

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

1.1. Product identifier

Trade name: Sodium hydroxide pellets p.A.

Article number: LC-4994

CAS Number: 1310-73-2

EC number: 215-185-5

Index number: 011-002-00-6

Registration number: 01-2119457892-27-XXXX

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

No further relevant information available.

1.3. Application of the substance / the mixture

- Biochemistry
- Laboratory chemical

1.4. Details of the supplier of the safety data sheet

Manufacturer/Supplier:

neoFroxx GmbH
Marie-Curie-Str. 3
D-64683 Einhausen
info@neofroxx.com

Further information obtainable from:

Dep. Quality Control

1.5. Emergency telephone number

+49 (6251) 989 24 - 0 (during normal business hours)

2. Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008:

Met. Corr.1 H290 May be corrosive to metals.

Skin Corr. 1A H314 Causes severe skin burns and eye damage.

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

C; Corrosive

R35: Causes severe burns.

2.2. Label elements

Labelling according to Regulation (EC) No 1272/2008:

The substance is classified and labelled according to the CLP regulation.

Hazard pictograms:

GHS05

Signal word: Danger

Hazard-determining components of labelling:

sodium hydroxide

Hazard statements:

H290 May be corrosive to metals.

H314 Causes severe skin burns and eye damage.

Precautionary statements:

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

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2.3. Other hazards

Results of PBT and vPvB assessment:

PBT: Not applicable.

vPvB: Not applicable.

3. Composition / information on ingredients

3.1. Chemical characterisation: Substances

CAS No. Description:

1310-73-2 sodium hydroxide

Identification number(s):

EC number: 215-185-5

Index number: 011-002-00-6

4. First aid measures

4.1. Description of first aid measures

General information: Immediately remove any clothing soiled by the product.

After inhalation:

Supply fresh air.

Seek medical treatment.

After skin contact:

Wash off with plenty of water.

Dab with polyethylene glycol 400.

Immediately wash with water and soap and rinse thoroughly.

Immediately remove any clothing soiled by the product.

After eye contact:

Rinse opened eye for several minutes under running water.

Call a doctor immediately.

After swallowing:

Rinse out mouth.

Call a doctor immediately.

Do not attempt to neutralize.

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

No further relevant information available.

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

No further relevant information available.

5. Firefighting measures

5.1. Extinguishing media

Suitable extinguishing agents: Use fire extinguishing methods suitable to surrounding conditions.

5.2. Special hazards arising from the substance or mixture

Non-combustible.

Ambient fire may liberate hazardous vapors.

5.3. Advice for firefighters

Protective equipment:

Wear self-contained respiratory protective device. In order to avoid contact with skin, keep a safety distance and wear suitable protective clothing.

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Additional information: Collect contaminated fire fighting water separately. It must not enter the sewage system.

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Avoid formation of dust.

Do not inhale dust.

Avoid substance contact.

Ensure adequate ventilation

6.2. Environmental precautions:

Do not allow to enter sewers/ surface or ground water.

6.3. Methods and material for containment and cleaning up:

Pick up mechanically.

Dispose of the material collected according to regulations.

Clean up affected area.

6.4. Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7. Handling and storage

7.1. Precautions for safe handling

Thorough dedusting.

Information about fire - and explosion protection: No special measures required.

7.2. Conditions for safe storage, including any incompatibilities

Storage:

Requirements to be met by storerooms and receptacles: No aluminum, tin or zinc containers.

Information about storage in one common storage facility: Not required.

Further information about storage conditions:

Store in dry conditions.

Keep container tightly sealed.

Recommended storage temperature: 15-25 °C

Storage class: 8 B

7.3. Specific end use(s)

No further relevant information available.

8. Exposure controls / personal protection

Additional information about design of technical facilities: No further data; see item 7.

8.1. Control parameters

Ingredients with limit values that require monitoring at the workplace:

1310-73-2 sodium hydroxide

WEL Short-term value: 2 mg/m³

Additional information: The lists valid during the making were used as basis.

8.2. Exposure controls

Personal protective equipment:

General protective and hygienic measures:

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

Respiratory protection:

Required when dusts are generated.

Filter B

Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

Material of gloves:

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

Penetration time of glove material:

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

For the permanent contact gloves made of the following materials are suitable:

Nitrile rubber, NBR

Recommended thickness of the material: ≥ 0.11 mm

Value for the permeation: Level ≥ 480 min

As protection from splashes gloves made of the following materials are suitable:

Nitrile rubber, NBR

Recommended thickness of the material: ≥ 0.11 mm

Value for the permeation: Level ≥ 480 min

Eye protection:



Tightly sealed goggles

Body protection:

Protective work clothing

Protective clothing should be selected specifically for the working place, depending on concentration and quantity of the hazardous substances handled.

