

SAFETY DATA SHEET

Sodium hydroxide 5–50 %

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

1.1. Product identifier

Trade name

Sodium hydroxide 5–50 %

Other names / Synonyms

Natriumhydroksid, Natronlut 25%, Natronlut 32%, Natronlut 46%, Natronlut 50%, Sodium hydroxide solution

Product no.

309, 332, 342, 363, 371, 372, 376, 398, 403, 422, 424, 431, 445, 448, 1002, 1035, 1052, 1056, 1057, 1058, 1062, 1063, 1064, 1065, 1066, 1067, 1136, 1137

▼ Unique formula identifier (UFI)

0000-A0PG-W009-2X3J

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

Relevant identified uses of the substance or mixture

pH regulation. Production of alkaline soaps. Refining of oils.
Restricted to professional and industrial use.

Uses advised against

None known.

1.3. Details of the supplier of the safety data sheet

Company and address

Acinor AS

Titangaten 13
1630 Gamle Fredrikstad
Norway
+ 47 69 38 40 82

Contact person

-

E-mail

post@acinor.no

Revision

06/05/2026

SDS Version

10.0

Date of previous version

16/03/2026 (1.0)

1.4. Emergency telephone number

In urgent situations: Call 113 and request the poison information centre. (24h service)
Poison Center at Tel.: + 47 22 59 13 00
See section 4 on 'First Aid Measures'

SECTION 2: Hazards identification

Classified according to Regulation (EC) No. 1272/2008 (CLP).

2.1. Classification of the substance or mixture

Met. Corr. 1; H290, May be corrosive to metals.
 Skin Corr. 1A; H314, Causes severe skin burns and eye damage.
 Eye Dam. 1; H318, Causes serious eye damage.

2.2. Label elements

Hazard pictogram(s)



Signal word

Danger

Hazard statement(s)

May be corrosive to metals. (H290)
 Causes severe skin burns and eye damage. (H314)

Precautionary statement(s)

General

Not applicable.

Prevention

Do not breathe vapour/mist/dust/fume/gas/spray. (P260)
 Wear protective gloves/protective clothing/eye protection/face protection. (P280)

Response

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. (P301+P330+P331)
 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. (P303+P361+P353)
 IF INHALED: Remove person to fresh air and keep comfortable for breathing. (P304+P340)
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. (P305+P351+P338)
 Immediately call a POISON CENTER/doctor. (P310)

Storage

Not applicable.

Disposal

Not applicable.

Hazardous substances

Sodium hydroxide

Additional labelling

2.3. Other hazards

Additional warnings

This mixture/product does not contain any substances known to fulfil the criteria for PBT and vPvB classification.
 This product does not contain any substances considered to be endocrine disruptors in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2023/707.

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable. This product is a mixture.

3.2. Mixtures

Product/substance	Identifiers	% w/w	Classification	Note
Sodium hydroxide	CAS No.: 1310-73-2 EC No.: 215-185-5 REACH: 01-2119457892-27 Index No.: 011-002-00-6	5 - 50 %	Skin Corr. 1A, H314 (SCL: ≥ 5 %) Skin Corr. 1B, H314 (SCL: 2,0 < 5,0 %) Skin Irrit. 2, H315 (SCL: 0,5 < 2,0 %) Eye Irrit. 2, H319 (SCL: 0,5 < 2,0 %)	

See full text of H-phrases in section 16. Occupational exposure limits are listed in section 8, if these are available.

Other information

-

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Emergency telephone: see section 1.4.

Inhalation

Fresh air, calm and warmth. Contact a doctor if irritation persists. If breathing stops, give artificial respiration. If breathing is difficult, oxygen may be necessary. Contact a doctor immediately!

Skin contact

Remove contaminated clothing. Wash skin immediately with soap and water. Continue rinsing for at least 15 minutes. Burns should be treated by a physician.

Eye contact

Rinse immediately with large amounts of water (temperature 20-30°C) for at least 30 minutes. Remove contact lenses, if present, and open the eye wide. Transport to a doctor. Continue rinsing during transport.

Ingestion

Rinse mouth thoroughly with water. Drink plenty of water. Do not induce vomiting. Consult a doctor if all discomfort persists.

Burns

Not applicable.

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

The chemical is corrosive to skin and mucous membranes. Forms blisters and can cause ulceration.

The chemical is corrosive to the eyes and can cause permanent damage. Symptoms such as severe burning, watery eyes, redness and blurred vision may occur. In severe cases, there is a risk of visual impairment/blindness.

Corrosive if swallowed. Causes burning pain in the mouth, throat and esophagus. Risk of serious permanent damage. Risk of perforation of the esophagus. Hospital treatment required.

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

Symptomatic treatment.

Information to medics

Bring this safety data sheet or the label from this product.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media: Powder, carbon dioxide (CO₂), alcohol-resistant foam.

