

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 06.02.2014

Version number 9

Revision: 06.02.2014

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

- **1.1 Product identifier**
- **Trade name:** Sodium Hydroxide
- **Article number:**
0288, 0290, 0402, 0403, 0404, 0903, 7682, 0405, 3723-05, C7772-XX, 3718-01, 3722-01, 3728-01, 3718-07CEN, 0389-XX, 3718-05, 3718-07, 3718-20, 3718-70, 3722-05, 3722-19, 3723-08, 3728-04, 3728-05, 3728-07, 3718-07EU, 3718-10EU, 3718-70EU, C7772, C7708, C7708-10, 3718EU, 0290.W, 0405.W, 0288.W, 0405.S, 0288.S, 0348, 3718-32, 3718-37, 3728-28, 7690-02, 7690-06, 7740-02, 7740-06, 7760-02, 7760-06, 7690-QM, 7740-QM
- **CAS Number:**
1310-73-2
- **EC number:**
215-185-5
- **Index number:**
011-002-00-6
- **Registration number** 01-2119457892-27-XXXX
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
- **Application of the substance / the mixture :** For Laboratory, Research or Manufacturing use.
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Avantor Performance Materials B.V.
P.O.Box 1
7400 AA Deventer
The Netherlands
Tel: (+31) (0)570 - 687500
Fax: (+31) (0)570 - 687574
E-mail : jtbaker.nl@avantormaterials.com
- **Informing department:**
E-mail : pawel.skiba@avantormaterials.com
Avantor Performance Materials Sales Office Tel.: +31(0) 570 687500
- **1.4 Emergency telephone number:**
Environment Health & Safety department
during normal opening times (8 am till 5.30 pm) tel: (+31)(0) 570 687500

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
 - **Classification according to Regulation (EC) No 1272/2008**
Skin Corr. 1A H314 Causes severe skin burns and eye damage.
 - **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**
C; Corrosive
R35: Causes severe burns.
 - **Information concerning particular hazards for human and environment:** void
 - **2.2 Label elements**
 - **Labelling according to Regulation (EC) No 1272/2008**
The substance is classified and labelled according to the CLP regulation.
 - **Hazard pictograms**
- 

GHS05
- **Signal word** Danger
 - **Hazard statements**
H314 Causes severe skin burns and eye damage.
 - **Precautionary statements**
P260 Do not breathe dust/fume/gas/mist/vapours/spray.

(Contd. on page 2)

GB

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 06.02.2014

Version number 9

Revision: 06.02.2014

Trade name: Sodium Hydroxide

(Contd. of page 1)

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 for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER/doctor/...

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· **2.3 Other hazards**

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

· **3.1 Chemical characterization: Substances**

· **CAS No. Designation:**

1310-73-2 Sodium Hydroxide

· **Identification number(s):**

· **EC number:** 215-185-5

· **Index number:** 011-002-00-6

SECTION 4: First aid measures

· **4.1 Description of first aid measures**

· **General information** Instantly remove any clothing soiled by the product.

· **After inhalation** In case of unconsciousness bring patient into stable side position for transport.

· **After skin contact** Instantly wash with water and soap and rinse thoroughly.

· **After eye contact** Rinse opened eye for several minutes under running water. Then consult doctor.

· **After swallowing** Drink copious amounts of water and provide fresh air. Instantly call for doctor.

· **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.

· **4.3 Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

SECTION 5: Firefighting measures

· **5.1 Extinguishing media**

· **Suitable extinguishing agents**

CO₂, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.

· **For safety reasons unsuitable extinguishing agents** Water with a full water jet.

· **5.2 Special hazards arising from the substance or mixture** No further relevant information available.

· **5.3 Advice for firefighters**

· **Protective equipment:** No special measures required.

SECTION 6: Accidental release measures

· **6.1 Personal precautions, protective equipment and emergency procedures**

Wear protective equipment. Keep unprotected persons away.

· **6.2 Environmental precautions:** No special measures required.

· **6.3 Methods and material for containment and cleaning up:**

Use neutralizing agent.

Dispose of contaminated material as waste according to item 13.

Ensure adequate ventilation.

(Contd. on page 3)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 06.02.2014

Version number 9

Revision: 06.02.2014

Trade name: Sodium Hydroxide

(Contd. of page 2)

- **6.4 Reference to other sections**
See Section 7 for information on safe handling
See Section 8 for information on personal protection equipment.
See Section 13 for information on disposal.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling** Thorough dedusting.
- **Information about protection against explosions and fires:** no special requirements
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage**
- **Requirements to be met by storerooms and containers:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep container tightly sealed.
- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

- **8.1 Control parameters**
- **Components with critical values that require monitoring at the workplace:**

1310-73-2 Sodium Hydroxide	
WEL	Short-term value: 2 mg/m ³

- **Additional information:** The lists that were valid during the compilation were used as basis.
- **8.2 Exposure controls**
- **Personal protective equipment**
- **General protective and hygienic measures**
Keep away from foodstuffs, beverages and food.
Instantly remove any soiled and impregnated garments.
Wash hands during breaks and at the end of the work.
Avoid contact with the eyes and skin.
- **Breathing equipment:** Not required.
- **Protection of hands:**
Protective gloves.
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
- **Material of gloves**
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.
- **Penetration time of glove material**
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye protection:** Tightly sealed safety glasses.