9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

General Information

Appearance:

Form: Solid

Colour: White

Odour: Odourless

pH-value at 20 °C: >14

Change in condition:

Melting point/Melting range: 319 °C

Boiling point/Boiling range: > 999 °C

Flash point: Not applicable.

Flammability (solid, gaseous): Product is not flammable.

Danger of explosion: Product does not present an explosion hazard

Explosion limits:

Lower: Not determined.

Upper: Not determined.

Vapour pressure at 800 °C: 3.5 hPa

Density at 20 °C: 2.13 g/cm³

Solubility in / Miscibility with water at 20 °C: 1090 g/l

Viscosity:

Dynamic: Not applicable.

Kinematic: Not applicable.

Solvent content:

Organic solvents: 0.0 %

VOC (EC) 0.00 %

9.2. Other information

No further relevant information available.

10. Stability and reactivity

10.1. Reactivity

10.2. Chemical stability

Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

10.3. Possibility of hazardous reactions

Risk of explosion with:

metals

Light metals

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

Violent reactions possible with:

acids, Nitriles, Alkaline earth metals, in powder form, ammonium compounds, Cyanides, magnesium, organic nitro compounds, organic combustible substances, phenols, oxidizable substances.

10.4. Conditions to avoid

No further relevant information available.

10.5. Incompatible materials:

No further relevant information available.

10.6. Hazardous decomposition products:
No dangerous decomposition products known.

Additional information:

hygroscopic

Incompatible with:

metals

metal alloys

brass, Aluminium, Zinc, Tin, various plastics

11. Toxicological information

11.1. Information on toxicological effects

Acute toxicity:

LD/LC50 values relevant for classification:

Components	Type	Value	Species
1310-73-2 sodium hydroxide			
Oral	LD50	1350 mg/kg	(rat)

Primary irritant effect:

on the skin: Strong caustic effect on skin and mucous membranes.

on the eye: Strong caustic effect.

After inhalation: Caustic effect on skin and mucous membranes.

Sensitisation: No sensitising effects known.

Additional toxicological information:

Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

The product should be handled with the care usual when dealing with chemicals.

12. Ecological information

12.1. Toxicity

Aquatic toxicity:

Harmful effect on aquatic organisms.

Toxic effect on fish and plankton.

12.2. Persistence and degradability

Methods for the determination of biodegradability are not applicable on inorganic substances.

12.3. Bioaccumulative potential

Due to the distribution coefficient n-octanol/water an accumulation in organisms is not expected.

12.4. Mobility in soil

No further relevant information available.

Ecotoxicological effects:

Remark:

Harmful effect due to pH shift.

Harmful effect on aquatic organism.

Caustic even in diluted form.

Does not cause biological oxygen deficit.

Neutralization possible in waste water treatment plants.

Additional ecological information:

General notes:

Must not reach sewage water or drainage ditch undiluted or unneutralised.

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Water hazard class 1 (German Regulation) (Assessment by list): slightly hazardous for water
Do not allow to enter waters, waste water, or soil.

12.5. Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

12.6. Other adverse effects

No further relevant information available.

13. Disposal considerations

13.1. Waste treatment methods

Recommendation: Chemicals must be disposed of in compliance with the respective national regulations.

Uncleaned packaging:

Recommendation:

Disposal must be made according to official regulations.

Packaging that may not be cleansed are to be disposed of in the same manner as the product.

14. Transport information

14.1. UN-Number

ADR, IMDG, IATA UN1823

14.2. UN proper shipping name

ADR, IMDG, IATA SODIUM HYDROXIDE, SOLID

14.3. Transport hazard class(es)

ADR



Class 8 (C6) Corrosive substances.

Label 8

IMDG, IATA



Class 8 Corrosive substances.

Label 8

14.4. Packing group

ADR, IMDG, IATA II

14.5. Environmental hazards:

Marine pollutant: No

14.6. Special precautions for user

Warning: Corrosive substances.

Danger code (Kemler): 80

EMS Number: F-A,S-B

Segregation groups: Alkalis

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14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable.

Transport/Additional information:

ADR

Limited quantities (LQ) 1 kg

Excepted quantities (EQ) Code: E2

Maximum net quantity per inner packaging: 30 g

Maximum net quantity per outer packaging: 500 g

Transport category 2

Tunnel restriction code E

IMDG

Limited quantities (LQ) 1 kg

Excepted quantities (EQ) Code: E2

Maximum net quantity per inner packaging: 30 g

Maximum net quantity per outer packaging: 500 g

UN "Model Regulation": UN1823, SODIUM HYDROXIDE, SOLID, 8, II

15. Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture
No further relevant information available.

15.2. Chemical safety assessment:

A Chemical Safety Assessment has not been carried out

16. Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organisation

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 Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

Met. Corr.1: Corrosive to metals, Hazard Category 1

Skin Corr. 1A: Skin corrosion/irritation, Hazard Category 1A