according to Regulation (EC) No. 1907/2006 and Regulation (EU) No 453/2010 (REACH)

Revision date:09.01.2013Version:4Language:en-GB,IEDate of print:06.03.2014



pH Buffer 9.21

Material number 238xx9

1 of 7

Page:

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

1.1 Product identifier

Trade name:

pH Buffer 9.21

This safety data sheet pertains to the following products: Article number 238216, 238219, 238268, 238897, 238319, 238919, 242146, 242147.

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

General use: buffer solution, calibration solution

1.3 Details of the supplier of the safety data sheet

Company name:HAMILTON Bonaduz AGStreet/POB-No.:Via Crusch 8Postal Code, city:7402 BonaduzSwitzerlandSwitzerlandWWW:www.hamilton.chTelephone:+41 81 660 62 76Telefax:+41 81 660 60 70

Dept. responsible for information:

Susanne Näf-Rüdiger, Telephone: +41 81 660 62 76, E-mail SNaef@hamilton.ch

1.4 Emergency telephone number

GIZ-Nord, Germany, Telephone: +49 (0)551-19240

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to EC regulation 1272/2008 (CLP)

This mixture is classified as not hazardous.

Classification according to Directive 67/548/EEC or 1999/45/EC

This preparation is classified as not hazardous.

2.2 Label elements

Labelling (CLP)

- Hazard statements: not applicable
- Safety precautions: not applicable

Labelling (67/548/EEC or 1999/45/EC)

R phrase(s):not applicableS phrase(s):not applicable

2.3 Other hazards

No risks worthy of mention.

according to Regulation (EC) No. 1907/2006 and Regulation (EU) No 453/2010 (REACH)

Revision date:09.01.2013Version:4Language:en-GB,IEDate of print:06.03.2014

Page

pH Buffer 9.21

Material number 238xx9

2 of 7

SECTION 3: Composition / information on ingredients

3.1 Substances: not applicable

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3.2 Mixtures

Chemical characterization: Mixture of inorganic salts in aqueous solution with dyestuff

Hazardous ingredients:

Ingredient	Designation	Content	Classification
EINECS 215-540-4	Disodium tetraborate x 10	< 2 %	EU: Repr. Cat. 2; R60. Repr. Cat. 2; R61.
CAS 1303-96-4	H2O (SVHC)		CLP: Repr. 1B; H360FD.

Additional information: This mixture contains the following substances of very high concern (SVHC) which are included in the Candidate List according to Article 59 of REACH: Disodium tetraborate x 10 H2O (CMR)

SECTION 4: First aid measures

4.1 Description of first aid measures

In case of inhalation:Move victim to fresh air. In case of respiratory difficulties seek medical attention.In case of skin contact:Remove residues with water. Remove contaminated clothing.
In case of skin reactions, consult a physician.After eye contact:With eyelids open, wash out eyes for several minutes under flowing water. In case of troubles
or persistent symptoms, consult an opthalmologist.After swallowing:Rinse mouth and drink large quantities of water.
After ingestion of high quantities: Induce vomiting.
If you feel unwell, seek medical advice.

4.2 Most important symptoms and effects, both acute and delayed

no data available

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media:

Product is non-combustible. Extinguishing materials should therefore be selected according to surroundings.

5.2 Special hazards arising from the substance or mixture

Fires in the immediate vicinity may cause the development of dangerous vapours.

5.3 Advice for firefighters

Special protective equipment for firefighters:

In case of surrounding fires: Wear self-contained breathing apparatus.

Additional information: Hazchem-Code: -

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Avoid contact with skin and eyes.

according to Regulation (EC) No. 1907/2006 and Regulation (EU) No 453/2010 (REACH)

Revision date:09.01.2013Version:4Language:en-GB,IEDate of print:06.03.2014

Page:



pH Buffer 9.21

Material number 238xx9

3 of 7

6.2 Environmental precautions

Discharge into the environment must be avoided.

6.3 Methods and material for containment and cleaning up

Soak up with absorbent materials such as sand, siliceus earth, acid- or universal binder. Store in special closed containers and dispose of according to ordinance. Wash spill area with plenty of water.

6.4 Reference to other sections

Refer additionally to chapter 8 and 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advices on safe handling: Avoid contact with skin and eyes.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storerooms and containers:

Keep container tightly closed. Store at room temperature.

Storage class:

12 = Non-combustible liquids

7.3 Specific end use(s)

buffer solution, calibration solution

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values:

CAS No.	Designation	Туре	Limit value
1303-96-4	Disodium tetraborate x 10 H2O (SVHC)	Great Britain: WEL-TWA Ireland: 8 hours	5 mg/m³ 5 mg/m³

8.2 Exposure controls

Provide good ventilation and/or an exhaust system in the work area.