Unsuitable extinguishing media: Do not use full water jet.

5.2. Special hazards arising from the substance or mixture

The chemical is not classified as flammable.

Reacts violently with water. May form toxic or explosive fumes in contact with some metals. Explosive toxic gas may be formed in contact with trichloroethylene.

5.3. Advice for firefighters

Firefighters should wear appropriate protective equipment and self-contained breathing apparatus with a full face mask.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Avoid inhalation of vapours and contact with skin and eyes. Wear specified protective equipment, see section 8.

Be careful! The product is corrosive.

6.2. Environmental precautions

Prevent discharge into sewers, waterways or soil.

6.3. Methods and material for containment and cleaning up

Absorb in vermiculite, dry sand or earth and place in containers. Collect in suitable containers and dispose of as hazardous waste according to section 13.

6.4. Reference to other sections

See section 13 "Disposal considerations" on handling of waste.

See section 8 "Exposure controls/personal protection" for protective measures.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Ensure adequate ventilation. Avoid inhalation of vapours and contact with skin and eyes. Wear specified protective equipment, see section 8.

Be careful! The product is corrosive.

Never pour water directly into the product, this can cause a violent reaction/boiling. When diluting, always pour the product carefully into water.

7.2. Conditions for safe storage, including any incompatibilities

Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

Store in a container with a resistant inner liner.

Recommended storage material

Suitable containers: Acid-resistant steel.

Unsuitable containers: Aluminium. Lead, copper, tin or zinc.

Storage conditions

No specific requirements.

Incompatible materials

Acids

Water

Aluminium

Zinc

Tin

Lead

Strong oxidizing agents

Ammonium compounds

Food and animal feed

7.3. Specific end use(s)

This product should only be used for applications quoted in section 1.2.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Sodium hydroxide

Long term exposure limit (8 hours) (mg/m³): 2

Annotations:

T = Ceiling value is a momentary value that specifies the maximum concentration of a chemical in the breathing zone, that must not be exceeded.

Reference: FOR-2011-12-06-1358 Forskrift om tiltaks- og grenseverdier. Sist endret gjennom FOR-2025-12-18-2660.

DNEL

Sodium hydroxide

Duration:	Route of exposure:	DNEL:
Long term – Local effects - Workers	Inhalation	1 mg/m ³

PNEC

No data available.

8.2. Exposure controls

Ensure adequate ventilation. Personal protective equipment should be CE marked and should be selected in cooperation with the supplier of such equipment. The recommended protective equipment and the standards specified are indicative. Standards should be of the latest version. Risk assessment of the relevant workplace/operation (actual risk) may require other protective measures. The suitability and durability of the protective equipment will depend on the area of application.

General recommendations

Smoking, drinking and consumption of food is not allowed in the work area.

Exposure scenarios

Follow the link to the relevant exposure scenario in section 16 and ensure that the operational conditions and risk management measures are complied with.

Exposure limits

Professional users are subjected to the legally set maximum concentrations for occupational exposure. See occupational hygiene limit values above.

Appropriate technical measures

The formation of vapours must be kept at a minimum and below current limit values (see above). Installation of a local exhaust system if normal air flow in the work room is not sufficient is recommended. Ensure eyewash and emergency showers are clearly marked.

Ensure that eyewash stations and safety showers are located within easy reach.

Apply standard precautions during use of the product. Avoid inhalation of vapours.

Hygiene measures

In between use of the product and at the end of the working day all exposed areas of the body must be washed thoroughly. Pay special attention to hands, forearms and face.

Measures to avoid environmental exposure

Keep damming materials near the workplace. If possible, collect spillage during work.

Individual protection measures, such as personal protective equipment

Generally

Use only CE marked protective equipment.

Respiratory Equipment





Type	Class	Colour	Standards
In case of insufficient ventilation or if there is a risk of inhalation of vapours, suitable respiratory protection with a combination filter (type A/P3) must be used.	A/P3	-	NS-EN 14387, NS-EN 149

Skin protection


Recommended	Type/Category	Standards
Wear appropriate protective clothing to protect against skin contact.		-
Emergency shower should be available at the workplace.		-

Recommended	Type/Category	Standards
Unsuitable protective clothing: Leather.	-	-

Hand protection

Material	Glove thickness (mm)	Breakthrough time (min.)	Standards	
Butyl	0,5	> 480	EN374-3	
Nitrile	0,35-0,4	> 480	EN374-3	
Viton	0,35-0,4	> 480	EN374-3	
Polyvinylklorid	0,5	> 480	EN374-3	
Replace gloves at any sign of wear. Protective gloves must always be worn on clean, dry hands.	-	-		

Eye protection

Type	Standards	
Safety glasses with side shields.	EN ISO 16321-1	
An eyewash station should be available at the workplace. Either a fixed eyewash station connected to drinking water (tempered water preferred) or a portable disposable unit (eyewash bottle).	-	

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state

Liquid

Colour

Colourless

Odour / Odour threshold

No characteristic odor

pH

> 13

Density (g/cm³)

1,11 - 1,51 (25 °C)

Relative density

1,274 - 1,525 (20 °C)

Kinematic viscosity

No data available

Particle characteristics

Not applicable - product is a liquid

Phase changes

Melting point/Freezing point (°C)

No data available

Softening point/range (°C)

Does not apply to liquids.

