

Safety Data Sheet

according to the (US) Hazard Communication Standard (29 CFR 1910.1200)

SECTION 1: Identification

Product identifier

Trade name/designation: Buffer, Reference Standard pH 7.00 ± 0.01 at $25 \,^{\circ}$ C (Color Coded Yellow)

Product No.: BDH5046 Synonyms: none

CAS No.: not applicable

Relevant identified uses of the substance or mixture and uses advised against

Recommended use For Further Manufacturing Use Only
Uses advised against Not for Human or Animal Drug Use

Details of the supplier of the safety data sheet

Supplier

VWR International LLC

Street 100 Matsonford Road Radnor Corporate Center,

Building One, Suite 200 P. O. Box 6660

Postal code/City Radnor, PA 19087

Telephone +1-800-932-5000 toll-free within US/Canada

+1-610-386-1700

Telefax +1-610-728-2103



Emergency phone number

Telephone +1-800-424-9300 (Chemtrec, 24 hrs/day, 7 days/week, USA)

Preparation Information

VWR International - Product Information Compliance

E-mail SDS@avantorsciences.com

SECTION 2: Hazard identification

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910.1200 (OSHA HCS)

This mixture is classified as not hazardous according to regulation 29 CFR 1910.1200 (OSHA HCS).

2.2 Label elements

Labelling in accordance with 29 CFR 1910.1200 (OSHA HCS)

According to regulation 29 CFR 1910.1200 (OSHA HCS) the product does not have to be labelled.

Hazard(s) not otherwise classified (HNOC)

none

SECTION 3: Composition / information on ingredients

3.1 Substances

not applicable

3.2 Mixtures

This mixture does not contain any substances presenting a health or environmental hazard within the meaning of regulation 29 CFR 1910.1200 (OSHA HCS)

SECTION 4: First aid measures

4.1 Description of first aid measures

General information

When in doubt or if symptoms are observed, get medical advice. Change contaminated, saturated clothing. Wash contaminated clothing before reuse. Do not leave affected person unattended.

In case of inhalation

Remove casualty to fresh air and keep warm and at rest. Obtain medical attention if symptoms appear.

In case of skin contact

Gently wash with plenty of soap and water. In case of skin reactions, consult a physician.



After eye contact:

Rinse immediately carefully and thoroughly with eye-bath or water. Obtain medical attention if symptoms appear.

In case of ingestion

Rinse mouth thoroughly with water. Call a doctor if you feel unwell.

Self-protection of the first aider

First aider: Pay attention to self-protection!

4.2 Most important symptoms/effects, acute and delayed

No known symptoms to date.

4.3 Indication of any immediate medical attention and special treatment needed

No special information on medical attention and special treatment availabel.

SECTION 5: Fire fighting measures

5.1 Extinguishing media

Suitable extinguishing media

Co-ordinate fire-fighting measures to the fire surroundings.

Water spray.

Dry extinguishing powder.

Alcohol resistant foam.

Carbon dioxide (CO2).

Extinguishing media which must not be used for safety reasons

Full water jet.

5.2 Specific hazards arising from the chemical

In case of fire and/or explosion do not breathe fumes.

Do not allow run-off from fire-fighting to enter drains or water courses.

In case of fire: Evacuate area.

In case of fire may be liberated:

Pyrolysis products, toxic

5.3 Advice for firefighters

The product itself does not burn.

Do not breathe gas/fume/vapor/spray.

 $\label{lem:fight-fire} \mbox{Fight fire with normal precautions from a reasonable distance}.$

Protective equipment and precautions for firefighters:

Wear a self-contained breathing apparatus and chemical protective clothing.

Additional information

no data available

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel: Remove victim out of the danger area. First Aid, decontamination, treatment of symptoms.



6.2 Environmental precautions

No special environmental measures are necessary.

6.3 Methods and material for containment and cleaning up

Take up mechanically, placing in appropriate containers for disposal. Dispose according to legislation.

