

## 1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND OF THE COMPANY / UNDERTAKING

**Product identifier:**

**Product name:** POTASSIUM HYDROXIDE 25%

**CAS number:** 1310-58-3

**EINECS number:** 215-181-3

**Index number:** 019-002-00-8

**Synonyms:** CAUSTIC POTASH. LYE

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

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## 2. HAZARDS IDENTIFICATION

**Classification of the substance or mixture:**

**Classification under CHIP:** Xn: R22; C: R35

**Classification under CLP:** Acute Tox. 3: H301; Skin Corr. 1A: H314

**Most important adverse effects:** Harmful if swallowed. Causes severe burns.

**Label elements:**

**Label elements under CLP:**

**Hazard statements:** H301: Toxic if swallowed.  
H314: Causes severe skin burns and eye damage.

**Signal words:** Danger

**Hazard pictograms:** GHS05: Corrosion  
GHS06: Skull and crossbones



**Precautionary statements:**

P264: Wash thoroughly after handling.  
 P270: Do not eat, drink or smoke when using this product.  
 P280: Wear.  
 P305+351+338: 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).  
 P330: Rinse mouth.

**Label elements under CHIP:****Hazard symbols:**

Corrosive.

**Risk phrases:**

R22: Harmful if swallowed.

R35: Causes severe burns.

**Safety phrases:**

S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S36/37/39: Wear suitable protective clothing, gloves and eye / face protection.

S45: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

**Other hazards:****PBT:**

This product is not identified as a PBT substance.

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

**Mixtures:****Hazardous ingredients:**

POTASSIUM HYDROXIDE

EINECS	CAS	CHIP Classification	CLP Classification	Percent
215-181-3	1310-58-3	Xn: R22; C: R35	Acute Tox. 4: H302; Skin Corr. 1A: H314	10-30%

### 4. FIRST AID MEASURES

**Description of first aid measures:****Skin contact:**

Remove all contaminated clothes and footwear immediately unless stuck to skin. Drench the affected skin with running water for 10 minutes or longer if substance is still on skin. Transfer to hospital if there are burns or symptoms of poisoning.

**Eye contact:**

Bathe the eye with running water for 15 minutes. Transfer to hospital for specialist examination.

**Ingestion:**

Do not induce vomiting. Give 1 cup of water to drink every 10 minutes. If unconscious, check for breathing and apply artificial respiration if necessary. If unconscious and breathing is OK, place in the recovery position. Transfer to hospital as soon as possible.

**Inhalation:**

Remove casualty from exposure ensuring one's own safety whilst doing so. If unconscious, check for breathing and apply artificial respiration if necessary. If unconscious and breathing is OK, place in the recovery position. If conscious, ensure the casualty sits or lies down. If breathing becomes bubbly, have the casualty sit and provide oxygen if available.

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

<b>Skin contact:</b>	Irritation or pain may occur at the site of contact. There may be redness or whiteness of the skin in the area of exposure. Blistering may occur. Severe burns may occur.
<b>Eye contact:</b>	There may be pain and redness. The eyes may water profusely. Corneal burns may occur.
<b>Ingestion:</b>	There may be soreness and redness of the mouth and throat. There may be difficulty swallowing. Corrosive burns may appear around the lips. Nausea and stomach pain may occur. There may be vomiting. Blood may be vomited.
<b>Inhalation:</b>	There may be a feeling of tightness in the chest with shortness of breath. There may be coughing and a sore throat. There may be congestion of the lungs causing severe shortness of breath. There may be loss of consciousness.
<b>Delayed / immediate effects:</b>	Immediate effects can be expected after short-term exposure.

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

**Immediate / special treatment:** Eye bathing equipment should be available on the premises.

**5. FIRE-FIGHTING MEASURES**

**Extinguishing media:** Carbon dioxide. Dry chemical powder. Alcohol or polymer foam.

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

**Exposure hazards:** Corrosive In combustion emits toxic fumes of carbon dioxide / carbon monoxide.

**Advice for fire-fighters:** Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.

**6. ACCIDENTAL RELEASE MEASURES****Personal precautions, protective equipment and emergency procedures:**

**Personal precautions:** Refer to section 8 of SDS for personal protection details. Mark out the contaminated area with signs and prevent access to unauthorised personnel.

**Environmental precautions:** Do not discharge into drains or rivers.

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

**Clean-up procedures:** Neutralise with dilute hydrochloric acid testing with litmus paper periodically. Wash the spillage site with large amounts of water.

**Reference to other sections:** Refer to section 8 of SDS.

**7. HANDLING AND STORAGE****Precautions for safe handling:**

**Handling requirements:** Avoid direct contact with the substance. Avoid the formation or spread of mists in the air.

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

**Storage conditions:** Store in cool, well-ventilated area. Keep container tightly closed.

**Suitable packaging:** Stainless steel. Do not use aluminium containers.

**SAFETY DATA SHEET**

Potassium Hydroxide 25%

**Specific end use(s):** No data available.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### Control parameters:

**Workplace exposure limits:** Respirable dust

State	8 hour TWA	15 min. STEL	8 hour TWA	15 min. STEL
UK	-	2 mg/m <sup>3</sup>	-	-

**Hazardous ingredients:** POTASSIUM HYDROXIDE

**Workplace exposure limits:** Respirable dust

State	8 hour TWA	15 min. STEL	8 hour TWA	15 min. STEL
UK	-	2 mg/m <sup>3</sup>	-	-

### DNEL/PNEC Values:

**DNEL / PNEC:** No data available.

### Exposure controls:

**Engineering measures:** Ensure there is sufficient ventilation of the area.

**Respiratory protection:** Respiratory protective device with particle filter. Self-contained breathing apparatus must be available in case of emergency.

