

according to Regulation (EC) No 1907/2006

## Sodium hydroxide solution 32% pure

Revision date: 06.03.2024 Product code: 18964 Page 1 of 10

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

#### 1.1. Product identifier

Sodium hydroxide solution 32% pure

UFI: X5HP-J169-S000-91AP

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

#### Use of the substance/mixture

Laboratory chemicals

Industrial uses: Uses of substances as such or in preparations at industrial sites

Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

#### Uses advised against

Do not use for private purposes (household).

## 1.3. Details of the supplier of the safety data sheet

Company name: AnalytiChem GmbH

ACD

Street: Stempelstraße 6
Place: D-47167 Duisburg

Telephone: 0203/5194-0 Telefax: 0203/5194-290

E-mail: info@analytichem.de

Contact person: Abteilung Produktsicherheit Telephone: 0203/5194-107/117

E-mail: produktsicherheit@analytichem.de

Internet: www.analytichem.de
Responsible Department: Abteilung Produktsicherheit

**1.4. Emergency telephone** For Hazardous Materials [or Dangerous Goods] Incidents Spill, Leak, Fire,

number: Exposure, or Accident Call CHEMTREC Day or Night Within USA and Canada:

1-800-424-9300 Outside USA and Canada: +1 703-741-5970 (collect calls

accepted)

#### **Further Information**

This product is a mixture. REACH Registration Number see section 3.

#### **SECTION 2: Hazards identification**

## 2.1. Classification of the substance or mixture

## Regulation (EC) No 1272/2008

Met. Corr. 1; H290 Skin Corr. 1A; H314 Eye Dam. 1; H318

Full text of hazard statements: see SECTION 16.

## 2.2. Label elements

### Regulation (EC) No 1272/2008

### Hazard components for labelling

sodium hydroxide

Signal word: Danger

Pictograms:



## Hazard statements

H290 May be corrosive to metals.



according to Regulation (EC) No 1907/2006

## Sodium hydroxide solution 32% pure

Revision date: 06.03.2024 Product code: 18964 Page 2 of 10

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.

P308 IF exposed or concerned:

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			
	EC No Index No REACH No			
	Classification (Regulation (EC) No 1272/2008)			
1310-73-2	sodium hydroxide			30 - < 35 %
1310-73-2	sodium nydroxide			30 - < 33 /6
1310-73-2	215-185-5	011-002-00-6	01-2119457892-27	30 - < 35 %

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	30 - < 35 %	
	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





according to Regulation (EC) No 1907/2006

## Sodium hydroxide solution 32% pure

Revision date: 06.03.2024 Product code: 18964 Page 3 of 10

apart and consult an ophthalmologist.

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

Protect uninjured eye.

#### 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

corrosive

Irritant

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-flammable.

### 5.3. Advice for firefighters

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

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.





according to Regulation (EC) No 1907/2006

## Sodium hydroxide solution 32% pure

Revision date: 06.03.2024 Product code: 18964 Page 4 of 10

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).

#### 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

Read label before use. Handle and open container with care.

When using do not eat, drink, smoke, sniff. Use personal protection equipment.

Provide adequate ventilation. Avoid contact with skin, eyes and clothes.

Do not breathe vapour/aerosol.

### Advice on protection against fire and explosion

Usual measures for fire prevention.

## 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

Draw up and observe skin protection programme.

Wash hands and face before breaks and after work and take a shower if necessary.

Take off immediately all contaminated clothing and wash it before reuse.

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

## Requirements for storage rooms and vessels

Corrosive to metals.

Unsuitable container/equipment material:

Metal, Aluminium, Zinc, tin

## Further information on storage conditions

Store in a dry place.

Keep container tightly closed. storage temperature: > +15°C

## 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/m³	fib/cm³	Category	Origin
1310-73-2	Sodium hydroxide	-	2		STEL (15 min)	





according to Regulation (EC) No 1907/2006

## Sodium hydroxide solution 32% pure

Revision date: 06.03.2024 Product code: 18964 Page 5 of 10

#### **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/m³	
Consumer DNE	EL, long-term	inhalation	local	1 mg/m³	

## 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 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).

## Skin protection

Wear suitable protective clothing.

