

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### 23144-26 Potassium Hydroxide Standard Solution; 1.0 N

Revision date: 03.06.2015

Product code: 2314426

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

### 1.1. Product identifier

23144-26 Potassium Hydroxide Standard Solution; 1.0 N

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

#### Use of the substance/mixture

Water analysis

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

Company name: HACH LANGE GmbH  
Street: Willstätterstr. 11  
Place: D-40549 Düsseldorf  
Telephone: +49 (0)211 5288-383  
e-mail: SDS@hach.com  
Internet: www.de.hach.com  
Responsible Department: HACH LANGE Ltd.  
5, Pacific Way  
Salford Manchester M50 1DL - United Kingdom  
Tel. +44 (0) 161 872 1487 \* Fax +44 (0) 161 848 7324  
e-Mail: info-uk@hach.com

HACH LANGE Ltd.  
Unit 1, Chestnut Road Western Industrial Estate  
IRL-Dublin 12  
Tel. +353 (0)1 4602522  
e-Mail: info-ie@hach.com

### 1.4. Emergency telephone number:

Poison Control Center Mainz: Tel: +49 (0) 6131 19240 - 24 hour emergency service -

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

#### Regulation (EC) No. 1272/2008

Hazard categories:

Skin corrosion/irritation: Skin Corr. 1A

Serious eye damage/eye irritation: Eye Dam. 1

Hazard Statements:

Causes severe skin burns and eye damage.

### 2.2. Label elements

#### Regulation (EC) No. 1272/2008

#### Hazard components for labelling

potassium hydroxide; caustic potash

**Signal word:** Danger**Pictograms:**

#### Hazard statements

H314 Causes severe skin burns and eye damage.

#### Precautionary statements

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

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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): Take off immediately all contaminated clothing. Rinse skin with water or 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.
P310	Immediately call a POISON CENTER/doctor.

#### Additional advice on labelling

The product is classified as dangerous in accordance with Regulation (EC) No. 1272/2008.

#### 2.3. Other hazards

None known.

### SECTION 3: Composition/information on ingredients

#### 3.2. Mixtures

##### Hazardous components

CAS No	Chemical name	Quantity
	EC No	
	Index No	
	REACH No	
	Classification according to Regulation (EC) No. 1272/2008 [CLP]	
7732-18-5	Water	90-100 %
	231-791-2	
1310-58-3	potassium hydroxide; caustic potash	5-10 %
	215-181-3	
	019-002-00-8	
	Acute Tox. 4, Skin Corr. 1A; H302 H314	

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

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

##### General information

Take off all contaminated clothing immediately.  
Show this safety data sheet to the doctor in attendance.

##### After inhalation

Move to fresh air. Consult a physician. In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

##### After contact with skin

Wash off immediately with plenty of water for at least 15 minutes. Consult a physician.  
Immediate medical treatment is necessary as untreated wounds from corrosion of the skin heal slowly and with difficulty. Show this safety data sheet to the doctor in attendance.

##### After contact with eyes

Rinse immediately with plenty of water for at least 15 minutes. Call a physician immediately.

##### After ingestion

Do NOT induce vomiting. Drink 1 or 2 glasses of water.  
Never give anything by mouth to an unconscious person.  
Call a physician immediately.

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

Irritation and corrosion

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

Treat symptomatically.

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#### SECTION 5: Firefighting measures

##### 5.1. Extinguishing media

###### Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

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

The product itself does not burn.

##### 5.3. Advice for firefighters

In the event of fire, wear self-contained breathing apparatus.

In order to avoid contact with skin, keep a safety distance and wear suitable protective clothing.

##### **Additional information**

Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

#### SECTION 6: Accidental release measures

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

Use personal protective equipment.

##### 6.2. Environmental precautions

Do not flush into surface water or sanitary sewer system.

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

Soak up with inert absorbent material and dispose of as hazardous waste.

##### 6.4. Reference to other sections

13. Disposal considerations

#### SECTION 7: Handling and storage

##### 7.1. Precautions for safe handling

###### Advice on safe handling

Avoid contact with skin and eyes. Do not breathe vapours or spray mist. Use only in well-ventilated areas.

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

###### Requirements for storage rooms and vessels

Keep away from heat. Keep container tightly closed in a dry and well-ventilated place.

###### Hints on joint storage

Do not store near acids.

###### Further information on storage conditions

Keep locked up or in an area accessible only to qualified or authorised persons.

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

Laboratory chemicals

#### SECTION 8: Exposure controls/personal protection

##### 8.1. Control parameters

###### Exposure limits (EH40)

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

###### Additional advice on limit values

None known.

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#### 8.2. Exposure controls

##### Appropriate engineering controls

The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

##### Protective and hygiene measures

Wash hands before breaks and at the end of workday.

##### Eye/face protection

Safety glasses with side-shields

##### Hand protection

Use barrier skin cream.

Chemical resistant protective gloves

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

##### Skin protection

Avoid contact with skin, eyes and clothing.

##### Respiratory protection

Ensure adequate ventilation, especially in confined areas.

Breathing apparatus only if aerosol or dust is formed.

