

SAFETY DATA SHEET

Version 8.11
Revision Date 03/02/2024
Print Date 06/15/2024

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

1.1 Product identifiers

Product name : Sodium hydroxide on support granulated
about 0.8-1.6 mm for elementary analysis

Product Number : 1.01567
Catalogue No. : 101567
Brand : Millipore

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

Identified uses : Reagent for analysis

1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich Inc.
3050 SPRUCE ST
ST. LOUIS MO 63103
UNITED STATES

Telephone : +1 314 771-5765
Fax : +1 800 325-5052

1.4 Emergency telephone

Emergency Phone # : 800-424-9300 CHEMTREC (USA) +1-703-
527-3887 CHEMTREC (International) 24
Hours/day; 7 Days/week

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Corrosive to Metals (Category 1), H290
Skin corrosion (Category 1A), H314
Serious eye damage (Category 1), H318
Short-term (acute) aquatic hazard (Category 3), H402

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

2.2 GHS Label elements, including precautionary statements

Pictogram



Signal Word	Danger
Hazard Statements	
H290	May be corrosive to metals.
H314	Causes severe skin burns and eye damage.
H402	Harmful to aquatic life.
Precautionary Statements	
P234	Keep only in original container.
P260	Do not breathe dust.
P264	Wash skin thoroughly after handling.
P273	Avoid release to the environment.
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/ shower.
P304 + P340 + P310	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/ doctor.
P305 + P351 + P338 + P310	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/ doctor.
P363	Wash contaminated clothing before reuse.
P390	Absorb spillage to prevent material damage.
P405	Store locked up.
P406	Store in corrosive resistant container with a resistant inner liner.
P501	Dispose of contents/ container to an approved waste disposal plant.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS - none

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Component	Classification	Concentration
sodium hydroxide		
CAS-No.	1310-73-2	Met. Corr. 1; Skin Corr. 1A; Eye Dam. 1; Aquatic Acute 3; H290, H314, H318, H402 Concentration limits: >= 0.4 %: Met. Corr. 1, H290; >= 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;
EC-No.	215-185-5	
Index-No.	011-002-00-6	
Registration number	01-2119457892-27-XXXX	
		>= 90 - <= 100 %

talca (Mg₃H₂(SiO₃)₄)			
CAS-No.	14807-96-6		≥ 5 - < 10 %
EC-No.	238-877-9		

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.

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
Magnesium oxide
silicon oxides
Not combustible.

Millipore - 1.01567

Page 3 of 14

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

7.1 Precautions for safe handling

For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

No aluminium, tin, or zinc containers. No metal containers.

Tightly closed. Dry.

Recommended storage temperature see product label.

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

Ingredients with workplace control parameters

Component	CAS-No.	Value	Control parameters	Basis
sodium hydroxide	1310-73-2	C	2 mg/m ³	USA. ACGIH Threshold Limit Values (TLV)
		C	2 mg/m ³	USA. NIOSH Recommended Exposure Limits
		TWA	2 mg/m ³	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
		C	2 mg/m ³	California permissible exposure limits for chemical contaminants (Title 8, Article 107)
talca (Mg ₃ H ₂ (SiO ₃) ₄)	14807-96-6	TWA	20 Million particles per cubic foot	USA. Occupational Exposure Limits (OSHA) - Table Z-3 Mineral Dusts
		TWA	2 mg/m ³	USA. NIOSH Recommended Exposure Limits
		PEL	2 mg/m ³	California permissible exposure limits for chemical contaminants (Title 8, Article 107)
		TWA	2 mg/m ³	USA. ACGIH Threshold Limit Values (TLV)
	Remarks	Not classifiable as a human carcinogen		
		PEL	0.05 mg/m ³	OSHA Specifically Regulated Chemicals/Carcinogens
		OSHA specifically regulated carcinogen		

8.2 Exposure controls

Appropriate engineering controls

Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.

Personal protective equipment

Eye/face protection

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

Skin protection

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 EN 16523-1 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).

Full contact

Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min
Material tested:KCL 741 Dermatril® L

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 EN 16523-1 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).

Splash contact

Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min
Material tested:KCL 741 Dermatril® L

Body Protection

protective clothing

Respiratory protection

Recommended Filter type: Filter B-(P3)

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.

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.

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

- | | |
|--|------------------------------------|
| a) Appearance | Form: solid
Color: dark gray |
| b) Odor | odorless |
| c) Odor Threshold | Not applicable |
| d) pH | ca.13.8 at 50 g/l at 20 °C (68 °F) |
| e) Melting point/freezing point | No data available |
| f) Initial boiling point and boiling range | No data available |
| g) Flash point | ()Not applicable |
| h) Evaporation rate | No data available |
| i) Flammability (solid, gas) | The product is not flammable. |
| j) Upper/lower | No data available |

Millipore - 1.01567

Page 6 of 14

	flammability or explosive limits	
k)	Vapor pressure	No data available
l)	Vapor density	No data available
m)	Density	No data available
	Relative density	No data available
n)	Water solubility	partly soluble
o)	Partition coefficient: n-octanol/water	No data available
p)	Autoignition temperature	Not applicable
q)	Decomposition temperature	No data available
r)	Viscosity	No data available
s)	Explosive properties	Not classified as explosive.
t)	Oxidizing properties	none

9.2 Other safety information

Bulk density	ca.800 kg/m ³
Particle size	0.8 - 3.0 mm - Particle size

SECTION 10: Stability and reactivity

10.1 Reactivity

No data available

10.2 Chemical stability

The product is chemically stable under standard ambient conditions (room temperature) .

