



## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### Natronlauge 1 mol/l - 1 N Lösung

Revision date: 05.03.2024

Product code: 01830

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H314 Causes severe skin burns and eye damage.

#### Precautionary statements

P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.  
 P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.  
 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.

#### 2.3. Other hazards

No information available.

### SECTION 3: Composition/information on ingredients

#### 3.2. Mixtures

##### Chemical characterization

Mixtures in aqueous solution

##### Relevant ingredients

| CAS No    | Chemical name                                 |              |                  | Quantity  |
|-----------|---|--------------|------------------|-----------|
|           | EC No   | Index No     | REACH No         |           |
|           | Classification (Regulation (EC) No 1272/2008) |              |                  |           |
| 1310-73-2 | sodium hydroxide                              |              |                  | 1 - < 5 % |
|           | 215-185-5                                     | 011-002-00-6 | 01-2119457892-27 |           |
|           | Met. Corr. 1, Skin Corr. 1A; H290 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 | 1 - < 5 % |
|           | 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 |                  |           |

##### Further Information

This product does not contain substances of very high concern according to Regulation (EC) No 1907/2006 (REACH), Article 57 above the respective regulatory concentration limit of = 0.1 % (w/w).

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

##### General information

First aider: Pay attention to self-protection!

##### After inhalation

Provide fresh air.  
Call a physician immediately.

##### After contact with skin

Wash immediately with: Water  
Take off immediately all contaminated clothing and wash it before reuse.  
Call a physician immediately.

##### After contact with eyes

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.

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Remove contact lenses, if present and easy to do. Continue rinsing.

#### After ingestion

Rinse mouth immediately and drink plenty of water. Do NOT induce vomiting. Adverse human health effects and symptoms: Gastric perforation. Call a physician immediately. Do not allow a neutralisation agent to be drunk.

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

Skin corrosion/irritation

Dyspnoea

Cough

Circulatory collapse

Risk of serious damage to eyes.

#### 4.3. Indication of any immediate medical attention and special treatment needed

No data available

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

#### Suitable extinguishing media

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

#### Unsuitable extinguishing media

no restriction

### 5.2. Special hazards arising from the substance or mixture

Non-combustible liquids

### 5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus.

Avoid contact with skin, eyes and clothes.

#### Additional information

Suppress gases/vapours/mists with water spray jet.

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

#### General advice

Corrosive to metals.

#### For non-emergency personnel

Provide adequate ventilation.

Use personal protection equipment.

Avoid contact with skin, eyes and clothes.

Remove persons to safety.

Emergency procedures

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

#### For emergency responders

Precautionary statements For emergency responders : Personal protection equipment: see section 8

### 6.2. Environmental precautions

Do not allow to enter into surface water or drains.

### 6.3. Methods and material for containment and cleaning up

#### For containment

Cover drains.

Prevent spread over a wide area (e.g. by containment or oil barriers).

Collect in closed and suitable containers for disposal.

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents).

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**For cleaning up**

Clean contaminated articles and floor according to the environmental legislation.

**Other information**

Provide adequate ventilation.  
Do not breathe dust/fume/gas/mist/vapours/spray.  
Wear breathing apparatus if exposed to vapours/dusts/aerosols.

**6.4. Reference to other sections**

Safe handling: see section 7  
Personal protection equipment: see section 8  
Disposal: see section 13

**SECTION 7: Handling and storage**

**7.1. Precautions for safe handling**

**Advice on safe handling**

Do not breathe vapour/aerosol.  
Read label before use.

**Advice on protection against fire and explosion**

No special fire protection measures are necessary.

**Advice on general occupational hygiene**

Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme.  
Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat or drink.

**Further information on handling**

Take off immediately all contaminated clothing and wash it before reuse.  
If handled uncovered, arrangements with local exhaust ventilation have to be used.  
Draw up and observe skin protection programme. Wash hands before breaks and after work.

**7.2. Conditions for safe storage, including any incompatibilities**

**Requirements for storage rooms and vessels**

Provide adequate ventilation as well as local exhaust at critical locations.

