



Preparing for the New Era of Laboratories

MATERIAL SAFETY DATA SHEET (MSDS)

According to regulation (EU) no.1907/2006

SODIUM HYDROXIDE PELLETS 98% AR

PRODUCT CODE : O-5192

CAS No : 1310-73-2

FORMULA : NaOH

UN No : 1823

website : www.labotiq.net

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MSDS Number : 0339

Date : Aug 29th, 2024

Version : 1.0

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

- 1.1 Product Name** : SODIUM HYDROXIDE PELLETS 98% AR
Synonyms : Caustic Soda
CAS No. : 1310-73-2
HS Code : 2815 11 90
Chemical Formula : NaOH
Molecular Weight : 40.00 g/mol
Product Code : O-5192
Brand : Labotiq
1.2 Manufacturer : Labotiq
Address : Jl.Terapi Raya AD2-Bumi Menteng Asri Bogor, Jawa Barat Indonesia – 16111
Website : www.labotiq.net
Email : labotiq.id@gmail.com
For information : Phone : (+62-251) 839110, 8311662, Fax : (+62-251) 83135710
Emergency number : +6281316894650
1.3 Application : Laboratory chemicals, Manufacture of substances, General Chemical reagent

SECTION 2: Hazards identification

- 2.1 Classification of the substance or mixture**
Classification according to Regulation (EC) No 1272/2008
 Corrosive to Metals (Category 1), H290
 Skin corrosion (Sub-category 1A), H314
 Serious eye damage (Category 1), H318

For the full text of the H-Statements mentioned in this Section, see Section 16

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008

Pictogram



Signal word

Danger

Hazard statement(s)

H290

May be corrosive to metals.

H314

Causes severe skin burns and eye damage.

Precautionary statement(s)

P280

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

P303 + P361 + P353

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P304 + P340 + P310

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor.

MATERIAL SAFETY DATA SHEET (SDS/MSDS)

SODIUM HYDROXIDE PELLETS 98% AR



MSDS Number : 0339

Date : Aug 29th, 2024

Version : 1.0

P305 + P351 + P338

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

Supplemental Hazard Statements

none

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.1 Substances

Synonyms : SODIUM HYDROXIDE
 Formula : NaOH
 Molecular weight : 40.00 g/mol
 CAS-No. : 1310-73-2
 EC-No. : 215-185-5

3.2 Mixture

Hazardous ingredients according to Regulation (EC) No 1272/2008

Component	Classification	Concentration
Sodium hydroxide CAS-No. 1310-73-2 EC-No. 215-185-5 Index-No. 011-002-00-6	Met. Corr. 1; Skin Corr. 1A; H290, H314 Concentration limits: $\geq 5\%$: Skin Corr. 1A, H314; $2 - < 5\%$: Skin Corr. 1B, H314; $0.5 - < 2\%$: Skin Irrit. 2, H315; $0.5 - < 2\%$: Eye Irrit. 2, H319;	$\leq 100\%$

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice

First aiders need to protect themselves. Show this material safety data sheet to the doctor in attendance.

If inhaled

After inhalation: fresh air. Call in physician.

In case of skin contact

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/shower. Call a physician immediately.

In case of eye contact

After eye contact: rinse out with plenty of water. Immediately call in ophthalmologist. Remove contact lenses.

MATERIAL SAFETY DATA SHEET (SDS/MSDS)

SODIUM HYDROXIDE PELLETS 98% AR



MSDS Number : 0339

Date : Aug 29th, 2024

Version : 1.0

If swallowed

After swallowing: make victim drink water (two glasses at most), avoid vomiting (risk of perforation). Call a physician immediately. Do not attempt to neutralise.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

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

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media

For this substance/mixture no limitations of extinguishing agents are given.

5.2 Special hazards arising from the substance or mixture

Sodium oxides, Not combustible. Ambient fire may liberate hazardous vapours.

5.3 Advice for firefighters

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

5.4 Further information

Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Avoid inhalation of dusts. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert. For personal protection see section 8.

