

Safety Data Sheet

Buffer Solution pH 7



Section 1 Product Description

Product Name: Buffer Solution pH 7
Recommended Use: Science education applications
Synonyms: None known
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;

Not a dangerous substance according to GHS classification criteria. No known OSHA hazards.

GHS Classification:

Section 3 Composition / Information on Ingredients

<u>Chemical Name</u>	<u>CAS #</u>	<u>%</u>
Water	7732-18-5	99.2
Potassium Phosphate, Monobasic	7778-77-0	0.7
Sodium Hydroxide	1310-73-2	0.1

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: 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: Fire or excessive heat may produce hazardous decomposition products.
Hazardous Combustion Products: Phosphorus compounds, Potassium Oxide, Sodium Oxides

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
Environmental Precautions: Avoid breathing material. Avoid contact with skin and eyes.
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

Handling: Avoid contact with skin and eyes.

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

Section 8 Protection Information

<u>Chemical Name</u>	<u>ACGIH</u>		<u>OSHA PEL</u>	
	<u>(TWA)</u>	<u>(STEL)</u>	<u>(TWA)</u>	<u>(STEL)</u>
Sodium Phosphate, Monobasic	N/A	N/A	N/A	N/A
Sodium Hydroxide	N/A	N/A	2 mg/m3 TWA	N/A

Control Parameters

Engineering Measures:

Local exhaust ventilation or other engineering controls are normally required when handling or using this product to avoid overexposure.

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.

Eye Protection:

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:

No information available

Section 9 Physical Data

Formula: See Section 3

Molecular Weight: No data available

Appearance: Colorless Yellow Depends upon product selection.
The color additives do not affect product hazards. Liquid

Odor: None

Odor Threshold: No data available

pH: 7

Melting Point: Estimated 0 C

Boiling Point: 100 C

Flash Point: No data available

Flammable Limits in Air: No data available

Vapor Pressure: No data available

Evaporation Rate (BuAc=1): No data available

Vapor Density (Air=1): No data available

Specific Gravity: Approx. 1

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: No data available

Section 10 Reactivity Data

Reactivity:

Not generally reactive under normal conditions.

Chemical Stability:

Stable under normal conditions.

Conditions to Avoid:

None known.

Incompatible Materials:

Water-reactive materials

Hazardous Decomposition Products:

Sodium Oxides, Potassium Oxide, Phosphorus compounds

Hazardous Polymerization:

Will not occur

Section 11 Toxicity Data

Routes of Entry

Ingestion, skin and eye contact.

Symptoms (Acute):

No data available

Delayed Effects:

No data available

Acute Toxicity:

Chemical Name

Water

CAS Number

7732-18-5

Oral LD50

Oral LD50 Rat
90000 mg/kg

Dermal LD50

Inhalation LC50

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Potassium Phosphate, Monobasic

7778-77-0

Oral LD50 Rat
3200 mg/kg

Dermal LD50
Rabbit > 4640
mg/kg

Carcinogenicity:

Chemical Name

CAS Number

IARC

NTP

OSHA

Potassium Phosphate, Monobasic

7778-77-0

Not listed

Not listed

Not listed

Sodium Hydroxide

1310-73-2

Not listed

Not listed

Not 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:

Respiratory system, Cardiovascular system, Musculoskeletal system

Chronic:

No information available

Section 12

Ecological Data

Overview:

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

Mobility:

This material is expected to have high mobility in soil. It absorbs weakly to most soil types.

Persistence:

Dissolved into water

Bioaccumulation:

Bioconcentration is not expected to occur.

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

Sodium Hydroxide

1310-73-2

Aquatic LC50 (96h) Rainbow Trout 45.4 MG/L

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 by US DOT.

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

Sodium Hydroxide

1310-73-2

No

1000 lb
RQ

1000lb (454kg)
final RQ

No

No

Section 16

Additional Information

Revised: 11/18/2015

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.

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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