Unsuitable container/equipment material:

Metal  
Aluminium  
Tin  
Zinc

**Further information on storage conditions**

Keep container tightly closed.

**7.3. Specific end use(s)**

Laboratory chemicals

**SECTION 8: Exposure controls/personal protection**

**8.1. Control parameters**

**Occupational exposure limits**

| CAS No    | Substance        | ppm | mg/m <sup>3</sup> | fib/cm <sup>3</sup> | Category      | Origin |
|-----------|------------------|-----|-------------------|---------------------|---------------|--------|
| 1310-73-2 | Sodium hydroxide | -   | 2                 |                     | STEL (15 min) |        |

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#### DNEL/DMEL values

| CAS No                   | Substance        |        |                     |
|--------------------------|------------------|--------|---------------------|
| DNEL type                | Exposure route   | Effect | Value               |
| 1310-73-2                | sodium hydroxide |        |                     |
| Worker DNEL, long-term   | inhalation       | local  | 1 mg/m <sup>3</sup> |
| Consumer DNEL, long-term | inhalation       | local  | 1 mg/m <sup>3</sup> |

#### 8.2. Exposure controls

##### 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.

Do not breathe vapour/aerosol.

##### Individual protection measures, such as personal protective equipment

##### Eye/face protection

Suitable eye protection: goggles.

##### Hand protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Protective gloves are recommended Company KCL GmbH, D-36124 Eichenzell, email: [vertrieb@kcl.de](mailto:vertrieb@kcl.de) With specification (test according to EN374):

By long-term hand contact

Trade name/designation: KCL 741 Dermatril® L

Recommended material: NBR (Nitrile rubber) 0,11 mm

Wearing time with permanent contact: > 480 min

By short-term hand contact

Trade name/designation: KCL 741 Dermatril® L

Recommended material: NBR (Nitrile rubber) 0,11 mm

Wearing time with occasional contact (splashes): > 480 min

The breakthrough times stated above were determined by KCL in laboratory tests acc. to EN374 with samples of the recommended glove types. This recommendation applies only to the product stated in the safety data sheet (>,<) supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: [www.kcl.de](http://www.kcl.de)).

##### Skin protection

Wear suitable protective clothing.

##### Respiratory protection

Respiratory protection necessary at: aerosol or mist formation

Filtering device with filter or ventilator filtering device of type: P2

##### Environmental exposure controls

Do not allow to enter into surface water or drains.

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## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

|   |            |                        |
|---|------------|------------------------|
| Physical state:   | Liquid     |                        |
| Colour:   | colourless |                        |
| Odour:  | odourless  |                        |
| Melting point/freezing point:                             |            | No data available      |
| Boiling point or initial boiling point and boiling range: |            | No data available      |
| Flammability:   |            | not applicable         |
| Lower explosion limits:                                   |            | not applicable         |
| Upper explosion limits:                                   |            | not applicable         |
| Flash point:  |            | X                      |
| Auto-ignition temperature:                                |            | No data available      |
| Decomposition temperature:                                |            | No data available      |
| pH-Value (at 20 °C):                                      |            | ca.13,7                |
| Viscosity / kinematic:                                    |            | No data available      |
| Water solubility:   |            | very soluble           |
| Solubility in other solvents                              |            |                        |
| not determined  |            |                        |
| Partition coefficient n-octanol/water:                    |            | No data available      |
| Vapour pressure:  |            | No data available      |
| Vapour pressure:  |            | No data available      |
| Density (at 20 °C):                                       |            | 1,04 g/cm <sup>3</sup> |
| Bulk density:   |            | No data available      |
| Relative vapour density:                                  |            | No data available      |

### 9.2. Other information

#### Information with regard to physical hazard classes

|                           |  |                   |
|---------------------------|--|-------------------|
| Explosive properties      |  |                   |
| not applicable            |  |                   |
| Sustaining combustion:    |  | No data available |
| Self-ignition temperature |  |                   |
| Solid:                    |  | not applicable    |
| Gas:                      |  | not applicable    |
| Oxidizing properties      |  |                   |
| Not oxidising.            |  |                   |

#### Other safety characteristics

|                          |  |                   |
|--------------------------|--|-------------------|
| Evaporation rate:        |  | No data available |
| Solvent separation test: |  | No data available |
| Solvent content:         |  | 0                 |
| Solid content:           |  | 0                 |
| Sublimation point:       |  | No data available |
| Softening point:         |  | No data available |
| Pour point:              |  | No data available |
| Viscosity / dynamic:     |  | No data available |
| Flow time:               |  | No data available |

#### Further Information

Corrosive to metals.

