



### 1. PRODUCT AND COMPANY IDENTIFICATION

#### 1.1 Product identifiers

Product name : Potassium Hydroxide Solution

Product Number : PN000933

CAS-No. : 1310-58-3

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

Identified uses : Laboratory chemicals/reagents

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

Company : Associates of Cape Cod, Inc.  
124 Bernard E St Jean Drive  
East Falmouth, MA 02536  
USA

Telephone : +1 888-395-2221  
: +1 508-540-3444

#### 1.4 Emergency telephone number

Emergency Phone Number: CHEMTEL: +1-800-704-9215 (NORTH AMERICA)  
+1-360-256-7365 (INTERNATIONAL)

### 2. HAZARDS IDENTIFICATION

#### 2.1 Classification of the substance or mixture

##### GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Skin corrosive (Category 1A)

Eye damage (Category 1)

#### 2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word

Danger

##### Hazard statement(s)

- Causes severe skin burns and eye damage.
- Causes serious eye damage.
- Harmful if swallowed

##### Precautionary statement(s)

- Do not breathe mists.



- Wash skin thoroughly after handling.
- Wear eye protection / face protection.
- Wear protective gloves.
- If swallowed: Rinse mouth. Do NOT induce vomiting.
- If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
- If inhaled: Remove person to fresh air and keep comfortable for breathing.
- IF ON SKIN: Wash with plenty of soap and water.
- If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- If skin irritation occurs: Get medical advice/ attention.
- If eye irritation persists: Get medical advice/ attention.
- Take off contaminated clothing and wash before reuse.
- Store locked up.

**2.3 Hazards not otherwise classified (HNOC) or not covered by GHS – none**

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

**3.2 Mixtures**

Formula : KOH  
 Molecular weight : 56.11 g/mol

Component	Classification	Concentration
<b>Potassium hydroxide</b>		
CAS-No. 1310-58-3	Skin Corr. 1A; Eye Dam. 1; Aquatic Acute 3	>= 1 - < 5 %

### 4. FIRST AID MEASURES

**Description of first aid measures**

**General advice**

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

**If inhaled**

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**In case of skin contact**

Immediately wash off with soap and plenty of water. Consult a physician.

**In case of eye contact**

Immediately rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

**If swallowed**

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

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

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11. Burning, redness, tearing, and blurry vision.

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

No data available



### 5. FIREFIGHTING MEASURES

#### 5.1 Extinguishing media

**Suitable extinguishing media**

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

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

Potassium oxides

#### 5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

#### 5.4 Further information

No data available

### 6. ACCIDENTAL RELEASE MEASURES

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

Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. For personal protection see section 8.

#### 6.2 Environmental precautions

Do not let product enter drains.

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

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

#### 6.4 Reference to other sections

For disposal see section 13.

### 7. HANDLING AND STORAGE

#### 7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapor or mist. For precautions see section 2.2.

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

Keep container tightly closed in a dry and well-ventilated place. Storage class (TRGS 510): Non Combustible Liquids

#### 7.3 Specific end use(s)

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

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### 8.1 Exposure guidelines

Component	CAS-No.	Value	Control Parameters	Basis
Potassium Hydroxide	1310-58-3	C	2.000000 mg/m3	USA. ACGIH Threshold Limit Values (TLV)
	Remarks	Upper Respiratory Tract irritation Eye irritation Skin irritation		



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Component	CAS-No.	Value	Control Parameters	Basis
		C	2 mg/m3	USA. ACGIH Threshold Limit Values (TLV)
		Upper Respiratory Tract irritation Eye irritation Skin irritation		
		C	2.000000 mg/m3	USA. NIOSH Recommended Exposure Limits

### 8.2 Exposure controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

#### Personal protective equipment

##### Eye/face protection

Safety glasses with side-shields or goggles conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

##### Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

##### Full contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

##### Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

##### Body Protection

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

##### Respiratory protection

Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

##### Control of environmental exposure

Do not let product enter drains.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

a) Appearance

Form: liquid

Color: colorless

b) Odor

No data available



c) Odor Threshold	No data available
d) pH	13.4
e) Melting point/freezing point	No data available
f) Initial boiling point and boiling range	No data available
g) Flash point	No data available
h) Evaporation rate	No data available
i) Flammability (solid, gas)	No data available
j) Upper/lower flammability or explosive limits	No data available
k) Vapor pressure	No data available
l) Vapor density	No data available
m) Relative density	No data available
n) Water solubility	No data available
o) Partition coefficient: n- octanol/water	No data available
p) Auto-ignition temperature	No data available
q) Decomposition temperature	No data available
r) Viscosity	No data available
s) Explosive properties	No data available
t) Oxidizing properties	No data available

### 9.2 Other safety information

No data available

## 10. STABILITY AND REACTIVITY

### 10.1 Reactivity

No data available

### 10.2 Chemical stability

Stable under recommended storage conditions.

### 10.3 Possibility of hazardous reactions

No data available

### 10.4 Conditions to avoid

No data available

### 10.5 Incompatible materials

Water, Light metals, Alkali metals, Metals, Organic materials, Copper, reacts violently with, vigorous reaction with: Halogens, Nitro compounds, Magnesium, Azides, Contact with aluminum, tin and zinc liberates hydrogen gas. Contact with nitromethane and other similar nitro compounds cause formation of shock-sensitive salts.

### 10.6 Hazardous decomposition products

In the event of fire: see section 5

## 11. TOXICOLOGICAL INFORMATION

### 11.1 Symptoms

#### Eyes/skin

- Burning
- Redness in eyes



- Blurry vision
- Severe pain
- Conjunctivitis
- Tearing, and irritation
- Vision loss

### Mouth/throat

- Abdominal pain - severe
- Burns in the mouth and throat
- Chest pain
- Diarrhea
- Drooling
- Mouth pain - severe
- Throat pain - severe
- Throat swelling, which leads to difficulty breathing
- Vomiting, often bloody

## 11.2 Information on toxicological effects

### Acute toxicity

No data available

### Inhalation:

No data available

### Dermal:

No data available

### Skin corrosion/irritation

No data available

### Serious eye damage/eye irritation

No data available

### Respiratory or skin sensitization

No data available

### Germ cell mutagenicity

No data available

### Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.



### Reproductive toxicity

No data available

### Specific target organ toxicity - single exposure

No data available

### Specific target organ toxicity - repeated exposure

No data available

### Aspiration hazard

No data available

### Additional Information

RTECS: Not available

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

## 12. ECOLOGICAL INFORMATION

### 12.1 Toxicity

No data available

### 12.2 Persistence and degradability

No data available

### 12.3 Bioaccumulative potential

No data available

### 12.4 Mobility in soil

No data available

### 12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

### 12.6 Other adverse effects

No data available

## 13. DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

#### Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

#### Contaminated packaging

Dispose of as unused product.



### 14. TRANSPORT INFORMATION

**DOT (US)**

UN1814, Potassium hydroxide, solution, Class 8 PGIII.

**IMDG**

UN1814, Potassium hydroxide, solution, Class 8 PGIII.

**IATA**

UN1814, Potassium hydroxide, solution, Class 8 PGIII.

### 15. REGULATORY INFORMATION

**SARA 302 Components**

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components**

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**SARA 311/312 Hazards**

Acute Health Hazard

**Massachusetts Right To Know Components**

Potassium hydroxide	CAS-No. 1310-58-3	Revision Date 2007-03-01
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**Pennsylvania Right To Know Components**

Water	CAS-No. 7732-18-5	Revision Date
Potassium hydroxide	1310-58-3	2007-03-01

**New Jersey Right To Know Components**

Water	CAS-No. 7732-18-5	Revision Date
Potassium hydroxide	1310-58-3	2007-03-01

**California Prop. 65 Components**

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

### 16. OTHER INFORMATION

**HMIS Rating**

Health hazard:	3
Flammability:	0
Physical Hazard	0

**NFPA Rating**

Health hazard:	3
Fire Hazard:	0
Reactivity Hazard:	0





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### Further information

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### Preparation Information

Associates of Cape Cod, Inc.

Version: 9

SDS *KOH*