



Date of Issue: 6/1/2022      Revision Date: 8/1/2022      Version 1.5

## 1. Identification

**Product Name:** pH/BpH, Std 4

**Identifier:** pH probe storage solution

**Contains CAS-No:** 7747-40-7

**Identified Uses:** Reagent for analysis, Laboratory chemicals

**Recommended Use:** professional, scientific and technical activities

**Restriction on Use:** Not for food, drug, or household use

**Supplier:**

Precision Planting  
23207 Townline Road  
Tremont, IL 61568  
(309) 925-5050

**Emergency Number:** CHEMTREC: 1-800-424-9300 within USA or Canada  
or +1-703-527-3887 outside USA or Canada

## 2. Hazards Identification

**Classification of substance or mixture:**

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200). Not a dangerous substance or mixture according to the Globally Harmonized System (GHS). Product contains no substance which at their given concentrations is considered to be hazardous to health.

**Labeling Elements:** Not Applicable

**Signal Word:** Not Applicable

**Hazard Statement:** Not Applicable

**Precautionary Statement:**

Wear protective gloves and safety glasses.  
Do not handle until all safety information has been read and understood.  
Do not ingest. In case of contact, flush affected area with water.

**Storage:** Keep containers tightly closed in a dry, cool and well-ventilated place

**Disposal:** Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

**Hazards not otherwise classified:** None identified

### 3. Composition/Information on Ingredients

Name:	Formula	Molar Mass	CAS Number	% Weight
Water	H <sub>2</sub> O	18.015 g/mol	7732-18-5	70 – 80
Potassium chloride	KCl	74.55 g/mol	7447-40-7	20 – 30
Potassium Hydrogen Phthalate	C <sub>8</sub> H <sub>5</sub> KO <sub>4</sub>	204.22 g/mol	877-24-7	<1

\* Specific chemical identity and/or percentage of composition may be withheld as a trade secret

### 4. First-Aid Measures

**General:** Use first aid treatment according to the nature of the injury. Get medical attention immediately if symptoms occur. Show this safety data sheet to the doctor in attendance. Ensure medical personnel are aware of the material(s) involved and take precautions to protect themselves. Wash contaminated clothing before reuse.

**If swallowed:** Clean mouth with water and drink water afterwards. Do NOT induce vomiting. Get medical attention if symptoms occur.

**If inhaled:** Move to fresh air. Get medical attention immediately if symptoms occur.

**In case of skin contact:** Wash off with soap and plenty of water for at least 15 minutes while removing all contaminated clothing. Get medical attention immediately if symptoms occur.

**In case of eye contact:** Rinse immediately with plenty of water, including under the eyelids, for at least 15 minutes. Get medical attention. Causes eye irritation.

**Protection of First aiders:** Use personal protection equipment. See Section 8 for more detail.

**Symptoms/Effects:** Not expected to present a significant hazard under anticipated conditions of normal use. Notes to physician, treat symptomatically.

Refer to Sections 2 and/or 11 for hazard information and/or toxicological information.

### 5. Fire-Fighting Measures

**Fire Hazard:** Not flammable

**Explosion Hazard:** Not applicable

**Reactivity:** None

**Suitable Extinguishing Media:** Use extinguishing measure that are appropriate to local circumstances and the surrounding environment.

**Unsuitable Extinguishing Media:** No information available

**Advice for firefighters:** In case of fire, stop leak if safe to do so. Exercise caution when fighting any chemical fires. Do not enter fire area without proper protective equipment including respiratory protection.

**Specific Hazards Arising from the Chemical:** Keep product and empty containers away from heat and sources of ignition.

**Hazardous Combustion Products:** Hydrogen chloride gas, potassium oxides

Refer to Section 10 for stability and reactivity information.

## 6. Accidental Release Measures

**Personal precautions, protective equipment, and emergency procedures:**

Use personal protective equipment. Evacuate personnel to safe areas.

**Environmental precautions and methods for containment and clean-up:**

Clean up spills with proper personal protection. Contain spill area with inert absorbent material. Sweep or shovel into properly labeled waste containers.