## SECTION 10: Stability and reactivity

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#### **10.1. Reactivity**

Corrosive to metals.

#### **10.2. Chemical stability**

The product is stable under storage at normal ambient temperatures.

#### **10.3. Possibility of hazardous reactions**

Metal, Light metal (Formation of: Hydrogen)  
Phenols  
Combustible substance  
Alkaline earth metal (Metal powder)  
Acids, Nitriles

#### **10.4. Conditions to avoid**

No data available

#### **10.5. Incompatible materials**

Aluminium, Brass, Glass  
Tin, Zinc, Aluminium  
plastic

#### **10.6. Hazardous decomposition products**

No known hazardous decomposition products.

#### **Further information**

No data available

## SECTION 11: Toxicological information

### **11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008**

#### **Toxicokinetics, metabolism and distribution**

There are no data available on the preparation/mixture itself.

#### **Acute toxicity**

Based on available data, the classification criteria are not met.

If swallowed danger of perforation of the esophagus and the stomach (strong corrosive effects).

#### **ATEmix calculated**

ATE (oral) > 2000 mg/kg; ATE (dermal) > 2000 mg/kg; ATE (inhalation vapour) > 20 mg/l; ATE (inhalation dust/mist) > 5 mg/l

#### **Irritation and corrosivity**

Causes severe skin burns and eye damage.

Causes serious eye damage.

#### **Sensitising effects**

Based on available data, the classification criteria are not met.

#### **Carcinogenic/mutagenic/toxic effects for reproduction**

Based on available data, the classification criteria are not met.

#### **STOT-single exposure**

Based on available data, the classification criteria are not met.

#### **STOT-repeated exposure**

Based on available data, the classification criteria are not met.

#### **Aspiration hazard**

Based on available data, the classification criteria are not met.

#### **Specific effects in experiment on an animal**

There are no data available on the preparation/mixture itself.

#### **Additional information on tests**

There are no data available on the preparation/mixture itself.

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#### Practical experience

There are no data available on the preparation/mixture itself.

#### 11.2. Information on other hazards

##### Other information

There are no data available on the preparation/mixture itself.

#### Further information

Skin corrosion/irritation

Dyspnoea

Cough

Circulatory collapse

Risk of serious damage to eyes.

## SECTION 12: Ecological information

### 12.1. Toxicity

Based on available data, the classification criteria are not met.

| CAS No    | Chemical name            |              |           |         |                  |  |
|-----------|--------------------------|--------------|-----------|---------|------------------|--|
|           | Aquatic toxicity         | Dose         | [h]   [d] | Species | Source           | Method   |
| 1310-73-2 | sodium hydroxide         |              |           |         |                  |  |
|           | Acute crustacea toxicity | EC50<br>mg/l | 40,4      | 48 h    | Ceriodaphnia sp. | Ecotoxicology and Environmental Safety,4<br>other: acute 48-h immobilization test ac |

### 12.2. Persistence and degradability

The methods for determining the biological degradability are not applicable to inorganic substances.

### 12.3. Bioaccumulative potential

not applicable

### 12.4. Mobility in soil

There are no data available on the preparation/mixture itself.

### 12.5. Results of PBT and vPvB assessment

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

### 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.

### 12.7. Other adverse effects

Discharge into the environment must be avoided.

#### Further information

Do not allow to enter into surface water or drains.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

#### Disposal recommendations

Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste.

Do not empty into drains.

Handle contaminated packages in the same way as the substance itself.

