

# MATERIAL SAFETY DATA SHEET

## Part # PHFS-1047

### SECTION I: GENERAL INFORMATION

**PRODUCT NAME:** Reference Fill Solution, 0.1M NH<sub>4</sub>Cl & Saturated Ag

**CHEMICAL NAME:** Ammonium Chloride/Silver Chloride in Water

**CHEMICAL FAMILY:** salt solution

**DOT SHIPPING INFO:** none

**IATA SHIPPING INFO:** none

### SECTION II: INGREDIENTS

CAS NO.	%	CHEMICAL NAME(S)	LD50 (mg/kg) oral-rat	OSHA/PEL ACGIH TLV
12125-02-9	0.5%	Ammonium Chloride	1650	20 mg/m <sup>3</sup>
7783-90-6	0.001%	Silver Chloride	330	none
7732-18-5	99.049%	Water	-	none

### SECTION III: PHYSICAL DATA

**BOILING POINT:** 100°C

**SPECIFIC GRAVITY:** 1.03

**VAPOR PRESSURE:** N/A

**FREEZING POINT:** -4°C

**VAPOR DENSITY:** N/A

**pH:** 5-8

**WATER SOLUBILITY:** Soluble

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

### SECTION IV: FIRE & EXPLOSION HAZARD DATA

**FLASHPOINT:** Not flammable

**AUTOIGNITION TEMPERATURE:** N/A

**EXTINGUISHING MEDIA:** Any

**SPECIAL FIRE FIGHTING PROCEDURES:** Self contained breathing apparatus should be worn.

**UNUSUAL FIRE & EXPLOSION HAZARDS:** N/A

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

**EFFECTS OF OVEREXPOSURE:** Respiratory and stomach ailments.

**EMERGENCY & FIRST AID:**

**EYES & SKIN:** Skin-wash off with water. Eyes-irrigate with water lifting the eye lids occasionally.

**INGESTION/INHALATION:** Dilute with large amount of water and consult a physician.

## **SECTION VI: REACTIVITY DATA**

**STABLE:** yes

**CONDITIONS TO AVOID:** Heat or flame

**INCOMPATIBILITY:** Oxidizers, Br, F<sub>3</sub>, KClO<sub>3</sub>, hypochlorite bleaches, NH<sub>4</sub>, NO<sub>3</sub>

**HAZARDOUS DECOMPOSITION PRODUCTS:** Emits toxic fumes when heated to decomposition.

**HAZARDOUS POLYMERIZATION:** Will not occur.

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

**STEPS TO BE TAKEN:** Vacuum up and set aside for waste disposal.

**WASTE DISPOSAL METHOD:** Observe all federal, state, and local laws when disposing of this product.

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

**RESPIRATORY PROTECTION:** N/A

**VENTILATION:** N/A

**PROTECTIVE GLOVES:** N/A

**EYE PROTECTION:** Safety goggles

**OTHER PROTECTIVE EQUIPMENT:** Lab coat

## **SECTION IX: SPECIAL PRECAUTIONS**

**PRECAUTIONS TO BE TAKEN IN HANDLING & STORAGE:** Keep well sealed and store away from heat or oxidizers. Ammonium Chloride is a CERCLA hazard and is subject to reporting under Section 304 of SARA Title III.

**OTHER PRECAUTIONS:** No eating or drinking while working with this product. NFPA Rating (0-4): Health-1, Fire-0, Reactivity-0, Specific-none.

**ISSUE DATE:** April 17, 2003

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