Recommended Filter type: ABEK-filter

## SECTION 9: Physical and chemical properties

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

Physical state:	liquid	
Colour:	colourless	
Odour:	irritating	
pH-Value (at 20 °C):		14

##### Changes in the physical state

Melting point:	not applicable
Initial boiling point and boiling range:	100 °C
Sublimation point:	not applicable
Softening point:	not applicable
Pour point:	not applicable
Flash point:	not applicable

##### Flammability

Solid:	not applicable
Gas:	not applicable

##### Explosive properties

not applicable

Lower explosion limits:	not applicable
Upper explosion limits:	not applicable
Ignition temperature:	not applicable

##### Auto-ignition temperature

Solid:	no data available
Gas:	no data available

Decomposition temperature:	no data available
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##### Oxidizing properties

not applicable

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Vapour pressure:	no data available
Density (at 20 °C):	1,2 g/cm <sup>3</sup>
Bulk density:	not applicable
Water solubility:	miscible
<b>Solubility in other solvents</b>	
no data available	
Partition coefficient:	no data available
Viscosity / dynamic:	no data available
Viscosity / kinematic:	no data available
Flow time:	no data available
Vapour density:	no data available
Evaporation rate:	no data available
Solvent separation test:	no data available
Solvent content:	no data available

#### 9.2. Other information

Solid content:	not applicable
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### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

No dangerous reaction known under conditions of normal use.

#### 10.2. Chemical stability

Stable under recommended storage conditions.

#### 10.3. Possibility of hazardous reactions

To avoid thermal decomposition, do not overheat.

#### 10.4. Conditions to avoid

Extremes of temperature and direct sunlight. Decomposes on heating.

#### 10.5. Incompatible materials

Acids, Alcohols, Metals, Peroxides

#### 10.6. Hazardous decomposition products

None known.

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

##### Toxicokinetics, metabolism and distribution

No toxicology information is available.

##### Acute toxicity

No data is available on the product itself.

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
1310-58-3	potassium hydroxide; caustic potash				
	oral	LD50 mg/kg	333	Rat	Merck

##### Irritation and corrosivity

Causes burns.

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**Aspiration hazard**

No aspiration toxicity classification

**Specific effects in experiment on an animal**

No toxicology information is available.

**Further information**

Other dangerous properties can not be excluded. Handle in accordance with good industrial hygiene and safety practice.

## SECTION 12: Ecological information

**12.1. Toxicity**

No data is available on the product itself.

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h]   [d]	Species	Source	Method
1310-58-3	potassium hydroxide; caustic potash					
	Acute fish toxicity	LC50	80 mg/l	96 h	Gambusia affinis	IUCLID

**12.2. Persistence and degradability**

No data is available on the product itself.

**12.3. Bioaccumulative potential**

No data is available on the product itself.

**12.4. Mobility in soil**

no data available

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

no data available

**12.6. Other adverse effects**

No known effect.

## SECTION 13: Disposal considerations

**13.1. Waste treatment methods****Advice on disposal**

In accordance with local and national regulations.

**Waste disposal number of waste from residues/unused products**

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; laboratory chemicals, consisting of or containing hazardous substances, including mixtures of laboratory chemicals; hazardous waste

**Waste disposal number of used product**

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; laboratory chemicals, consisting of or containing hazardous substances, including mixtures of laboratory chemicals; hazardous waste

**Waste disposal number of contaminated packaging**

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; laboratory chemicals, consisting of or containing hazardous substances, including mixtures of laboratory chemicals; hazardous waste

## SECTION 14: Transport information

**Land transport (ADR/RID)****14.1. UN number:**

UN 1814

**14.2. UN proper shipping name:**

Potassium hydroxide solution

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**14.3. Transport hazard class(es):** 8

**14.4. Packing group:** II

Hazard label: 8



Classification code: C5

Limited quantity: 1 L

Excepted quantity: E2

Transport category: 2

Hazard No: 80

Tunnel restriction code: E

**Inland waterways transport (ADN)**

**Other applicable information (inland waterways transport)**

Not tested

**Marine transport (IMDG)**

**14.1. UN number:** UN 1814

**14.2. UN proper shipping name:** POTASSIUM HYDROXIDE SOLUTION

**14.3. Transport hazard class(es):** 8

**14.4. Packing group:** II

Hazard label: 8



Special Provisions: -

Limited quantity: 1 L

Excepted quantity: E2

EmS: F-A, S-B

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

**14.1. UN number:** UN 1814

**14.2. UN proper shipping name:** POTASSIUM HYDROXIDE SOLUTION

**14.3. Transport hazard class(es):** 8

**14.4. Packing group:** II

Hazard label: 8



Special Provisions: A3 A803

Limited quantity Passenger: 0.5 L

Passenger LQ: Y840

Excepted quantity: E2

IATA-packing instructions - Passenger: 851

IATA-max. quantity - Passenger: 1 L

IATA-packing instructions - Cargo: 855

IATA-max. quantity - Cargo: 30 L

**14.5. Environmental hazards**

ENVIRONMENTALLY HAZARDOUS: no

Danger releasing substance: Not relevant

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#### **14.6. Special precautions for user**

no data available

#### **14.7. Transport in bulk according to Annex II of Marpol and the IBC Code**

Not relevant

#### **Other applicable information**

Not relevant

### **SECTION 15: Regulatory information**

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

##### **National regulatory information**

Employment restrictions: Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC).  
Water contaminating class (D): 1 - slightly water contaminating

#### **15.2. Chemical safety assessment**

Chemical safety assessments for substances in this mixture were not carried out.

### **SECTION 16: Other information**

#### **Changes**

Revision: 03.06.2015

Safety datasheet sections which have been updated: 2

Revision: 3.09.2014

Safety datasheet sections which have been updated: 4-16

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

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

#### **Further Information**

The information is based on present level of our knowledge. It does not, however, give assurances of product properties and establishes no contract legal rights.

*(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)*