

No. 809, Chuhua Branch Road, Fengxian District, Shanghai

# SAFETY DATA SHEET

Version: v1

Revision Date: 2024-01-28

Print Date: 2024-02-05

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

## 1.1 Product identifiers

Product name : Potassium hydroxide

Product Number : P112283
Brand : aladdin

CAS-No. : 1310-58-3(Water)

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

Identified uses : Laboratory chemicals, Manufacture of substances.

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

Company : Shanghai Aladdin Biochemical Tech Co.,Ltd

Address : 36 Xinjinqiao Road, Shanghai

Telephone : 400-620-6333
Fax : no data available

# 1.4 Emergency telephone number

Emergency Phone : 0532-83889090

### **SECTION 2: Hazards identification**

### 2.1 Classification of the substance or mixture

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

Corrosive to Metals (Category 1), H290

Acute toxicity, Oral (Category 4), H302

Skin corrosion (Sub-category 1A), H314

Serious eye damage (Category 1), H318

# 2.2 GHS Label elements, including precautionary statements

Pictogram





Signal word Danger

Hazard statement(s)

H290 May be corrosive to metals

H302 Harmful if swallowed



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H314	Causes severe skin burns and eye damage	
H402	Harmful to aquatic life	
Precautionary statement(s)		
P234	Keep only in original container.	
P260	Do not breathe dust/fume/gas/mist/vapors/spray.	
P264	Wash hands [and] thoroughly after handling.	
P270	Do not eat, drink or smoke when using this product.	
P273	Avoid release to the environment.	
P280	Wear protective gloves/protective clothing/eye protection/face protection.	
P310	Immediately call a POISON CENTER or doctor/physician.	
P330	Rinse mouth.	
P363	Wash contaminated clothing before reuse.	
P390	Absorb spillage to prevent material damage.	
P301+P312	IF SWALLOWED: call a POISON CENTER/doctor/ IF you feel unwell.	
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].	
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.	
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact	
	lenses if present and easy to do - continue rinsing.	
P405	Store locked up.	
P406	Store in corrosive resistant/ container with a resistant inner liner.	
P501	Dispose of contents/container to an approved waste disposal plant.	

# 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

# SECTION 3: Composition/information on ingredients

## 3.2 Mixtures

Synonyms : Caustic potash Potassium hydroxide solution 1M

Formula : KOH Molecular weight : 56.11

Component	Classification	Concentration
Potassium hydroxide		
CAS-No.: 1310-58-3 EC-No.: 215-181-3	Corrosive to Metals Category 1; Acute toxicity Category 4; Skin corrosion/irritation Category 1A; Serious eye damage/eye irritation Category 1; Short-term (acute) aquatic hazard Category 3; H290, H302, H314, H318, H402 Concentration limits: >= 0.5 %: Met. Corr. 1, H290; >= 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;	



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### **SECTION 4: First aid measures**

## 4.1 Description of first aid measures

General advice

First aiders need to protect themselves. Show this material safety data sheet to the doctor in attendance.

If inhaled

After inhalation: fresh air. Call in physician.

In case of skin contact

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower. Call a physician immediately.

In case of eye contact

After eye contact: rinse out with plenty of water. Immediately call in ophthalmologist. Remove contact lenses.

If swallowed

After swallowing: make victim drink water (two glasses at most), avoid vomiting (risk of perforation). Call a physician immediately. Do not attempt to neutralise.

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

no data available

## 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

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

no data available

## 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

## **SECTION 6: Accidental release measures**

# 6.1 Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Avoid inhalation of dusts. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert.



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## 6.2 Environmental precautions

Do not let product enter drains.

## 6.3 Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

## 6.4 Reference to other sections

For disposal see section 13.

## SECTION 7: Handling and storage

## 7.1 Precautions for safe handling

For precautions see section 2.2.

## 7.2 Conditions for safe storage, including any incompatibilities

No metal containers. Tightly closed. Dry.

