

Safety Data Sheet
according to 1907/2006/EC, Article 31

Printing date 24.08.2007

Revision: 24.08.2007

1 Identification of substance:

- **Product details:**
- **Trade name:** Sodium Hydroxide 40% (10N)
- **Article number:** 6165, 5000, 93-0195, 5674
- **Application of the substance / the preparation**

Chemicals for synthesis
Laboratory chemicals

- **Manufacturer/Supplier:**

Mallinckrodt Baker 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@covidien.com

- **Informing department:**

Quality Systems & Regulatory Affairs
E-mail : sjors.duteweert@covidien.com

- **Emergency information:**

Environment Health & Safety department
during normal opening times (8 am till 5.30 pm) tel: (+31)(0) 570 687500

2 Hazards identification

- **Hazard designation:**



C Corrosive

- **Information pertaining to particular dangers for man and environment**

R 35 Causes severe burns.

- **Classification system**

The classification is in line with current EC lists. It is expanded, however, by information from technical literature and by information furnished by supplier companies.

3 Composition/information on ingredients

- **Chemical characterization**

- **Description:** Mixture of the substances listed below with harmless additions.

- **Dangerous components:**

CAS: 1310-73-2	Sodium Hydroxide	C; R 35	25 - 50%
EINECS: 215-185-5			

- **Additional information** For the wording of the listed risk phrases refer to section 16.

4 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.

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5 Fire fighting measures

- **Suitable extinguishing agents**
CO₂, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.
- **Protective equipment:** Wear self-contained breathing apparatus.

6 Accidental release measures

- **Person-related safety precautions:** Wear protective equipment. Keep unprotected persons away.
- **Measures for environmental protection:** Dilute with plenty of water.
- **Measures for cleaning/collecting:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Use neutralizing agent.
Dispose of contaminated material as waste according to item 13.
Ensure adequate ventilation.

* **7 Handling and storage**

- **Handling**
- **Information for safe handling:**
No special precautions necessary if used correctly.
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
- **Information about protection against explosions and fires:** no special requirements
- **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.

* **8 Exposure controls and personal protection**

- **Additional information about design of technical systems:** No further data; see item 7.
- **Components with critical values that require monitoring at the workplace:**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:** The lists that were valid during the compilation were used as basis.
- **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:**
In case of brief exposure or low pollution use breathing filter apparatus. In case of intensive or longer exposure use breathing apparatus that is independent of circulating air.
- **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

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- **Material of gloves**
Butyl rubber, BR
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. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
- **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.
- **Body protection:** Protective work clothing.

9 Physical and chemical properties:

- **General Information**
 - Form:** Fluid
 - Colour:** Colourless
 - Smell:** Odourless
- **Change in condition**
 - Melting point/Melting range:** -10°C
 - Boiling point/Boiling range:** 100°C
- **Flash point:** n/a
- **Self-inflammability:** Product is not selfigniting.
- **Danger of explosion:** Product is not explosive.
- **Steam pressure at 20°C:** 23.0 hPa
- **Density at 20°C** 1.5 g/cm³
- **Solubility in / Miscibility with Water:** Fully miscible

10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** Heat,boiling teperatures.
- **Materials to be avoided:**
- **Dangerous reactions**
Reacts with halogenated compounds
Reacts with acids
- **Dangerous products of composition:** No dangerous decomposition products known

11 Toxicological information

- **Acute toxicity:**
- **LD/LC50 values that are relevant for classification:**

1310-73-2 Sodium Hydroxide

Oral	LD50	2000 mg/kg (rat)
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- **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.

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Additional toxicological information:

The product shows the following dangers according to the calculation method of the General EC Classification Guidelines for Preparations as issued in the latest version:

Corrosive

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

12 Ecological information:

General notes:

Water hazard class (D) 1 (Self-assessment): 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.

13 Disposal considerations

Product:

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.

14 Transport information

Land transport ADR/RID and GGVS/GGVE (cross-border/domestic)



ADR/RID-GGVS/E Class: 8 Corrosive substances.

Kemler Number: 80

UN-Number: 1824

Packaging group: II

Label: 8

Designation of goods: 1824 SODIUM HYDROXIDE SOLUTION

Limited quantities (LQ): LQ22

Transport category: 2

Tunnel restriction code: E

Maritime transport IMDG/GGVSea:



IMDG/GGVSea Class: 8

UN Number: 1824

Label: 8

Packaging group: II

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- **EMS Number:** F-A,S-B
- **Marine pollutant:** No
- **Correct technical name:** SODIUM HYDROXIDE SOLUTION

· **Air transport ICAO-TI and IATA-DGR:**



- **ICAO/IATA Class:** 8
- **UN/ID Number:** 1824
- **Label** 8
- **Packaging group:** II
- **Correct technical name:** SODIUM HYDROXIDE SOLUTION

15 Regulatory information

- **Designation according to EC guidelines:**
The product has been classified and labelled in accordance with EC Directives / Ordinance on Hazardous Materials (GefStoffV)
- **Code letter and hazard designation of product:**
C Corrosive
- **Hazard-determining components of labelling:**
Sodium Hydroxide
- **Risk phrases:**
35 Causes severe burns.
- **Safety phrases:**
 - 20 When using do not eat or drink.
 - 23 Do not breathe gas/fumes/vapour/spray (appropriate wording to be specified by the manufacturer).
 - 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
 - 36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
 - 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
 - 60 This material and its container must be disposed of as hazardous waste.

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.

- **Relevant R phrases**
35 Causes severe burns.
- **Department issuing data specification sheet:** Quality Assurance Department
- **Contact:** Sjors duiteweert
- *** Data compared to the previous version altered.**