Material Safety Data Sheet

Section 1 – Chemical Product and Company Identification

Catalog Numbers: PHA-10

Product Identity: Buffer Solution, pH 10.00

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

Issue Date: 04/02/09
Revision Date: 08/10/10

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, blue 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

Sodium Bicarbonate, CAS# 144-55-8, <0.5% w/v
Sodium Carbonate, CAS# 497-19-8, <0.5% w/v
Water, purified, CAS# 7732-18-5, >99% 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**

Sodium Bicarbonate, CAS# 144-55-8, ACGIH TLV: NA, OSHA PEL: NA
Sodium Carbonate, CAS# 497-19-8, 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, blue liquid
**Odor:** Odorless
**Boiling Point:** Approx 100°C
**Melting Point:** Approx 0°C
**Vapor Density:** No Information Available
**Evaporation Rate:** No Information Available
**pH:** 10.0
**Flammability:** No Information Available
**Solubility:** Infinite
**Relative Density:** No Information Available
**% Volatility:** No Information Available
**Specific Gravity:** Approx 1
**Vapor Pressure:** No Information Available
**Flash Point:** Not Applicable
**Coefficient of water/oil distribution:** Not Available
**Odor Threshold:** Not Available
**Decomposition Temperature:** No Information Available
**Partition Coefficient n-octanol/water:** No data
**Molecular Weight:** Not available

**Section 10 – Stability and Reactivity**

**Chemical Stability:** Stable under normal conditions of use and storage.
**Incompatible Materials** None identified.
**Conditions to Avoid:** No Information Available.
**Hazardous Decomposition Products:** Oxides of sodium.
**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: 4090 mg/kg (Sodium Carbonate), 4220 mg/kg (Sodium Bicarbonate) 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**

**Waste Disposal/Waste Disposal of Packaging:** Dilute with water.
All chemical waster generators must determine whether a discarded chemical is classified as hazardous 

**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:** None Reported
**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 form the products use.