeat until vomit fluid is clear. Give whites of eggs beaten with water. Consult physician.

## **SECTION VI: REACTIVITY DATA**

**STABLE:** yes

**CONDITIONS TO AVOID:** Storing near heat or incompatible chemicals.

**INCOMPATIBILITY:** Reducing agents, B, BaS, charcoal, S, trichloroethylene

**HAZARDOUS DECOMPOSITION PRODUCTS:** Oxides upon heating to decomposition

**HAZARDOUS POLYMERIZATION:** Will not occur.

## **SECTION VII: SPILL OR LEAK PROCEDURES**

**STEPS TO BE TAKEN:** Dilute spill with water, clean up and store for waste disposal.

**WASTE DISPOSAL METHOD:** Controlled by OSHA Standard.

## **SECTION VIII: SPECIAL PROTECTION INFORMATION**

**RESPIRATORY PROTECTION:** N/A

**VENTILATION:** Control to exposure limits.

**PROTECTIVE GLOVES:** Any

**EYE PROTECTION:** Safety goggles

**OTHER PROTECTIVE EQUIPMENT:** Lab coat

## **SECTION IX: SPECIAL PRECAUTIONS**

**PRECAUTIONS TO BE TAKEN IN HANDLING & STORAGE:** Silver metal and its inorganic compounds are regulated under OSHA Standard (29 CFR 1910.1025) and section 313 of SARA Title III.

**OTHER PRECAUTIONS:** No food in work area, always wash hands and protective clothing after using these products. NFPA rating (0-4): Fire-0, Health-2, Reactivity-0, Specific-0.

**ISSUE DATE:** January 6, 2004

**NAME:** Peter Boyle, R & D Director

**SIGNATURE:** Peter F. Boyle