

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

1.1. Product identifier

Product form : Mixture
Name : Sodium Hydroxide, volumetric solution 0.5 M (0.5 N)
Trade name : Sodium Hydroxide, volumetric solution 0.5 M (0.5 N)
UFI : 8PC0-R05P-K006-S4DP
Product code : SOHY-05V

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

Relevant identified uses

Main use category : Laboratory use

1.3. Details of the supplier of the safety data sheet

labbox labware s.l.
Migjorn, 1
P.O. Box Barcelona (SPAIN)
08338 Premia de Dalt, SPAIN
ES
T +34 937 07 79 70, F +34 937 909 532
info@labbox.com, www.labbox.com

1.4. Emergency telephone number

Emergency number : +34 937 077 970 (For technical information_Office Hours) In case of medical emergency phone 112 or to your local emergency number.

Country/Area	Organisation/Company	Address	Emergency number	Comment
United Kingdom	National Poisons Information Service (Belfast Centre) Royal Victoria Hospital	Grosvenor Road BT12 6BA	0344 892 0111	

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Corrosive to metals, Category 1 H290
Skin corrosion/irritation, Category 1 H314
Serious eye damage/eye irritation, Category 1 H318
Full text of H and EUH statements: see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS05

Signal word (CLP)

: Danger

Sodium Hydroxide, volumetric solution 0.5 M (0.5 N)

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Hazard statements (CLP)	: H290 - May be corrosive to metals. H314 - Causes severe skin burns and eye damage.
Precautionary statements (CLP)	: P260 - Do not breathe dust/fume/gas/mist/vapours/spray. P280 - Wear protective gloves/protective clothing/eye protection/face protection. P303+P361+P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/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. P406 - Store in corrosive resistant container with a resistant inner liner. P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. Other hazards

PBT: not relevant – no registration required

Contains no PBT/vPvB substances $\geq 0.1\%$ assessed in accordance with REACH Annex XIII

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Sodium hydroxide micropearls	CAS-No.: 1310-73-2 EC-No.: 215-185-5 EC Index-No.: 011-002-00-6 REACH-no: 01-2119457892-27	3 – 5	Met. Corr. 1, H290 Skin Corr. 1A, H314

Specific concentration limits:

Name	Product identifier	Specific concentration limits (%)
Sodium hydroxide micropearls	CAS-No.: 1310-73-2 EC-No.: 215-185-5 EC Index-No.: 011-002-00-6 REACH-no: 01-2119457892-27	($0,5 \leq C < 2$) Eye Irrit. 2; H319 ($0,5 \leq C < 2$) Skin Irrit. 2; H315 ($2 \leq C < 5$) Skin Corr. 1B; H314 ($5 \leq C < 100$) Skin Corr. 1A; H314

Full text of H and EUH statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	: Get medical advice/attention if you feel unwell.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact	: Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures after eye contact	: Rinse eyes with water as a precaution. Remove contact lenses, if present and easy to do. Continue rinsing.
First-aid measures after ingestion	: Rinse mouth. Do not induce vomiting. Give nothing or a little water to drink. Obtain emergency medical attention.

Sodium Hydroxide, volumetric solution 0.5 M (0.5 N)

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

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

Symptoms/effects after inhalation	: May cause respiratory irritation.
Symptoms/effects after skin contact	: Causes skin irritation.
Symptoms/effects after eye contact	: Causes eye irritation.

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

Never give anything by mouth to an unconscious person.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	: Making extinguishing agents environment-friendly.
------------------------------	---

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire	: Toxic fumes may be released.
--	--------------------------------

5.3. Advice for firefighters

Firefighting instructions	: Exercise caution when fighting any chemical fire.
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	: Absorb spillage to prevent material damage.
------------------	---

For non-emergency personnel

Emergency procedures	: Notify police and fire brigade as soon as possible.
----------------------	---

6.2. Environmental precautions

Prevent entry to sewers and public waters.

6.3. Methods and material for containment and cleaning up

For containment	: Collect spillage.
Methods for cleaning up	: Take up liquid spill into absorbent material. Store away from other materials.

6.4. Reference to other sections

See Heading 8. For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling	: Avoid contact with skin, eyes and clothing. Do not eat, drink or smoke when using this product.
Hygiene measures	: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions	: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Store in a well-ventilated place. Keep container tightly closed.
Storage area	: Store in a well-ventilated place. Store away from heat.

7.3. Specific end use(s)

Laboratory chemicals.

