Material Safety Data Sheet

Section 1 – Chemical Product and Company Identification

Catalog Numbers: PHA-4
Product Identity: Buffer Solution, pH 4.00

Chemical Family: Not Applicable
Synonyms: Not Applicable
Recommended Use: Laboratory chemicals

Issue Date: 04/02/09
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Section 2 – Hazard Identification

Emergency Overview: Non-flammable, non-corrosive, non-toxic. Does not present significant health hazards. Wash areas of contact with water.
Appearance: Clear, reddish liquid
Odor: Odorless
Target Organs: Eyes, skin

Potential Health Effects/ Routes of Exposure:
Eyes: May cause slight irritation.
Skin: May cause slight irritation.
Ingestion: May cause diarrhea, nausea, vomiting, and cramps.
Inhalation: Not likely to be a hazard.

Chronic Effect / Carcinogenicity: None (IARC, NTP, OSHA)
Aggravated Medical Conditions: No information available
These chemicals are not considered hazardous by OSHA.
See section 11 for toxicological information. See section 12 for potential environmental effects.

Section 3 – Composition, Information on Ingredients

Potassium Acid Phthalate, CAS# 877-24-7, <1% w/v
Water, purified, CAS# 7732-18-5, >98% w/v

Section 4 – First Aid

Eyes: Immediately flush eyes with water for at least 15 minutes. Immediately get medical assistance.
Skin: Flush with water for 15 minutes. Get medical assistance if irritation develops.
Ingestion: DO NOT induce vomiting. Dilute with water or milk. Get medical assistance.
Inhalation: Remove to fresh air. Give artificial respiration if necessary. If breathing is difficult, give oxygen.
Notes to Physician: Treat symptomatically.

Section 5 – Fire Fighting Measures

Flash Point: Not Applicable
Autoignition Temperature: No information available.
Explosion Limits Upper: No data available
Lower: No data available
Extinguishing Media: Use means suitable to extinguishing surrounding fire.
Unsuitable Extinguishing Media: No information available
Fire & Explosion Hazards: Not considered to be a fire or explosion hazard.
Fire Fighting Instructions / Equipment: Use normal procedures. Use protective clothing. Use NIOSH- approved breathing equipment.
Hazardous Combustion Products: No information Available
Sensitivity to mechanical impact: No information available.
Sensitivity to static discharge: No information available.
Specific Hazards Arising from the Chemical: No information available
NFPA Rating: (estimated) Health: 1; Flammable: 0; Reactivity: 0

Section 6 – Accidental Release Measures

Personal Precautions Use personal protective equipment. Ensure adequate ventilation. Avoid contact with skin, eyes and clothing.
Environmental Precautions No information available.
Methods for Containment and Clean Up Absorb with suitable material. Always obey local regulations.

Section 7 – Handling and Storage

Handling: Wash hands after handling. Avoid contact with skin and eyes.
Storage: Protect from freezing and physical damage.

Section 8 – Exposure Controls, Personal Protection

Potassium Acid Phthalate, CAS# 877-24-7, ACGIH TLV: NA, OSHA PEL: NA
Water, purified, CAS# 7732-18-5, ACGIH TLV: NA, OSHA PEL: NA

Engineering Measures/ General Hygiene: Normal ventilation is adequate. Ensure eyewash and safety showers are available.
Personal Protection Equipment: Skin Protection: Chemical resistant gloves.
Eye/Face Protection: Safety Glasses or goggles. Respiratory Protection: Normal ventilation is adequate

Section 9 – Physical and Chemical Properties

Appearance/Physical State: Clear, reddish liquid
Odor: Odorless
Boiling Point: Approx 100C
Melting Point: Approx 0 C
Vapor Density: No Information Available
Evaporation Rate: No Information Available
pH: 4.0
Flammability: No Information Available
Solubility: Infinite
Relative Density: No Information Available
Molecular Weight: Not available

Section 10 – Stability and Reactivity

Chemical Stability: Stable under normal conditions of use and storage.
Incompatible Materials Nitric Acid.
Conditions to Avoid: No Information Available.
Hazardous Decomposition Products: Oxides of potassium and carbon.
Hazardous Polymerization: Does not occur
Hazardous Reactions: None under normal processing.

Section 11 – Toxicological Information

Routes of Exposure/Symptoms/Corrosiveness – See Section 2
LD50 orl-rat: 3200 mg/kg (Potassium Acid Phthalate)  LC50 inhalation-rat: NA
Irritation: No Information Available
Toxicologically Synergistic: No Information Available
Chronic Exposure
Carcinogenicity No Information Available
Sensitization No information available.
Mutagenic Effects No information available.
Reproductive Effects No information available.
Developmental Effects (Immediate/Delayed) No information available.
Teratogenicity: No information available.
Other Adverse Effects: No Information Available.
Endocrine Disruptor Information: No information available

Section 12 – Ecological Information

Ecotoxicity: Not Available.
Persistence and Degradability: No Information Available
Mobility: No Information Available
Bioaccumulation/Accumulation: No Information Available

Section 13 – Disposal Considerations

All chemical waster generators must determine whether a discarded chemical is classified as hazardous waste. Comply with all local, state, and federal regulations.

Section 14 – Transport Information

DOT - Not Regulated

Section 15 – Regulatory Information (not meant to be all inclusive)

OSHA Status: These chemicals are not considered hazardous by OSHA.
Canada DSL: These chemicals are listed on Canada’s DSL list.
TSCA: The components of this solution are listed on the TSCA Inventory
SARA Title III Section 313: Not Applicable
RCRA Status: Not Applicable
CERCLA Reportable Quantity: Not Applicable
WHMIS: Not Applicable.

Section 16 – Additional Information

Disclaimer: The information on this MSDS applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. It is the user’s responsibility to determine the suitability and completeness of this information for his own particular use. No warranty is implied regarding the accuracy of the data or the results to be obtained from the products use.