**Hand protection:** Protective gloves.

**Eye protection:** Face-shield.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties:

<b>State:</b>	Liquid
<b>Colour:</b>	Colourless
<b>Odour:</b>	Odourless
<b>Oxidising:</b>	Non-oxidising (by EC criteria)
<b>Solubility in water:</b>	Highly soluble
<b>Boiling point/range°C:</b>	145 Melting point/range°C: 6
<b>Relative density:</b>	1.525 pH: 14
<b>Other information:</b>	No data available.

## 10. STABILITY AND REACTIVITY

**Reactivity:** Stable under recommended transport or storage conditions.

**Chemical stability:** Unstable.

**Possibility of hazardous reactions:** Hazardous reactions will not occur under normal transport or storage conditions. Decomposition may occur on exposure to conditions or materials listed below.

**Conditions to avoid:** Heat.

**SAFETY DATA SHEET**

Potassium Hydroxide 25%

**Incompatible materials:****Materials to avoid:** Acids. Oxidising agents. Halogens. Organic materials.**Hazardous decomposition products:** In combustion emits toxic fumes of carbon dioxide / carbon monoxide.**11. TOXICOLOGICAL INFORMATION****Information on toxicological effects:****Toxicity values:**

Route	Species	Test	Value	Units
ORL	RAT	LD50	273	mg/kg

**Hazardous ingredients:** POTASSIUM HYDROXIDE

ORL	RAT	LD50	273	mg/kg
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**Relevant effects for mixture:****Effect Route Basis****Acute toxicity (harmful) ING Hazardous:** calculated**Corrosivity OPT INH DRM Hazardous:** calculated**Symptoms / routes of exposure:****Skin contact:** Irritation or pain may occur at the site of contact. There may be redness or whiteness of the skin in the area of exposure. Blistering may occur. Severe burns may occur.**Eye contact:** There may be pain and redness. The eyes may water profusely. Corneal burns may occur.**Ingestion:** There may be soreness and redness of the mouth and throat. There may be difficulty swallowing. Corrosive burns may appear around the lips. Nausea and stomach pain may occur. There may be vomiting. Blood may be vomited.**Inhalation:** There may be a feeling of tightness in the chest with shortness of breath. There may be coughing and a sore throat. There may be congestion of the lungs causing severe shortness of breath. There may be loss of consciousness.**Delayed / immediate effects:** Immediate effects can be expected after short-term exposure.**12. ECOLOGICAL INFORMATION****Toxicity:****Ecotoxicity values:** No data available.**Persistence and degradability:** Biodegradable.**Bioaccumulative potential:** No bioaccumulation potential.**Mobility in soil:****Mobility:** Soluble in water.**Results of PBT and vPvB assessment:****PBT identification:** This product is not identified as a PBT substance.**Other adverse effects:** Toxic to fauna. Very toxic to aquatic organisms.

**13. DISPOSAL CONSIDERATIONS****Waste treatment methods:**

- Disposal operations:** Deposit into or on to land (e.g. landfill, etc.)
- Disposal of packaging:** Dispose of in a regulated landfill site or other method for hazardous or toxic wastes.
- NB:** The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

**14. TRANSPORT INFORMATION**

- UN number:** UN1814
- UN proper shipping name:**
- Shipping name:** POTASSIUM HYDROXIDE SOLUTION
- Transport hazard class(es):**
- Transport class:** 8
- Packing group:** II
- Environmentally hazardous:** No Marine pollutant: No
- Special precautions for user:** No special precautions.
- Tunnel code:** E
- Transport category:** 2

**15. REGULATORY INFORMATION**

- Chemical safety assessment:** A chemical safety assessment has not been carried out for the substance or the mixture by the supplier.
- Note:** The regulatory information given above only indicates the principal regulations specifically applicable to the product described in the safety data sheet. The user's attention is drawn to the possible existence of additional provisions which complete these regulations. Refer to all applicable national, international and local regulations or provisions.

**16. OTHER INFORMATION**

- Other information:** This safety data sheet is prepared in accordance with Commission Regulation (EU) No 453/2010.

\* indicates text in the SDS which has changed since the last revision.

- Phrases used in s.2 and 3:** H301: Toxic if swallowed.  
H302: Harmful if swallowed.  
H314: Causes severe skin burns and eye damage.  
R22: Harmful if swallowed.  
R35: Causes severe burns.

- Legal disclaimer:** The information contained in this SDS does not constitute a risk assessment, and should not replace the user's own assessment of risks as required by other health and safety legislation. This advice is given by Nexchem Ltd who accept no legal liability for it except otherwise provided by law. The information contained herein is based on the present state of our knowledge and is intended to describe our products from the point of view of safety requirements. It should not therefore be construed as guaranteeing specific properties.

