

Printing 03.07.2024 version number 25 (replaces version 24) Revision: 22.05.2020

SECTION 1: Identification of the substance/mixture and of the company/undertaking

*1.1 Product identifier

*Trade name: <u>BUFFER SOLUTION pH 10.00 ± 0.01 @ 25°C</u> Certified Traceable to N.I.S.T.

*Article number: 1100525C *Registration number

A registration number is not available for this substance as the substance or its uses are exempted from registration, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.

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

*Product category For experiments, research, or testing purposes only. Prohibited of use for other purposes.

*Application of the substance / the mixture Laboratory Chemicals

*1.3 Details of the supplier of the safety data sheet

*Manufacturer/Supplier:

Reagecon Diagnostics Ltd.

Shannon Free Zone,

Shannon,

Co. Clare,

Ireland.

Tel +353 61 472622

Fax +353 61 472642

*Further information obtainable by contacting: sds@reagecon.ie

*1.4 Emergency telephone number:

National Poisons Information Centre: +353 (1) 809 2166 (8.00 a.m. to 10.00 p.m. 7 days a week) Healthcare Professionals: +353 (1) 809 2566 (24 hour service)

For Hazardous Materials [or Dangerous Goods] Incident

Spill, Leak, Fire, Exposure, or Accident

Call CHEMTREC

For Ireland call +(353)-19014670

For Outside Ireland call +1 703-741-5970 / 1-800-424-9300 CCN849800

SECTION 2: Hazards identification

*2.1 Classification of the substance or mixture

*Classification according to Regulation (EC) No 1272/2008



health hazard

Repr. 1B H360FD May damage fertility. May damage the unborn child.

*2.2 Label elements

*Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the GB CLP regulation.

*Hazard pictograms



GHS08

*Signal word Danger

*Hazard-determining components of labelling:

boric acid, disodium salt

*Hazard statements

H360FD May damage fertility. May damage the unborn child.

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*Precautionary statements

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.

P308+P313 IF exposed or concerned: Get medical advice/attention.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international

regulations.

*2.3 Other hazards

*Results of PBT and vPvB assessment

***PBT:** Not applicable. ***vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

*3.2 Mixtures

*Description: Mixture of substances listed below with nonhazardous additions.

1				
*Dangerous compon	ents:			
CAS: 1330-43-4 EINECS: 215-540-4	boric acid, disodium salt	♦ Repr. 1B, H360FD	≥0.3-≤2.5%	
*SVHC				
CAS: 1330-43-4 box	ric acid, disodium salt			

SECTION 4: First aid measures

*4.1 Description of first aid measures

*After inhalation:

Provide fresh air, warmth and rest. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. Obtain medical attention if any discomfort continues.

*After skin contact: Generally the product does not irritate the skin.

*After eye contact:

Promptly wash eyes with plenty of water for up to 15 minutes. Open eyes wide apart and rinse well to remove any contact lenses. Do not remove contact lenses by hand. Continue to rinse. Get medical attention if symptoms persist.

*After swallowing: If symptoms persist consult doctor.

*4.2 Most important symptoms and effects, both acute and delayed No further relevant information available.

*4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

SECTION 5: Firefighting measures

*5.1 Extinguishing media

*Suitable extinguishing agents:

Indications shall be given whether any extinguishing media are inappropriate for a particular situation involving the substance or mixture

Use fire extinguishing methods suitable to surrounding conditions.

*5.2 Special hazards arising from the substance or mixture No further relevant information available.

*5.3 Advice for firefighters

*Protective equipment:

Fire fighters should wear complete protective clothing including self-contained breathing apparatus. Do not breathe fumes. Keep containers cool by spraying with water if exposed to fire. Avoid run off to waterways and sewers



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SECTION 6: Accidental release measures

*6.1 Personal precautions, protective equipment and emergency procedures

Wear protective equipment as described in Section 8 below. Keep unprotected persons away.

*6.2 Environmental precautions: Dilute with plenty of water.

*6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

*6.4 Reference to other sections

No dangerous substances are released.

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

SECTION 7: Handling and storage

*7.1 Precautions for safe handling

Keep receptacles tightly sealed.

No special precautions are necessary if used correctly.

*Information about fire - and explosion protection: No special measures required.

*7.2 Conditions for safe storage, including any incompatibilities

*Storage:

*Requirements to be met by storerooms and receptacles: No special requirements.

*Further information about storage conditions: None.

*7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

*8.1 Control parameters

*Ingredients with limit values that require monitoring at the workplace:

CAS: 1330-43-4 boric acid, disodium salt

WEL Long-term value: 1 mg/m³

*8.2 Exposure controls

*Appropriate engineering controls No further data; see section 7.

*Individual protection measures, such as personal protective equipment

*General protective and hygienic measures: Wash hands before breaks and at the end of work.

*Respiratory protection:

Where risk assessment shows air-purifying respirators are appropriate use a respirator with multi-purpose combination (US) or type ABEK (EN14387) respirator cartridges as back up to engineering controls. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

*Hand protection

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Always ensure that gloves are inspected before use.

Selection of protective gloves must include consideration of the penetration times along with rates of diffusion and degradation. The selected glove should comply with the specifications of EU Directive 89/686/EEC and the standard EN374 derived from it.

*Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with

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^{*}Information about storage in one common storage facility: Not required.

^{*}Additional information: The lists valid during the making were used as basis.



