

Safety Data Sheet

HACH LANGE GmbH

according to Regulation (EC) No 1907/2006

22835-00 Singlet pH Buffer Solution; pH 7.00

Revision date: 21.06.2018 Product code: 2283500 Page 1 of 8

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

1.1. Product identifier

22835-00 Singlet pH Buffer Solution; pH 7.00

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

Use of the substance/mixture

Water analysis

1.3. Details of the supplier of the safety data sheet

Company name: HACH LANGE GmbH
Street: Willstätterstr. 11
Place: D-40549 Düsseldorf
Telephone: +49 (0)211 5288-383
e-mail: SDS@hach.com
Internet: www.de.hach.com
Responsible Department: HACH LANGE Ltd.

5, Pacific Way

Salford Manchester M50 1DL - United Kingdom Tel. +44 (0) 161 872 1487 * Fax +44 (0) 161 848 7324

e-Mail: info-uk@hach.com

HACH LANGE Ltd.

Unit 1, Chestnut Road Western Industrial Estate

IRL-Dublin 12

Tel. +353 (0)1 4602522 e-Mail: info-ie@hach.com

1.4. Emergency telephone Poison Control Center Mainz: Tel: +49 (0) 6131 19240 - 24 hour emergency

number: service -

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No. 1272/2008

This mixture is not classified as hazardous in accordance with Regulation (EC) No. 1272/2008.

2.2. Label elements

Additional advice on labelling

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

2.3. Other hazards

no data available

SECTION 3: Composition/information on ingredients

3.2. Mixtures



according to Regulation (EC) No 1907/2006

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Hazardous components

CAS No	Chemical name					
	EC No	Index No	REACH No			
	GHS Classification					
7732-18-5	Water					
	231-791-2					
7558-79-4	di-Sodium hydrogen phosphate					
	231-448-7		01-2119489797-11			
	Skin Irrit. 2, Eye Irrit. 2; H315 H319					
7778-77-0	Potassium dihydrogen phosphate		< 1 %			
	231-913-4					
	Acute Tox. 4, Eye Irrit. 2; H302 H319					

Full text of H and EUH statements: see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Take off contaminated clothing and shoes immediately.

Show this safety data sheet to the doctor in attendance.

After inhalation

Move to fresh air.

If symptoms persist, call a physician.

After contact with skin

Wash off immediately with plenty of water for at least 15 minutes.

If skin irritation persists, call a physician.

After contact with eyes

Immediately flush eye(s) with plenty of water.

If eye irritation persists, consult a specialist.

After ingestion

Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Obtain medical attention.

4.2. Most important symptoms and effects, both acute and delayed

No known effect.

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

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. The product itself does not burn.

Unsuitable extinguishing media

no data available

5.2. Special hazards arising from the substance or mixture

Fire may liberate hazardous vapours.





Be Right"

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5.3. Advice for firefighters

In order to avoid contact with skin, keep a safety distance and wear suitable protective clothing. In the case of respirable dust and/or fumes, use self-contained breathing apparatus and dust impervious protective suit.

Additional information

Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Use personal protective equipment.

Only qualified personnel equipped with suitable protective equipment may intervene. Immediately evacuate personnel to safe areas.

6.2. Environmental precautions

Do not flush into surface water or sanitary sewer system.

6.3. Methods and material for containment and cleaning up

Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local/national regulations (see section 13).

6.4. Reference to other sections

See also section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Avoid contact with skin and eyes.

Wash thoroughly after handling.

General industrial hygiene practice.

Advice on protection against fire and explosion

See also section 5

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

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

Hints on joint storage

This information is not available.

Further information on storage conditions

This information is not available.

7.3. Specific end use(s)

Standard solution

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Additional advice on limit values

This information is not available.

8.2. Exposure controls

Appropriate engineering controls

Technical measures and appropriate working operations should be given priority over the use of personal protective equipment.



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Protective and hygiene measures

The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Wash hands before breaks and at the end of workday.

Eye/face protection

Safety glasses with side-shields

Hand protection

Use barrier skin cream.

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

Skin protection

Avoid contact with skin, eyes and clothing.

Respiratory protection

Use with adequate ventilation.

