

## Safety Data Sheet

SDS Number SDS-3  
Prepare Date 07.03.2013  
Revision Date 22.01.2022  
Revision 7



likitkimya

### POTASSIUM HYDROXIDE % 45 - %50

#### 1. Identification of the substance/mixture and of the company/undertaking

##### 1.1 Product identifiers

Product name : Potassium hydroxide solution  
CAS-Numarası : 1310-58-3

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

Identified uses : Manufacture of substances, Washing and cleaning products, Coatings and paints, Petroleum Industry, putties, thinners

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

Company : Likit Kimya Sanayi Ticaret A.Ş.  
Terminal Address : Sultanköy Merkez Mah. İncirli Mandıra Cad. No:64  
M.Ereğlisi/TEKİRDAĞ/TURKEY  
Terminal Telephone : 0 282 613 41 38  
Central Office Address : Nartanesi Sokak No:16/A Küçükbakkalköy 34750  
Ataşehir /İstanbul / TURKEY  
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E-mail : [info@likitkimya.com](mailto:info@likitkimya.com)  
: [onur\\_evcil@likitkimya.com](mailto:onur_evcil@likitkimya.com)  
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Web site : [www.likitkimya.com](http://www.likitkimya.com)

##### 1.4 Hazards identification

Emergency Phone : 112

#### 2. Hazards identification

##### 2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008  
Corrosive to metals (Category 1), H290  
Acute toxicity, Oral (Category 4), H302  
Skin corrosion (Category 1A), H314

##### 2.2 Label elements

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Pictogram



Signal word

Danger

Hazard statement(s)

H290

May be corrosive to metals

H302

Harmful if swallowed.

H314

Causes severe skin burns and eye damage.

Precautionary statement(s)

P280

Wear protective gloves/ protective clothing/ eye protection/ face protection.

P301 + P312 + P330

IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell. Rinse mouth.

P303 + P361 + P353

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P304 + P340 + P310

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor.

P305 + P351 + P338

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

#### 2.3 Other hazards

none

### 3. Composition/information on ingredients

#### 3.1 Component

Component		Classification	Concentration
Potassium hydroxide			
CAS No	1310-58-3	Met. Corr. 1; Acute Tox. 4; Skin Corr. 1A; H290, H302, H314 Concentration limits: >= 5 %: Skin Corr. 1A, H314; 2 - < 5 %: Skin Corr. 1B, H314; 0,5 - < 2 %: Skin Irrit. 2, H315; 0,5 - < 2 %: Eye Irrit. 2, H319;	%50 ≥ C ≥ %45
EC No	215-181-3		
Index-No.	019-002-00-8		
For the full text of the H-Statements mentioned in this Section, see Section 16.			

### 4. First aid measures

according to Regulation (EC) No. 1907/2006  
 Version 5.5 Revision Date 08.08.2016

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#### 4.1 Description of first aid measures

##### General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

##### If inhaled

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

##### In case of skin contact

Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Consult a physician.

##### In case of eye contact

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

##### If swallowed

Do NOT induce vomiting. 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

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

Corrosive. May aggravate pre-existing eye, skin, and respiratory conditions (including asthma and other breathing disorders).

### 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

Non-combustible, substance itself does not burn but may decompose upon heating to produce corrosive and/or toxic fumes. May react with chemically reactive metals such as aluminum, zinc, magnesium, copper, etc. to release hydrogen gas which can form explosive mixtures in air.

#### 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

Wear respiratory protection. Avoid breathing vapours, mist or gas. Ensure adequate ventilation.

Evacuate personnel to safe areas.

For personal protection see section 8.

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#### 6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

#### 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 vapour or mist.  
 For precautions see section 2.2.

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

Store in room temperature place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Flammable liquids, acids, halogenated compounds, water, Prolonged contact with aluminum, brass, bronze, copper, lead, tin, zinc or other alkali sensitive metals or alloys

#### 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 Control parameters

Components with workplace control parameters.

Derived No Effect Level (DNEL)

Application Area	Exposure routes	Health effect	Value
Workers	Inhalation	Long-term local effects	-
Consumers	Inhalation	Long-term local effects	-

#### 8.2 Exposure controls

##### Appropriate engineering 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

Tightly fitting safety goggles. Faceshield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

##### Skin protection

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

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  
Break through time: 480 min

#### Splash contact

Material: Nitrile rubber  
Minimum layer thickness: 0,11 mm  
Break through time: 480 min

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. 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

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

#### Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

#### Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

## 9. Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

- |                    |                                    |
|--------------------|------------------------------------|
| a) Appearance      | Form: liquid<br>Colour: colourless |
| b) Odour           | Odourless                          |
| c) Odour Threshold | No data available                  |
| d) pH              | 12-14                              |