Boiling point (°C)

105 - 146

Vapour pressure

170 - 3000 Pa (25 °C)

Relative vapour density

No data available

Decomposition temperature (°C)

No data available

Data on fire and explosion hazards

Flash point (°C)

No data available

Flammability (°C)

No data available

Auto-ignition temperature (°C)

No data available

Lower and upper explosion limit (% v/v)

No data available

Solubility

Solubility in water

Soluble

n-octanol/water coefficient (LogKow)

Not applicable - inorganic material

Solubility in fat (g/L)

No data available.

9.2. Other information

Other physical and chemical parameters

No data available.

Oxidizing properties

No data available.

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under recommended storage conditions.

10.2. Chemical stability

Stable under normal temperature conditions and recommended use. The substance is hygroscopic and absorbs water in contact with humidity.

10.3. Possibility of hazardous reactions

Contact with metals produces hydrogen gas which can form an explosive mixture with air.

10.4. Conditions to avoid

Sunlight
Moisture

10.5. Incompatible materials

Acids
Water
Aluminium
Zinc
Tin
Lead
Strong oxidizing agents
Ammonium compounds

10.6. Hazardous decomposition products

None under normal conditions. See also section 5.2.

SECTION 11: Toxicological information

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

Acute toxicity

Product/substance	Sodium hydroxide
Species:	Rabbit
Route of exposure:	Oral
Test:	LD50
Result:	> 500 mg/kg

Product/substance	Sodium hydroxide
Species:	Rabbit
Route of exposure:	Dermal
Test:	LD50
Result:	1350 mg/kg

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

Skin corrosion/irritation

Causes severe skin burns and eye damage.

Serious eye damage/irritation

Causes serious eye damage.

Respiratory sensitization

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

Skin sensitisation

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

Germ cell mutagenicity

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

Carcinogenicity

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

Reproductive toxicity

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.

Symptoms related to the physical, chemical and toxicological characteristics

Tissue-damaging effects: This product contains substances with skin corrosive properties. Inhaled vapour or aerosols may produce adverse effects to lungs, irritations and burns in the respiratory organs as well as coughing. Dermal contact and contact with the eye cause irreversible effects.

11.2. Information on other hazards

Endocrine disrupting properties

This mixture/product does not contain any substances known to have hormone-disrupting properties in relation to health.

Other information

None known.

SECTION 12: Ecological information

12.1. Toxicity

The chemical is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent releases may be environmentally hazardous.

12.2. Persistence and degradability

Methods for determining biodegradability are not relevant for inorganic substances.

12.3. Bioaccumulative potential

Not expected to bioaccumulate.

12.4. Mobility in soil

The product is soluble in water.

12.5. Results of PBT and vPvB assessment

This mixture/product does not contain any substances known to fulfil the criteria for PBT and vPvB classification.

12.6. Endocrine disrupting properties

This mixture/product does not contain any substances considered to have endocrine-disrupting properties in relation to the environment.

12.7. Other adverse effects

Prevent discharge into sewers, waterways or soil.

Discharge of the chemical into water can locally cause high pH with the risk of fish death.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Delivered as hazardous waste to an approved treatment or collector. The hazardous waste code (EAL code) is a guideline. The user must specify the correct EWC code if the area of use deviates. The product must not be poured down the drain.

EWC code

06 02 04* Sodium and potassium hydroxide

National waste number and description

7132 Inorganic bases




Contaminated packing

Packaging containing residues of the product must be disposed of similarly to the product.

SECTION 14: Transport information

14.1 ADR/A DN/RID	14.2 UN / ID UN proper shipping name	14.3 UN1824 SODIUM HYDROXIDE SOLUTION	14.3 Hazard class(es)	14.4 PG*	14.5 Env**	Other information:
		Transport hazard class: 8 Label: 8 Classification code: C5	II	No	Limited quantities: 1 L Tunnel restriction code: (E) See below for additional information.	

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

14.1 UN / ID	14.2 UN proper shipping name	14.3 Hazard class(es)	14.4 PG*	14.5 Env**	Other information:
					
IMDG	UN1824 SODIUM HYDROXIDE SOLUTION	Transport hazard class: 8 Label: 8 Classification code: C5	II	No	Limited quantities: 1 L EmS: F-A S-B See below for additional information.
					