Environmental exposure controls

Should not be released into the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: liquid
Colour: yellow
Odour: odourless

pH-Value (at 20 °C): 7,01

Changes in the physical state

Melting point: ~0 °C
Initial boiling point and boiling range: ~100 °C
Sublimation point: no data available
Softening point: no data available
Pour point: no data available
: no data available
: no data available
Flash point: not applicable
Sustaining combustion: No data available

Flammability

Solid: no data available
Gas: no data available

Explosive properties

no data available

Lower explosion limits:

Upper explosion limits:

Ignition temperature:

no data available

no data available

Auto-ignition temperature

Solid: no data available
Gas: no data available
Decomposition temperature: no data available

Oxidizing properties

no data available

Vapour pressure: no data available



according to Regulation (EC) No 1907/2006

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no data available Vapour pressure: Density (at 20 °C): 1,0 g/cm³ not applicable Bulk density: Water solubility: soluble (at 20 °C)

Solubility in other solvents

no data available

Partition coefficient: no data available Viscosity / dynamic: no data available Viscosity / kinematic: no data available Flow time: no data available Vapour density: no data available Evaporation rate: no data available Solvent separation test: no data available Solvent content: no data available

9.2. Other information

Solid content: no data available

no data available

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reaction known under conditions of normal use.

10.2. Chemical stability

The product is chemically stable.

10.3. Possibility of hazardous reactions

Hazardous polymerisation does not occur.

10.4. Conditions to avoid

Heat.

10.5. Incompatible materials

None known.

10.6. Hazardous decomposition products

No decomposition if stored and applied as directed.

Further information

Stable under recommended storage conditions.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicocinetics, metabolism and distribution

No information available.

Acute toxicity

No toxicology information is available.



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CAS No	Chemical name							
	Exposure route	Dose	Species	Source	Method			
7558-79-4	di-Sodium hydrogen phosphate							
	oral	LD50 17000 mg/kg	rat					
7778-77-0	Potassium dihydrogen phosphate							
	oral	LD50 1700 mg/kg	mouse					
	dermal	LD50 4640 mg/kg	rabbit					

Irritation and corrosivity

No information available.

Sensitising effects

No information available.

Carcinogenic/mutagenic/toxic effects for reproduction

No information available.

STOT-single exposure

The substance or mixture is not classified as specific target organ toxicant, single exposure.

STOT-repeated exposure

No information available.

Aspiration hazard

No aspiration toxicity classification

Specific effects in experiment on an animal

No information available.

Additional information on tests

No information available.

Practical experience

Observations relevant to classification

No information available.

Other observations

No information available.

Further information

Other dangerous properties can not be excluded. Handle in accordance with good industrial hygiene and safety practice.

SECTION 12: Ecological information

12.1. Toxicity

No information on ecology is available.

Do not flush into surface water or sanitary sewer system.

CAS No	Chemical name							
	Aquatic toxicity Dose [h] [d] Species Source Method							
7558-79-4	di-Sodium hydrogen phosphate							
	Acute crustacea toxicity	EC50 1089 mg/l		Daphnia magna (Water flea)				

12.2. Persistence and degradability

No information available.

12.3. Bioaccumulative potential





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No information available.

12.4. Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

No information available.

12.6. Other adverse effects

No information available.

Further information

No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

In accordance with local and national regulations.

List of Wastes Code - residues/unused products

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and

discarded chemicals; laboratory chemicals, consisting of or containing hazardous substances,

including mixtures of laboratory chemicals; hazardous waste

List of Wastes Code - used product

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and

discarded chemicals; laboratory chemicals, consisting of or containing hazardous substances,

including mixtures of laboratory chemicals; hazardous waste

List of Wastes Code - contaminated packaging

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and

discarded chemicals; laboratory chemicals, consisting of or containing hazardous substances,

including mixtures of laboratory chemicals; hazardous waste

Contaminated packaging

Dispose of as unused product.

SECTION 14: Transport information

Land transport (ADR/RID)

Other applicable information (land transport)

Not subject to transport regulations.

Inland waterways transport (ADN)

Other applicable information (inland waterways transport)

Not tested

Marine transport (IMDG)

Other applicable information (marine transport)

Not subject to transport regulations.

Air transport (ICAO-TI/IATA-DGR)

Other applicable information (air transport)

Not subject to transport regulations.

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

14.6. Special precautions for user

no data available



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14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not relevant

Other applicable information

no data available

SECTION 15: Regulatory information

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

National regulatory information

Water hazard class (D): 1 - slightly hazardous to water

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Changes

Revision: 21.06.2018

Safety datasheet sections which have been updated: 1-16

Relevant H and EUH statements (number and full text)

H302 Harmful if swallowed.
H315 Causes skin irritation.
H319 Causes serious eye irritation.

