

Safety Data Sheet

According to Regulation (EC) No 1907/2006 (REACH)



DFM
Danmarks Nationale Metrologiinstitut

Trade name: Reference solution pH 4.005
Product No: R03.101
Version: 1.1

Page 1 of 6

Revision date: 2020-01-28

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

1.1 Product identifier: Reference solution pH 4.005

1.2. Relevant identified uses of the substance
Measurement of pH.

1.3 Details of the supplier of the safety data sheet:

Supplier:

DFM A/S
Kogle Allé 5
2970 Hørsholm
Denmark
Telephone: +45 77 30 58 00
E-Mail crm@dfm.dk

1.4 EMERGENCY TELEPHONE NUMBER:

Giftlinjen: +45 82 12 12 12 - 24 hour emergency service

Poison Control Center Mainz: Tel: +49 (0) 6131 19240 - 24 hour emergency service

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture:

None

2.2 Label elements

None

2.3 Other hazards None

SECTION 3. Composition/information on ingredients

3.1 Substances

Not applicable

3.2 Mixtures

Description of the mixture: Aqueous solution of potassium hydrogen phthalate.

Hazardous ingredients

Substance name	CAS No.	Classification
Water	7732-18-5	
potassium hydrogen phthalate	877-24-7	Eye irrit. 2 H319

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Product No: R03.101
Version: 1.1

Page 2 of 6

Revision date: 2020-01-28

SECTION 4: First aid measures

4.1 Description of first aid measures

General information:

Take off all contaminated clothing immediately.

Following inhalation:

Move to fresh air.

If symptoms persist consult your doctor.

Following skin contact:

Wash off immediately with plenty of water.

If symptoms persist consult your doctor.

Following eye contact:

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If symptoms persist consult your doctor.

Following ingestion:

Clean mouth with water and drink afterwards plenty of water.

Self-protection of the first aider:

None

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:

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

The product itself does not burn.

5.2 Special hazards arising from the substance or mixture

None

5.3 Advice for fire-fighters

In the event of fire, wear self-contained breathing apparatus. Use personal protective equipment.

Additional information:

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

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Trade name: Reference solution pH 4.005
Product No: R03.101
Version: 1.1

Page 3 of 6

Revision date: 2020-01-28

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment.

6.2 Environmental precautions:

Don't flush in to surface water or sanitary sewer system.

6.3 Methods and material for containment and cleaning up

Soak up with absorbing material

6.4 Reference to other sections

13. Disposal considerations

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Avoid contact with eyes and skin.
Wash thoroughly after handling.

7.2 Conditions for safe storage, including any incompatibilities

Keep container in a dry and cool place

7.3 Specific end uses:

Reagent for analysis

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

None known

8.2 Exposure controls

No dangerous reaction known under conditions of normal use.

8.2.2 Personal protective equipment:

Eye / Face protection: Suitable eye protection

Skin protection: Use suitable gloves. Remove and wash contaminated clothing before re-use.

Respiratory protection: Provide adequate ventilation.

SECTION 9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state: Liquid

Colour: Colourless

Odour: Odourless

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Version: 1.1

Page 4 of 6

Revision date: 2020-01-28

	Value
pH	4.005
Melting point/freezing point	no data available
Initial boiling point/boiling range	approx. 100 °C
Flash point	not applicable
Evaporation rate	no data available
Flammability (solid, gas)	not applicable
Upper/lower flammability or explosive limits	not applicable
Vapour pressure	no data available
Vapour density	not applicable
Density (at 20 °C)	1 g/cm ³
Water solubility	Soluble
Partition coefficient: n-octanol/water	no data available
Auto-ignition temperature	not applicable
Decomposition temperature	not applicable
Viscosity	no data available
Explosive properties	not applicable
Oxidising properties	not applicable

9.2 Other information:

Not applicable

SECTION 10: Stability and reactivity

10.1 Reactivity

None known.

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

No dangerous reaction known under conditions of normal use.

10.4 Conditions to avoid:

Extremes of temperature and direct sunlight.

10.5 Incompatible materials:

None known.

10.6 Hazardous decomposition products:

No decomposition if stored and applied as directed.

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Trade name: Reference solution pH 4.005
Product No: R03.101
Version: 1.1

Page 5 of 6

Revision date: 2020-01-28

SECTION 11: Toxicological information No data is available on the product itself.

11.1 Information on toxicological effects

Acute toxicity

No data is available on the product itself.

Potassium hydrogen phthalate	Effect dose / concentration	Value	Species	Source
Oral	LD50	3200 mg/kg	Rat	RTECS
Dermal		>1000 mg/kg	Guinea pig	

Irritation and corrosivity

May cause eye and skin irritation.

Sensitising effects

No known effect.

Aspiration hazard

No aspiration toxicity classification.

Further information

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

SECTION 12: Ecological information

12.1 Toxicity:

Aquatic toxicity

No data is available on the product itself.

12.2 Persistence and degradability

No data is available on the product itself.

12.3 Bio accumulative potential

No data is available on the product itself.

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

No data available

12.6 Other adverse effects:

No known effect.

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Page 6 of 6

Revision date: 2020-01-28

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Advice on disposal

In accordance with local and national regulations.

Waste disposal number of waste from residues/unused products, used products and contaminated packing: 160506

WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; laboratory chemicals, consisting of or containing dangerous substances, including mixtures of laboratory chemicals. Classified as hazardous waste.

SECTION 14: Transport information

Not subject to transport regulations.

14.5 Environmental hazards

None

14.6 Special precautions for user

No data available

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

Not applicable

SECTION 15: Regulatory information

15.1 National regulations

Water contaminating class (D): not water contaminating.

15.2 Chemical safety assessment

Assessment for the substances in this mixture were not carried out.

SECTION 16: Other information

Relevant H- EUH-phrases (Number and full text)

H319 Causes serious eye irritation.

Further information:

The information is based on present level of our knowledge.