6.4 Additional information

Personal protection equipment (PPE): see section 8 Disposal information: see section 13

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advices on safe handling

No special measures are necessary.

Measures to prevent fire, aerosol and dust generation

No special measures are necessary.

Measures required to protect the environment

No special measures are necessary.

Wash hands before breaks and after work. Avoid contact with eyes and skin. When using do not eat, drink or smoke. Provide eye shower and label its location conspicuously.

7.2 Conditions for safe storage, including any incompatibilities

Recommended storage temperature: 4-30 °C

Keep container tightly closed and in a well-ventilated place.

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Does not contain substances above concentration limits fixing an occupational exposure limit.

8.2 Engineering controls

Appropriate engineering controls

Technical measures and the application of suitable work processes have priority over personal protection equipment. If handled uncovered, arrangements with local exhaust ventilation have to be used.

Personal protection equipment (PPE)

Wear suitable protective clothing. When handling with chemical substances, protective clothing must be worn.

Eye/face protection

Eye glasses with side protection

Skin protection

Wear suitable gloves. When handling with chemical substances, protective gloves must be worn. In the case of wanting to use the gloves again, clean them before taking off and air them well. Check leak tightness/impermeability prior to use.



By short-term hand contact

Suitable material: NBR (Nitrile rubber)

Thickness of the glove material: 0,12 mm
Breakthrough time: > 480 min

By long-term hand contact

Suitable material: NBR (Nitrile rubber)

Thickness of the glove material: 0,12 mm
Breakthrough time: > 480 min

Respiratory protection

Usually no personal respirative protection necessary.

Additional information

Wash hands before breaks and after work. Avoid contact with eyes and skin. When using do not eat, drink or smoke. Provide eye shower and label its location conspicuously.

Environmental exposure controls no data available



SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

(a) Appearance

Physical state: liquid Color: yellow

(b) Odor: no data available (c) Odor threshold: no data available

Safety relevant basic data

(d) pH: $7.00 (25 \, ^{\circ}\text{C}) \pm 0.01$ (e) Melting point/freezing point: no data available (f) Initial boiling point and boiling range: no data available (g) Flash point: no data available (h) Evaporation rate: no data available (i) Flammability (solid, gas): not applicable

(j) Flammability or explosive limits

Lower explosion limit:
Upper explosion limit:
no data available
(k) Vapor pressure:
no data available
(l) Vapor density:
no data available
mo data available
no data available

(n) Solubility(ies)

Water solubility: no data available
(o) Partition coefficient: n-octanol/water: no data available
(p) Auto-ignition temperature: no data available
(q) Decomposition temperature: not applicable

(r) Viscosity

Kinematic viscosity: no data available
Dynamic viscosity: no data available
(s) Explosive properties: not applicable
(t) Oxidising properties: not applicable

(u) Particle characteristics: does not apply to liquids

9.2 Other information

Bulk density:no data availableRefraction index:no data availableDissociation constant:no data availableSurface tension:no data availableHenry's Law Constant:no data available

SECTION 10: Stability and reactivity

10.1 Reactivity

This material is non-reactive under normal conditions.



10.2 Chemical stability

The product is chemically stable under standard ambient conditions (room temperature).

10.3 Possibility of hazardous reactions

No further relevant information available.

10.4 Conditions to avoid

No further relevant information available.

10.5 Incompatible materials

No further relevant information available.

10.6 Hazardous decomposition products

Decomposition products in case of fire: see section 5.

10.7 Additional information

no data available

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute effects

Acute oral toxicity: no data available

Acute dermal toxicity: no data available

Acute inhalation toxicity: no data available

Irritant and corrosive effects

Primary irritation to the skin: not applicable

Irritation to eyes: not applicable

Irritation to respiratory tract: not applicable



Respiratory or skin sensitization

In case of skin contact: not sensitizing In case of inhalation: not sensitizing

STOT-single exposure

not applicable

STOT-repeated exposure

not applicable

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Carcinogenicity

No indication of human carcinogenicity.