Sodium Hydroxide, volumetric solution 0.5 M (0.5 N)

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

National occupational exposure and biological limit values

Sodium Hydroxide, volumetric solution 0.5 M (0.5 N)	
EU - Indicative Occupational Exposure Limit (IOEL)	
IOEL TWA	2 mg/m ³
France - Occupational Exposure Limits	
Local name	Hydroxyde de sodium
VME (OEL TWA)	2 mg/m ³
Remark	Valeurs recommandées/admises
Portugal - Occupational Exposure Limits	
Local name	Hidróxido de sódio
OEL Ceiling	2 mg/m ³
Spain - Occupational Exposure Limits	
Local name	Hidróxido de sodio
VLA-EC (OEL STEL)	2 mg/m ³
United Kingdom - Occupational Exposure Limits	
Local name	Sodium hydroxide
WEL STEL	2 mg/m ³
Sodium hydroxide micropearls (1310-73-2)	
France - Occupational Exposure Limits	
Local name	Hydroxyde de sodium
VME (OEL TWA)	2 mg/m ³
Remark	Valeurs recommandées/admises
Regulatory reference	Circulaire du Ministère du travail (réf.: INRS ED 984, 2016)
Greece - Occupational Exposure Limits	
Local name	Υδροξείδιο του νατρίου
OEL TWA	2 mg/m ³
OEL STEL	2 mg/m ³
Regulatory reference	Π.Δ. 90/1999
Portugal - Occupational Exposure Limits	
Local name	Hidróxido de sódio
OEL Ceiling	2 mg/m ³ 2 ppm
Regulatory reference	Norma Portuguesa NP 1796:2014
Spain - Occupational Exposure Limits	
Local name	Hidróxido de sodio
VLA-EC (OEL STEL)	2 mg/m ³
Regulatory reference	Límites de Exposición Profesional para Agentes Químicos en España 2019. INSHT

Sodium Hydroxide, volumetric solution 0.5 M (0.5 N)

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Sodium hydroxide micropearls (1310-73-2)

United Kingdom - Occupational Exposure Limits

Local name	Sodium hydroxide
WEL STEL	2 mg/m ³
Regulatory reference	EH40/2005 (Third edition, 2018). HSE

DNEL and PNEC

Sodium Hydroxide, volumetric solution 0.5 M (0.5 N)

DNEL/DMEL (Workers)

Acute - systemic effects, inhalation	1 mg/m ³
--------------------------------------	---------------------

DNEL/DMEL (General population)

Acute - systemic effects, inhalation	1 mg/m ³
--------------------------------------	---------------------

8.2. Exposure controls

Appropriate engineering controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

Personal protection equipment

Personal protective equipment:

Avoid all unnecessary exposure. EN 374.

Personal protective equipment symbol(s):



Eye and face protection

Eye protection:

Safety glasses

Eye protection

Type	Field of application	Characteristics	Standard
			EN 166

Skin protection

Skin and body protection:

Wear suitable protective clothing

Skin and body protection

Type	Standard

Hand protection:

Nitrile rubber (NBR) /

Hand protection

Type	Material	Permeation	Thickness (mm)	Penetration	Standard
	Nitrile rubber (NBR)	6 (> 480 minutes)	0.2 mm		EN ISO 374, EN 388

Sodium Hydroxide, volumetric solution 0.5 M (0.5 N)

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: Colourless.
Odour	: odourless.
Odour threshold	: Not available
Melting point	: Not available
Freezing point	: Not available
Boiling point	: Not available
Flammability	: Not available
Lower explosion limit	: Not available
Upper explosion limit	: Not available
Flash point	: Not available
Auto-ignition temperature	: Not available
Decomposition temperature	: Not available
pH	: Not available
Viscosity, kinematic	: Not available
Solubility	: Not available
Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure	: Not available
Vapour pressure at 50 °C	: Not available
Density	: Not available
Relative density	: Not available
Relative vapour density at 20 °C	: Not available
Particle characteristics	: Not applicable

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

No additional information available

10.5. Incompatible materials

Strong acids. Strong bases. Strong reducing agents. Oxidizing agent.

10.6. Hazardous decomposition products

No additional information available

SECTION 11: Toxicological information

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

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified

Sodium Hydroxide, volumetric solution 0.5 M (0.5 N)

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Sodium hydroxide micropearls (1310-73-2)

LD50 oral	325 mg/kg Rabbit
-----------	------------------

Skin corrosion/irritation : Causes severe skin burns.

Sodium hydroxide micropearls (1310-73-2)

pH	> 13 (0.5%)
----	-------------

Serious eye damage/irritation : Causes serious eye damage.

