

# Material Safety Data Sheet according to EC 1907/2006

Trade name: 1N Sodiumhydroxide solution, 1N NaOH

## 1. IDENTIFICATION OF THE PREPARATION AND OF THE COMPANY/UNDERTAKING

### 1.1 Identification of the preparation:

**Identification on the label / trade name:** 1N Sodiumhydroxide solution, 1N NaOH

**Additional identification:** NaOH 4%

### 1.2 Use of the preparation:

The NaOH is used to neutralize acidified samples.

### 1.3 Company/undertaking identification:

Bender MedSystems GmbH

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E-Mail: [europa@ebioscience.com](mailto:europa@ebioscience.com)

**Information contact:** [europa@ebioscience.com](mailto:europa@ebioscience.com)

### 1.4 EMERGENCY TELEPHONE:

phone: +43 1 796 40 40 100 (Austria)

phone: +1 (888) 999 1371 (USA)

These phone numbers are available during office hours.

## 2. HAZARDS IDENTIFICATION

### 2.1 Hazards description:

Causes corrosion/ irritation

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## 2.1.1 Classification:

Regulation (EC) No 1272/2008 [CLP]	
Hazard classes/Hazard categories	Hazard statement
3.1/ Category 4	H302, H312
3.2/ Category 2	H315
3.3/ Category 2	H319
4.1/ Category 3	H412

67/548/EEC or 1999/45/EC	
Hazards characteristics	R-Phrases
Xi	R36, R38, R53

## 2.1.2 Remark:

Full text of H- and R-phrases: see section 16.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1 Preparation / mixture related informations

**Description:** Mixture of mentioned below ingredients:

### 3.2 Ingredients:

Chemical name	EC-No	Index-No	CAS-No	Amount (%)	Classification according Regulation (EC) No 1272/2008 [CLP]		Classification according 67/548/EEC
					Hazard class/ Hazard categories	Hazard-statement	
NaOH	215-185-5	011-002-00-6	1310-73-2	solid	3.2/ Category 1	H314	C; R34
Water, dest.	231-791-2	-	7732-18-5	-	-	-	-

## 4. FIRST AID MEASURES

### 4.1 General informations:

In case of longer exposer contact a doctor, show this datasheet.  
Skin- and eyecontact causes corrosion.

### 4.2 In case of skin contact:

Wash affected bodyparts with plenty amount of water.  
In case of constant skin irritation contact a doctor.

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## 4.3 In case of eye contact:

Wash the affected eye with water for a minimum of 10 minutes.  
Contact an eye-specialist.

## 4.4 In case of ingestion:

Immediately wash your mouth with plenty of water.  
Furthermore swallow water in small amounts (dilution).  
Don't cause vomiting. Contact a doctor.

## 5. FIRE-FIGHTING MEASURES

### 5.1 Suitable extinguishing media:

water, dry powder extinguisher, carbondioxid

### 5.2 Extinguishing media which must not be used for safety reasons:

Attention with dry powder extinguisher.  
It's not appropriate for in door fire because raised foam causes lack of sight.

### 5.3 Special exposure hazards arising from the substance or preparation itself, combustion products, resulting gases:

In case of fire, despite flue gas also dangerous, product specific gases might be produced. Because of the very low concentration of this mixture it is very unlikely that oxides will be produced in a hazardous amount.  
Further data are not known.

### 5.4 Special protective equipment for fire-fighters:

In case of heavy smoke a respirator shall be used.

## 6. ACCIDENTAL RELEASE MEASURES

### 6.1 Personal precautions:

In case of spilled mixture safety gloves have to be worn to prevent skin contact.  
In case of big amounts an additional inhalation protection is recommended.

### 6.2 Environmental precautions:

Mixture must not discard in sewage system/ residual waste.  
Dilute residues cautiously with water and clean it up with a paper towel.

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## 6.3 Methods for cleaning up:

Spilled mixture can be cleaned up with a paper towel and discarded in an appropriate waste.

Afterwards clean bench with water.

## 7. HANDLING AND STORAGE

### 7.1 Handling

#### Advices on safe handling:

Protective measures: wear protective clothing

#### Precautions against fire and explosion:

Development of explosive atmosphere is not possible

### 7.2 Storage

#### Technical measures and storage conditions:

Storage in well closed containers

#### Packaging materials:

Base resistant containers (e.g.: polyethylen) are suitable

Containers made of aluminium, tin, zinc are not suitable.

#### Requirements for storage rooms and vessels:

Prevent direct sunlight and heat.

Store in well aired storage rooms.

