



Safety Data Sheet

according to Regulation (EC) No. 1907/2006 Version 2 Revision Date 07.03.2019

1. Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

| | |
|------------------------|--|
| Trade name/designation | Sodium hydroxide 0.2 mol/l (0.2 N) aqueous solution volumetric solution |
| Product No. | 5690 |
| Substance name | Sodium hydroxide 0.2 mol/l (0.2 N) aqueous solution |
| CAS No. | 1310-73-2 |
| REACH registration No. | A registration number is not available for this substance as the substance or its uses are exempted from registration or the annual tonnage does not require a registration. |

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

| | |
|--------------------------|---|
| Relevant identified uses | For laboratory use and chemical production. |
|--------------------------|---|

1.3 Details of the supplier of the safety data sheet

Supplier (manufacturer/importer/only representative/downstream user/distributor)

: Better Equipped,
Wrenbury Business Park,
Wrenbury Road,
Wrenbury,
Nantwich, Cheshire,
CW5 8EB, UK

Telephone +44 (0) 800 9707142
Fax +44 (0) 800 066 4443
E-mail address sales@betterequipped.co.uk

1.4 Emergency telephone

| | |
|-----------|--------------------|
| Telephone | +44 (0)1270 781238 |
|-----------|--------------------|

2. Hazards identification

2.1 Classification of the substance or mixture

2.1.1 Classification according to Regulation (EC) No. 1272/2008 [CLP]

This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [CLP].

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

This mixture is not classified as dangerous according to 1999/45/EC.

2.2 Label elements

2.2.1 Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Signal word: not applicable

Hazard Statements: not applicable

Precautionary statements: not applicable

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

Not applicable

2.3 Other hazards

None

3. Composition/ Information on ingredients

Hazardous ingredients:

Classification according to Regulation (EC) No. 1272/2008 [CLP]

| Substance name | CAS No. | EC No | concentration | hazard classes and hazard categories |
|-------------------------|-----------|-----------|---------------|--------------------------------------|
| Sodium hydroxide (SVHC) | 1310-73-2 | 215-185-5 | 0,10 - 1,00% | H314 - Skin corrosion, category |

Hazardous ingredients:

Classification according to 67/548/EEC

| Substance name | CAS No. | EC No | concentration | Hazard symbols: | R-phrases |
|------------------|-----------|-----------|---------------|-----------------|-----------|
| Sodium hydroxide | 1310-73-2 | 215-185-5 | 0,10 - 1,00% | C | 35 |

Molecular formula NaOH
Molecular weight (g/mol) 40 g/mol
CAS No. 1310-73-2
EC No 215-185-5
INDEX no.

4. First-aid measures

4.1 General information

When in doubt or if symptoms are observed, get medical advice. If unconscious place in recovery position and seek medical advice. Never give anything by mouth to an unconscious person or a person with cramps. Change contaminated, saturated clothing. Do not leave affected person unattended.

4.2 After inhalation

Remove casualty to fresh air and keep warm and at rest. If breathing is irregular or stopped, administer artificial respiration. In case of respiratory tract irritation, consult a physician.

4.3 In case of skin contact

After contact with skin, wash immediately with plenty of water and soap. Remove contaminated, saturated clothing immediately. In case of skin reactions, consult a physician.

4.4 After eye contact

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist. Protect uninjured eye. Remove contact lenses, if present and easy to do. Continue rinsing.

4.5 After ingestion

If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention. Do not induce vomiting. Give nothing to eat or drink.

4.6 Self-protection of the first aider

First aider: Pay attention to self-protection!

4.7 Information to physician:

| | |
|-----------|-------------------|
| Symptoms | No data available |
| Hazards | No data available |
| Treatment | No data available |

5. Firefighting measures

5.1 Suitable extinguishing media

The product itself does not burn. Co-ordinate fire-fighting measures to the fire surroundings.

5.2 Extinguishing media which must not be used for safety reasons:

No restriction

5.3 Special hazards arising from the substance or mixture

In case of fire may be liberated: Nitrogen oxides (NO_x) Sulphur oxides

5.4 Advice for firefighters

DO NOT fight fire when fire reaches explosives. In case of fire: Wear self-contained breathing apparatus.