Germ cell mutagenicity

No indications of human germ cell mutagenicity exist.

Reproductive toxicity

No indications of human reproductive toxicity exist.

Aspiration hazard

not applicable

Other adverse effects

no data available

Additional information

no data available

SECTION 12: Ecological information

12.1 Ecotoxicity

Fish toxicity:

no data available

Daphnia toxicity:

no data available

Algae toxicity:

no data available

Bacteria toxicity:

no data available

12.2 Persistence and degradability

no data available

12.3 Bioaccumulative potential

Partition coefficient: n-octanol/water: no data available



12.4 Mobility in soil:

no data available

12.5 Results of PBT/vPvB assessment

not applicable

12.6 Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to the environment.

12.7 Other adverse effects

no data available

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Appropriate disposal / Product

Dispose according to legislation. Consult the appropriate local waste disposal expert about waste disposal. Before discharge into sewage plants the product normally needs to be neutralised.

Waste code product: no data available

Appropriate disposal / Package

Dispose according to legislation. Handle contaminated packages in the same way as the substance itself.

Additional information

no data available

SECTION 14: Transport information

Land transport (DOT)

No dangerous good in sense of this transport regulation.

Sea transport (IMDG)

No dangerous good in sense of this transport regulation.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code not relevant $\,$

Air transport (ICAO-TI / IATA-DGR)

No dangerous good in sense of this transport regulation.



SECTION 15: Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture

National regulations

Toxic Substances Control Act (TSCA)

- Sodium phosphate dibasic anhydrous CAS No.: 7558-79-4
- Potassium phosphate monobasic CAS No.: 7778-77-0
- Water CAS No.: 7732-18-5

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Does not contain listed substances.

SARA 313 Components

Does not contain listed substances.

US State Regulations

Massachusetts Right To Know Components

- Sodium phosphate dibasic anhydrous - CAS No.: 7558-79-4

Pennsylvania Right To Know Components

- Sodium phosphate dibasic anhydrous - CAS No.: 7558-79-4

New Jersey Right To Know Components

- Sodium phosphate dibasic anhydrous - CAS No.: 7558-79-4

California Prop. 65 Components

Does not contain listed substances.



SECTION 16: Other information

Abbreviations and acronyms

ACGIH - American Conference of Governmental Industrial Hygiensts

DOT - Department of Transportation

IARC - International Agency for Research on Cancer

IATA-DGR - International Air Transport Association-Dangerous Goods Regulations

ICAO-TI - International Civil Aviation Organization-Technical Instructions

IMDG - International Maritime Code for Dangerous Goods

LTV - Long Term Value

NIOSH - National Institute for Occupational Safety and Health

NTP - National Toxicology Program

OSHA - Occupational Safety & Health Administration

PBT - Persistent, Bioaccumulative and Toxic

PEL - Permissible Exposure Limit

STV - Short Term Value

SVHC - Substances of Very High Concern

TDG - Transport of Dangerous Goods

TLV - Threshold Limit Value

vPvB - very Persistent, very Bioaccumulative

Key literature references and sources for data

This Safety Data Sheet has been prepared based on information available for public as TOXNET information, European Chemicals Agency (ECHA) substance dossier, papers from international cancer research institutes (IARC Monographs), U.S. National Toxicology Program data, U.S. Agency for Toxic Substances and Disease Control (ATSDR), PubChem websites and SDS from our raw material manufacturers.

Revision date	Version	Print date
29.11.2022	6.1	29.11.2022

Additional information

Indication of changes general update

If you need an explanation of the change, contact the supplier (SDS@avantorsciences.com).

The above information is believed to be correct but does not purport to be all-inclusive and shall be used only as a guidance. The information in this document is based on the present state knowledge and is applicable to the product with regard to appropriate safty precautions. It does not represent any guarantee of the properties of the product. VWR International and his Affiliates shall not be held liable for any damage resulting from handling.