IATA	UN1824 SODIUM HYDROXIDE SOLUTION	Transport hazard class: 8 Label: 8 Classification code: C5	II	No	See below for additional information.
					

Additional information

This product is within scope of the regulations of transport of dangerous goods.

ADR/ADN/RID / See Table A, section 3.2.1 for any information on special provisions, requirements, or warnings in connection with transport. See section 5.4.3, for instructions in writing regarding mitigation of damages in relation to incidents or accidents during transport.

IMDG / See section 3.2.1, for any information on special provisions, requirements, or warnings in connection with transport.

IATA / See Table 4.2 for any information on special provisions, requirements, or warnings in connection with transport.

14.6. Special precautions for user

Not applicable.

14.7. Maritime transport in bulk according to IMO instruments

No data available.

SECTION 15: Regulatory information

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

Restrictions for application

Restricted to professional users.

People under the age of 18 shall not be exposed to this product.

Demands for specific education

No specific requirements.

SEVESO - Categories / dangerous substances

Not applicable.

Product registration number

93940

Declaration of chemicals

If the product is imported or produced in more than 100 kg/year it is subject to registration in the Product Register because it is classified as hazardous.

Additional information

Not applicable.

Sources

Regulation on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH Regulation) of 30 May 2008 with subsequent amendments.

Regulations on classification, labelling and packaging of substances and mixtures (CLP) of 16.06.2012 with subsequent amendments.

FOR-2004-06-01-930: Regulations on the recycling and treatment of waste (the Waste Regulations), with subsequent amendments.

FOR 2009-04-01 no. 384: Regulations on the land transport of dangerous goods with subsequent amendments, Directorate for Civil Protection and Emergency Preparedness.

FOR-2015-05-19-541: Regulations on the declaration of chemicals to the product register (declaration regulations) of 01.06.2015 with subsequent amendments.

15.2. Chemical safety assessment

Yes

SECTION 16: Other information

Full text of H-phrases as mentioned in section 3

H314, Causes severe skin burns and eye damage.

H315, Causes skin irritation.

H319, Causes serious eye irritation.

Abbreviations and acronyms

ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway

ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road

ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

CAS = Chemical Abstracts Service

CE = Conformité Européenne (European conformity)

CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]

CSA = Chemical Safety Assessment

CSR = Chemical Safety Report

DMEL = Derived Minimal Effect Level

DNEL = Derived No Effect Level

EC = Effective concentration

ED = Effective dose

EINECS = European Inventory of Existing Commercial chemical Substances

EL = Effective Loading

ErC = Concentration associated with x% growth rate response

ES = Exposure Scenario

EUH statement = CLP-specific Hazard statement

EuPCS = European Product Categorisation System

EWC = European Waste Catalogue

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

GWP = Global warming potential

HP = Hazardous Property code

IARC = International Agency for Research on Cancer (IARC)

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IC = X maximum inhibitory concentration

IMDG = International Maritime Dangerous Goods

LC = Lethal concentration

LCLo = Value is the lowest concentration of a material in air reported to have caused the death of animals or humans

LD = Lethal dose

LOAEC = Lowest Observed Adverse Effect Concentration

LOAEL = Lowest Observed Adverse Effect Level

LOEC = Lowest Observed Effect Concentration

LogKow = logarithm of the n-octanol/water coefficient

LL = Lethal Loading

M = For multiplication factor

MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)

NOAEC = No Observed Adverse Effect Concentration
NOAEL = No Observed Adverse Effect Level
NOEC = No Observed Effect Concentration
NOELR = No Observable Effect Loading Rate
OECD = Organisation for Economic Co-operation and Development
PBT = Persistent, Bioaccumulative and Toxic
PNEC = Predicted No Effect Concentration
RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail
RRN = REACH Registration Number
SCL = A specific concentration limit
SVHC = Substances of Very High Concern
STOT-RE = Specific Target Organ Toxicity - Repeated Exposure
STOT-SE = Specific Target Organ Toxicity - Single Exposure
TWA = Time weighted average
UN = United Nations
UVBC = Unknown or variable composition, complex reaction products or of biological materials
VOC = Volatile Organic Compound
vPvB = Very Persistent and Very Bioaccumulative

Additional information

The classification of the mixture in regard of health hazards is in accordance with the calculation methods given by Regulation (EC) No. 1272/2008 (CLP).

The safety data sheet is validated by

Kiwa Kompetanse AS / NOB

Other

Dette sikkerhetsdatablad er kvalitetskontrollert av Kiwa Kompetanse AS, som er sertifisert iht. ISO 9001:2015.
Country-language: NO-en

Exposure scenario

Natriumhydroksid 5-50%.pdf (<https://almego.ecoonline.net/file/HTXVJA>)