## 7.3 Specific end use(s)

no data available

# SECTION 8: Exposure controls/personal protection

# 8.1 Control parameters

# 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

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN166(EU).

Skin protection

Gloves must be checked before use. Please use proper methods to remove the gloves (do not touch the outer surface of the gloves), and avoid any skin parts contacting the product. After use, please handle the contaminated gloves carefully according to relevant laws and regulations and effective laboratory rules and procedures. Please clean and blow dry the protective gloves selected for your hands must meet the specifications given in regulation (EU) 2016 / 425 and the en 374 standard derived from it.

**Body Protection** 

Complete suit protecting against chemicals, Flame retardant antistatic protective clothing., The type of protective equipment must be selected according to the concentration and amount of the dangerous



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substance at the specific workplace.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a fullface respirator with multipurpose 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

no data available

## **SECTION 9: Physical and chemical properties**

## 9.1 Information on basic physical and chemical properties

a) Appearance form: Transparent Liquid color: Colorless

b) Odour
c) Odour Threshold
no data available
g) Flash point
no data available

j) Upper/lower flammability or

no data available explosive limits no data available k) Vapour pressure no data available I) Vapour density no data available m) Relative density 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 N no data available t) Oxidizing properties N no data available

# 9.2 Other safety information

no data available

## **SECTION 10: Stability and reactivity**

## 10.1 Reactivity

no data available

## 10.2 Chemical stability



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The product is chemically stable under standard ambient conditions (room temperature). Heat of solution is very high, and with limited amounts of water, violent boiling may occur

## 10.3 Possibility of hazardous reactions

no data available

### 10.4 Conditions to avoid

Do not heat above melting point.

# 10.5 Incompatible materials

animal/vegetable tissues, glass, various plastics, Metals

## 10.6 Hazardous decomposition products

no data available

# **SECTION 11: Toxicological information**

## 11.1 Information on toxicological effects

Acute toxicity

LD50 Oral - Rat - male - 333 mg/kg

(OECD Test Guideline 425)

Symptoms: If ingested, severe burns of the mouth and throat, as well as a danger of

perforation of the esophagus and the stomach.

Symptoms: burns of mucous membranes, Cough, Shortness of breath, Possible damages:,

damage of respiratory tract

Dermal: No data available

Skin corrosion/irritation

no data available

Serious eye damage/eye irritation

no data available

Respiratory or skin sensitisation

no data available

Germ cell mutagenicity

no data available

Carcinogenicity

no data available

Reproductive toxicity

no data available

Specific target organ toxicity - single exposure



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no data available

Specific target organ toxicity - repeated exposure

no data available

Aspiration hazard

no data available

Additional Information

RTECS: TT2100000

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

## **SECTION 12: Ecological information**

#### 12.1 **Toxicity**

# 12.2 Persistence and degradability

no data available

#### 12.3 Bioaccumulative potential

no data available

# 12.4 Mobility in soil

no data available

#### Results of PBT and vPvB assessment 12.5

no data available

#### Other adverse effects 12.6

no data available

## **SECTION 13:**

#### 13.1 Disposal considerations

Recycle to process, if possible. Consult your local regional authorities and an expert of disposal. You may be able to dissolve or mix material with a combustible solvent and little by little burn in a chemical incinerator equipped with an afterburner and scrubber system. If a large amount of the substance is burned at a time, an explosion may occur.

Observe all federal, state and local regulations when disposing of the substance.

Contaminated packaging

Dispose of as unused product.

## **SECTION 14: Transport information**



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DOT (US)

UN number: 1813 Packing group: II Class: 8

Proper shipping name: Potassium Reportable Quantity(RQ): no data Poison Inhalation Hazard: no data

hydroxide available available

Environmental Hazards: no

**IMDG** 

UN number: 1813 Packing group: II EMS-No: no data available

Proper shipping name: Potassium hydroxide

IATA

UN number: 1813 Packing group: II Class: 8

Proper shipping name: Potassium hydroxide

# **SECTION 15: Regulatory information**

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

## **SECTION 16: Other information**

Further information

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