Further Information

The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)



Safety Data Sheet

HACH LANGE GmbH

according to Regulation (EC) No 1907/2006

22836-00 Singlet pH Buffer Solution; pH 10.01

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

1.1. Product identifier

22836-00 Singlet pH Buffer Solution; pH 10.01

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

Use of the substance/mixture

Water analysis

1.3. Details of the supplier of the safety data sheet

Company name: HACH LANGE GmbH
Street: Willstätterstr. 11
Place: D-40549 Düsseldorf
Telephone: +49 (0)211 5288-383
e-mail: SDS@hach.com
Internet: www.de.hach.com
Responsible Department: HACH LANGE Ltd.

5, Pacific Way

Salford Manchester M50 1DL - United Kingdom Tel. +44 (0) 161 872 1487 * Fax +44 (0) 161 848 7324

e-Mail: info-uk@hach.com

HACH LANGE Ltd.

Unit 1, Chestnut Road Western Industrial Estate

IRL-Dublin 12

Tel. +353 (0)1 4602522 e-Mail: info-ie@hach.com

1.4. Emergency telephone Poison Control Center Mainz: Tel: +49 (0) 6131 19240 - 24 hour emergency

number: service -

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No. 1272/2008

This mixture is not classified as hazardous in accordance with Regulation (EC) No. 1272/2008.

2.2. Label elements

Additional advice on labelling

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

2.3. Other hazards

None known.

SECTION 3: Composition/information on ingredients

3.2. Mixtures



according to Regulation (EC) No 1907/2006

22836-00 Singlet pH Buffer Solution; pH 10.01

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Hazardous components

CAS No	Chemical name						
	EC No	Index No	REACH No				
	GHS Classification						
7732-18-5	Water			> 99%			
	231-791-2						
144-55-8	Sodium hydrogen carbonate						
	205-633-8						
497-19-8	sodium carbonate						
	207-838-8	011-005-00-2					
	Eye Irrit. 2; H319						

Full text of H and EUH statements: see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Take off contaminated clothing and shoes immediately.

Show this safety data sheet to the doctor in attendance.

After inhalation

Move to fresh air.

After contact with skin

Wash off immediately with plenty of water for at least 15 minutes.

If skin irritation persists, call a physician.

After contact with eyes

In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

After ingestion

Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Obtain medical attention.

4.2. Most important symptoms and effects, both acute and delayed

None known.

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

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. The product itself does not burn.

Unsuitable extinguishing media

None known.

5.2. Special hazards arising from the substance or mixture

Fire may liberate hazardous vapours.

5.3. Advice for firefighters

In order to avoid contact with skin, keep a safety distance and wear suitable protective clothing.





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In the event of fire, wear self-contained breathing apparatus.

Additional information

Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Use personal protective equipment.

6.2. Environmental precautions

Do not flush into surface water or sanitary sewer system.

6.3. Methods and material for containment and cleaning up

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal.

6.4. Reference to other sections

See also section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Avoid contact with skin and eyes. General hygiene considerations

Advice on protection against fire and explosion

This information is not available.

Further information on handling

This information is not available.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

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

Hints on joint storage

This information is not available.

Further information on storage conditions

This information is not available.

7.3. Specific end use(s)

Standard solution

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Additional advice on limit values

no data available

8.2. Exposure controls

Appropriate engineering controls

The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Protective and hygiene measures

Wash hands before breaks and at the end of workday.

Eye/face protection

Safety glasses with side-shields



Safety Data Sheet

according to Regulation (EC) No 1907/2006

22836-00 Singlet pH Buffer Solution; pH 10.01

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Hand protection

Use barrier skin cream.

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

Skin protection

Avoid contact with skin, eyes and clothing.

Respiratory protection

Use with adequate ventilation.

