

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**Potassium hydroxide for analysis, Reag. Ph.Eur. pellets**

Revision date: 14.08.2023

Product code: 18218

Page 1 of 11

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

**1.1. Product identifier**

Potassium hydroxide for analysis, Reag. Ph.Eur. pellets

REACH Registration Number: 01-2119487136-33-XXXX  
 CAS No: 1310-58-3  
 Index No: 019-002-00-8  
 EC No: 215-181-3

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

**Use of the substance/mixture**

Laboratory chemicals  
 Industrial uses: Uses of substances as such or in preparations at industrial sites  
 Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

**Uses advised against**

Do not use for private purposes (household).

**1.3. Details of the supplier of the safety data sheet**

Company name: AnalytiChem GmbH  
 Street: Stempelstraße 6  
 Place: D-47167 Duisburg  
 Telephone: 0203/5194-0  
 E-mail: info@analytichem.de  
 Contact person: Abteilung Produktsicherheit  
 E-mail: produktsicherheit@analytichem.de  
 Internet: www.analytichem.de  
 Responsible Department: Abteilung Produktsicherheit  
 Telefax: 0203/5194-290  
 Telephone: 0203/5194-107/117

**1.4. Emergency telephone number:**

For Hazardous Materials [or Dangerous Goods] Incidents Spill, Leak, Fire, Exposure, or Accident Call CHEMTREC Day or Night Within USA and Canada: 1-800-424-9300 Outside USA and Canada: +1 703-741-5970 (collect calls accepted)

**Further Information**

No data available

**SECTION 2: Hazards identification**

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

**Regulation (EC) No 1272/2008**

Met. Corr. 1; H290  
 Acute Tox. 4; H302  
 Skin Corr. 1A; H314

Full text of hazard statements: see SECTION 16.

**2.2. Label elements**

**Regulation (EC) No 1272/2008**

**Signal word:** Danger

**Pictograms:**



**Hazard statements**

H290 May be corrosive to metals.

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### Potassium hydroxide for analysis, Reag. Ph.Eur. pellets

Revision date: 14.08.2023

Product code: 18218

Page 2 of 11

H302 Harmful if swallowed.  
H314 Causes severe skin burns and eye damage.

#### Precautionary statements

P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing 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.  
P308+P311 IF exposed or concerned: Call a POISON CENTER/doctor.

#### 2.3. Other hazards

No information available.

### SECTION 3: Composition/information on ingredients

#### 3.1. Substances

Sum formula: KOH  
Molecular weight: 56,11 g/mol

#### Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (Regulation (EC) No 1272/2008)			
1310-58-3	potassium hydroxide			100 %
	215-181-3	019-002-00-8	01-2119487136-33-XXXX	
	Met. Corr. 1, Acute Tox. 4, Skin Corr. 1A; H290 H302 H314			

Full text of H and EUH statements: see section 16.

#### Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
	Specific Conc. Limits, M-factors and ATE		
1310-58-3	215-181-3	potassium hydroxide	100 %
	oral: LD50 = 333 mg/kg Skin Corr. 1A; H314: >= 5 - 100 Skin Corr. 1B; H314: >= 2 - < 5 Skin Irrit. 2; H315: >= 0,5 - < 2 Eye Irrit. 2; H319: >= 0,5 - < 2		

#### Further Information

This product does not contain substances of very high concern according to Regulation (EC) No 1907/2006 (REACH), Article 57 above the respective regulatory concentration limit of = 0.1 % (w/w).

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

##### General information

First aider: Pay attention to self-protection!

##### After inhalation

Provide fresh air.  
Call a physician immediately.

##### After contact with skin

Wash immediately with: Water  
Take off immediately all contaminated clothing and wash it before reuse.  
Call a physician immediately.

##### After contact with eyes

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### Potassium hydroxide for analysis, Reag. Ph.Eur. pellets

Revision date: 14.08.2023

Product code: 18218

Page 3 of 11

Remove contact lenses, if present and easy to do. Continue rinsing.  
Protect uninjured eye.

#### After ingestion

Rinse mouth immediately and drink plenty of water. Do NOT induce vomiting. Adverse human health effects and symptoms: Gastric perforation. Call a physician immediately. Do not allow a neutralisation agent to be drunk.

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

Skin corrosion/irritation  
Dyspnoea  
Cough  
Circulatory collapse  
Vomiting  
Abdominal pain  
Corneal opacity.  
Risk of serious damage to eyes.

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

No data available

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

##### Suitable extinguishing media

Co-ordinate fire-fighting measures to the fire surroundings.

##### Unsuitable extinguishing media

no restriction

#### 5.2. Special hazards arising from the substance or mixture

Non-flammable.