Sodium hydroxide micropearls (1310-73-2)

pH	> 13 (0.5%)
----	-------------

Respiratory or skin sensitisation : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

STOT-single exposure : Not classified

STOT-repeated exposure : Not classified

Aspiration hazard : Not classified

Sodium hydroxide micropearls (1310-73-2)

Viscosity, kinematic	10,5 (30% - 20°)
----------------------	------------------

11.2. Information on other hazards

Endocrine disrupting properties

Adverse health effects caused by endocrine disrupting properties : Not applicable

SECTION 12: Ecological information

12.1. Toxicity

Hazardous to the aquatic environment, short-term (acute) : Not classified

Hazardous to the aquatic environment, long-term (chronic) : Not classified

Sodium hydroxide micropearls (1310-73-2)

EC50 - Daphnia [1]	40,4 mg/l Test organisms (species): Ceriodaphnia sp.
--------------------	--

12.2. Persistence and degradability

Sodium Hydroxide, volumetric solution 0.5 M (0.5 N)

Persistence and degradability	Rapidly degradable
-------------------------------	--------------------

Sodium hydroxide micropearls (1310-73-2)

Persistence and degradability	Rapidly degradable
-------------------------------	--------------------

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

Sodium Hydroxide, volumetric solution 0.5 M (0.5 N)

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

12.5. Results of PBT and vPvB assessment

Sodium Hydroxide, volumetric solution 0.5 M (0.5 N)

PBT: not relevant – no registration required

12.6. Endocrine disrupting properties

Adverse effects on the environment caused by endocrine disrupting properties : Not applicable.

12.7. Other adverse effects

Other adverse effects : Do not discharge into drains or rivers.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Must follow special treatment according to local regulation.
HP Code : HP8 - "Corrosive:" waste which on application can cause skin corrosion.

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

14.1. UN number or ID number

UN-No. (ADR) : UN 1824
UN-No. (IMDG) : UN 1824
UN-No. (IATA) : UN 1824
UN-No. (ADN) : UN 1824
UN-No. (RID) : UN 1824

14.2. UN proper shipping name

Proper Shipping Name (ADR) : SODIUM HYDROXIDE SOLUTION
Proper Shipping Name (IMDG) : SODIUM HYDROXIDE SOLUTION
Proper Shipping Name (IATA) : Sodium hydroxide solution
Proper Shipping Name (ADN) : SODIUM HYDROXIDE SOLUTION
Proper Shipping Name (RID) : SODIUM HYDROXIDE SOLUTION
Transport document description (ADR) (ADR) : UN 1824 SODIUM HYDROXIDE SOLUTION, 8, III, (E)
Transport document description (IMDG) : UN 1824 SODIUM HYDROXIDE SOLUTION, 8, III
Transport document description (IATA) : UN 1824 Sodium hydroxide solution, 8, III
Transport document description (ADN) : UN 1824 SODIUM HYDROXIDE SOLUTION, 8, III
Transport document description (RID) : UN 1824 SODIUM HYDROXIDE SOLUTION, 8, III

14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR) : 8
Danger labels (ADR) : 8
:



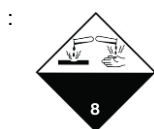
IMDG

Transport hazard class(es) (IMDG) : 8
Danger labels (IMDG) : 8

Sodium Hydroxide, volumetric solution 0.5 M (0.5 N)

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878



IATA

Transport hazard class(es) (IATA)

: 8

Danger labels (IATA)

: 8

:



ADN

Transport hazard class(es) (ADN)

: 8

Danger labels (ADN)

: 8

:



RID

Transport hazard class(es) (RID)

: 8

Danger labels (RID)

: 8

:



14.4. Packing group

Packing group (ADR)

: III

Packing group (IMDG)

: III

Packing group (IATA)

: III

Packing group (ADN)

: III

Packing group (RID)

: III

14.5. Environmental hazards

Dangerous for the environment

: No

Marine pollutant

: No

EmS-No. (Fire)

: F-A

EmS-No. (Spillage)

: S-B

Other information

: No supplementary information available

14.6. Special precautions for user

Overland transport

Classification code (ADR)

: C5

Limited quantities (ADR)

: 5I

Excepted quantities (ADR)

: E1

Packing instructions (ADR)

: P001, IBC03, LP01, R001

Mixed packing provisions (ADR)

: MP19

Portable tank and bulk container instructions (ADR)

: T4

Portable tank and bulk container special provisions (ADR)

: TP1

Tank code (ADR)

: L4BN

Vehicle for tank carriage

: AT

Transport category (ADR)

: 3

Special provisions for carriage - Packages (ADR)

: V12

Hazard identification number (Kemler No.)

