

Trade name: Sodium hydroxide**Current version :** 5.0.1, issued: 03.04.2023**Replaced version:** 5.0.0, issued: 27.10.2022**Region:** GB**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1 Product identifier****Trade name****Sodium hydroxide**

Substance name sodium hydroxide

Identification numbers

CAS no. 1310-73-2

EC no. 215-185-5

Index no. 011-002-00-6

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

chemical analysis

Uses advised against

No data available.

1.3 Details of the supplier of the safety data sheet**Address**ELTRA GmbH
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Advice on Safety Data Sheet

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1.4 Emergency telephone number

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+49 (0)551 192 40 (Giftinformationszentrum Nord)

SECTION 2: Hazards identification**2.1 Classification of the substance or mixture****Classification in accordance with Regulation (EC) No 1272/2008 (CLP)**

Eye Dam. 1; H318

Skin Corr. 1A; H314

Classification information

This product is assessed and classified using the methods and criteria below referred to in Article 9 of Regulation (EC) n° 1272/2008:

Physical hazards: determined through assessment data based on the methods or standards referred to in part 2 of Annex I to CLP

Health hazards and environmental hazards: determined through toxicological and ecotoxicological assessment data based on the methods or standards referred to in Part 3 and 4 of Annex I to CLP.

2.2 Label elements**Labelling according to Regulation (EC) No 1272/2008 (CLP Regulation)****Product identifier**

011-002-00-6 (sodium hydroxide)

Hazard pictograms

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GHS05

Signal word

Danger

Hazard statement(s)

H314 Causes severe skin burns and eye damage.

Precautionary statement(s)

P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P280 Wear protective gloves/protective clothing/eye protection/face 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].
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
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.
P363 Wash contaminated clothing before reuse.
P405 Store locked up.
P501 Dispose of contents/container to hazardous or special waste collection point.

2.3 Other hazards

PBT assessment

The study does not need to be conducted according to Annex XIII of Regulation (EC) 1907/2006 (REACH).

vPvB assessment

The study does not need to be conducted according to Annex XIII of Regulation (EC) 1907/2006 (REACH).

SECTION 3: Composition/information on ingredients**3.1 Substances****Chemical characterization**

Substance name sodium hydroxide
Formula NaOH

Identification numbers

CAS no. 1310-73-2
EC no. 215-185-5
Index no. 011-002-00-6

Other information

Note	Specific concentration limits	M-factor (acute)	M-factor (chronic)
-	Eye Irrit. 2; H319: C $\geq$ 0.5% Skin Irrit. 2; H315: C $\geq$ 0.5% Skin Corr. 1B; H314: C $\geq$ 2% Skin Corr. 1A; H314: C $\geq$ 5%	-	-

3.2 Mixtures

Not applicable. The product is not a mixture.

SECTION 4: First aid measures**4.1 Description of first aid measures****General information**

If the patient is likely to become unconscious, place and transport in stable sideways position. Remove contaminated, soaked clothing immediately and dispose of safely.

After inhalation

Ensure supply of fresh air. Take medical treatment.

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In case of contact with skin wash off immediately with soap and water. Dab off with polyethylene glycol 400. Seek medical attention.

After eye contact

Remove contact lenses. Rinse eye thoroughly under running water keeping eyelids wide open and protecting the unaffected eye (at least 10 to 15 minutes). Call a doctor immediately.

After ingestion

Rinse out mouth and give plenty of water to drink. Do not induce vomiting. Call a doctor immediately. Never give anything by mouth to an unconscious person.

4.2 Most important symptoms and effects, both acute and delayed**Effects**

Risk of stomach perforation

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**

Product itself is non-combustible; adapt fire extinguishing measures to surrounding areas.

Unsuitable extinguishing media

High power water jet

5.2 Special hazards arising from the substance or mixture

In case of fires, hazardous combustion gases are formed: Carbon dioxide (CO₂); Carbon monoxide (CO)

5.3 Advice for firefighters

Use self-contained breathing apparatus. Run-off water from fire fighting must not be discharged into drains or enter surface water. Wear protective clothing.

SECTION 6: Accidental release measures**6.1 Personal precautions, protective equipment and emergency procedures****For non-emergency personnel**

Refer to protective measures listed in sections 7 and 8. Evacuate endangered area; Ensure adequate ventilation. Avoid contact with skin, eyes and clothing. Avoid dust formation.

For emergency responders

No data available. Personal protective equipment (PPE) - see Section 8.

6.2 Environmental precautions

Do not discharge into surface waters/groundwater. Do not discharge into the subsoil/soil.

6.3 Methods and material for containment and cleaning up

Use chemical neutralising agents. Take up mechanically. Send in suitable containers for recovery or disposal. Clean thoroughly.