#### 5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing.  
Avoid contact with skin, eyes and clothes.

#### Additional information

Suppress gases/vapours/mists with water spray jet.  
Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

### SECTION 6: Accidental release measures

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

##### General advice

Corrosive to metals.

##### For non-emergency personnel

Provide adequate ventilation.  
Use personal protection equipment.  
Avoid contact with skin, eyes and clothes.  
Remove persons to safety.  
Emergency procedures  
Do not breathe dust/fume/gas/mist/vapours/spray.

##### For emergency responders

Precautionary statements For emergency responders : Personal protection equipment: see section 8

#### 6.2. Environmental precautions

Do not allow to enter into surface water or drains.

#### 6.3. Methods and material for containment and cleaning up

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### Potassium hydroxide for analysis, Reag. Ph.Eur. pellets

Revision date: 14.08.2023

Product code: 18218

Page 4 of 11

#### For containment

- Cover drains.
- Prevent spread over a wide area (e.g. by containment or oil barriers).
- Collect in closed and suitable containers for disposal.
- Take up carefully when dry. Take up dust-free and set down dust-free.

#### For cleaning up

- Clean contaminated articles and floor according to the environmental legislation.

#### Other information

- Provide adequate ventilation.
- Do not breathe dust/fume/gas/mist/vapours/spray.
- Wear breathing apparatus if exposed to vapours/dusts/aerosols.

#### 6.4. Reference to other sections

- Safe handling: see section 7
- Personal protection equipment: see section 8
- Disposal: see section 13

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

#### Advice on safe handling

- Read label before use. Handle and open container with care.
- When using do not eat, drink, smoke, sniff. Use personal protection equipment.
- Provide adequate ventilation. Avoid contact with skin, eyes and clothes.
- Do not breathe dust. Avoid dust formation.

#### Advice on protection against fire and explosion

- Usual measures for fire prevention.

#### Advice on general occupational hygiene

- Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme.
- Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat or drink.
- If handled uncovered, arrangements with local exhaust ventilation have to be used.

#### Further information on handling

- Draw up and observe skin protection programme.
- Wash hands and face before breaks and after work and take a shower if necessary.
- Take off immediately all contaminated clothing and wash it before reuse.

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

#### Requirements for storage rooms and vessels

- Corrosive to metals.
- Unsuitable container/equipment material: Metal, Aluminium, Tin, Zinc
- Provide adequate ventilation as well as local exhaustion at critical locations.

#### Further information on storage conditions

- Store in a dry place.
- Keep container tightly closed.
- storage temperature +5°C - +30°C

### 7.3. Specific end use(s)

- Laboratory chemicals

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**Potassium hydroxide for analysis, Reag. Ph.Eur. pellets**

Revision date: 14.08.2023

Product code: 18218

Page 5 of 11

**Occupational exposure limits**

CAS No	Substance	ppm	mg/m <sup>3</sup>	fib/cm <sup>3</sup>	Category	Origin
1310-58-3	Potassium hydroxide	-	2		STEL (15 min)	

**DNEL/DMEL values**

CAS No	Substance	Exposure route	Effect	Value
1310-58-3	potassium hydroxide			
Worker DNEL, long-term		inhalation	local	1 mg/m <sup>3</sup>
Consumer DNEL, long-term		inhalation	local	1 mg/m <sup>3</sup>

**8.2. Exposure controls**

**Appropriate engineering controls**

Do not breathe dust. Avoid dust formation.  
If handled uncovered, arrangements with local exhaust ventilation have to be used.  
Technical measures and the application of suitable work processes have priority over personal protection equipment.

**Individual protection measures, such as personal protective equipment**

**Eye/face protection**

Suitable eye protection: goggles.

**Hand protection**

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Protective gloves are recommended Company KCL GmbH, D-36124 Eichenzell, email: [vertrieb@kcl.de](mailto:vertrieb@kcl.de) With specification (test according to EN374):

By long-term hand contact

Trade name/designation: KCL 741 Dermatril® L  
Recommended material: NBR (Nitrile rubber) 0,11 mm  
Wearing time with permanent contact: > 480 min

By short-term hand contact

Trade name/designation: KCL 741 Dermatril® L  
Recommended material: NBR (Nitrile rubber) 0,11 mm  
Wearing time with occasional contact (splashes): > 480 min

The breakthrough times stated above were determined by KCL in laboratory tests acc. to EN374 with samples of the recommended glove types. This recommendation applies only to the product stated in the safety data sheet (>,<) supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: [www.kcl.de](http://www.kcl.de)).

**Skin protection**

Wear suitable protective clothing.

**Respiratory protection**

Respiratory protection necessary at: dust formation  
Filtering device with filter or ventilator filtering device of type: P2

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**Potassium hydroxide for analysis, Reag. Ph.Eur. pellets**

Revision date: 14.08.2023

Product code: 18218

Page 6 of 11

**Environmental exposure controls**

Do not allow to enter into surface water or drains.