6.2 Environmental precautions

Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

6.4 Reference to other sections

For disposal see section 13.

SECTION 7: Handling and storage

MATERIAL SAFETY DATA SHEET (SDS/MSDS)

SODIUM HYDROXIDE PELLETS 98% AR



MSDS Number : 0339

Date : Aug 29th, 2024

Version : 1.0

7.1 Precautions for safe handling

For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

No metal containers. Tightly closed. Dry.

Storage class

Storage class (TRGS 510): 8B: Non-combustible, corrosive hazardous materials

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Derived No Effect Level (DNEL)

Application Area	Exposure routes	Health effect	Value
Workers	Inhalation	Long-term local effects	1 mg/m ³
Consumers I	Inhalation	Long-term local effects	1 mg/m ³

8.2 Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Full contact

Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min
Material tested: Dermatrill® (KCL 740, Size M)

Splash contact

Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min
Material tested: Dermatrill® (KCL 740, Size M)

MATERIAL SAFETY DATA SHEET (SDS/MSDS)

SODIUM HYDROXIDE PELLETS 98% AR



MSDS Number : 0339

Date : Aug 29th, 2024

Version : 1.0

Body Protection

protective clothing

Respiratory protection

required when dusts are generated. Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.

Recommended Filter type: Filter type P2

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.

Control of environmental exposure

Do not let product enter drains.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	Form: pellets
	Colour: white
Odour	odourless
Odour Threshold	Not applicable
pH	ca.> 14 at 100 g/l at 20 °C
Melting point/freezingpoint	Melting point/range: 318 °C
Initial boiling point and boiling range	1.390 °C at 1.013 hPa
Flash point	Not applicable
Evaporation rate	No data available
Flammability (solid, gas)	The product is not flammable
Upper/lower flammability or explosive limits	No data available
Vapour pressure	< 24 hPa at 20 °C
Vapour density	1,38 - (Air = 1.0)
Relative density	2,13 g/cm ³ at 20 °C
Water solubility	1.090 g/l at 20 °C
Partition coefficient: octanol/water	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	No data available
Explosive properties	No data available
Oxidizing properties	none

9.2 Other safety information

Relative vapor density	1,38 - (Air = 1.0)
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SECTION 10: Stability and reactivity

10.1 Reactivity

No data available

10.2 Chemical stability

Stable under recommended storage conditions.

MATERIAL SAFETY DATA SHEET (SDS/MSDS)
SODIUM HYDROXIDE PELLETS 98% AR

MSDS Number : 0339

Date : Aug 29th, 2024

Version : 1.0

10.3 Possibility of hazardous reactions

Violent reactions possible with:

Acetone, Chlorine, Ethylene oxide, Fluorine, Hydrogen, halides, Hydrazine hydrate, hydroxylamine, Acid anhydrides, Acrolein, Acid chlorides, Acids sulfuric, acid Chloroform, Water hydrogen peroxide, anhydrides phosphides, halogen-halogen compounds, trichloroethene

can decompose violently in contact with:

Organic Substances, hydrogen sulphide

Risk of ignition or formation of inflammable gases or vapours with:

powdered aluminium, Ammonium salts, persulfates, Sodium borohydride, phosphorus, Oxides of phosphorus, Halogenated hydrocarbon, Light metals, Metals

Risk of explosion/exothermic reaction with:

Bromine, Calcium, in powder form furfuryl alcohol, Nitromethane, Peroxides organic, nitro compounds, Nitriles, Acrylic monomers, Chloroform with Acetone, Nitrobenzene with Methanol, Nitrobenzene with salts magnesium, Zinc and Tin (in the presence of atmospheric oxygen and/or moisture)

10.4 Conditions to avoid

No data available

10.5 Incompatible materials

Aluminum, brass, Metals, metal alloys, Zinc, Tin

10.6 Hazardous decomposition products

In the event of fire: see section 5

SECTION 11: Toxicological information**11.1 Information on toxicological effects****Acute toxicity**

Oral: No data available

Symptoms: If ingested, severe burns of the mouth and throat, as well as a danger of perforation of the esophagus and the stomach.