6.4 Reference to other sections

Information regarding safe handling, see section 7. Information regarding personal protective measures, see section 8. Information regarding waste disposal, see section 13.

SECTION 7: Handling and storage**7.1 Precautions for safe handling****Advice on safe handling**

Provide good ventilation at the work area (local exhaust ventilation, if necessary). Risks inherent to handling the product must be minimised by applying the appropriate protective and preventive measures. Working processes should - so far as possible, according to the state of the art - be designed to rule out bodily contact or the release of hazardous substances.

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Keep away from food, drink and animal feeding stuffs. Do not eat, drink or smoke during work time. Wash hands before breaks and after work. Remove soiled or soaked clothing immediately. Use barrier skin cream. Avoid contact with eyes and skin. Do not inhale dust. Provide eye wash fountain in work area. Have emergency shower available.

7.2 Conditions for safe storage, including any incompatibilities**Technical measures and storage conditions**

Keep container tightly closed and dry in a cool, well-ventilated place. Product is hygroscopic.

Requirements for storage rooms and vessels

Always keep in containers of same material as the original. Containers which are opened must be carefully closed and kept upright to prevent leakage.

Incompatible products

Do not store together with: Metals; metal alloys

7.3 Specific end use(s)

No data available.

SECTION 8: Exposure controls/personal protection**8.1 Control parameters****Occupational exposure limit values**

No	Substance name	CAS no.	EC no.
1	sodium hydroxide	1310-73-2	215-185-5
List of approved workplace exposure limits (WELs) / EH40			
Sodium hydroxide			
	WEL short-term (15 min reference period)	2	mg/m ³

8.2 Exposure controls**Appropriate engineering controls**

Ensure adequate ventilation, local exhaust at the work station if necessary.

Personal protective equipment**Respiratory protection**

If workplace exposure limits are exceeded, a respiration protection approved for this particular job must be worn. In case of dust, aerosol and mist formation, take appropriate measures for breathing protection in the event workplace threshold values are not specified.

Respirator P3

Eye / face protection

Tightly fitting safety glasses (EN 166).

Hand protection

Sufficient protection is given wearing suitable protective gloves checked according to i.e. EN 374, in the event of risk of skin contact with the product. Before use, the protective gloves should be tested in any case for its specific work-station suitability (i.e. mechanical resistance, product compatibility and antistatic properties). Adhere to the manufacturer's instructions and information relating to the use, storage, care and replacement of protective gloves. Protective gloves shall be replaced immediately when physically damaged or worn. Design operations thus to avoid permanent use of protective gloves.

Appropriate Material nitrile rubber

Material thickness 0.11 mm

Breakthrough time > 480 min

Other

Normal chemical work clothing.

Environmental exposure controls

No data available.

SECTION 9: Physical and chemical properties**9.1 Information on basic physical and chemical properties****State of aggregation**

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solid			
Form			
solid			
Colour			
grey to black			
Odour			
odourless			
pH value			
Value	appr.	13.8	
Reference temperature		20	°C
Concentration		50	g/l H2O
Boiling point / boiling range			
No data available			
Melting point/freezing point			
No data available			
Decomposition temperature			
No data available			
Flash point			
Not applicable			
Ignition temperature			
No data available			
Flammability			
No data available			
Lower explosion limit			
No data available			
Upper explosion limit			
No data available			
Vapour pressure			
Not applicable			
Relative vapour density			
No data available			
Relative density			
No data available			
Density			
No data available			
Bulk density			
Value	appr.	800	kg/m³
Solubility in water			
Reference temperature		20	°C
Comments	partly soluble		
Solubility			
No data available			
Partition coefficient n-octanol/water (log value)			
No data available			
Kinematic viscosity			
No data available			
Particle characteristics			
No data available			

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9.2 Other information**Other information**

No data available.

SECTION 10: Stability and reactivity**10.1 Reactivity**

Exothermic reaction with water and acids.

10.2 Chemical stability

Stable under recommended storage and handling conditions (See section 7).

10.3 Possibility of hazardous reactions

Hydrogen may be formed upon contact with metals (danger of explosion!).

10.4 Conditions to avoid

Protect against humidity. Corrosive to metals.

10.5 Incompatible materials

Metals; Oxidizing agents; Water; Acids; Aluminium; light metals; metal alloys

10.6 Hazardous decomposition products

Hydrogen

SECTION 11: Toxicological information**11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008****Acute oral toxicity**

No data available

Acute dermal toxicity

No data available

Acute inhalational toxicity

No data available

Skin corrosion/irritation

Species	rabbit
Source	RTECS
Evaluation	corrosive

Serious eye damage/irritation

Species	rabbit
Source	RTECS
Evaluation	corrosive

Respiratory or skin sensitisation

No data available

Germ cell mutagenicity

No data available

Reproduction toxicity

No data available

Carcinogenicity

No data available

STOT - single exposure

No data available

STOT - repeated exposure

No data available

Aspiration hazard

No data available

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Product is caustic.