Refer to Section 12 for ecological information.

Refer to Section 8 for exposure controls and personal protection.

## 7. Handling and Storage

**Precautions for Handling:** Wear personal protection equipment. Do not handle until all safety precaution have been read and understood. Do not eat, drink or smoke during use. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and when leaving work.

**Precautions for Storage:** Store in well-ventilated, dry areas. Keep container tightly closed and sealed until ready for use.

**Storage Conditions:**

Store at room temperature

Store only in original container

Keep away from direct sunlight

Protect from freezing and physical damage

**Incompatible Products:** No information available

**Keep out of reach of children**

Refer to Section 10 for stability and reactivity incompatibilities.

## 8. Exposure Controls/Personal Protection

**Occupational exposure limits:** No information available

**Personal Protective Equipment:** Wear appropriate eyeglasses or chemical safety goggles as described

by OSHA's eye and face protection regulation in 29 CFR 1910.144 or European Standard EN166.

**Skin and Body Protection:** Wear appropriate protective gloves and clothing to prevent skin exposure.

**Respiratory Protection:** No personal respiratory protective equipment normally required. In case of insufficient ventilation, wear suitable respiratory equipment.

**Other Information:** Do not eat, drink, or smoke during use. Handle in accordance with good industrial hygiene and safety practices, such as washing after handling the material. Routinely wash work clothing and protective equipment to remove contaminants  
Refer to Section 7 for handling and storage.

## 9. Physical and Chemical Properties

**Physical State:** Liquid

**Appearance:** Clear, colorless

**Odor:** Odorless

**pH:** 5.0 – 7.0

**Freezing Point:** 32 °F (0 °C) estimated

**Initial Boiling Point:** 212 °F (100 °C) estimated

**Flashpoint:** Not applicable

**Evaporation Rate:** No information available

**Flammability:** Not applicable

**Vapor Pressure/Density:** No information available

**Specific gravity/Density:** 1.125 g/mL

**Solubility:** Soluble in water

**Partition Coefficient: n-octanol/water :** No information available

**Autoignition Temperature :** No information available

**Decomposition Temperature:** No information available

**Viscosity:** No information available

**Explosive Properties:** No information available

**Oxidizing Properties:** No information available

**Other:** No additional information available

## 10. Stability and Reactivity

**Reactivity:** None known, based on information available

**Chemical Stability:** Material is stable under normal conditions

**Possibility of Hazardous Reactions:** No dangerous reaction known under condition of normal use.

**Conditions to Avoid:** Incompatible material and excess heat

**Incompatible Materials:** Strong oxidizing agents, strong acids

**Hazardous Decomposition Products:** Hydrogen chloride gas, potassium oxides

**Hazardous Polymerization:** No information available

## 11. Toxicological Information

**Acute Toxicity:**

pH/BpH, Std 4 (CAS mixture):

Oral LD50 – Based on ATE data, the classification criteria are not met. ATE > 2,000 mg/kg

Dermal LD50 – Based on ATE data, the classification criteria are not met. ATE > 2,000 mg/kg

Vapor LC50 – Based on ATE data, the classification criteria are not met. ATE > 20 mg/L

Potassium chloride (CAS 7447-40-7):

Oral LD50 – Rat 2,600 mg/kg

Potassium Hydrogen Phthalate (CAS 877-24-7):

Oral LD50 – Rat > 3,200 mg/kg

**Information of likely routes of exposure:**

**Inhalation:** No information available

**Skin contact:** No information available

**Eye contact:** No information available

**Ingestion:** No information available

**Skin corrosion/irritation:** Prolonged skin contact may cause temporary irritation.

**Serious eye damage/eye irritation:** Direct contact with eyes may cause temporary irritation.

**Respiratory or skin sensitization:** Not a respiratory sensitizer. May cause allergic skin reaction.

**Germ cell mutagenicity:** No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

**Carcinogenicity:** Ingredients not listed as carcinogens

No ingredient of this product present at levels greater than or equal to 0.1% is identified as probably, possible, or confirmed human carcinogen by IARC, NTP, or OSHA

