

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

MATERIAL SAFETY DATA SHEET  
pH 7 Buffer  
12/20/99

### SECTION 1. MATERIAL IDENTIFICATION

**Product Name:** General Hydroponics pH 7 Buffer

**Chemical Formula:** Sodium dihydrogen phosphate 2.4gm/L, Potassium hydrogen phosphate 5.2 gm/L

**Other Designations:** Sodium phosphate monobasic, sodium acid phosphate, MSP, Potassium phosphate dibasic, potassium monophosphate, DKP

**Manufactured by:** General Hydroponics, P.O. Box 1576 Sebastopol, CA 95473-1576  
(707) 824-9376 Fax: (707) 824-9377

**General Use:** Buffering agent.

### SECTION 2. COMPOSITION/INFORMATION ON INGREDIENTS

**Ingredients:**

2.4gm/L Sodium dihydrogen phosphate, CAS # 7558-80-7  
5.2 gm/L Potassium hydrogen phosphate, CAS # 7758-11-4

**OSHA PEL**  
None established

**NIOSH REL**  
None established

**ACGIH TLV**  
None established

### SECTION 3. HAZARDS IDENTIFICATION

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

General Hydroponics pH 7 Buffer is a colorless, odorless solution containing sodium dihydrogen phosphate, and potassium hydrogen phosphate. Can be harmful if ingested, inhaled or absorbed. Large quantities may cause eye, skin mucous membrane, and upper respiratory tract irritation.

**Potential Health Effects**

**Primary Entry:** Ingestion, skin, and eye contact.

**Target Organs:** Skin, eyes and mucous membranes

**Carcinogenicity:** sodium dihydrogen phosphate, and potassium hydrogen phosphate are not listed as a carcinogen by the NTP, IARC, or OSHA.

**HMIS**  
H 1  
F 0  
R 0

**Acute Effects:** Jaundice, albuminuria, hematuria, anuria, and acidosis.

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

**Chronic Effects:** None reported.

### SECTION 4. FIRST AID MEASURES

**Ingestion:** Seek medical attention.

**Eyes:** Do not allow victim to rub or keep eyes tightly shut. Gently lift eyelids and flush immediately and continuously with flooding amounts of water for at least 15 minutes. Consult a physician or ophthalmologist if pain or irritation develops.

**Skin:** Wash with soap and water.

**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:** Noncombustible. Use extinguishing agents to put out the surrounding fire.  
**Unusual Fire or Explosion Hazards:** None reported.  
**Hazardous Combustion Products:** None reported  
**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, skin, and eye contact.  
**Storage Requirements:** Protect containers against damage.

## SECTION 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

**Engineering Controls:** Use good general ventilation.  
**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 pH 4 buffer.  
**Protective Clothing/Equipment:** Wear chemically protective gloves. 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 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

**Physical State:** Liquid  
**Appearance and Odor:** Colorless, no odor  
**Molecular Weight of potassium acid phthalate:** 74.55 grams/mole  
**Solubility in water:** 100%  
**pH:** 4

## SECTION 10. STABILITY AND REACTIVITY

**Stability:** General Hydroponics pH 4 buffer is stable at room temperature in closed containers.  
**Polymerization:** Hazardous polymerization cannot occur.  
**Chemical Incompatibilities:** Nitric acid.  
**Conditions to Avoid:** Contact with nitric acid.  
**Hazardous Decomposition Products:** Thermal oxidative decomposition of potassium acid phthalate may produce carbon and potassium oxides.

## SECTION 11.. TOXICOLOGICAL INFORMATION

**Acute Oral Effects:** Jaundice, albuminuria, hematuria, anuria, and acidosis.

## 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 pH 7 Buffer is a product prepared for buffering hydroponic plant nutrient systems. 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.