5.5 Additional information

Do not allow run-off from fire-fighting to enter drains or water courses. Do not inhale explosion and combustion gases. Use caution when applying carbon dioxide in confined spaces. Carbon dioxide can displace oxygen. Use water spray jet to protect personnel and to cool endangered containers.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

- 6.1.1 For non-emergency personnel

Wear respiratory protection. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. Avoid generation of dust. Avoid contact with skin, eyes and clothes.

- 6.1.2 For emergency responders

Wear respiratory protection. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. Avoid generation of dust. Avoid contact with skin, eyes and clothes.

6.2 Environmental precautions

Do not allow to enter into surface water or drains.

6.3 Methods and material for containment and cleaning up

Spilled product must never be returned to the original container for recycling. Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Collect in closed and suitable containers for disposal.

6.4 Additional information

Clear spills immediately.

7. Handling and storage

7.1 Precautions for safe handling

Avoid: Inhalation. Avoid contact with skin and eyes. Use extractor hood (laboratory). If handled uncovered, arrangements with local exhaust ventilation have to be used. If local exhaust ventilation is not possible or not sufficient, the entire working area must be ventilated by technical means. Protect from moisture.

7.1.2 Advice on general occupational hygiene:

- No smoking.
- Do not eat or drink.
- Wash hands after use.
- Remove contaminated clothing.

For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Storage temperature

15-25°C

Keep container tightly closed in a cool, well-ventilated place.

7.3 Specific end use(s)

No data available

8. Exposure controls / Personal protection

8.1 Control parameters

NA

8.2 Appropriate engineering controls

Technical measures and the application of suitable work processes have priority over personal protection equipment. If handled uncovered, arrangements with local exhaust ventilation have to be used. Use Local exhaust ventilation (LEV).

8.3 Personal protective equipment

Wear suitable protective clothing. When handling with chemical substances, protective clothing with CE-labels including the four control digits must be worn.

8.3.1 Eye / face protection

Eye glasses with side protection DIN-/EN-Norms: DIN EN 166

8.3.2 Skin protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. Recommended glove articles DIN-/EN-Norms: DIN EN 374 In the case of wanting to use the gloves again, clean them before taking off and air them well.

By short-term hand contact

| | |
|--|-------------------|
| Suitable material: | No data available |
| Thickness of the glove material | No data available |
| Breakthrough time (maximum wearing time) | No data available |
| Recommended glove articles | No data available |

By long-term hand contact

| | |
|--|-------------------|
| Suitable material: | No data available |
| Thickness of the glove material | No data available |
| Breakthrough time (maximum wearing time) | No data available |
| Recommended glove articles | No data available |

8.3.3 Protective clothing

Wash hands before breaks and after work. Avoid contact with skin and eyes. When using do not eat, drink or smoke. Provide eye shower and label its location conspicuously.

8.3.4 Respiratory protection

Respiratory protection necessary at: aerosol or mist formation.

| | |
|--|-------------------|
| Suitable respiratory protection apparatus: | No data available |
| Recommendation | No data available |
| Suitable material: | No data available |
| Recommendation | No data available |

8.4 Additional information

Wash hands before breaks and after work. Avoid contact with skin and eyes. When using do not eat, drink or smoke. Provide eye shower and label its location conspicuously.

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

| | | |
|----|--|----------------------------|
| a) | Appearance | Liquid colourless |
| b) | Odour | No data available |
| c) | Odour Threshold | No data available |
| d) | pH | No data available |
| e) | Melting point/freezing point | No data available |
| f) | Initial boiling point and boiling range | No data available |
| g) | Flash point | No data available |
| h) | Evaporation rate | No data available |
| i) | Flammability (solid, gas) | No data available |
| j) | Upper/lower flammability or explosive limits | No data available |
| k) | Vapour pressure | No data available |
| l) | Vapour density | No data available |
| m) | Relative density | 1 g/cm ³ (25°C) |
| n) | Water solubility | No data available |
| o) | Partition coefficient: n- octanol/water | No data available |
| p) | Auto-ignition temperature | No data available |
| q) | Decomposition temperature | No data available |
| r) | Viscosity | No data available |
| s) | Explosive properties | No data available |
| t) | Oxidizing properties | No data available |

9.2 Other information

| | |
|-----------------------|-------------------|
| Bulk density | No data available |
| refraction index | No data available |
| dissociation constant | No data available |
| Surface tension | No data available |
| Henry constant | No data available |

10. Stability and reactivity

10.1 Reactivity

No data available

10.2 Chemical stability

The product is chemically stable under standard ambient conditions (room temperature).