**SECTION 9: Physical and chemical properties**

**9.1. Information on basic physical and chemical properties**

Physical state:	solid
Colour:	colourless
Odour:	odourless
Odour threshold:	No data available
Melting point/freezing point:	360 °C
Boiling point or initial boiling point and boiling range:	1327 °C
Flammability:	not applicable
Lower explosion limits:	not determined
Upper explosion limits:	not determined
Flash point:	not applicable
Auto-ignition temperature:	not determined
Decomposition temperature:	not determined
pH-Value (at 20 °C):	~ 14 (56 g/l)
Viscosity / kinematic:	No data available
Water solubility: (at 20 °C)	1130 g/L
Solubility in other solvents	not determined
Dissolution rate:	No data available
Partition coefficient n-octanol/water:	not determined
Dispersion stability:	No data available
Vapour pressure:	No data available
Vapour pressure:	No data available
Density (at 20 °C):	2,04 g/cm <sup>3</sup>
Relative density:	No data available
Bulk density:	No data available
Relative vapour density:	not determined
Particle characteristics:	No data available

**9.2. Other information**

**Information with regard to physical hazard classes**

Explosive properties	No data available
Sustaining combustion:	No data available
Self-ignition temperature	
Solid:	not applicable
Gas:	not applicable
Oxidizing properties	
Not oxidising.	

**Other safety characteristics**

Evaporation rate:	not determined
Solvent separation test:	No data available
Solvent content:	No data available
Solid content:	100%
Sublimation point:	No data available
Softening point:	No data available
Pour point:	No data available

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**Potassium hydroxide for analysis, Reag. Ph.Eur. pellets**

Revision date: 14.08.2023

Product code: 18218

Page 7 of 11

No data available:

Viscosity / dynamic:

No data available

Flow time:

No data available

**Further Information**

Corrosive to metals.

**SECTION 10: Stability and reactivity**

**10.1. Reactivity**

Corrosive to metals.

Exothermic reaction with: Water

**10.2. Chemical stability**

The product is stable under storage at normal ambient temperatures.

**10.3. Possibility of hazardous reactions**

Tetrahydrofurane, peroxides, for example hydrogen peroxide, Carbide, Chlorine

Fluorine, aldehydes, Alcohols, Acetic acid

Reducing agent, Acid chlorides, inorganic

Methanol, Chloroform, Aluminium, Lead

Copper, Zinc, Tin

Acid, White/yellow phosphor, Hydrogen halide

Alkaline earth metal, Light metal, Metal

The product develops hydrogen in an aqueous solution in contact with metals.

**10.4. Conditions to avoid**

No data available

**10.5. Incompatible materials**

Metal

Glass

Keep away from: Metal.

The product develops hydrogen in an aqueous solution in contact with metals.

**10.6. Hazardous decomposition products**

No known hazardous decomposition products.

**Further information**

No data available

**SECTION 11: Toxicological information**

**11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008**

**Toxicokinetics, metabolism and distribution**

No data available

**Acute toxicity**

Harmful if swallowed.

If swallowed danger of perforation of the esophagus and the stomach (strong corrosive effects).

Pulmonary oedema

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
1310-58-3	potassium hydroxide				
	oral	LD50 mg/kg	333	Rat	Fund. Appl. Toxicol., 8, 97-100 (1987)
					OECD Guideline 425

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### Potassium hydroxide for analysis, Reag. Ph.Eur. pellets

Revision date: 14.08.2023

Product code: 18218

Page 8 of 11

#### **Irritation and corrosivity**

Causes severe skin burns and eye damage.  
Causes serious eye damage.  
Corneal opacity.  
Risk of serious damage to eyes.

#### **Sensitising effects**

Based on available data, the classification criteria are not met.

#### **Carcinogenic/mutagenic/toxic effects for reproduction**

Based on available data, the classification criteria are not met.

#### **STOT-single exposure**

Based on available data, the classification criteria are not met.

#### **STOT-repeated exposure**

Based on available data, the classification criteria are not met.

#### **Aspiration hazard**

Based on available data, the classification criteria are not met.  
No data available

#### **Information on likely routes of exposure**

No data available

#### **Specific effects in experiment on an animal**

No data available

#### **Additional information on tests**

No data available

#### **Practical experience**

No data available

### **11.2. Information on other hazards**

#### **Endocrine disrupting properties**

No data available

#### **Other information**

No data available

#### **Further information**

Skin corrosion/irritation  
Dyspnoea  
Cough  
Circulatory collapse  
Vomiting  
Abdominal pain

## **SECTION 12: Ecological information**

### **12.1. Toxicity**

No data available

### **12.2. Persistence and degradability**

The methods for determining the biological degradability are not applicable to inorganic substances.