11.2 Information on other hazards**Endocrine disrupting properties**

No data available.

Other information

No data available.

SECTION 12: Ecological information**12.1 Toxicity****Toxicity to fish (acute)**

No data available

Toxicity to fish (chronic)

No data available

Toxicity to Daphnia (acute)

No data available

Toxicity to Daphnia (chronic)

No data available

Toxicity to algae (acute)

No data available

Toxicity to algae (chronic)

No data available

Bacteria toxicity

No data available

12.2 Persistence and degradability**Biodegradability**

Comments	No data available.
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12.3 Bioaccumulative potential

No data available.

12.4 Mobility in soil

No data available.

12.5 Results of PBT and vPvB assessment**Results of PBT and vPvB assessment**

PBT assessment	The study does not need to be conducted according to Annex XIII of Regulation (EC) 1907/2006 (REACH).
vPvB assessment	The study does not need to be conducted according to Annex XIII of Regulation (EC) 1907/2006 (REACH).

12.6 Endocrine disrupting properties

No data available.

12.7 Other adverse effects**Other adverse effects**

Adverse effect due to pH-shifting possible.

12.8 Other information**Other information**

Product is not allowed to discharge into aquatic environment, drains or sewage treatment plants.

SECTION 13: Disposal considerations**13.1 Waste treatment methods**

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Allocation of a waste code number, according to the European Waste Catalogue, should be carried out in agreement with the regional waste disposal company.

Packaging

Packaging that cannot be cleaned should be disposed off as product waste. Uncontaminated packaging may be taken for recycling.

SECTION 14: Transport information**14.1 Transport ADR/RID/ADN**

Class	8
Classification code	C6
Packing group	II
Hazard identification no.	80
UN number	UN1823
Proper shipping name	SODIUM HYDROXIDE, SOLID
Tunnel restriction code	E
Label	8

14.2 Transport IMDG

Class	8
Packing group	II
UN number	UN1823
Proper shipping name	SODIUM HYDROXIDE, SOLID
EmS	F-A, S-B
Label	8

14.3 Transport ICAO-TI / IATA

Class	8
Packing group	II
UN number	UN1823
Proper shipping name	Sodium hydroxide, solid
Label	8

14.4 Other information

No data available.

14.5 Environmental hazards

Information on environmental hazards, if relevant, please see 14.1 - 14.3.

14.6 Special precautions for user

No data available.

14.7 Maritime transport in bulk according to IMO instruments

Not relevant

SECTION 15: Regulatory information**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture****EU regulations****Regulation (EC) No 1907/2006 (REACH) Annex XIV (List of substances subject to authorisation)**

In accordance with the REACH regulation (EC) 1907/2006, the product does not contain any substances that are considered as subject to listing in annex XIV, inventory of substances requiring authorisation.

REACH candidate list of substances of very high concern (SVHC) for authorisation

In accordance with article 57 and article 59 of the Reach regulation (EC) 1907/2006, this substance is not considered as subject to listing in annex XIV, inventory of substances requiring authorisation ("Authorization list").

Regulation (EC) No 1907/2006 (REACH) Annex XVII: RESTRICTIONS ON THE MANUFACTURE, PLACING ON THE MARKET AND USE OF CERTAIN DANGEROUS SUBSTANCES, MIXTURES AND ARTICLES

The substance is considered being subject to REACH regulation (EC) 1907/2006 annex XVII.

No	Substance name	CAS no.	EC no.	No
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Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances				
This substance is not subject to Part 1 or 2 of Annex I				
Other regulations				
Adhere to the national sanitary and occupational safety regulations when using this product.				

15.2 Chemical safety assessment

A chemical safety assessment has not been carried out for this substance.

SECTION 16: Other information**Further information**

Article no. 90210-500 g; 90212-250 g

Sources of key data used to compile the data sheet:

Regulation (EC) No 1907/2006 (REACH), 1272/2008 (CLP) as amended in each case.

Directives 2000/39/EC, 2006/15/EC, 2009/161/EU, (EU) 2017/164.

National Threshold Limit Values of the corresponding countries as amended in each case.

Transport regulations according to ADR, RID, IMDG, IATA as amended in each case.

The data sources used to determine physical, toxic and ecotoxic data, are indicated directly in the corresponding section.

Full text of the H- and EUH- phrases drawn up in sections 2 and 3 (provided not already drawn up in these sections)

H318 Causes serious eye damage.

Creation of the safety data sheet

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