Symptoms: burns of mucous membranes, Cough, Shortness of breath, Possible damages:, damage of respiratory tract Dermal: No data available

Skin corrosion/irritation

Skin - Rabbit

Result: Causes burns.

Remarks: (Regulation (EC) No 1272/2008, Annex VI)

Serious eye damage/eye irritation

Eyes - Rabbit

Result: Causes serious eye damage. (OECD Test Guideline 405)

Remarks: (Regulation (EC) No 1272/2008, Annex VI) Causes serious eye damage.

Respiratory or skin sensitisation

Patch test: - In vitro study

Result: negative

Remarks: (ECHA)

MATERIAL SAFETY DATA SHEET (SDS/MSDS)
SODIUM HYDROXIDE PELLETS 98% AR

MSDS Number : 0339

Date : Aug 29th, 2024

Version : 1.0

Germ cell mutagenicity

No data available(Sodium hydroxide)

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity

No data available(Sodium hydroxide)

Specific target organ toxicity - single exposure

No data available(Sodium hydroxide)

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available(Sodium hydroxide)

Additional Information

RTECS: WB4900000

burning sensation, Cough, wheezing, laryngitis, Shortness of breath, spasm, inflammation and edema of the larynx, spasm, inflammation and edema of the bronchi, pneumonitis, pulmonary edema, Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. Other dangerous properties can not be excluded. Handle in accordance with good industrial hygiene and safety practice

SECTION 12: Ecological information**12.1 Toxicity**

Toxicity to fish

LC50 - Gambusia affinis (Mosquito fish) - 125 mg/l - 96 h

Remarks: (ECOTOX Database)

Toxicity to daphnia and other aquatic invertebrates

EC50 - Ceriodaphnia (water flea) - 40,4 mg/l - 48 h

Remarks: (ECHA)

Toxicity to bacteria

EC50 - Photobacterium phosphoreum - 22 mg/l - 15 min

Remarks: (External MSDS)

12.2 Persistence and degradability

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

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available(Sodium hydroxide)

MATERIAL SAFETY DATA SHEET (SDS/MSDS)

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MSDS Number : 0339

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12.5 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects

Harmful effect due to pH shift.
Forms corrosive mixtures with water even if diluted.
Neutralisation possible in waste water treatment plants.
Discharge into the environment must be avoided.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Dissolve or mix the material with a combustible solvent and burn in a chem scrubber.

Contaminated packaging

Dispose of as unused product.

SECTION 14: Transport information

14.1 UN number

ADR/RID: 1823

IMDG: 1823

IATA: 1823

14.2 UN proper shipping name

ADR/RID: SODIUM HYDROXIDE, SOLID

IMDG: SODIUM HYDROXIDE, SOLID

IATA: Sodium hydroxide, solid

14.3 Transport hazard class(es)

ADR/RID: 8

IMDG: 8

IATA: 8

14.4 Packaging group

ADR/RID: II

IMDG: II

IATA: II

14.5 Environmental hazards

ADR/RID: no

IMDG Marine pollutant: no

IATA: no

14.6 Special precautions for user

Further information

No data available

SECTION 15: Regulatory information

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

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

15.2 Chemical safety assessment

For this product a chemical safety assessment was not carried out

SECTION 16: Other information

MATERIAL SAFETY DATA SHEET (SDS/MSDS)

SODIUM HYDROXIDE PELLETS 98% AR



MSDS Number : 0339

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Full text of H-Statements referred to under sections 2 and 3.

- H290 May be corrosive to metals.
- H314 Causes severe skin burns and eye damage.
- H315 Causes skin irritation.
- H318 Causes serious eye damage.
- H319 Causes serious eye irritation.

National Fire Protection Association (U.S.A.):

Health: 3

Flammability: 0

Reactivity: 1

Further information

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Labotiq shall not be held liable for any damage resulting from handling or from contact with the above product.

Version : 1.0

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