#### Contaminated packaging

The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

## SECTION 14: Transport information



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**Land transport (ADR/RID)**

|  |                           |
|--|---------------------------|
| <b>14.1. UN number or ID number:</b>     | UN 1824                   |
| <b>14.2. UN proper shipping name:</b>    | SODIUM HYDROXIDE SOLUTION |
| <b>14.3. Transport hazard class(es):</b> | 8                         |
| <b>14.4. Packing group:</b>              | II                        |
| Hazard label:                            | 8                         |
| Classification code:                     | C5                        |
| Limited quantity:                        | 1 L                       |
| Excepted quantity:                       | E2                        |
| Transport category:                      | 2                         |
| Hazard No:                               | 80                        |
| Tunnel restriction code:                 | E                         |

**Inland waterways transport (ADN)**

|  |                           |
|--|---------------------------|
| <b>14.1. UN number or ID number:</b>     | UN 1824                   |
| <b>14.2. UN proper shipping name:</b>    | SODIUM HYDROXIDE SOLUTION |
| <b>14.3. Transport hazard class(es):</b> | 8                         |
| <b>14.4. Packing group:</b>              | II                        |
| Hazard label:                            | 8                         |
| Classification code:                     | C5                        |
| Limited quantity:                        | 1 L                       |
| Excepted quantity:                       | E2                        |

**Marine transport (IMDG)**

|  |                            |
|--|----------------------------|
| <b>14.1. UN number or ID number:</b>     | UN 1824                    |
| <b>14.2. UN proper shipping name:</b>    | SODIUM HYDROXIDE, SOLUTION |
| <b>14.3. Transport hazard class(es):</b> | 8                          |
| <b>14.4. Packing group:</b>              | II                         |
| Hazard label:                            | 8                          |
| Special Provisions:                      | -                          |
| Limited quantity:                        | 1 L                        |
| Excepted quantity:                       | E2                         |
| EmS:                                     | F-A, S-B                   |
| Segregation group:                       | alkalis                    |

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

|  |                            |
|--|----------------------------|
| <b>14.1. UN number or ID number:</b>     | UN 1824                    |
| <b>14.2. UN proper shipping name:</b>    | SODIUM HYDROXIDE, SOLUTION |
| <b>14.3. Transport hazard class(es):</b> | 8                          |
| <b>14.4. Packing group:</b>              | II                         |
| Hazard label:                            | 8                          |
| Special Provisions:                      | A3 A803                    |
| Limited quantity Passenger:              | 0.5 L                      |
| Passenger LQ:                            | Y840                       |
| Excepted quantity:                       | E2                         |
| IATA-packing instructions - Passenger:   | 851                        |
| IATA-max. quantity - Passenger:          | 1 L                        |
| IATA-packing instructions - Cargo:       | 855                        |
| IATA-max. quantity - Cargo:              | 30 L                       |

**14.5. Environmental hazards**

ENVIRONMENTALLY HAZARDOUS: No

**14.6. Special precautions for user**

Warning: strongly corrosive.

**14.7. Maritime transport in bulk according to IMO instruments**

not applicable

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**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

Information according to Directive 2012/18/EU (SEVESO III):

Not subject to 2012/18/EU (SEVESO III)

**National regulatory information**

Employment restrictions:

Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC).

Water hazard class (D):

1 - slightly hazardous to water

**SECTION 16: Other information**

**Changes**

This data sheet contains changes from the previous version in section(s): 1,9,12.

**Abbreviations and acronyms**

Met. Corr: Substance or mixture corrosive to metals

Skin Corr: Skin corrosion

Eye Dam: Eye damage

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service

LC50: Lethal concentration, 50%

LD50: Lethal dose, 50%

**Classification for mixtures and used evaluation method according to Regulation (EC) No 1272/2008 [CLP]**

| Classification      | Classification procedure |
|---------------------|--------------------------|
| Met. Corr. 1; H290  | On basis of test data    |
| Skin Corr. 1B; H314 | Calculation method       |
| Eye Dam. 1; H318    | Calculation method       |

**Relevant H and EUH statements (number and full text)**

- H290 May be corrosive to metals.
- H314 Causes severe skin burns and eye damage.
- H318 Causes serious eye damage.

**Further Information**

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.

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