pH Electrode Storage Solution



Section 1

Product Description

Product Name: pH Electrode Storage Solution Recommended Use: Science education applications

Synonyms: None

Distributor: Carolina Biological Supply Company

2700 York Road, Burlington, NC 27215

1-800-227-1150

Chemical Information: 800-227-1150 (8am-5pm (ET) M-F)

Chemtrec: 800-424-9300 (Transportation Spill Response 24 hours)

Section 2

Hazard Identification

Classification of the chemical in accordance with paragraph (d) of §1910.1200;





Harmful in contact with skin. Causes eye irritation.

GHS Classification:

Serious Eye Damage/Eye Irritation Category 2B, Skin Corrosion/Irritation Category 3, Acute Toxicity - Dermal Category 4

Section 3 Composition / Information on Ingredients

Chemical Name	CAS#	%
Water	7732-18-5	91
Potassium Chloride	7447-40-7	8
Potassium Biphthalate	877-24-7	1

Section 4

First Aid Measures

Emergency and First Aid Procedures

Inhalation: In case of accident by inhalation: remove casualty to fresh air and keep at rest.

Eyes: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy

to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Skin Contact: After contact with skin, wash immediately with plenty of water.

Ingestion: If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

Section 5

Firefighting Procedures

Extinguishing Media: Use dry chemical, CO2 or appropriate foam.

Fire Fighting Methods and Protection: Firefighters should wear full protective equipment and NIOSH approved self-contained

breathing apparatus.

Fire and/or Explosion Hazards: N/A

Hazardous Combustion Products: Carbon dioxide, Carbon monoxide, Potassium Oxide

Section 6

Spill or Leak Procedures

Steps to Take in Case Material Is Released or Spilled:

No adverse health affects expected from the clean-up of spilled material. Follow personal protective equipment recommendations found in Section 8 of this (M)SDS.

Exposure to the spilled material may be irritating or harmful. Follow personal protective equipment recommendations found in Section 8 of this SDS. Additional precautions may be necessary based on special circumstances created by the spill including; the material spilled, the quantity of the spill, the area in which the spill occurred. Also consider the expertise of employees in the area responding to the spill. Avoid the generation of dusts during clean-up. Prevent the spread of any spill to minimize harm to human health and the environment if safe to do so. Wear complete and proper personal protective equipment following the

recommendation of Section 8 at a minimum. Dike with suitable absorbent material like granulated clay. Gather and store in a sealed container pending a waste disposal evaluation.

Section 7

Handling and Storage

Wash thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection. Keep Handling:

container tightly closed in a cool, well-ventilated place. Keep container dry. Keep away from ... (incompatible materials to be indicated by the manufacturer). After contact with skin, wash immediately with plenty of water.

Suitable for any general chemical storage. Storage:

Keep container tightly closed in a cool, well-ventilated place.

Storage Code: Green - general chemical storage

Section 8 Protection Information

	ACG	ACGIH		<u>OSHA PEL</u>	
Chemical Name	<u>(TWA)</u>	(STEL)	(TWA)	(STEL)	
Potassium Chloride	N/A	N/A	N/A	N/A	
Potassium Biphthalate	N/A	N/A	N/A	N/A	

Control Parameters

Eye Protection:

Engineering Measures: No exposure limits exist for the constituents of this product. General room ventilation

might be required to maintain operator comfort under normal conditions of use.

Personal Protective Equipment (PPE): Lab coat, apron, eye wash, safety shower.

Respiratory Protection: No respiratory protection required under normal conditions of use.

Respirator Type(s): None required where adequate ventilation is provided. If airborne concentrations are

above the applicable exposure limits, use NIOSH/MSHA approved respiratory protection. Wear chemical splash goggles when handling this product. Have an eye wash station

available.

Skin Protection: Avoid skin contact by wearing chemically resistant gloves, an apron and other protective

equipment depending upon conditions of use. Inspect gloves for chemical break-through and replace at regular intervals. Clean protective equipment regularly. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving

Gloves: Natural latex,, Natural rubber, Neoprene, Nitrile, Polyvinyl chloride

Section 9

Physical Data

Formula: See Section 3

Molecular Weight: No Data Available

Appearance: Colorless Liquid

Odor: None

Odor Threshold: No data available

pH: No data available

Melting Point: No data available

Boiling Point: 100 C Flash Point: Not available Flammable Limits in Air: N/A Vapor Pressure: N/A

Evaporation Rate (BuAc=1): N/A Vapor Density (Air=1): N/A Specific Gravity: N/A Solubility in Water: Soluble

Log Pow (calculated): No data available Autoignition Temperature: No data available **Decomposition Temperature:** No data available

Viscosity: No data available Percent Volatile by Volume: N/A

Section 10

Reactivity Data

Reactivity: No data available

Chemical Stability: Stable under normal conditions.

