

Safety Data Sheet  
According to Regulation (EC) 1907/2006



**2404 Sodium Hydroxide solution 50% w/w**

**1. Identification of the substance/preparation and of the company or firm**

**1.1 Identification of the substance or preparation**

Name:

Sodium Hydroxide solution 50% w/w

**Synonym:**

Soda lye

**REACH Registration Number:** 01-2119457892-27-XXXX

**1.2 Use of the substance/preparation:**

For laboratory utilisation, analysis, research and fine chemistry.

**1.3 Identification of the company or firm:**

PANREAC QUIMICA S.L.U.

C/Garraf 2

Polígono Pla de la Bruguera

E-08211 Castellar del Vallès

(Barcelona) Spain

Tel. (+34) 937 489 400

e-mail: [product.safety@panreac.com](mailto:product.safety@panreac.com)

**1.4 Emergency telephone:**

Single telephone number for emergency calls: 112 (EU)

Tel.: (+34) 937 489 499

**2. Identification of dangers**

Classification of the substance or the mixture.

**Classification Regulation (CE) nº 1272/2008.**

Skin Corr. 1A

**Hazard Pictograms**



**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.  
P264 Wash...thoroughly after handling.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.  
P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.  
P501 Dispose of contents/container according to Directive 94/62/CE or 2008/98/CE.

**Classification (67/548/CEE or 1999/45/CE).**

C Corrosive

R35

For the full text of the R-phrases mentioned in this section, see section 16.

**3. Component Composition/Information**

Aqueous solution

Name: Sodium Hydroxide solution 50% w/w  
Formula: NaOH M.= 40,00 CAS [1310-73-2]  
EC number (EINECS): 215-185-5  
EC index number: 011-002-00-6  
REACH Registration Number: 01-2119457892-27-XXXX

**Composition:****0001: Sodium Hydroxide pellets**

Formula: NaOH M.= 40,00 CAS [1310-73-2]  
EC number (EINECS): 215-185-5  
EC index number: 011-002-00-6  
REACH Registration Number: 01-2119457892-27-XXXX

**Content:** 50 %

**Classification Regulation (CE) nº 1272/2008.**

Skin Corr. 1A

**Hazard Pictograms****Signal word**

Danger

**Hazard statements**

H314 Causes severe skin burns and eye damage.

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P501 Dispose of contents/container according to Directive 94/62/CE or 2008/98/CE.  
P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
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 or doctor/physician.  
P321 Specific treatment (see on this label).  
P338 Remove contact lenses, if present and easy to do. Continue rinsing.  
P363 Wash contaminated clothing before reuse.  
P405 Store locked up.

### **Classification (67/548/CEE or 1999/45/CE).**

**C** Corrosive

**R35** Causes severe burns.

## **4. First aid**

### **4.1 General indications:**

Never provide drink or induce vomiting in the event of loss of consciousness.

### **4.2 Inhaling:**

Take the person out into the fresh air. In the event of suffocation, proceed immediately to provide artificial respiration. Seek immediate medical assistance.

### **4.3 Contact with the skin:**

Wash with plenty of water. Remove contaminated clothing. Take the product out with cotton wool soaked in polyethylene-glycol 400.

### **4.4 Eyes:**

Wash with plenty of water (for at least 15 minutes), keeping eyelids open. Seek immediate medical assistance.

### **4.5 Swallowing:**

Drink large amounts of water. Avoid vomiting (there is a risk of perforation). Seek immediate medical assistance. Do not neutralize.

## **5. Fire-fighting means**

### **5.1 Suitable fire-extinguishing means:**

As appropriate to the environment.

### **5.2 Fire-fighting means which must NOT be used:**

No specific data.

### **5.3 Special risks:**

Incombustible. Upon contact with metals, hydrogen gas may form (there is a risk of explosion).

#### **5.4 Protective equipment:**

Suitable clothing and footwear.

### **6. Measures to be taken in the event of accidental spillage**

#### **6.1 Individual precautions:**

Do not inhale the fumes. Avoid contact with the skin, eyes or clothing.

#### **6.2 Precautions for care of the environment:**

Avoid pollution of the soil, water supplies and drains.

#### **6.3 Methods for collection/cleaning:**

Collect up with absorbent materials (Panreac General Absorbent, Kieselguhr, etc.) or, if none available, dry sand or earth, and deposit in waste containers for subsequent elimination in accordance with current legislation. Clean any remains with plenty of water. Neutralize with diluted sulphuric acid.

### **7. Handling and storage**

#### **7.1 Handling:**

No special indications.

#### **7.2 Storage:**

Well sealed containers. Dry atmosphere. Protected from air. Room temperature. Keep away from acids. Do not store in metal containers.

### **8. Staff exposure/protection controls**

#### **8.1 Technical protective measures:**

No special indications.

#### **8.2 Exposure limit control:**

TLV-TWA(NaOH): 2 mg/m<sup>3</sup>

VLA-EC(NaOH): 2 mg/m<sup>3</sup>

#### **8.3 Respiratory protection:**

In the event of fumes forming/aerosols, use suitable respiratory protection. Filter P.

#### **8.4 Hand protection:**

Use suitable gloves

#### **8.5 Eye protection:**

Use suitable goggles.