Environmental exposure controls

None known.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: liquid
Colour: blue
Odour: odourless

pH-Value (at 20 °C): 10,01

Changes in the physical state

Melting point:

Initial boiling point and boiling range:

Sublimation point:

Softening point:

Pour point:

Pour point:

In data available

no data available

Flammability

Solid: no data available
Gas: no data available

Explosive properties

not applicable

Lower explosion limits:

Upper explosion limits:

no data available

Ignition temperature:

no data available

Auto-ignition temperature

Solid: no data available
Gas: no data available
Decomposition temperature: no data available

Oxidizing properties

not applicable

Vapour pressure:

Vapour pressure:

Density (at 20 °C):

Bulk density:

Water solubility:

(at 20 °C)

soluble

(at 20 °C)





according to Regulation (EC) No 1907/2006

22836-00 Singlet pH Buffer Solution; pH 10.01

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Solubility in other solvents

no data available

Partition coefficient: no data available Viscosity / dynamic: no data available Viscosity / kinematic: no data available Flow time: no data available Vapour density: no data available Evaporation rate: no data available Solvent separation test: no data available no data available Solvent content:

9.2. Other information

Solid content: no data available

no data available

SECTION 10: Stability and reactivity

10.1. Reactivity

This information is not available.

10.2. Chemical stability

Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

This information is not available.

10.4. Conditions to avoid

Heat.

10.5. Incompatible materials

This information is not available.

10.6. Hazardous decomposition products

This information is not available.

Further information

Stable under recommended storage conditions.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicocinetics, metabolism and distribution

This information is not available.

Acute toxicity

No toxicology information is available.



Safety Data Sheet

according to Regulation (EC) No 1907/2006

22836-00 Singlet pH Buffer Solution; pH 10.01

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CAS No	Chemical name							
	Exposure route	Dose		Dose		Species	Source	Method
144-55-8	Sodium hydrogen carbonate							
	oral	LD50 mg/kg	4220	rat				
497-19-8	sodium carbonate							
	oral	LD50 mg/kg	4090	rat	IUCLID			
	inhalation (4 h) aerosol		1,15 mg/l	rat				

Irritation and corrosivity

This information is not available.

Sensitising effects

This information is not available.

Carcinogenic/mutagenic/toxic effects for reproduction

This information is not available.

STOT-single exposure

The substance or mixture is not classified as specific target organ toxicant, single exposure.

STOT-repeated exposure

This information is not available.

Aspiration hazard

No aspiration toxicity classification

Specific effects in experiment on an animal

This information is not available.

Additional information on tests

This information is not available.

Practical experience

Observations relevant to classification

This information is not available.

Other observations

This information is not available.

Further information

This information is not available.

SECTION 12: Ecological information

12.1. Toxicity

No information on ecology is available.

Do not flush into surface water or sanitary sewer system.

CAS No	Chemical name							
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method		
144-55-8	Sodium hydrogen carbonate							
	Acute fish toxicity	LC50 7550 mg/l	96 h					
	Acute crustacea toxicity	EC50 2350 mg/l	48 h					

12.2. Persistence and degradability

This information is not available.

12.3. Bioaccumulative potential





according to Regulation (EC) No 1907/2006

22836-00 Singlet pH Buffer Solution; pH 10.01

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This information is not available.

12.4. Mobility in soil

This information is not available.

12.5. Results of PBT and vPvB assessment

This information is not available.

12.6. Other adverse effects

This information is not available.

Further information

This information is not available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

In accordance with local and national regulations.

List of Wastes Code - residues/unused products

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and

discarded chemicals; laboratory chemicals, consisting of or containing hazardous substances,

including mixtures of laboratory chemicals; hazardous waste

List of Wastes Code - used product

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and

discarded chemicals; laboratory chemicals, consisting of or containing hazardous substances,

including mixtures of laboratory chemicals; hazardous waste

List of Wastes Code - contaminated packaging

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and

discarded chemicals; laboratory chemicals, consisting of or containing hazardous substances,

including mixtures of laboratory chemicals; hazardous waste

Contaminated packaging

Dispose of as unused product.

SECTION 14: Transport information

Land transport (ADR/RID)

Other applicable information (land transport)

Not subject to transport regulations.

Inland waterways transport (ADN)

Other applicable information (inland waterways transport)

Not tested

Marine transport (IMDG)

Other applicable information (marine transport)

Not subject to transport regulations.

Air transport (ICAO-TI/IATA-DGR)

Other applicable information (air transport)

Not subject to transport regulations.

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

14.6. Special precautions for user

no data available



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14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

not applicable

Other applicable information

no data available

SECTION 15: Regulatory information

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

National regulatory information

Water hazard class (D): 1 - slightly hazardous to water

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Changes

Revision: 21.06.2018

Safety datasheet sections which have been updated: 1-16

Relevant H and EUH statements (number and full text)

H319

Causes serious eye irritation.

Further Information

The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)