



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

### 2146 Potassium Hydroxide 0,1 mol/l \*(0,1N) ethanolic

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

##### 1.1 Product identifier

Name:

Potassium Hydroxide 0,1 mol/l \*(0,1N) ethanolic

**REACH Registration Number:** A registration number is not available for this substance as the substance or its use are exempted from registration according to Article 2 REACH Regulation (EC) N° 1907/2006, the annual tonnage does not require a registration, the registration is envisaged for a later registration deadline or it is a mixture.

##### 1.2 Relevant identified uses of the substance or mixture:

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

##### 2.1 Classification of the substance or the mixture.

**Classification Regulation (CE) n° 1272/2008.**

Flam. Liq. 2

Eye Irrit. 2

Skin Irrit. 2

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

**Xi** Irritant  
**F** Highly flammable

R36/38  
R11

**2.2 Label elements:**

**Hazard Pictograms**



**Signal word**

Danger

**Hazard statements**

H225 Highly flammable liquid and vapour.  
H319 Causes serious eye irritation.  
H315 Causes skin irritation.

**Precautionary statements**

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.  
P233 Keep container tightly closed.  
P240 Ground/bond container and receiving equipment.  
P241 Use explosion-proof electrical/ventilating/lighting/equipment.  
P242 Use only non-sparking tools.  
P501 Dispose of contents/container according to Directive 94/62/CE or 2008/98/CE.

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

**2.3 Other hazards:**

No further relevant information available.

**3. Composition/information on ingredients**

Solution of ethanol.

Name: Potassium Hydroxide 0,1 mol/l \*(0,1N) ethanolic  
Formula: KOH M.= 56,11

## COMPOSITION:

### 0001: Ethanol absolute

Formula:  $\text{CH}_3\text{CH}_2\text{OH}$  M.= 46,07 CAS [64-17-5]  
EC number (EINECS): 200-578-6  
EC index number: 603-002-00-5  
REACH Registration Number: 01-2119457610-43-XXXX

**Content:**  $\geq 50 \%$

**Classification Regulation (CE) n° 1272/2008.**

Flam. Liq. 2

### Hazard Pictograms



### Signal word

Danger

### Hazard statements

H225 Highly flammable liquid and vapour.

### Precautionary statements

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.  
P233 Keep container tightly closed.  
P240 Ground/bond container and receiving equipment.  
P241 Use explosion-proof electrical/ventilating/lighting/equipment.  
P242 Use only non-sparking tools.  
P501 Dispose of contents/container according to Directive 94/62/CE or 2008/98/CE.  
P243 Take precautionary measures against static discharge.  
P280 Wear protective gloves, protective clothing, eye protection or face protection.  
P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.  
P370+P378 In case of fire: Use for extinction.  
P403+P235 Store in a well-ventilated place. Keep cool.

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

**F** Highly flammable      **R11** Highly flammable.

### 0002: Potassium Hydroxide 85% \*pellets

Formula:  $\text{KOH}$  M.= 56,11 CAS [1310-58-3]  
EC number (EINECS): 215-181-3  
EC index number: 019-002-00-8  
REACH Registration Number: 01-2119487136-33-XXXX

**Content:**  $\geq 0,5 \%$   $\leq 2 \%$

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

Acute Tox. 4  
Skin Corr. 1A  
Met. Corr. 1

### Hazard Pictograms



### Signal word

Danger

### Hazard statements

H302 Harmful if swallowed.  
H314 Causes severe skin burns and eye damage.  
H290 May be corrosive to metals.

### Precautionary statements

P264 Wash...thoroughly after handling.  
P260 Do not breathe dust/fume/gas/mist/vapours/spray.  
P270 Do not eat, drink or smoke when using this product.  
P280 Wear protective gloves, protective clothing, eye protection or face protection.  
P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.  
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.  
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).  
P330 Rinse mouth.  
P338 Remove contact lenses, if present and easy to do. Continue rinsing.  
P363 Wash contaminated clothing before reuse.  
P405 Store locked up.  
P501 Dispose of contents/container according to Directive 94/62/CE or 2008/98/CE.  
P234 Keep only in original container.  
P390 Absorb spillage to prevent material damage.  
P406 Store in corrosive resistant/ container with a resistant inner liner.

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

**Xn** Harmful  
**C** Corrosive

**R35** Causes severe burns.  
**R22** Harmful if swallowed.

## 4. First aid measures

#### **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 sickness persists, seek medical assistance.

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

Wash with plenty of water. Remove contaminated clothing.

#### **4.4 Eyes:**

Wash with plenty of water, keeping eyelids open. In the event of irritation, seek medical assistance.

#### **4.5 Swallowing:**

Drink large amounts of water. Induce vomiting. Call for medical help.

### **5. Firefighting measures**

#### **5.1 Suitable extinguishing media:**

Water. Carbon dioxide (CO<sub>2</sub>). Alcohol resistant foam. Dry powder.

#### **5.2 Unsuitable extinguishing media:**

No specific data.

#### **5.3 Special hazards arising from the substance or mixture:**

Flammable. Keep away from sources of ignition. The fumes are heavier than air, so they may spread at floor level. Auf Rückzündung achten Prevent the build-up of static.

#### **5.4 Advice for firefighters:**

Suitable clothing and footwear.

