

# SAFETY DATA SHEET

according to Regulation (EG) no 1907/2006  
Generic EU MSDS – No country specific data  
REVISION DATE: 2014-06-30

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

### 1.1 Product identifier

Product name: Sodium Hydroxide  
Article number: 12-9193, 16-0019

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

Identified uses: Laboratory chemical

### 1.3 Details of the supplier of the safety data sheet

Company: Medicago AB  
Danmark Berga 13  
755 98 Uppsala  
Telephone: +46 (0)18 56 11 80  
Facsimile: +46 (0)18 56 11 88  
E-mail address: info@medicago.se

### 1.4 Emergency telephone number

Emergency telephone number: Giftinformationscentralen 112

## 2. Hazards identification

### 2.1 Classification of the substance or mixture

**Classification according to Regulation (EC) No 1272/2008 (EU-GHS/CLP)**

Classified: Skin corrosion (Cat. 1A) H314; corrosive to metals (Cat. 1) H290

### 2.2 Label elements

**Labelling according to Regulation (EC) No 1272/2008 (EU-GHS/CLP)**



Signal word: Danger  
Hazard statement(s):  
H290 May be corrosive to metals  
H314 Causes severe skin burns and eye damage

Precautionary statement(s):  
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): Take off immediately all contaminated clothing. Rinse skin with water/shower.  
P305+P351+P338 IF IN EYES: Rinse cautiously with water several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P310 Immediately call a POISON CENTRE and/or doctor/physician.

Complementary hazard information  
No further information

### 2.3 Other hazards

No further information

### 3. Composition/information on ingredients

#### 3.1 Substances

Substance	CAS-no.	EC-no.	Index-no.	Weight %	Classification according to constitution (EG) no 1272/2008 (CLP)
Sodium Hydroxide	1310-73-2	215-185-5	011-002-00-6	≤ 100%	Skin Corr. 1A, H314 Met Corr. 1, H290

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

### 4. First aid measures

#### 4.1 Description of first aid measures

If swallowed	Call a poison centre/doctor immediately; get person to the hospital as fast as possible; if person is conscious, rinse mouth with water; do NOT induce vomiting; oxygen might be necessary
If inhaled	Move to fresh air; give oxygen or artificial respiration if necessary; lie person down in recovery position, cover and keep warm; get medical attention immediately
In case of skin contact	Take off contaminated clothes and shoes; wash skin immediately with plenty of water; keep person warm and in a quiet place, get medical attention immediately
In case of eye contact	Rinse immediately with plenty of water (also under eyelids) for at least 15 min; in case of difficulties of opening eyes, administer analgesic eye wash; get medical attention immediately and/or get person to the hospital as fast as possible
General advice	Show this data sheet to the doctor in attendance

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

No data available

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

No data available

### 5. Firefighting measures

#### 5.1 Extinguishing media

Suitable extinguishing media: Use dry chemical powder: for large fire use fog or alcohol-resistant foam  
Unsuitable extinguishing media: Water may be ineffective

#### 5.2 Special hazards arising from the substance or mixture

Product reacts violently with water; release of hydrogen by reaction with metals; sodium oxides

#### 5.3 Advice for fire fighters

Wear self-contained breathing apparatus for firefighting; wear chemical resistant overall

#### 5.4 Further information

Product itself is not flammable

Advice for emergency responders: Evacuate personal to safe area; keep people away from and upwind of spillage/ leakage; ventilate area; wear suitable protective clothes

### 6. Accidental release measures

#### 6.1 Personal precautions, protective equipment and emergency procedures

Avoid dust formation; keep away from incompatible materials; wear lab coat, proper gloves, safety goggles and shoes; wearing of respiratory protection recommended; wash contaminated clothes before re-using

#### 6.2 Environmental precautions

Prevent further leakage/spillage if safe to do; product should not be released into the environment; do not flush into surface water of sanitary water system; if product contaminates rivers/lakes or drains, inform authorities

#### 6.3 Methods and material for containment and cleaning up

Sweep up and shovel into a suitable and closed container for disposal; avoid dust formation

