

## SAFETY DATA SHEET

### 1. Identification of the substance / preparation and company.

#### 1.1 Product identifier

Product Nr. CL05.1132  
Trade name Potassium hydroxide 4 mol/l  
REACH Registration Number 01-2119487136-33  
CAS-No. 1310-58-3

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

Identified uses: Reagent for analysis  
In compliance with the conditions described in the annex to this safety data sheet.

#### 1.3 Information provided by AnalytiChem Belgium NV product service.

Responsible department: AnalytiChem Belgium NV  
Industriezone "De Arend" 2  
B-8210 Zedelgem  
BELGIUM  
Tel. +32 50 28 83 20 e-mail: info.be@analytichem.com

#### 1.4 Emergency telephone: 00 (32) 50.28.83.20

### 2. Hazard identification

#### 2.1 Classification of the substance or the mixture (EG 1272/2008)

Skin corrosion/irritation, Categorie 1A, H314  
Acute toxicity, Oral, Categorie 4, H302  
Substance or mixture corrosive to metals, Categorie 1, H290

For the full text of H-sentences mentioned in this Section, see Section 16

For the full text of R-sentences mentioned in this Section, see Section 16

#### 2.2 GHS-Labeling

GHS-Labeling Labelling (REGULATION (EC) No 1272/2008) (EG 1272/2008)  
Hazard pictograms:



Signal word:  
Danger :

Hazard statements:

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

Precautionary statements:

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

P301 + P330 + P331	IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P309 + P311	IF exposed or if you feel unwell: Call a POISON CENTER or doctor/physician.

Reduced labelling  
Hazard pictograms:



Signal word:  
Danger :

Hazard statements:

H314 Causes severe skin burns and eye damage.

Precautionary statements:

P280	Wear protective gloves, protective clothing, eye protection, face protection.
P301 + P330 + P331	IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P309 + P310	IF exposed or if you feel unwell: Immediately call a POISON CENTER or doctor/physician.

### **3. Composition / Information on ingredients.**

#### **3.1 Substance**

Not applicable

#### **3.2 Mixture**

CAS-No.	1310-58-3
EC-Nr	215-181-3
Index-No	019-002-00-8
Formula	KOH/H2O

### **4. First aid measures.**

#### **4.1 Description of first aid measures**

##### **General advice**

First-aid personnel: ensure self-protection!

After inhalation: Remove to fresh air, seek medical advice.

After contact with skin: Wash off with plenty of water. Remove contaminated clothing.

After contact with eyes: Rinse out with plenty of water for at least 10 minutes with the eyelid held wide open. Immediately call an ophtalmologist.

After ingestion: Never give anything by mouth to an unconscious person. Make victim drink water (two glasses at most), avoid vomiting (risk of perforation!). Immediately call in physician. Do not attempt to neutralize.

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

The most important known symptoms and effects are described in the labeling (see section 2.2) and/or in section 11

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

No data available

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## **5. Fire fighting measures.**

### **5.1 Extinguishing media**

#### **Suitable extinguishing media**

In adaption to materials stored in the immediate neighbourhood.

#### **Unsuitable extinguishing media**

Prevent fire-fighting water from entering surface water or groundwater.

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

Non-combustible. Ambient fire may liberate hazardous vapours.

### **5.3 Advice for firefighters**

Do not stay in dangerous zone without self-contained breathing apparatus. In order to avoid contact with skin, keep a safety distance and wear suitable protective clothing.

### **5.4 Further information**

No data available

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

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

Do not inhale vapours/aerosols. Avoid substance contact. Ensure supply of fresh air in enclosed rooms. For personal protection see section 8.

### **6.2 Environmental precautions**

Do not allow to enter sewerage system.

### **6.3 Methods and materials for containment and cleaning up**

Absorb on vermiculite, sand or a pillow from Chemical Spill Center.

### **6.4 Reference to other sections**

For disposal see section 13.

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

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

No special measures necessary. The product should be handled with the care usual when dealing with chemicals.

For precautions see section 2.2

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

Closed in a well ventilated place.

Recommended storage temperature see product label.

### **7.3 Specific end use(s)**

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

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## **8. Exposure controls - Personal protection.**

### **8.1 Control parameters**

### **8.2 Exposure controls**

**Engineering measures**

Protective clothing should be selected specifically for the working place, depending on concentration and quantity of the hazardous substances handled. The resistance of the protective clothing to chemicals should be ascertained with the respective supplier.