#### Further information on storage conditions:

Storage temperature: 2 – 8 °C

Storage stability: stabil

Maximal storage periode: 2 years

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### 8.1 Exposure limit values:

#### 8.1.1 Components with occupational exposure limits requiring monitoring:

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## Sodiumhydroxide solution:

### maximum allowable concentration

Austria:	short term value:	2 mg/m <sup>3</sup>
	long term (8 hs):	4 mg/m <sup>3</sup>
USA:	short term value	no data available
	long term (8 hs):	2 mg/m <sup>3</sup>

## 8.2 Personal protection equipment:

<u>Respiratory protection:</u>	only necessary in case of fumes
<u>Hand protection:</u>	disposable protective gloves
<u>Eye protection:</u>	not necessary
<u>Body protection:</u>	lab coat, lab shoes

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Appearance

<b>Physical state:</b>	liquid
<b>Colour:</b>	colourless
<b>Odour:</b>	odourless

### 9.2 Important health, safety and environmental information

#### 9.2.1 Safety relevant data

	Value	Remark
<b>pH (20 °C):</b>	pH 10, alkaline	pH paper
<b>Melting point (°C):</b>	no data	
<b>Boiling point (°C):</b>	no data	
<b>Ignition temperature (°C):</b>	no data	
<b>Vapour pressure (°C):</b>	no data	
<b>Density (g/cm<sup>3</sup>):</b>	1.0318 g/cm <sup>3</sup>	
<b>Water solubility:</b>	very well soluble	
<b>Viscosity, dynamic (mPa s):</b>	no data	
<b>Explosion limits:</b>	-	mixture is not explosive

## 10. STABILITY AND REACTIVITY

stable under mentioned storage conditions

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## 10.1 Conditions to avoid:

Direct sunlight, high temperature

## 10.2 Materials to avoid:

Metals (development of hydrogen, explosion hazard)

Acids (heat development)

Sal ammoniac (development of ammoniac)

## 10.3 Hazardous decomposition products:

No data available

## 11. TOXICOLOGICAL INFORMATION

### 11.2 Acute effects (toxicity tests)

1310-73-2/ NaOH (waterfree NaOH)	Effect dose	Species
Acute oral toxicity	LD50 = 2000 mg/kg	rat
Acute dermal toxicity	no data	
Acute inhalative toxicity	no data	

### Specific symptoms in animal studies:

No data available

### Irritant and corrosive effects:

	Exposure time	Species	Evaluation
Primary irritation to the skin:	no data	rabbit	corrosion
Irritation to eyes	no data	rabbit	corrosion

### Sensitisation

In case of skin contact: no data

In case of inhalation: no data

### Repeated dose toxicity (sub-acute, sub-chronic, chronic)

No data available

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## CMR effects

**(carcinogenity, mutagenicity and toxicity for reproduction)**

No CMR effects

## 12. Ecological information

### 12.1 Ecotoxicity:

Aquatic toxicity	Effectdose	Exposure time	Species
Acute fish toxicity	LC50=45.4 mg/l	96 h	Onchorhynchus mykiss
Acute daphnia toxicity	EC50=76 mg/l	24 h	Daphnia magna
Acute algae toxicity	No data		

### 12.2 Mobility:

#### **Known or predicted distribution to environmental compartments:**

In case of shifting the pH value there might be some damaging effects for aquatic organism.

The mixture must not dispose in the sewage system without pretreatment.

## 13. DISPOSAL CONSIDERATIONS

### 13.1 Appropriate disposal / Product:

All national and local laws have to be considered. This product is only allowed to be discarded by a licensed waste management company.

### 13.2 Waste codes / waste designations according to EWC / AVV (Austria):

Medical waste: Waste code: 97101

In other countries different conditions might be valid. All national and local laws have to be considered.

### 13.3 Appropriate packaging:

Rinse container with water, dispose as the product.

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### 14. TRANSPORT INFORMATION

Official transport designation: 1N NaOH, 1N Sodiumhydroxyde solution  
Because product is no dangerous good, no specific codes or labes are necessary.

### 15. REGULATORY INFORMATION

#### 15.1 EU regulations

##### Labelling (Regulation (EC) No 1272/2008)

Hazard components for labelling: Sodiumhydroxide solution, NaOH

Signal words: Attention

Hazard pictograms: GHS07



Hazard statements: H302, H312, H315, H319, H412

Precautionary statements: P281, P301, P302, P305, P330, P404, P410

### 16. OTHER INFORMATION

#### 16.1 Relevant R- and H-phrases:

H302: Harmful if swallowed

H312: Harmful in contact with skin

H315: Causes skin irritation

H319: Causes serious eye irritation

H412 Harmful to aquatic life with long lasting effects

R36: Irritating to eyes

R38: Irritating to skin

R53: May cause long-term adverse effects in the aquatic environment

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P281: Use personal protective equipment as required  
P301: IF SWALLOWED: swallow water in small amounts  
P302: IF ON SKIN: wash with water  
P305: IF IN EYES: wash with water  
P330: Flush mouth  
P404: Store in a closed container  
P410: Protect from sunlight

**16.2 Training instructions:** no data

**16.4 Data sources:**  
REACH Helpdesk (Austria), BDI Helpdesk Germany), ECHA, GESTIS (IFA)

**16.5 Further information:**  
The above information has been assembled to the best of our knowledge but might not be complete.  
Bender MedSystems GmbH can not be held liable for any damages resulting from handling with the product

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