#### 6.4 Reference to other sections

For disposal: See section 13

## 7. Handling and storage

### 7.1 Precautions for safe handling

Do not breathe dust; avoid contact with skin and eyes; when diluting, always add product to the water (NEVER add water to the product); use equipment and materials which are compatible with the product; do not overheat

### 7.2 Conditions for safe storage, including any incompatibilities

Store in original container in a dry and well-ventilated place; the product is hygroscopic

### 7.3 Specific end use(s)

No data available

## 8. Exposure controls/personal protection

### 8.1 Control parameters

No data available

### 8.2 Exposure controls

#### Appropriate engineering controls

Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits; if user operations generate dust, fume, or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit

#### Personal protective equipment

**Eye/face protection:** Wear safety goggles

**Skin protection:** Wear proper gloves; gloves must be inspected prior to use

**Body Protection:** Wear lab coat or other impervious clothes

**Respiratory protection:** Use of dust respirator (filter type P2) recommended

## 9. Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Appearance	white pellets
Odour	odourless
Odour threshold	no data available
pH	14 at 50 g/l at 20°C
Melting point/ freezing point	melting point: 323°C
Initial boiling point and boiling range	boiling point: 1388°C
Flash point	no data available
Evaporation rate	no data available
Flammability (Solid, gas)	no data available
Upper/lower flammability or explosive limits	no data available
Vapour pressure	no data available
Vapour density	no data available
Relative density	2.13 g/cm <sup>3</sup> at 20°C
Water solubility	ca 1260 g/l at 20°C
Partition coefficient: n-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	no data available

### 9.2 Other information

No further information

## 10. Stability and Reactivity

### 10.1 Reactivity

Potential for exothermic hazard; may be corrosive

### 10.2 Chemical stability

Stable under recommended storage conditions

(Continued on page 4)

**10.3 Possibility of hazardous reactions**

Release of hydrogen by reaction with metals; exothermic reactions with strong acids; risk of violent reaction with water

**10.4 Conditions to avoid**

Keep away from direct sun light; do not overheat; exposure to moisture; freezing

**10.5 Incompatible materials**

Metals, oxidizing agents; acids, aluminium; other light metals and their alloys; organic materials

**10.6 Hazardous decomposition products**

In case of reaction with metals: Hydrogen

In case of fire: Sodium oxides

## 11. Toxicological information

**11.1 Information on toxicological effects****11.1.1 Substances****Acute toxicity**

No data available

**Skin corrosion/irritation**

Skin: rabbit- causes severe burns – 24h

**Serious eye damage/ eye irritation**

Eye: rabbit – corrosive – 24h

**Respiratory or skin sensitization**

No data available

**Germ cell mutagenicity**

No data available

**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

**Potential health effects**

Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes and skin.

## 12. Ecological information

**12.1 Toxicity**

Toxicity to fish: LC50 – *Gambusia affinis* (Mosquito fish) – 125 mg/l – 96h

LC50 – *Oncorhynchus mykiss* (Rainbow trout) – 45.4 mg/l – 96h

Toxicity to daphnia and other aquatic invertebrates: Immobilization EC 50 – *Daphnia* – 40.38 mg/l – 96h

**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**

No data available

**12.6 Other adverse effects**

Harmful to aquatic life

## 13. Disposal considerations

### 13.1 Waste treatment methods

Waste must be disposed of in accordance with federal, state, and local environmental control regulations.  
Contaminated packaging: Dispose of as unused product.

## 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, water pollutant:                      no  
IATA:                      no

### 14.6 Special precautions for user

No data available

### 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

No data available

## 15. Regulatory information

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

No data available

### 15.2 Chemical safety assessment

No data available

## 16. Other information

This information is based on the current state of knowledge.

Precaution and disclaimer: For laboratory use only; not for drug, household, or any other use

### Text of H-phrase(s) in section 3

Hazard statement(s):

H290                      May be corrosive to metals  
H314                      Causes severe skin burns and eye damages

Met Corr.                      Corrosive to metals  
Skin Corr.                      Skin corrosion