Telephone: +49 3528 4041 8732

Safety Data Sheet

according to UK REACH Regulation

Sodium hydroxide 4M

Revision date: 29.08.2022 Product code: PEDP-0107-V4 Page 1 of 5

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

1.1. Product identifier

Sodium hydroxide 4M

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

1.3. Details of the supplier of the safety data sheet

Company name: ABX advanced biochemical compounds

Biomedizinische Forschungsreagenzien GmbH

Street: Heinrich-Gläser-Straße 10-14

Place: 01454 Radeberg
Telephone: +49 3528 4041 60

Telephone: +49 3528 4041 60 Telefax: +49 3528 4041 65 e-mail: info@abx.de

Contact person: Dr. Christoph Meyer
e-mail: meyer@abx.de
Internet: http://www.abx.de

1.4. Emergency telephone +49 3528 4041 60

number:

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GB CLP Regulation

Skin Corr. 1A; H314 Eye Dam. 1; H318

Full text of hazard statements: see SECTION 16.

2.2. Label elements

GB CLP Regulation

Hazard components for labelling

sodium hydroxide; caustic soda **Signal word:**Danger

Pictograms:



Hazard statements

H314 Causes severe skin burns and eye damage.

Precautionary statements

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

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

protection.

P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with

water or shower.

P363 Wash contaminated clothing before reuse.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P310 Immediately call a POISON CENTER/doctor.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER/doctor.

according to UK REACH Regulation

Sodium hydroxide 4M

Revision date: 29.08.2022 Product code: PEDP-0107-V4 Page 2 of 5

P405

Store locked up.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous components

| CAS No | Chemical name | | | Quantity |
|-----------|------------------------------------|--------------|----------|-------------|
| | EC No | Index No | REACH No | |
| | Classification (GB CLP Regulation) | | | |
| 1310-73-2 | sodium hydroxide; caustic soda | | | 15 - < 20 % |
| | 215-185-5 | 011-002-00-6 | | |
| | Skin Corr. 1A; H314 | | | |

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

Specific Conc. Limits, M-factors and ATE

| CAS No | EC No | Chemical name | Quantity |
|-----------|--|--------------------------------|-------------|
| | Specific Conc. Limits, M-factors and ATE | | |
| 1310-73-2 | 215-185-5 | sodium hydroxide; caustic soda | 15 - < 20 % |
| | Skin Corr. 1A; H314: >= 5 - 100 Skin Corr. 1B; H314: >= 2 - < 5 Skin Irrit. 2; H315: >= 0,5 - < 2 Eye Irrit. 2; H319: >= 0,5 - < 2 | | |

SECTION 4: First aid measures

4.1. Description of first aid measures

After inhalation

Provide fresh air.

After contact with skin

After contact with skin, wash immediately with: Water. Subsequently wash off with: Polyethylene glykol 400. Remove contaminated, saturated clothing immediately.

After contact with eyes

In case of contact with eyes, rinse immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Subsequently consult an ophthalmologist.

After ingestion

Rinse mouth immediately and drink plenty of water. Do NOT induce vomiting. Hazards identification: Stomach perforation. Call a physician immediately. Do not allow a neutralisation agent to be drunk.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Co-ordinate fire-fighting measures to the fire surroundings.

5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing.

Additional information

Suppress gases/vapours/mists with water spray jet. Contaminated fire-fighting water must be collected separately. Do not allow to enter into surface water or drains.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General advice

Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and

according to UK REACH Regulation

Sodium hydroxide 4M

Revision date: 29.08.2022 Product code: PEDP-0107-V4 Page 3 of 5

clothes. Wear personal protection equipment.

6.2. Environmental precautions

Do not allow to enter into surface water or drains.

6.3. Methods and material for containment and cleaning up

Other information

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray.

Advice on general occupational hygiene

Remove contaminated, saturated clothing immediately. Protect skin by using skin protective cream. After work, wash hands and face. When using do not eat or drink.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed.

Further information on storage conditions

Storage of °C: 2 up to °C: 8 Protect against: Light.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

| CAS No | Substance | ppm | mg/m³ | fibres/ml | Category | Origin |
|-----------|------------------|-----|-------|-----------|---------------|--------|
| 1310-73-2 | Sodium hydroxide | - | 2 | | STEL (15 min) | WEL |

8.2. Exposure controls

Appropriate engineering controls

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: liquid
Colour: colourless

Changes in the physical state

Water solubility: easily soluble.

SECTION 10: Stability and reactivity

SECTION 11: Toxicological information

according to UK REACH Regulation

Sodium hydroxide 4M

Revision date: 29.08.2022 Product code: PEDP-0107-V4 Page 4 of 5

11.1. Information on hazard classes as defined in GB CLP Regulation

Irritation and corrosivity

after ingestion: Irritation and etching. Hazards identification: Stomach perforation.

Additional information on tests

The classification was carried out according to the calculation method of the Preparations Directive (1999/45/EC).

SECTION 12: Ecological information

12.1. Toxicity

| CAS No | Chemical name | | | | | |
|-----------|--------------------------------|-------------------|-----------|-------------------------|--------|--------|
| | Aquatic toxicity | Dose | [h] [d] | Species | Source | Method |
| 1310-73-2 | sodium hydroxide; caustic soda | | | | | |
| | Acute fish toxicity | LC50 45,4 mg/l | | Onchorhynchus mykiss | | |

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to UK REACH.

12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

Further information

The classification was carried out according to the calculation method of the Preparations Directive (1999/45/EC).

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Dispose of waste according to applicable legislation.

Contaminated packaging

Water (with cleaning agent). Completely emptied packages can be recycled.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number or ID number: UN 1824

14.2. UN proper shipping name: Sodium hydroxide solution

14.3. Transport hazard class(es):814.4. Packing group:IIIHazard label:8

Inland waterways transport (ADN)

14.1. UN number or ID number: UN 1824

14.2. UN proper shipping name: Sodium hydroxide solution

14.3. Transport hazard class(es):814.4. Packing group:IIIHazard label:8

Marine transport (IMDG)

14.1. UN number or ID number: UN 1824

14.2. UN proper shipping name: Sodium hydroxide solution

14.3. Transport hazard class(es): 8
14.4. Packing group: | ||

according to UK REACH Regulation

| | Sodium hydroxide 4M | |
|---------------------------|----------------------------|-------------|
| Revision date: 29.08.2022 | Product code: PEDP-0107-V4 | Page 5 of 5 |

Hazard label: 8

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number or ID number: UN 1824

14.2. UN proper shipping name: Sodium hydroxide solution

14.3. Transport hazard class(es):814.4. Packing group:IIIHazard label:8

SECTION 15: Regulatory information

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

EU regulatory information

Restrictions on use (REACH, annex XVII):

Entry 3, Entry 75

National regulatory information

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

SECTION 16: Other information

Classification for mixtures and used evaluation method according to GB CLP Regulation

| Classification | Classification procedure |
|---------------------|--------------------------|
| Skin Corr. 1A; H314 | Calculation method |
| Eye Dam. 1; H318 | Calculation method |

Relevant H and EUH statements (number and full text)

H314 Causes severe skin burns and eye damage.

H318 Causes serious eye damage.

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