Conditions to Avoid:

Incompatible Materials: Water-reactive materials, Bromine Trifluoride, Strong oxidizing agents

Hazardous Decomposition Products: Potassium Oxide, Carbon dioxide, Carbon monoxide

Hazardous Polymerization: Will not occur

Section 11 Toxicity Data

Routes of Entry Ingestion, skin and eye contact., Ingestion.

Symptoms (Acute): N/A

Delayed Effects: No data available

Acute Toxicity:

Chemical Name CAS Number Oral LD50 Dermal LD50 Inhalation LC50

Water 7732-18-5 Oral LD50 Rat

90000 mg/kg

Potassium Chloride 7447-40-7 Oral LD50 Rat

2600 mg/kg Oral LD50 Mouse

1500 mg/kg

Potassium Biphthalate 877-24-7 Oral LD50 Rat > Dermal LD50

3200 mg/kg Guinea pig > 1000

mg/kg

Carcinogenicity:

Chemical NameCAS NumberIARCNTPOSHAPotassium Chloride7447-40-7Not listedNot listedNot listedPotassium Biphthalate877-24-7Not listedNot listedNot listed

Chronic Effects:

Mutagenicity: No evidence of a mutagenic effect.

Teratogenicity: No evidence of a teratogenic effect (birth defect).

Sensitization: No evidence of a sensitization effect.
Reproductive: No evidence of negative reproductive effects.

Target Organ Effects:

Acute: See Section 2

Chronic: Not listed as a carcinogen by IARC, NTP or OSHA.

Section 12 Ecological Data

Overview: This material is not expected to be harmful to the ecology.

Mobility: No data

Persistence: Dissolved into water, Biodegradation

Bioaccumulation: No data
Degradability: No data
Other Adverse Effects: No data

Chemical NameCAS NumberEco ToxicityWater7732-18-5No data available

Potassium Chloride 7447-40-7 Aquatic LC50 (96h) Bluegill Sunfish 1060 MG/L

Aquatic EC50 (48h) Daphnia 825 MG/L

72 HR EC50 DESMODESMUS SUBSPICATUS 2500 MG/L

Potassium Biphthalate 877-24-7

Section 13 Disposal Information

Disposal Methods: Dispose in accordance with all applicable Federal, State and Local regulations. Always

contact a permitted waste disposer (TSD) to assure compliance.

Waste Disposal Code(s): Not Determined

Section 14 Transport Information

Ground - DOT Proper Shipping Name: Air - IATA Proper Shipping Name: N/A Not regulated for air transport by IATA.

Section 15 Regulatory Information

TSCA Status: All components in this product are on the TSCA Inventory.

Chemical Name	CAS Number	§ 313 Name	§ 304 RQ	CERCLA RQ	§ 302 TPQ	CAA 112(2) TQ
Potassium Chloride	7447-40-7	No	No	No	No	No
Potassium Biphthalate	877-24-7	No	No	No	No	No

Section 16 Additional Information

Revised: 04/20/2016 Replaces: 09/09/2015 Printed: 07-06-2016

The information provided in this (Material) Safety Data Sheet represents a compilation of data drawn directly from various sources available to us. Carolina Biological Supply makes no representation or guarantee as to the suitability of this information to a particular application of the substance covered in the (Material) Safety Data Sheet.

Glossary			
ACGIH	American Conference of Governmental	NTP	National Toxicology Program
	Industrial Hygienists	OSHA	Occupational Safety and Health Administration
CAS	Chemical Abstract Service Number	PEL	Permissible Exposure Limit
CERCLA	Comprehensive Environmental Response,	ppm	Parts per million
	Compensation, and Liability Act	RCRA	Resource Conservation and Recovery Act
DOT	U.S. Department of Transportation	SARA	Superfund Amendments and Reauthorization Act
IARC	International Agency for Research on Cancer	TLV	Threshold Limit Value
N/A	Not Available	TSCA	Toxic Substances Control Act
		IDLH	Immediately dangerous to life and health