

GENERAL HYDROPONICS  
P.O. Box 1576  
Sebastopol, CA 95473-1576

MATERIAL SAFETY DATA SHEET  
Standard Reference Solution  
for EC and PPM Meters.  
12/20/99

### SECTION 1. MATERIAL IDENTIFICATION

**Product Name:** General Hydroponics Standard Reference Solution for EC and PPM Meters.  
**Chemical Formula:** >1.0 % Potassium Chloride in water.  
**Other Designations:** Potassium monochloride; KCl; CAS No. 7447-40-7  
**Manufactured by:** General Hydroponics, P.O. Box 1576 (707) 824-9376 Fax: (707) 824-9377  
**General Use:** Standard reference solution for calibrating EC and PPM meters.

### SECTION 2. COMPOSITION/INFORMATION ON INGREDIENTS

**Ingredients:**  
Potassium Chloride >1.0 %, CAS No. 7447-40-7  
Water

**OSHA PEL**  
None established

**NIOSH REL**  
None established

**ACGIH TLV**  
None established

### SECTION 3. HAZARDS IDENTIFICATION

#### \*\*\* Emergency Overview \*\*\*

General Hydroponics Standard Reference solution for EC and PPM meters is a colorless, odorless liquid containing >1.0% Potassium chloride. Ingestion of large doses of potassium chloride can cause gastrointestinal irritation, purging, weakness, and circulatory disturbance. Potassium chloride has been used as a nutrient and/or dietary food supplement. Deleterious health effects would not be expected from routine occupational exposure to it unless it were ingested in large quantities.

#### Potential Health Effects

**Primary Entry:** Accidental ingestion of this material.

**Target Organs:** Circulatory and/or blood system

**Carcinogenicity:** Potassium chloride is not listed as a carcinogen by the NTP, IARC, or OSHA.

**Acute Effects:** Excessive ingestion causes gastric disturbances and electrolytic imbalance.

**Medical Conditions Aggravated by Long-term Exposure:** None reported.

**Chronic Effects:** None reported.

**HMIS**  
H 1  
F 0  
R 0

### SECTION 4. FIRST AID MEASURES

**Ingestion:** Give the exposed person 2 to 3 glasses of water or milk to drink. Do not induce vomiting. Seek medical attention.

**Eyes:** Immediately flush eyes, including under the eyelids, gently, but thoroughly with flooding amounts of running water for at least 15 minutes.

**Skin:** Health effects are not expected to occur from skin contact.

**Get medical help for all exposures.** Seek prompt medical assistance for further treatment, observation, and support after first aid.

## SECTION 5. FIRE AND EXPLOSION DATA

**Flash Point, Auto-Ignition Temperature, LEL, UEL:** None reported.  
**Extinguishing Media:** Nonflammable. Use extinguishing agents to put out the surrounding fire.  
**Unusual Fire or Explosion Hazards:** None reported.  
**Hazardous Combustion Products:** None.  
**Fire-Fighting Equipment:** Because fire may produce toxic thermal decomposition products, wear a self-contained breathing apparatus (SCBA) with a full facepiece operated in pressure-demand or positive-pressure mode.

## SECTION 6. ACCIDENTAL RELEASE MEASURES

**Spill/leak Procedures:** Vacuum, mop, or absorb spilled material, and place in appropriate containers for disposal.  
**Regulatory Requirements:** Follow applicable OSHA regulations (29 CFR 1910.120).

## SECTION 7. HANDLING AND STORAGE

**Handling Precautions:** Avoid ingestion.  
**Storage Requirements:** Protect containers against damage.

## SECTION 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

**Engineering Controls:** In addition to ventilation, there are no specific controls recommended.  
**Ventilation:** No special requirements needed for use of this product.  
**Administrative Controls:** Practice good housekeeping procedures.  
**Respiratory Protection:** Not required with normal use of General Hydroponics Standard Reference Solution for EC and PPM Meters.  
**Protective Clothing/Equipment:** Wear protective eyeglasses or chemical safety goggles, per OSHA eye- and face-protection regulations (29 CFR 1910.133). Contact lenses are not eye protective devices. Appropriate eye protection must be worn instead of, or in conjunction with contact lenses.  
**Safety Stations:** Make emergency eyewash stations, safety/quick-drench showers, and washing facilities available in work area.  
**Comments:** Never eat, drink, or smoke in work areas. Practice good personal hygiene after using chemicals, especially before eating, drinking, smoking, using the toilet, or applying cosmetics.

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical State:</b> Liquid	<b>Density:</b> 1.004
<b>Appearance and Odor:</b> Colorless, no odor	<b>pH:</b> 7
<b>Molecular Weight of KCl:</b> 74.55 grams/mole	<b>Solubility in water:</b> 100%
<b>Melting Point:</b> Not applicable	

## SECTION 10. STABILITY AND REACTIVITY

**Stability:** General Hydroponics Standard Reference Solution for EC and PPM meters is stable at room temperature in closed containers.  
**Polymerization:** Hazardous polymerization cannot occur.  
**Chemical Incompatibilities:** Compatible with most chemicals, but may react with potassium permanganate, bromine tri fluoride, and sulfuric acid.  
**Conditions to Avoid:** Exposure to chemicals listed above.  
**Hazardous Decomposition Products:** Thermal oxidative decomposition of potassium chloride at elevated temperatures may produce toxic potassium and/or chlorine fumes.

## SECTION 11. TOXICOLOGICAL INFORMATION

**Acute Oral Effects:** None

## SECTION 12. ECOLOGICAL INFORMATION

**Ecotoxicity:** Data not found

**Environmental Fate:** Data not found

## SECTION 13. DISPOSAL CONSIDERATIONS

**Waste Disposal:** Follow Federal, State, and local regulations.

## SECTION 14. TRANSPORTATION INFORMATION

**DOT Transportation Data (49 CFR 172.101) :** Not listed

## SECTION 15. REGULATORY INFORMATION

### **EPA Regulations:**

RCRA Hazardous Waste (40 CFR 261.33): Not listed

CERCLA Hazardous Substance (40 CFR 302.4): Not listed

SARA Toxic Chemical (40 CFR 372.65): Not listed

SARA EHS (Extremely Hazardous Substance) (40 CFR 355): Not listed

### **OSHA Regulations:**

Air Contaminant (29 CFR 1910.1000, Table Z-1, Z-1-A): Not listed

## SECTION 16. OTHER INFORMATION

General Hydroponics Standard Reference Solution for EC and PPM Meters is a product prepared for the purpose of calibrating EC and PPM Meters. Information assembled for this Material Safety Data Sheet is for the use of this product as intended by the manufacturer. Users should take all precautions recommended herein while working with this product.

General Hydroponics provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in using this product.