SECTION 9: Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**
- **General Information**
- **Appearance:**
- Form: Solid.

(Contd. on page 4)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 06.02.2014

Version number 9

Revision: 06.02.2014

Trade name: Sodium Hydroxide

(Contd. of page 3)

Colour:	White
· Smell:	Odourless
· Odour threshold:	Not determined.
· pH-value:	Not applicable.
· Change in condition	
Melting point/Melting range:	319 °C
Boiling point/Boiling range:	1390 °C
· Flash point:	Not applicable
· Inflammability (solid, gaseous)	Product is not inflammable.
· Ignition temperature:	
Decomposition temperature:	Not determined.
· Self-inflammability:	Not determined.
· Danger of explosion:	Product is not explosive.
· Critical values for explosion:	
Lower:	Not determined.
Upper:	Not determined.
· Steam pressure at 800 °C:	3.5 hPa
· Density at 20 °C	2.13 g/cm ³
· Relative density	Not determined.
· Vapour density	Not applicable.
· Evaporation rate	Not applicable.
· Solubility in / Miscibility with	
Water at 20 °C:	420 g/l
· Partition coefficient (n-octanol/water):	Not determined.
· Viscosity:	
dynamic:	Not applicable.
kinematic:	Not applicable.
· 9.2 Other information	No further relevant information available.

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SECTION 10: Stability and reactivity

- **10.1 Reactivity**
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:** Heat,boiling teperatures.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** No dangerous decomposition products known

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SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
 - **Acute toxicity:**
 - **LD/LC50 values that are relevant for classification:**
- | | | |
|------|------|------------------|
| Oral | LD50 | 2000 mg/kg (rat) |
|------|------|------------------|
- **Primary irritant effect:**
 - **on the skin:** Strong caustic effect on skin and mucous membranes.
 - **on the eye:** Strong caustic effect.
 - **Sensitization:** No sensitizing effect known.

(Contd. on page 5)

GB

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 06.02.2014

Version number 9

Revision: 06.02.2014

Trade name: Sodium Hydroxide

(Contd. of page 4)

· **Additional toxicological information:**

Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

SECTION 12: Ecological information

· **12.1 Toxicity**

· **Aquatic toxicity:** No further relevant information available.

· **12.2 Persistence and degradability** No further relevant information available.

· **12.3 Bioaccumulative potential** No further relevant information available.

· **12.4 Mobility in soil** No further relevant information available.

· **Additional ecological information:**

· **General notes:**

Water hazard class (D) 1 (Assessment by list): slightly hazardous for water.

Do not allow undiluted product or large quantities of it to reach ground water, water bodies or sewage system.

Must not reach sewage water or drainage ditch undiluted or unneutralized.

· **12.5 Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

· **12.6 Other adverse effects** No further relevant information available.

SECTION 13: Disposal considerations

· **13.1 Waste treatment methods**

· **Recommendation**

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

· **Uncleaned packagings:**

· **Recommendation:** Disposal must be made according to official regulations.

· **Recommended cleaning agent:** Water, if necessary with cleaning agent.

SECTION 14: Transport information

· **14.1 UN-Number**

· **ADR, IMDG, IATA**

UN1823

· **14.2 UN proper shipping name**

· **ADR**

1823 SODIUM HYDROXIDE, SOLID

· **IMDG, IATA**

SODIUM HYDROXIDE, SOLID

· **14.3 Transport hazard class(es)**

· **ADR**



· **Class**

8 (C6) Corrosive substances.

· **Label**

8

(Contd. on page 6)

GB

Safety data sheet
according to 1907/2006/EC, Article 31

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Version number 9

Revision: 06.02.2014

Trade name: Sodium Hydroxide

(Contd. of page 5)

· **IMDG, IATA**



- **Class** 8 Corrosive substances.
- **Label** 8

- **14.4 Packing group**
- **ADR, IMDG, IATA** II

- **14.5 Environmental hazards:**
- **Marine pollutant:** No

- **14.6 Special precautions for user** Warning: Corrosive substances.
- **Kemler Number:** 80
- **EMS Number:** F-A,S-B
- **Segregation groups** Alkalis

- **14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** Not applicable.

· **Transport/Additional information:**

- **ADR**
- **Limited quantities (LQ)** 1 kg
- **Transport category** 2
- **Tunnel restriction code** E
- **UN "Model Regulation":** UN1823, SODIUM HYDROXIDE, SOLID, 8, II

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SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Labelling according to Regulation (EC) No 1272/2008**
The substance is classified and labelled according to the CLP regulation.
- **Hazard pictograms**



GHS05

- **Signal word** Danger
- **Hazard statements**
H314 Causes severe skin burns and eye damage.
- **Precautionary statements**
P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
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(Contd. on page 7)

GB

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 06.02.2014

Version number 9

Revision: 06.02.2014

Trade name: Sodium Hydroxide

(Contd. of page 6)

· **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Department issuing data specification sheet:** EHS

· **Contact:** Paweł Skiba

· **Abbreviations and acronyms:**

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organization

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

· *** Data compared to the previous version altered.**

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