## Respiratory protection

Respiratory protection necessary at: aerosol or mist formation

#### **Environmental exposure controls**

Do not allow to enter into surface water or drains.



according to Regulation (EC) No 1907/2006

## Sodium hydroxide solution 32% pure

Revision date: 06.03.2024 Product code: 18964 Page 6 of 10

### **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:

Boiling point or initial boiling point and

No data available

No data available

boiling range:

Flammability: not applicable
Lower explosion limits: not applicable
Upper explosion limits: not applicable
Flash point: X
Auto-ignition temperature: not applicable
Decomposition temperature: not determined
pH-Value: alkaline

Viscosity / kinematic:

Water solubility:

No data available completely miscible

Solubility in other solvents

not determined

Partition coefficient n-octanol/water:

Vapour pressure:

Vapour pressure:

No data available

Vapour pressure:

No data available

Density (at 20 °C):

1,3593 g/cm³

Bulk density:

No data available

Relative vapour density:

not determined

### 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:

Solvent separation test:

No data available
Solvent content:

No data available
Solid content:

No data available
solid content:

No data available
No data available
Softening point:

No data available
Pour point:

No data available

No data available:

Viscosity / dynamic:

Flow time:

No data available

No data available

Further Information
Corrosive to metals.

# SECTION 10: Stability and reactivity





according to Regulation (EC) No 1907/2006

## Sodium hydroxide solution 32% pure

Revision date: 06.03.2024 Product code: 18964 Page 7 of 10

### 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

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

#### 10.4. Conditions to avoid

No data available

### 10.5. Incompatible materials

Aluminium, Brass metals (including their alloys), Zinc Tin, Light metal Glass, plastics Material, containing silicate

### 10.6. Hazardous decomposition products

No data available

#### **Further information**

No data available

## **SECTION 11: Toxicological information**

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

## **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.

Risk of serious damage to eyes.

## 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.

No data available

## Specific effects in experiment on an animal

No data available

#### Additional information on tests

No data available





according to Regulation (EC) No 1907/2006

## Sodium hydroxide solution 32% pure

Revision date: 06.03.2024 Product code: 18964 Page 8 of 10

### **Practical experience**

No data available

### 11.2. Information on other hazards

### Other information

No data available

### **Further information**

corrosive

Irritant

Dyspnoea

Cough

Circulatory collapse

## **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 4 mg/l	.0,4	48 h		Environmental	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

There are no data available on the mixture itself.

## 12.4. Mobility in soil

There are no data available on the 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 allow to enter into surface water or drains.

Do not mix with other wastes.

### Contaminated packaging

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

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



according to Regulation (EC) No 1907/2006

## Sodium hydroxide solution 32% pure

Revision date: 06.03.2024 Product code: 18964 Page 9 of 10

## **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): П 14.4. Packing group: Hazard label: 8 Classification code: C5 Limited quantity: 1 L Excepted quantity: F2 Transport category: 2 Hazard No: 80 Tunnel restriction code: Ε

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:IIHazard label:8Classification code:C5Limited quantity:1 LExcepted quantity:E2

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):814.4. Packing group:IIHazard label:8Special Provisions:-Limited quantity:1 LExcepted quantity:E2EmS:F-A, S-B

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:IIHazard label:8Special Provisions:A3 A803Limited quantity Passenger:0.5 LPassenger LQ:Y840Excepted quantity:E2

IATA-packing instructions - Passenger:851IATA-max. quantity - Passenger:1 LIATA-packing instructions - Cargo:855IATA-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



AnalytiChem GmbH

according to Regulation (EC) No 1907/2006

## Sodium hydroxide solution 32% pure

Revision date: 06.03.2024 Product code: 18964 Page 10 of 10

not applicable

## **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

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

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**

#### 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. 1A; 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.)