: 80

Sodium Hydroxide, volumetric solution 0.5 M (0.5 N)

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Orange plates	:	<div><div>80</div><div>1824</div></div>
---------------	---	---

Tunnel restriction code (ADR)	:	E
EAC code	:	2R

Transport by sea

Special provisions (IMDG)	:	223
Limited quantities (IMDG)	:	5 L
Excepted quantities (IMDG)	:	E1
Packing instructions (IMDG)	:	P001, LP01
IBC packing instructions (IMDG)	:	IBC03
Tank instructions (IMDG)	:	T4
Tank special provisions (IMDG)	:	TP1
Stowage category (IMDG)	:	A
Segregation (IMDG)	:	SGG18, SG35
Properties and observations (IMDG)	:	Colourless liquid. Corrosive to aluminium, zinc and tin. Reacts with ammonium salts, evolving ammonia gas. Causes burns to skin, eyes and mucous membranes. Reacts violently with acids.

Air transport

PCA Excepted quantities (IATA)	:	E1
PCA Limited quantities (IATA)	:	Y841
PCA limited quantity max net quantity (IATA)	:	1L
PCA packing instructions (IATA)	:	852
PCA max net quantity (IATA)	:	5L
CAO packing instructions (IATA)	:	856
CAO max net quantity (IATA)	:	60L
Special provisions (IATA)	:	A3, A803
ERG code (IATA)	:	8L

Inland waterway transport

Classification code (ADN)	:	C5
Limited quantities (ADN)	:	5 L
Excepted quantities (ADN)	:	E1
Carriage permitted (ADN)	:	T
Equipment required (ADN)	:	PP, EP
Number of blue cones/lights (ADN)	:	0

Rail transport

Classification code (RID)	:	C5
Limited quantities (RID)	:	5L
Excepted quantities (RID)	:	E1
Packing instructions (RID)	:	P001, IBC03, LP01, R001
Mixed packing provisions (RID)	:	MP19
Portable tank and bulk container instructions (RID)	:	T4
Portable tank and bulk container special provisions (RID)	:	TP1
Tank codes for RID tanks (RID)	:	L4BN
Special provisions for RID tanks (RID)	:	TU42
Transport category (RID)	:	3
Special provisions for carriage – Packages (RID)	:	W12
Colis express (express parcels) (RID)	:	CE8
Hazard identification number (RID)	:	80

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

Sodium Hydroxide, volumetric solution 0.5 M (0.5 N)

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

SECTION 15: Regulatory information

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

EU-Regulations

REACH Annex XVII (Restriction List)

Contains no REACH substances with Annex XVII restrictions

REACH Annex XIV (Authorisation List)

Contains no REACH Annex XIV substances

REACH Candidate List (SVHC)

Contains no substance on the REACH candidate list

PIC Regulation (Prior Informed Consent)

Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

POP Regulation (Persistent Organic Pollutants)

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

Ozone Regulation (2024/590)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 2024/590 on substances that deplete the ozone layer)

Dual-Use Regulation (428/2009)

Contains no substance subject to the COUNCIL REGULATION (EC) No 428/2009 of 5 May 2009 setting up a Community regime for the control of exports, transfer, brokering and transit of dual-use items.

Explosives Precursors Regulation (2019/1148)

Contains no substance subject to Regulation (EU) 2019/1148 of the European Parliament and of the Council of 20 June 2019 on the marketing and use of explosives precursors.

Drug Precursors Regulation (273/2004)

Contains no substance subject to Regulation (EC) 273/2004 of the European Parliament and of the Council of 11 February 2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances.

National regulations

Germany

VOC ordinance (ChemVOCFarbV) :

Water hazard class (WGK) : WGK 3, Highly hazardous to water (Classification according to AwSV, Annex 1).

Hazardous Incident Ordinance (12. BImSchV) : Is not subject of the Hazardous Incident Ordinance (12. BImSchV)

Netherlands

SZW-lijst van kankerverwekkende stoffen : None of the components are listed

SZW-lijst van mutagene stoffen : None of the components are listed

NIET-limitatieve lijst van voor de voortplanting

giftige stoffen – Borstvoeding : None of the components are listed

NIET-limitatieve lijst van voor de voortplanting

giftige stoffen – Vruchtbaarheid : None of the components are listed

NIET-limitatieve lijst van voor de voortplanting

giftige stoffen – Ontwikkeling : None of the components are listed

Denmark

Danish National Regulations : Young people below the age of 18 years are not allowed to use the product

15.2. Chemical safety assessment

No additional information available

Sodium Hydroxide, volumetric solution 0.5 M (0.5 N)

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

SECTION 16: Other information

Full text of H- and EUH-statements:

Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Met. Corr. 1	Corrosive to metals, Category 1
Skin Corr. 1A	Skin corrosion/irritation, Category 1A
Skin Corr. 1B	Skin corrosion/irritation, Category 1B
Skin Irrit. 2	Skin corrosion/irritation, Category 2
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.

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.