### **6. Accidental release measures**

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

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

#### **6.2 Environmental precautions:**

Do not allow it to enter the drainage system. Avoid pollution of the soil, water supplies and drains.

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

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.

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

#### **7.1 Precautions for safe handling:**

Limited shelf-life.

**7.2 Conditions for safe storage, including any incompatibilities:**

Well sealed containers. Away from sources of ignition and heat. In well ventilated premises.

**Recommended storage temperature:** Room temperature. Do not store in metal containers.

**8. Exposure controls/personal protection****8.1 Exposure controls:**

No special indications.

**8.2 Control parameters:**

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

VLA-ED(ethanol): 1.000 ppm = 1.910 mg/m<sup>3</sup>

**8.3 Respiratory protection:**

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

**8.4 Hand protection:**

Use suitable gloves neopren PVC nitrile

**8.5 Eye/face 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: Ethanolic.

pH: ~14

Melting point/freezing point: N/A

Initial boiling point and boiling range:

N/A

Flash point: 13 °C

Flammability (solid, gas):

N/A

Upper/lower flammability or explosive limits: 15 %(V) / 3,5 %(V)

Vapour pressure: N/A

Vapour density: N/A

Relative density:

Insertar Aquí Grupo de repetición

(20/4) 0,816 g/ml

Solubility: Miscible with water

Partition coefficient: n-octanol/water:

N/A

Auto-ignition temperature: >425 °C

Decomposition temperature: N/A

Kinematic viscosity: N/A

Dynamic viscosity:

N/A

## **10. Stability and reactivity**

### **10.1 Conditions to avoid:**

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

### **10.2 Incompatible materials:**

Nitric acid. Oxidant agents. Aluminium. Anhydrides. Ammoniacal compounds  
Chromyl chloride. Salts of oxyhalogenic acids. Halogen oxides Halides. Halogen  
halides. Halogenated hydrocarbons. Hydrides. Alkaline metals. Alkali-earth metals.  
Nitrates. Nitriles. Alkaline oxides. Ethylene oxides. Metal oxides. Non-metal  
oxides. Hydrogen peroxide. Powdered zinc.

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

No specific data.

### **10.4 Chemical stability:**

The gases/fumes can form explosive mixtures with the air.

## **11. Toxicological information**

### **11.1 Acute toxicity:**

LD50 oral rat : 273 mg/kg referred to the pure substance

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

If inhaled: Irritations to the respiratory tracts. Upon contact with the skin:  
irritations Through contact with the eyes: irritations If swallowed: Irritations of the  
mucosae in the mouth, throat, oesophagus and intestinal tract. Risk of perforation  
in the oesophagus and stomach. Systemic effects: narcosis

## **12. Environmental information**

### **12.1 Toxicity:**

#### **- EC50 test (mg/l):**

Bacteria (Photobacterium phosphoreum) 31000 mg/l

Classification:

Toxic

#### **- Receptor medium:**

Risk for the water environment

Low

Risk for the land environment

Low

#### **- Observations:**

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

## **12.2 Persistence and Degradability :**

### **- Test:**

### **- Biotic degradation classification:**

BOD5/COD

Biodegradability

High, over 1/3

### **- Abiotic degradation depending on pH:**

### **- Observations:**

Easily biodegradable product.

## **12.3 Bioaccumulative potential:**

### **- Test:**

### **- Bioaccumulation:**

Risk

### **- Observations:**

Non-bioaccumulable product.

## **12.4 Mobility in soil :**

Data not available.

## **12.5 Assessment PBT and MPMB :**

Data not available.

## **12.6 Other adverse effects:**

If suitable handling conditions are maintained, no ecological problems are to be anticipated.

The treatment is neutralization.

Highly purifiable.

Corrosive product, even in diluted form.

Risk of formation of explosive fumes on the surface of the water.

## **13. Disposal considerations**

### **13.1 Waste treatment methods:**

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.

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## **14. Transport information**

Overland (ADR):

Technical name: FLAMMABLE LIQUID, N.O.S.

UN 1993    Class: 3    Packaging group: II (D/E)



By sea (IMDG):

Technical name: FLAMMABLE LIQUID, N.O.S.

UN 1993 Class: 3 Packaging group: II

By air (ICAI-IATA):

Technical name: Flammable liquid, n.o.s.

UN 1993 Class: 3 Packaging group: II

Packaging instructions: CAO 364 PAX 353

## 15. Regulatory information

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

## 16. Other information

### Other precautionary statements

P243 Take precautionary measures against static discharge.

P264 Wash...thoroughly after handling.

P280 Wear protective gloves, protective clothing, eye protection or face protection.

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

P303+P361+P353 IF ON SKIN (or hair): Remove/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.

P321 Specific treatment (see on this label).

P332+P313 If skin irritation occurs: Get medical advice/attention.

P337+P313 If eye irritation persists: Get medical advice/attention.

P362 Take off contaminated clothing and wash before reuse.

P370+P378 In case of fire: Use for extinction.

P403+P235 Store in a well-ventilated place. Keep cool.

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

R-phrases(s): **R36/38** Irritating to eyes and skin.  
**R11** Highly flammable.

S-phrases(s): **S26** In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
**S16** Keep away from sources of ignition - No smoking.  
**S7** Keep container tightly closed.

Version and revision date : 5 18.07.2014

Date published: 15.09.2011

In respect of the previous review, changes have been made to the following sections: 14

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.