10.3 Possibility of hazardous reactions

The generally known reaction partners of water.

10.4 Conditions to avoid

No data available

10.5 Incompatible materials

No data available

10.6 Hazardous decomposition products

No data available

10.7 Additional information

No data available

11. Toxicological information

11.1 Information on toxicological effects

Acute effects

Acute oral toxicity

Effective dose

No data available

species:

No data available

Exposure time

remark source

Acute dermal toxicity

Effective dose

No data available

species:

No data available

Exposure time

remark source

Acute inhalation toxicity

Effective dose

No data available

species:

No data available

Exposure time

remark source

Irritant and corrosive effects

Primary irritation to the skin Exposure
time

species: Result

Irritation to eyes Exposure

time species:

Result

Irritation to respiratory tract Exposure

time

species: Result

Sensitisation

In case of skin contact

not sensitising.

After inhalation

not sensitising.

Specific target organ toxicity (single exposure)

not relevant

Specific target organ toxicity (repeated exposure)

not relevant

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Carcinogenicity

No indication of human carcinogenicity.

Germ cell mutagenicity/Genotoxicity

No indications of human germ cell mutagenicity exist.

Reproductive toxicity

No indications of human reproductive toxicity exist.

Aspiration hazard

not relevant

11.2 Other adverse effects

No data available

11.3 Additional information

No data available

12. Ecological information

12.1 Ecotoxicity

Acute (short-term) fish toxicity

LC50: No data available

EC50

species: Exposure

time

Chronic (long-term) fish toxicity

LC50: No data available

EC50

species: Exposure

time

Acute (short-term) daphnia toxicity

LC50: No data available

EC50

species: Exposure

time

Chronic (long-term) daphnia toxicity

LC50: No data available

EC50

species: Exposure

time

Acute (short-term) algae toxicity

LC50: No data available

EC50

species: Exposure

time

Chronic (long-term) algae toxicity

LC50: No data available

EC50

species: Exposure

time

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

(o) Partition coefficient: n-octanol/water No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT assessment

No data available

12.6 Other adverse effects

No data available

13. Disposal considerations

13.1 Waste treatment methods

Appropriate disposal / Product

Dispose according to legislation. Consult the appropriate local waste disposal expert about waste disposal. Unused product may be returned and reused, in addition to disposal.

Waste code product 06 02 04 (sodium and potassium hydroxide)

13.2 Additional information

No data available

14. Transport information

14.1 Land transport (ADR/RID)

| | |
|----------------------|---------------------------|
| UN-No. | 1824 |
| Proper Shipping Name | SODIUM HYDROXIDE SOLUTION |
| Class(es) | 8 |
| Classification code: | C5 |
| Packing group | III |
| Hazard label(s) | 8 |

14.2 Sea transport (IMDG)

| | |
|------------------------------------|---------------------------|
| UN-No. | 1824 |
| Proper Shipping Name | SODIUM HYDROXIDE SOLUTION |
| Class(es) | 8 |
| Classification code: | C5 |
| Packing group | III |
| Marine pollutant Segregation group | |

14.3 Air transport (ICAO-TI / IATA-DGR)

| | |
|----------------------|---------------------------|
| UN-No. | 1824 |
| Proper Shipping Name | SODIUM HYDROXIDE SOLUTION |
| Class(es) | 8 |
| Classification code: | C5 |
| Packing group | III |

14.4 Additional information

No data available

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

N/A

15. Regulatory information

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

Water hazard class (WGK) 0

15.2 Chemical Safety Assessment

No data available

16. Other information

16.1 Relevant R-, H- and EUH-phrases (Number and full text)

not applicable

Revisions made since previous version of data sheet:

The following sections of this data sheet have been updated:

1.1, 1.2, 4.1, 5.1, 6.1, 7.1, 8.1, 8.2, 11, 12, 13, 14.7, 16

We strongly recommend reading the entire data sheet for this chemical in preparation ahead of use.

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.