Occupational exposure controls

Respiratory protection:	Respiratory protection must be worn whenever the WEL levels have been exceeded. Provide adequate ventilation.			
Hand protection:	Protective gloves according to EN 374. Glove material: Nitrile rubber. Observe glove manufacturer's instructions concerning penetrability and breakthrough time.			
Eye protection:	Tightly sealed goggles according to EN 166.			
Body protection:	Wear suitable protective clothing.			
General protection and hygiene measures:				
	Change contaminated clothing.			
	Wash hands before breaks and after work.			

according to Regulation (EC) No. 1907/2006 and Regulation (EU) No 453/2010 (REACH)

Revision date:09.01.2013Version:4Language:en-GB,IEDate of print:06.03.2014

Page:



Material number 238xx9

4 of 7

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance: Odour: Odour threshold:	Physical state: liquid Colour: blue odourless no data available
pH value: Melting point/freezing point: Initial boiling point and boiling range: Flash point/flash point range: Evaporation rate: Flammability: Explosive properties: Explosion limits:	at 20 °C: 9.2 no data available approx. 100 °C no data available no data available no data available no data available no data available no data available
Vapour pressure: Vapour density: Density: Water solubility: Partition coefficient: n-octanol/water: Auto-ignition temperature: Thermal decomposition: Viscosity, dynamic: Explosive properties: Oxidizing characteristics:	no data available no data available at 20 °C: approx. 1.0 g/mL at 20 °C: completely miscible no data available no data available no data available no data available no data available no data available no data available

9.2 Other information

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Additional information:

no data available

SECTION 10: Stability and reactivity

10.1 Reactivity

refer to 10.3

10.2 Chemical stability

Product is stable under normal storage conditions.

10.3 Possibility of hazardous reactions

No hazardous reactions known.

10.4 Conditions to avoid

no data available

10.5 Incompatible materials

Metals

10.6 Hazardous decomposition products

Thermal decomposition: no data available

according to Regulation (EC) No. 1907/2006 and Regulation (EU) No 453/2010 (REACH)

Revision date:09.01.2013Version:4Language:en-GB,IEDate of print:06.03.2014

Page:

pH Buffer 9.21

Material number 238xx9

5 of 7

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Toxicological effects:

Acute toxicity (oral): Lack of data. Acute toxicity (dermal): Lack of data.

Acute toxicity (inhalative): Lack of data.

Skin corrosion/irritation: Lack of data.

Eye damage/irritation: Lack of data.

Sensitisation to the respiratory tract: Lack of data.

Skin sensitisation: Lack of data.

Germ cell mutagenicity/Genotoxicity: Lack of data.

Carcinogenicity: Lack of data.

Reproductive toxicity: Lack of data.

Effects on or via lactation: Lack of data.

Specific target organ toxicity (single exposure): Lack of data.

Specific target organ toxicity (repeated exposure): Lack of data.

Aspiration hazard: Lack of data.

General remarks

The following applies to Disodium tetraborate in general: May impair fertility. May cause harm to the unborn child.

SECTION 12: Ecological information

12.1 Toxicity

Further details: no data available

12.2. Persistence and degradability

Further details: 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 and vPvB assessment

no data available

12.6 Other adverse effects

General information: Do not allow to enter undiluted resp. in large quantities into surface water or into drains.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Waste key number: 06 03 14 = Solid salts and solutions, which contain neither heavy metals nor cyanides



according to Regulation (EC) No. 1907/2006 and Regulation (EU) No 453/2010 (REACH)

Revision date:09.01.2013Version:4Language:en-GB,IEDate of print:06.03.2014

Page:



pH Buffer 9.21

Material number 238xx9

6 of 7

Recommendation: Dispose of waste according to applicable legislation.

Contaminated packaging

Waste key number: Recommendation: 15 01 02 = Plastic packaging

Dispose of waste according to applicable legislation. Non-contaminated packages may be recycled.

SECTION 14: Transport information

14.1 UN number

not applicable

14.2 UN proper shipping name

ADR/RID, IMDG, IATA: Not restricted

14.3 Transport hazard class(es)

not applicable

14.4 Packing group

not applicable

14.5 Environmental hazards

Marine pollutant:

14.6 Special precautions for user

No

No dangerous good in sense of these transport regulations.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

no data available

SECTION 15: Regulatory information

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

National regulations - Great Britain

Hazchem-Code:

National regulations - USA

Hazard rating systems:



NFPA Hazard Rating: Health: 1 (Slight) Fire: 0 (Minimal) Reactivity: 0 (Minimal) HMIS Version III Rating: Health: 1 (Slight) Flammability: 0 (Minimal) Physical Hazard: 0 (Minimal)

Personal Protection: B

HEALTH1FLAMMABILITY0PHYSICAL HAZARD0B

15.2 Chemical Safety Assessment

For this mixture a chemical safety assessment is not required.

according to Regulation (EC) No. 1907/2006 and Regulation (EU) No 453/2010 (REACH)

Revision date:09.01.2013Version:4Language:en-GB,IEDate of print:06.03.2014

Page:



pH Buffer 9.21

Material number 238xx9

7 of 7

SECTION 16: Other information

Further information

Wording of the H-phrases under paragraph 2 and 3:

H360FD = May damage fertility. May damage the unborn child.

Wording of the R-phrases under paragraph 2 and 3:

R 60 = May impair fertility.

R 61 = May cause harm to the unborn child.

Reason of change:Changes in section 3: SVHCDate of first version:20.01.2010

Department issuing data sheet

Contact person: see section 1: Dept. responsible for information

For abbreviations and acronyms, see: ECHA Guidance on information requirements and chemical safety assessment, chapter R.20 (Table of terms and abbreviations).

The information in this data sheet has been established to our best knowledge and was up-to-date at time of revision. It does not represent a guarantee for the properties of the product described in terms of the legal warranty regulations.