**Reproductive toxicity:** This product is not expected to cause reproductive or development effects.

**Specific target organ toxicity – single exposure:** Not classified

**Specific target organ toxicity – repeated exposure:** Not classified

**Aspiration hazard:** Not an aspiration hazard

**Chronic effects:** Prolonged inhalation may be harmful

**Signs and Symptoms of Exposure:** To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

## 12. Ecological Information

**Ecology General:** No information available

**Ecotoxicity:**

Potassium chloride (CAS 7447-40-7):

EC50 – Freshwater Algae 2,500 mg/L, 2 hours

LC50 – Lepomis macrochirus 1,060 mg/L, 96 hours

EC50 – Water Flea 825 mg/L, 48 hours

**Persistence and Degradability:** Miscible with water. Persistence is unlikely based on information available.

**Bioaccumulative Potential:** No data available

**Mobility in soil:** Will likely be mobile in the environment due to its water solubility.

**Other adverse effects:** No data available

### 13. Disposal Considerations

**Waste disposal recommendation:** Dispose in a safe manner in accordance with local/national regulations. Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

**Ecology waste materials:** Avoid release to the environment.

**Local disposal regulations:** Dispose in accordance with all applicable regulations.

**Hazardous waste code:** Not regulated

**Waste from residues/unused products:** Emptied containers may retain product residue. Improper disposal or reuse of this container may be dangerous and illegal. Dispose of in accordance with local regulations. Empty container or liners may retain some product residues, follow label warnings even after container is emptied.

### 14. Transportation

**Department of Transportation (DOT):** In accordance with DOT, not regulated as dangerous goods

**Transportation of Dangerous Goods (TDG):** Not regulated as dangerous goods

**International Maritime Dangerous Goods (IMDG):** Not regulated as dangerous goods

**International Air Transport Association (IATA):** Not regulated as dangerous goods

### 15. Regulatory Information

**Toxic Substance Control Act (TSCA) Inventory:**

Potassium chloride (CAS 7447-40-7): Listed

Water (CAS 7732-18-5): Listed

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**SARA 320:** Not applicable

**SARA 313 of Title III:** This product does not contain any chemicals which are subject to the reporting requirement of the Act and title 40n of the Code of Federal Regulations, Part 372.

**SARA 311/312 Hazardous Categorization:**

Acute Health Hazard – No

Chronic Health Hazard – No  
Fire Hazard – No  
Sudden Release of Pressure Hazard – No  
Reactive Hazard - No

**Clean Water Act (CWA):**

No information available

**Comprehensive Environmental Response Compensation and Liability Act (CERCLA) :**

No information available

**Clean Air Act:** Not applicable

**OSHA:** Not applicable

**Right-To-Know: US State Regulations**

Potassium Hydrogen Phthalate (CAS 877-24-7): LISTED – Pennsylvania, New Jersey

Water (CAS 7732-18-5): LISTED – Pennsylvania, New Jersey

**California Prop 65 Components:** California Safe Drinking Water and Toxic Enforcement Act of 1968

No components listed for causing cancer, birth defects or any reproductive harm

## 16. Other Information

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**Disclaimer:**

The above information is believed to be accurate but Precision Planting makes no representation as to its accuracy. The above information does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product regarding appropriate safety precautions, use, storage, transportation, disposal and release. This information relates to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. It does not represent any guarantee of the properties of the product. Precision Planting makes no warranties of any kind as to the accuracy or completeness of the information contained herein. NO WARRANTY OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED, IS MADE CONCERNING THE INFORMATION HEREIN PROVIDED. The information should be used to make an independent determination, and, therefore, users are responsible to verify this data under their own operating conditions and methods. It is the responsibility of the user to ensure that its activities comply with all applicable government requirements. Precision Planting and its Affiliates shall not be held liable for any injuries or damage resulting from handling, use, misuse, or contact with the product.

**End of Safety Data Sheet**