

Safety Data Sheet

Phosphate Buffer Solution, 0.1M



Section 1 Product Description

Product Name: Phosphate Buffer Solution, 0.1M
Recommended Use: Science education applications
Synonyms: Potassium Phosphate Buffer Solution
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;

GHS Classification:

Other Safety Precautions: Not a dangerous substance according to GHS classification criteria.
No known OSHA hazards.

Section 3 Composition / Information on Ingredients

<u>Chemical Name</u>	<u>CAS #</u>	<u>%</u>
Water	7732-18-5	90.05
Potassium Phosphate, Monobasic	7778-77-0	6.8
Potassium Phosphate, Dibasic	7758-11-4	3.15

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: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
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 media suitable to extinguish surrounding fire.
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 health affects expected from the clean-up of this material if contact can be avoided. Follow personal protective equipment recommendations found in Section 8 of this (M)SDS. No special spill clean-up considerations. Collect and discard in regular trash. Absorb the liquid and scrub the area with detergent and water.

Section 7 Handling and Storage

Handling: Keep container tightly closed in a cool, well-ventilated place.
Storage: Suitable for any general chemical storage.
Storage Code: Green - general chemical storage

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Section 8

Protection Information

Chemical Name	ACGIH		OSHA PEL	
	(TWA)	(STEL)	(TWA)	(STEL)
Sodium Phosphate, Monobasic	N/A	N/A	N/A	N/A

Control Parameters

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.

Eye 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 work.

Gloves:

Butyl rubber, Neoprene, Nitrile, Polyvinyl chloride

Section 9

Physical Data

Formula: See Section 3

Molecular Weight: N/A

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: No data 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: 10

Percent Volatile by Volume: 0%

Section 10

Reactivity Data

Reactivity:

No data available

Chemical Stability:

Stable under normal conditions.

Conditions to Avoid:

Exposure to moisture

Incompatible Materials:

Water-reactive materials, Strong oxidizing agents, Strong reducing agents

Hazardous Decomposition Products:

Potassium Oxide, Carbon dioxide, Carbon monoxide

Hazardous Polymerization:

Will not occur

Section 11

Toxicity Data

Routes of Entry

N/A

Symptoms (Acute):

, Eye disorders

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 Phosphate, Monobasic

7778-77-0

Oral LD50 Rat

3200 mg/kg

Dermal LD50

Rabbit > 4640

mg/kg

Carcinogenicity:

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Chemical Name Potassium Phosphate, Monobasic	CAS Number 7778-77-0	IARC Not listed	NTP Not listed	OSHA Not listed
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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: N/A

Section 12 Ecological Data

Overview: This material is not expected to be harmful to the ecology.
Mobility: No data
Persistence: No data
Bioaccumulation: No data
Degradability: No data
Other Adverse Effects: No data

Chemical Name	CAS Number	Eco Toxicity
Water	7732-18-5	No data available
Potassium Phosphate, Monobasic	7778-77-0	

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: Not Regulated for Transport
Air - IATA Proper Shipping Name: 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 Phosphate, Monobasic	7778-77-0	No	No	No	No	No

Section 16 Additional Information

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

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