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- |   |   |
|---|---|
| e) Melting point/freezing point                 | - 65 to 4° C  |
| f) Initial boiling point and boiling range      | 320 to 340° C   |
| g) Flash point                                  | Not applicable  |
| h) Evaporation rate                             | Slightly less than water  |
| i) Flammability (solid, gas)                    | No data available   |
| j) Upper/lower flammability or explosive limits | No data available   |
| k) Vapour pressure                              | 20% KOH Solution: 20mm Hg at 25°C<br>50% KOH Solution: 4 mm Hg at 25°C                |
| l) Vapour density                               | No data available   |
| m) Relative density                             | 45% KOH Solution: 1.49 g/cm <sup>3</sup><br>50% KOH Solution: 1.525 g/cm <sup>3</sup> |
| n) Water solubility                             | completely miscible, soluble  |
| o) Partition coefficient: noctanol/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

Soluble in water, releasing heat sufficient to ignite combustibles. Reacts with acids, giving off heat.

#### 10.2 Chemical stability

Stable under recommended storage conditions.

#### 10.3 Possibility of hazardous reactions

Mixing with water, acid, or incompatible materials may cause splattering and release of large amounts of heat.

#### 10.4 Conditions to avoid

Will react with some metals forming flammable hydrogen gas. Carbon monoxide gas may form upon contact with reducing sugars, food and beverage products in enclosed spaces.

#### 10.5 Incompatible materials

Strong oxidizing agents.

#### 10.6 Hazardous decomposition products

according to Regulation (EC) No. 1907/2006  
 Version 5.5 Revision Date 08.08.2016

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Other decomposition products - No data available  
In the event of fire: see section 5

#### 11. Toxicological information

##### 11.1 Information on toxicological effects

###### Acute toxicity

LD50 /Oral/(rat.) 365mg/kg  
LD50/Dermal/(Rat.) No data available  
LD50 /Inhalation / (Rat.) No data available

###### Skin corrosion/irritation

Corrosive. Causes severe skin burns.

###### Serious eye damage/eye irritation

Corrosive. Causes serious eye damage which can result in: severe irritation, pain and burns, and permanent damage including blindness.

###### Respiratory or skin sensitisation

Toxic if swallowed. Corrosive. May cause severe mucus membrane burns and gastrointestinal burns.

###### 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.

###### 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: No data available

Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., spasm, inflammation and edema of the larynx, spasm, inflammation and edema of the bronchi, pneumonitis, pulmonary edema, burning sensation, Cough, wheezing, laryngitis, Shortness of breath, Headache, Nausea

#### 12. Ecological information

##### 12.1 Toxicity

according to Regulation (EC) No. 1907/2006  
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This material is alkaline and may raise the pH of surface waters with low buffering capacity.  
EC50 (Daphnia magna) : 60 mg/L (48 h)

#### 12.2 Persistence and degradability

This material is inorganic and not subject to biodegradation.

#### 12.3 Bioaccumulative potential

Potassium hydroxide is a strong alkaline substance that dissociates completely in water to K<sup>+</sup> and OH<sup>-</sup>. Considering its high water solubility, potassium hydroxide is not expected to bioconcentrate in organisms. Log Pow is not applicable for an inorganic compound that dissociates.

#### 12.4 Mobility in soil

No data available

#### 12.5 Results of PBT and vPvB assessment

This product does not fulfill the criteria for persistence, bioaccumulation, and toxicity. Therefore, this substance is not considered a PBT or a vPvB substance.

#### 12.6 Other adverse effects

This material has exhibited slight toxicity to terrestrial organisms.

### 13. Disposal considerations

#### 13.1 Waste treatment methods

##### Product

Offer surplus and non-recyclable solutions to a licensed disposal company.

##### Contaminated packaging .

Dispose of as unused product.

### 14. Transport information

#### 14.1 UN number

ADR/RID: 1814

IMDG: 1814

IATA: 1814

#### 14.2 UN proper shipping name

ADR/RID POTASSIUM HYDROXIDE SOLUTION

IMDG POTASSIUM HYDROXIDE SOLUTION

IATA Potassium hydroxide solution

#### 14.3 Transport hazard class(es)

ADR/RID: 8

IMDG: 8

IATA: 8

#### 14.4 Packaging group

ADR/RID: II

IMDG: II

IATA: II

#### 14.5 Environmental hazards

ADR/RID: -

IMDG:-

IATA: -

#### 14.6 Special precautions for user

No data available



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#### 15. Regulatory information

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

This safety datasheet complies with the requirements of Regulation (EC) No. 453/2010.

##### 15.2 Chemical safety assessment

For this product a chemical safety assessment was not carried out.

#### 16. Other information

##### 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.
H315	Causes skin irritation.
H319	Causes serious eye irritation.

##### Further information

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