#### **8.6 Individual hygiene measures:**

Remove contaminated clothing. Use suitable work clothing. Wash hands and face before breaks and when the job is done.

#### **8.7 Environmental exposure controls:**

Fulfill the commitments under local environmental protection legislation.

### **9. Physical and chemical properties**

Appearance: liquid

Colour: Colourless

Granulometry: N/A  
Odour: Odourless.  
pH: 14  
Melting point/freezing point: N/A  
Initial boiling point and boiling range:  
N/A  
Flash point:  
N/A  
Flammability (solid, gas):  
N/A  
Upper/lower flammability or explosive limits:  
N/A  
Vapour pressure: N/A  
Vapour density: N/A  
Relative density: (20/4) 1,5253  
Solubility: in Soluble in water.  
Partition coefficient: n-octanol/water:  
N/A  
Auto-ignition temperature:  
N/A  
Decomposition temperature: N/A  
Viscosity: N/A

## **10. Stability and reactivity**

### **10.1 Conditions which should be avoided:**

The product is chemically stable under standar ambient conditions (room temperature).

### **10.2 Matter which should be avoided:**

Metals. Light metals Formation of hydrogen (risk of explosion) Acids. Ammoniacal compounds (Formation of Ammonia.

### **10.3 Hazardous decomposition products:**

No specific data.

### **10.4 Complementary information:**

No specific data.

## **11. Toxicological information**

### **11.1 Acute toxicity:**

LD L0 oral rbt : 500 mg/kg referred to the pure substance

LD L0 oral rbt : 500 mg/kg

LD50 ipr mus : 40 mg/kg referred to the pure substance

### **11.2 Dangerous effects for health:**

If inhaled: Burns in the mucosae. Upon contact with the skin: burns necrosis  
Through contact with the eyes: burns necrosis Risk of blindness (irreversible injury of the optic nerve) If swallowed: Irritations of the mucosae in the mouth, throat, oesophagus and intestinal tract. Risk of perforation in the oesophagus and stomach. Systemic effects: collapse death Other dangerous characteristics are not discarded. Take the usual precautions for handling chemical products.

## **12. Environmental information**

**12.1 Toxicity:**

12.1.1 - EC50 test (mg/l):

Fish 189 mg/l

Classification:

Highly toxic

12.1.2. - Receptor medium:

Risk for the water environment

Medium

Risk for the land environment

Low

12.1.3. - Observations:

Ecotoxic for water and land organisms due to the pH deviation. Major acute effects in the dumping area.

**12.2 Persistence and Degradability :**

12.2.1 - Test:

12.2.2. - Biotic degradation classification:

BOD5/COD

Biodegradability

12.2.3. - Abiotic degradation depending on pH:

12.2.4. - Observations:

**12.3 Bioaccumulative potential:**

12.3.1. - Test:

12.3.2. - Bioaccumulation:

Risk

12.3.3. - Observations:

**12.4 Mobility in soil :**

Data not available.

**12.5 Assessment PBT and MPMB :**

Data not available.

**12.6 Other possible effects on the environment:**

The treatment is neutralization.

Highly purifiable.

Do not allow it to enter soils or water channels.

Highly corrosive product.

**13. Considerations regarding elimination****13.1 Substance or preparation:**

In the European Union, there are no homogeneous standards established for elimination of chemical waste, which is waste of a special nature, and treatment and elimination of same is subject to the domestic legislation in each country.

In view of this, in each case, you should contact the competent authority or those companies legally authorized for elimination of waste.

2001/573/EC: Council Decision of 23 July 2001 amending Commission Decision

2000/532/EC as regards the list of wastes. Council Directive 91/156/EEC of 18

March 1991 amending Directive 75/442/EEC on waste.

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### 13.2 Contaminated containers:

Contaminated containers and packaging of dangerous substances or preparations must be treated in the same manner as the actual products contained in them. European Parliament and Council Directive 94/62/EC of 20 December 1994 on packaging and packaging waste.

## 14. Information concerning transport

Overland (ADR):

Technical name: SODIUM HYDROXIDE SOLUTION

UN 1824 Class: 8 Packaging group: II (E)

By sea (IMDG):

Technical name: SODIUM HYDROXIDE SOLUTION

UN 1824 Class: 8 Packaging group: II

By air (ICAI-IATA):

Technical name: Sodium hydroxide solution

UN 1824 Class: 8 Packaging group: II

Packaging instructions: CAO 855 PAX 851

## 15. Regulatory information

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

## 16. Other information

### Other precautionary statements

P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

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 or doctor/physician.

P321 Specific treatment (see on this label).

P338 Remove contact lenses, if present and easy to do. Continue rinsing.

P363 Wash contaminated clothing before reuse.

P405 Store locked up.

### Labelling (65/548/CEE or 1999/45/CE)

R-pharse(s): **R35** Causes severe burns.

S-pharse(s): **S45** In case of accident or if you feel unwell, seek medical advice immediately (show the lable where possible).

**S37/39** Wear suitable gloves and eye/face protection.

**S26** In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Review number and date: 4 15.09.2011

Date published: 15.09.2011

In respect of the previous review, changes have been made to the following sections: 15

The information included in this Safety Data Sheet is based on our most up-to-date knowledge, and is solely intended to inform regarding aspects of safety; the properties and characteristics indicated herein are not guaranteed.