### **12.3. Bioaccumulative potential**

No information available.

### **12.4. Mobility in soil**

No data available

### **12.5. Results of PBT and vPvB assessment**

This substance does not meet the PBT/vPvB criteria of REACH, annex XIII.



## Safety Data Sheet

according to Regulation (EC) No 1907/2006

**Potassium hydroxide for analysis, Reag. Ph.Eur. pellets**

Revision date: 14.08.2023

Product code: 18218

Page 9 of 11

**12.6. Endocrine disrupting properties**

This substance does not have endocrine disrupting properties with respect to non-target organisms.

**12.7. Other adverse effects**

No data available

**Further information**

Do not allow to enter into surface water or drains.

Discharge into the environment must be avoided.

**SECTION 13: Disposal considerations****13.1. Waste treatment methods****Disposal recommendations**

Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste.

Send to a physico-chemical treatment facility under observation of official regulations.

Do not allow to enter into surface water or drains.

**Contaminated packaging**

The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

Handle contaminated packages in the same way as the substance itself.

**SECTION 14: Transport information****Land transport (ADR/RID)**

<b>14.1. UN number or ID number:</b>	UN 1813
<b>14.2. UN proper shipping name:</b>	POTASSIUM HYDROXIDE, SOLID
<b>14.3. Transport hazard class(es):</b>	8
<b>14.4. Packing group:</b>	II
Hazard label:	8
Classification code:	C6
Limited quantity:	1 kg
Excepted quantity:	E2
Transport category:	2
Hazard No:	80
Tunnel restriction code:	E

**Inland waterways transport (ADN)**

<b>14.1. UN number or ID number:</b>	UN 1813
<b>14.2. UN proper shipping name:</b>	POTASSIUM HYDROXIDE, SOLID
<b>14.3. Transport hazard class(es):</b>	8
<b>14.4. Packing group:</b>	II
Hazard label:	8
Classification code:	C6
Limited quantity:	1 kg
Excepted quantity:	E2

**Marine transport (IMDG)**

<b>14.1. UN number or ID number:</b>	UN 1813
<b>14.2. UN proper shipping name:</b>	POTASSIUM HYDROXIDE, SOLID
<b>14.3. Transport hazard class(es):</b>	8
<b>14.4. Packing group:</b>	II
Hazard label:	8
Special Provisions:	-
Limited quantity:	1 kg
Excepted quantity:	E2
EmS:	F-A, S-B

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**Potassium hydroxide for analysis, Reag. Ph.Eur. pellets**

Revision date: 14.08.2023

Product code: 18218

Page 10 of 11

**Air transport (ICAO-TI/IATA-DGR)**

<b>14.1. UN number or ID number:</b>	UN 1813
<b>14.2. UN proper shipping name:</b>	POTASSIUM HYDROXIDE, SOLID
<b>14.3. Transport hazard class(es):</b>	8
<b>14.4. Packing group:</b>	II
Hazard label:	8
Limited quantity Passenger:	5 kg
Passenger LQ:	Y844
Excepted quantity:	E2
IATA-packing instructions - Passenger:	859
IATA-max. quantity - Passenger:	15 kg
IATA-packing instructions - Cargo:	863
IATA-max. quantity - Cargo:	50 kg

**14.5. Environmental hazards**

ENVIRONMENTALLY HAZARDOUS: No

**14.6. Special precautions for user**

Warning: strongly corrosive.

**14.7. Maritime transport in bulk according to IMO instruments**

not applicable

**SECTION 15: Regulatory information**

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

**EU regulatory information**

Restrictions on use (REACH, annex XVII):

Entry 75

Information according to 2012/18/EU (SEVESO III): Not subject to 2012/18/EU (SEVESO III)

**National regulatory information**

Employment restrictions: Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

Water hazard class (D): 1 - slightly hazardous to water

**SECTION 16: Other information**

**Changes**

This data sheet contains changes from the previous version in section(s): 9,12.

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### Potassium hydroxide for analysis, Reag. Ph.Eur. pellets

Revision date: 14.08.2023

Product code: 18218

Page 11 of 11

#### Abbreviations and acronyms

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  
ELINCS: European List of Notified Chemical Substances  
CAS: Chemical Abstracts Service  
LC50: Lethal concentration, 50%  
LD50: Lethal dose, 50%  
Met. Corr: Substance or mixture corrosive to metals  
Acute Tox: Acute toxicity  
Skin Corr: Skin corrosion  
Eye Dam: Eye damage

#### Relevant H and EUH statements (number and full text)

H290	May be corrosive to metals.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.

#### Further Information

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.