10.3 Possibility of hazardous reactions

Risk of explosion with:

Metals

Light metals

Possible formation of:

Hydrogen

Violent reactions possible with:

Nitriles

Alkaline earth metals

ammonium compounds

Cyanides

Magnesium

organic nitro compounds

organic combustible substances

phenols

oxidisable substances

Millipore - 1.01567

Page 7 of 14

Acetone
Chlorine
Ethylene oxide
Fluorine
Hydrogen halides
Hydrazine hydrate
hydroxylamine
Acid anhydrides
Acrolein
Acid chlorides
Acids
Sulphuric acid
Chloroform
hydrogen peroxide
anhydrides
Antimony trichloride
phosphides
halogen-halogen compounds
trichloroethene
(Methoxymethoxymethyl)tributyltin
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
Chloroform
with
Acetone
Risk of explosion/exothermic reaction with:
Nitrobenzene
with
Methanol
Bromine
Calcium
in powder form
furfuryl alcohol
Nitromethane
Peroxides
organic nitro compounds
Nitriles
Acrylic monomers
3-Pentylmagnesium bromide
Nitrobenzene
with

salts
Magnesium
Zinc
and
Tin
(in the presence of atmospheric oxygen and/or moisture)

10.4 Conditions to avoid

no information available

10.5 Incompatible materials

Metals, metal alloys, Aluminum, Zinc, Tin, BrassMetals

10.6 Hazardous decomposition products

In the event of fire: see section 5

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Mixture

Acute toxicity

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

Symptoms: mucosal irritations, Cough, Shortness of breath, Possible damages:, damage of respiratory tract

Dermal: No data available

Skin corrosion/irritation

Remarks: Mixture causes severe burns.

Serious eye damage/eye irritation

Remarks: Mixture causes serious eye damage.

Risk of blindness!

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

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

NTP: No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

Millipore - 1.01567

Page 9 of 14

No data available

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

11.2 Additional Information

Other dangerous properties can not be excluded.

Handle in accordance with good industrial hygiene and safety practice.

Components

sodium hydroxide

Acute toxicity

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

Inhalation: Corrosive to respiratory system.

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)

Remarks: Causes serious eye damage.

Respiratory or skin sensitization

Patch test: - In vitro study

Result: negative

Remarks: (ECHA)

Germ cell mutagenicity

No data available

Carcinogenicity

IARC:	No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
NTP:	No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
OSHA:	No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated

carcinogens.

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

Acute oral toxicity - If ingested, severe burns of the mouth and throat, as well as a danger of perforation of the esophagus and the stomach.

Acute inhalation toxicity - burns of mucous membranes, Cough, Shortness of breath, Possible damages:, damage of respiratory tract

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

talc (Mg₃H₂(SiO₃)₄)

Acute toxicity

LD50 Oral - Rat - male - > 5,000 mg/kg

(OECD Test Guideline 423)

Inhalation: No data available

Dermal: No data available

Skin corrosion/irritation

Skin - Human

Result: Mild skin irritation

Remarks: (RTECS)

Serious eye damage/eye irritation

No data available

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

Test Type: Ames test

Test system: *S. typhimurium*

Result: negative

Test Type: Chromosome aberration test in vitro

Test system: Other cell types

Result: negative

Method: OECD Test Guideline 478

Species: Rat - male - Bone marrow

Result: negative

Carcinogenicity

No data available

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

SECTION 12: Ecological information**12.1 Toxicity****Mixture**

No data available

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

12.6 Endocrine disrupting properties

No data available

12.7 Other adverse effects

Biological effects:

Harmful effect due to pH shift.

Death of fish possible.

Does not cause biological oxygen deficit.

Neutralisation possible in waste water treatment plants.

Discharge into the environment must be avoided.

Components**sodium hydroxide**

Toxicity to fish

LC50 - *Gambusia affinis* (Mosquito fish) - 125 mg/l - 96 h
Remarks: (ECOTOX Database)Toxicity to daphnia
and other aquatic
invertebratesEC50 - *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)**talc (Mg₃H₂(SiO₃)₄)**

No data available

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

Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself. See www.retrologistik.com for processes regarding the return of chemicals and containers, or contact us there if you have further questions.

SECTION 14: Transport information**DOT (US)**

UN number: 1823 Class: 8 Packing group: II
Proper shipping name: Sodium hydroxide, solid
Reportable Quantity (RQ): 1081 lbs
Poison Inhalation Hazard: No

IMDG

UN number: 1823 Class: 8 Packing group: II EMS-No: F-A, S-B
Proper shipping name: SODIUM HYDROXIDE, SOLID

IATA

UN number: 1823 Class: 8 Packing group: II
Proper shipping name: Sodium hydroxide, solid

SECTION 15: Regulatory information**SARA 302 Components**

This material does not contain any components with a section 302 EHS TPQ.

SARA 313 Components

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Massachusetts Right To Know Components

	CAS-No.	Revision Date
sodium hydroxide	1310-73-2	
talc (Mg ₃ H ₂ (SiO ₃) ₄)	14807-96-6	1989-08-11

Pennsylvania Right To Know Components

Millipore - 1.01567

Page 13 of 14

talc (Mg₃H₂(SiO₃)₄)

CAS-No.
14807-96-6

Revision Date
1989-08-11

California Prop. 65 Components

, which is/are known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov. talc (Mg₃H₂(SiO₃)₄)

CAS-No.
14807-96-6

Revision Date
2007-09-28

SECTION 16: Other information

Further information

The information is believed to be correct but is not exhaustive and will be used solely as a guideline, which is based on current knowledge of the chemical substance or mixture and is applicable to appropriate safety precautions for the product. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

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