

**Material Safety Data Sheet**  
**J. R. Simplot Company**  
**AgriBusiness**

**M77034**

**Trade Name:** PHT Nutrient Buffer 0-10-0  
**Registration No:** None

**SECTION 1**

**CHEMICAL PRODUCT AND COMPANY INFORMATION**

**Manufacturer or Formulator:** Plant Health Technologies  
P.O. Box 70013  
Boise, Idaho 83707  
**Emergency Phone - Chemtrec:** 1-800-424-9300

**Product Name:** Nutrient Buffer 0-10-0  
**Common Name:** 0-10-0  
**Chemical Type:** Nutrient Buffer

**SECTION 2**

**COMPOSITION INFORMATION**

Chemical Name and Synonyms	C.A.S. No.	Chemical Formula	WT% Hazardous Non-Hazardous	TLV	PEL
Phosphoric Acid	7664-38-2	H <sub>3</sub> PO <sub>4</sub>	16.3%		
Water	7732-18-5	H <sub>2</sub> O	83.7%	Not available	Not available

**SECTION 3**

**HAZARDS IDENTIFICATION**

**Ingestion:** Harmful if swallowed. Accidental ingestion may cause burns to mouth and throat and may cause gastrointestinal discomfort, vomiting, weakness or other medical problems.

**Inhalation:** May be aggravating to respiratory tract.

**Eye Contact:** Avoid contact with eyes.

**Skin Absorption:** May cause ulceration of the skin.

**Skin Contact:** Avoid contact with skin, open cuts or sores. May cause skin aggravation.

**Effects of Overdose:** Ingestion may cause nausea, vomiting and abdominal pains, diarrhea and acidosis. Aggravating to eyes and skin. Aggravating to respiratory tract.

**SECTION 4**

**FIRST AID MEASURES**

**Ingestion:** CALL A DOCTOR. Give 2-3 glasses of milk or water to dilute the acid. DO NOT INDUCE VOMITING. Administer milk of magnesia (approx. 20 mls). If vomiting occurs spontaneously, administer fluids repeatedly. Give demulcents, such as milk or beaten eggs at intervals of one to two hours.

**Inhalation:** Remove to fresh air and support respiration. Seek medical attention if condition persists.

**Eyes:** In case of contact with eyes, flush with water for at least 15 minutes. Seek medical attention.

**Skin:** If on skin, wash with soap and copious amounts of water. Seek medical attention if condition persists.

**Notes to Physicians:** Consult standard literature. Treatment based on the sound judgment of the physician and the individual reactions of the patient.

**SECTION 5**

**FIRE FIGHTING MEASURES**

**Extinguishing Media:** Non-flammable. Use media suitable to extinguish source of fire.

**Special Fire Fighting Procedures:** Avoid exposure of skin and eyes from mists and splashing.

**Unusual Fire and Explosion Hazards:** May react with metal to produce hydrogen.

**SECTION 6**

**ACCIDENTAL RELEASE MEASURES**

**Environmental Precautions:** Do not contaminate water supplies. Keep out of all bodies of water.

**Steps to be taken in case material is released or spilled:**  
Wear protective equipment. Contain spill and absorb with soda ash, limestone, or sand. Scoop up into container for disposal.

**SECTION 7**

**HANDLING AND STORAGE**

**Precautions to be taken in handling and storing:**  
Store in a well ventilated, dry area. Avoid storage below 32°F. Avoid contact with eyes and skin. Practice reasonable care and caution. Keep out of the reach of children and animals. Avoid breathing mists if generated.

**SECTION 8**

**EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Ventilation Protection:** General room ventilation.

**Respiratory Protection:** Approved mist respirator if mist is generated.

**Protective Clothing:** Body-covering clean clothing, rubber gloves and rubber boots and acid-resistant apron. Contaminated shoes or clothes must be removed and cleaned before reuse.

**Eye Protection:** Chemical splash-proof goggles.

**Other:** Eyewash fountain and safety shower in area.

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**SECTION 9**

**PHYSICAL AND CHEMICAL PROPERTIES**

<b>Boiling Point:</b>	87°C	<b>Solubility in Water:</b>	Soluble
<b>Density:</b>	1.07 g/ml @ 25°C (8.92 lbs/gal)	<b>% Volatiles (by volume):</b>	None
<b>Flashpoint:</b>	Non-flammable	<b>Vapor Pressure, mm Hg:</b>	Not applicable
<b>pH:</b>	0.72 @ 25°C	<b>Reaction with Water:</b>	None
<b>Appearance:</b>	Colorless liquid.		
<b>Extinguishing Media:</b>	Use media suitable to extinguish source of fire.		

**SECTION 10**

**STABILITY AND REACTIVITY**

<b>Stability (Normal Conditions):</b>	Stable
<b>Conditions to Avoid:</b>	None listed
<b>Incompatibility (Material to Avoid):</b>	Reacts with alkalis and metals producing heat and hydrogen gas.
<b>Hazardous Decomposition Products:</b>	PO <sub>x</sub> and H <sub>2</sub> . May react with alkalis and metals producing heat and hydrogen gas.
<b>Hazardous Polymerization:</b>	Will not occur
<b>Conditions to Avoid:</b>	Not applicable

**SECTION 11**

**TOXICOLOGY INFORMATION**

**Ingestion:** Acute oral toxicity (rat) LD<sub>50</sub>: 1530 mg/kg for phosphoric acid.  
**Skin absorption:** Acute dermal toxicity (rabbit) LD<sub>50</sub>: 2740 mg/kg for phosphoric acid.

**SECTION 12**

**ECOLOGICAL INFORMATION**

None listed.

**SECTION 13**

**DISPOSAL CONSIDERATIONS**

**Waste Disposal Procedures:** Triple rinse containers and utilize rinsate according to label using good agronomic practices. Dispose of container in accordance with local, state and federal regulations.

**SECTION 14**

**TRANSPORT INFORMATION**

<b>Shipping name:</b>	Phosphoric Acid, 8, UN1805, P.G. III	<b>C.A.S. Number:</b>	7664-38-2
<b>Hazard Class:</b>	8	<b>D.O.T. Number:</b>	UN1805
<b>Reportable Quantity (RQ):</b>	5000 lbs.	<b>Haz Waste No:</b>	None
<b>Labels Required:</b>	Corrosive	<b>EPA Regist No:</b>	None
<b>Placard:</b>	Corrosive		

**SECTION 15**

**REGULATORY INFORMATION**

**Carcinogenicity:**  
by IARC?: Yes ( ) No (X)      by NTP?: Yes ( ) No (X)

This product contains phosphoric acid, CAS No. 7664-38-2, which is subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

**SECTION 16**

**OTHER INFORMATION**

<b>Flash Point (Test Method):</b>	Non-flammable	<b>Flammable Limits</b>	<b>LOWER</b>	<b>UPPER</b>
<b>Autoignition Temperature:</b>	Not applicable	(% BY VOLUME)	N/A	N/A

**Hazard Rating (N.F.P.A.):**      **Health:** 2      **Fire:** 0      **Reactivity:** 0      **Specific:** Not applicable

This N.F.P.A. rating is a recommendation by the manufacturer using the guidelines or published evaluations prepared by the National Fire Protection Association.

**MSDS Version Number:** 7 (revisions to Section 2)

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