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applicable laws and good laboratory practices.

Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/ EEC and the standard EN 374 derived from it.

Full contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm Break through time: 480 min

Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm Break through time: 480 min

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

*Penetration time of glove material

In the absence of data above, the exact break through time has to be sourced from the manufacturer of the protective gloves and has to be observed.

*Eye/face protection



Goggles recommended during refilling: Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU)

SECTION 9: Physical and chemical properties

*9.1 Information on basic physical and chemical properties

*General Information

*Physical state Liquid

*Colour: According to product specification

*Odour: Characteristic
*Odour threshold: Not determined.

*Melting point/freezing point: $0 \, {}^{\circ}C$

*Boiling point or initial boiling point and boiling

range*FlammabilityNot applicable.

*Lower and upper explosion limit

*Lower:

*Upper:

*Upper:

*Flash point:

*Decomposition temperature:

*pH

Not determined.

Not applicable.

Not determined.

Not determined.

*Viscosity:

*Kinematic viscosity Not determined. *Dynamic: Not determined.

*Solubility

*water: Fully miscible.
*Partition coefficient n-octanol/water (log value) Not determined.

*Vapour pressure at 20 °C: 23 hPa

*Density and/or relative density

*Density: Not determined.

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*Relative density	Not determined.
*Vapour density	Not determined.
*9.2 Other information	
*Appearance:	
*Form:	Liquid
*Important information on protection of heal environment, and on safety.	th and
*Ignition temperature:	Product is not selfigniting.
*Explosive properties:	Product does not present an explosion hazard.
*Change in condition	
*Evaporation rate	Not determined.
*Information with regard to physical hazard o	classes
*Explosives	Void
*Flammable gases	Void
*Aerosols	Void
*Oxidising gases	Void
*Gases under pressure	Void
*Flammable liquids	Void
*Flammable solids	Void
*Self-reactive substances and mixtures	Void
*Pyrophoric liquids	Void
*Pyrophoric solids	Void
*Self-heating substances and mixtures	Void
*Substances and mixtures, which emit flamm	able
gases in contact with water	Void
*Oxidising liquids	Void
*Oxidising solids	Void
*Organic peroxides	Void
*Corrosive to metals	Void
*Desensitised explosives	Void

SECTION 10: Stability and reactivity

- *10.1 Reactivity No further relevant information available.
- *10.2 Chemical stability
- *Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- *10.3 Possibility of hazardous reactions No dangerous reactions known.
- *10.4 Conditions to avoid No further relevant information available.
- *10.5 Incompatible materials: No further relevant information available.
- *10.6 Hazardous decomposition products: No dangerous decomposition products known.

SECTION 11: Toxicological information

- *11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008
- *Acute toxicity Based on available data, the classification criteria are not met.
- *Reproductive toxicity May damage fertility. May damage the unborn child.
- *11.2 Information on other hazards
- *Endocrine disrupting properties

None of the ingredients is listed.



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SECTION 12: Ecological information

- *12.1 Toxicity
- *Aquatic toxicity: No further relevant information available.
- *12.2 Persistence and degradability No further relevant information available.
- *12.3 Bioaccumulative potential No further relevant information available.
- *12.4 Mobility in soil No further relevant information available.
- *12.5 Results of PBT and vPvB assessment
- ***PBT:** Not applicable.
- *vPvB: Not applicable.
- *12.6 Endocrine disrupting properties

The product does not contain substances with endocrine disrupting properties.

- *12.7 Other adverse effects
- *Additional ecological information:
- *General notes: Not hazardous for water.

SECTION 13: Disposal considerations

- *13.1 Waste treatment methods
- *Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

- *Uncleaned packaging:
- *Recommendation: Disposal must be made according to official regulations.
- *Recommended cleansing agents: Water, if necessary together with cleansing agents.

*14.1 UN number or ID number *ADR, ADN, IMDG, IATA	Void
*14.2 UN proper shipping name *ADR, ADN, IMDG, IATA	Void
*14.3 Transport hazard class(es)	
*ADR, ADN, IMDG, IATA *Class	Void
*14.4 Packing group *ADR, IMDG, IATA	Void
*14.5 Environmental hazards: *Marine pollutant:	No
*14.6 Special precautions for user	Not applicable.
*14.7 Maritime transport in bulk according instruments	to IMO Not applicable.
*Transport/Additional information:	Not dangerous according to the above specifications.
*UN "Model Regulation":	Void

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SECTION 15: Regulatory information

*15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture *Poisons Act

*Regulated explosives precursors

None of the ingredients is listed.

*Regulated poisons

None of the ingredients is listed.

*Reportable explosives precursors

None of the ingredients is listed.

*Reportable poisons

CAS: 1310-73-2 sodium hydroxide

12% of total caustic alkalinity

- *Directive 2012/18/EU
- *Named dangerous substances ANNEX I None of the ingredients is listed.
- *National regulations:
- *Waterhazard class: Generally not hazardous for water.

*Substances of very high concern (SVHC) according to UK REACH

CAS: 1330-43-4 boric acid, disodium salt

*15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

*Relevant Phrases:

H360FD May damage fertility. May damage the unborn child.

- *Department issuing SDS: Health and Safety
- *Contact: sds@reagecon.ie
- *Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organisation

UK REACH (Registration, Evaluation, Authorisation and restriction of Chemicals)

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative Repr. 1B: Reproductive toxicity – Category 1B

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