

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

Trade name:Reference solution pH 9.180Product No:R03.104Version: 1.1

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

- 1.1 **Product identifier:** Reference solution pH 9.180
- 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 Di-sodium tetraborate decahydrat.



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Hazardous ingredients

Substance name	CAS No.	Classification
Water	7732-18-5	
Di-sodium tetraborate decahydrat	1303-96-4	Repr. 1B, H360FD

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



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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.

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 Di-sodium tetraborat decahydrat – 5 mg/m³ – TWA (8 h) – WEL

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.



Odour: Odourless

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SECTION 9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state: Liquid **Colour:** Colourless

	Value
pH	9.180
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:	no data available
n-octanol/water	
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.



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10.6 Hazardous decomposition products:

No decomposition if stored and applied as directed.

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.

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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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.

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SECTION 16: Other information

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

H315 Causes skin irritation.

H319 Causes serious eye irritation.

Further information:

The information is based on present level of our knowledge.