See section 7.1

**Individual protection measures**

Immediately change contaminated clothing. Apply skin- protective barrier cream. Wash hands and face after working with substance. Under no circumstances eat or drink at workplace. Work under hood . Do not inhale substance.

**Respiratory protections**

Required when vapours/aerosols/dust are generated.

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.

**Eye protection**

Required.

**Hand protection**

Required.

**Body protection**

Required.

**Environmental exposure controls**

Do not allow to enter sewerage system.

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**9. Physical and chemical properties.****9.1 Information on basic physical**Appearance

Form:	Liquid
Colour:	Colourless
Odour:	Odourless

Changes in physical state

Melting Point:	0°C
Boiling point:	100°C
Flash point:	-
Self Ignation temperature:	-
Mol. Weight:	56.11 g/mol
Density:	1,17 g/ml
pH value:	-
Solubility in water:	soluble
Explosion limits:	

**9.2 Other data**

No further relevant information available.

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**10. Stability and reactivity.****10.1 Reactivity**

See section 10.3

**10.2 Chemical stability**

No further relevant information available.

### 10.3 Possibility of hazardous reactions

Avoid contact with acids, metals, combustible materials, heat and sun light.

### 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 further relevant information available.

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## **11. Toxicological information.**

### 11.1 Information on toxicological effects

Acute oral toxicity

LD50 orl. rat 273 mg/kg

Acute inhalation toxicity

No further relevant information available.

Acute dermal toxicity

No further relevant information available.

Skin irritation

No further relevant information available.

Eye irritation

No further relevant information available.

Sensitisation

No further relevant information available.

Germ cell mutagenicity

No further relevant information available.

Carcinogenicity

No further relevant information available.

Reproductive toxicity

No further relevant information available.

Teratogenicity

No further relevant information available.

Specific target organ toxicity - single exposure

No further relevant information available.

Specific target organ toxicity - repeated exposure

No further relevant information available.

Aspiration hazard

No further relevant information available.

### 11.2 Further information

No further relevant information available.

Further data:

Handle in accordance with good industrial hygiene and safety practice..

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## **12. Ecological information.**

**12.1 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.

**12.5 Results of PBT and vPvB assessment**

No further relevant information available.

**12.6 Other adverse effects**

Do not allow to enter waters, waste water, or soil!

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**13. Disposal considerations.**

Product: Chemicals must be disposed of in compliance with the respective national regulations. Packaging: Chem-lab product packaging must be disposed of in compliance with the country-specific regulations or must be passed to a packaging return system.

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**14. Transport information.****Land Transport (ADR/RID)**

<b>14.1 UN number</b>	UN 1814
<b>14.2 Proper shipping name</b>	Potassium hydroxide solution
<b>14.3 Class</b>	8
<b>14.4 Packing group</b>	II
<b>14.5 Environmentally hazardous</b>	-
<b>14.6 Special precautions for user</b>	yes
Tunnel restriction code	(E)

**Inland waterway transport (ADN)**

Not relevant

**Air Transport (IATA)**

<b>14.1 UN number</b>	UN 1814
<b>14.2 Proper shipping name</b>	Potassium hydroxide solution
<b>14.3 Class</b>	8
<b>14.4 Packing group</b>	II
<b>14.5 Environmentally hazardous</b>	-
<b>14.6 Special precautions for user</b>	yes

**Sea Transport (IMDG)**

<b>14.1 UN number</b>	UN 1814
<b>14.2 Proper shipping name</b>	Potassium hydroxide solution
<b>14.3 Class</b>	8
<b>14.4 Packing group</b>	II
<b>14.5 Environmentally hazardous</b>	-
<b>14.6 Special precautions for user</b>	yes

**14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

Not relevant

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**15. Regulatory information.****15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

For this product an assessment was not carried out.

### **15.2 Chemical Safety Assessment**

For this product an assessment was not carried out.

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### **16. Other information.**

The information and recommendations in this MSDS are to the best of our knowledge, information and belief accurate at the date of publications. Although utmost care has been taken in the composition of this text, the publisher cannot be held responsible for any damage resulting from any possible error in this publications.

Full text of H-Statements referred to under sections 2 and 3.

H290 May be corrosive to metals.

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.