ALADDIN SCIENTIFIC CORPORATION
14078 Meridian Parkway, Riverside, CA. 92518

SAFETY DATA SHEET

Version: v1
Revision Date: 2024-01-16
Print Date: 2024-01-23

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

1.1 Product identifiers

Product name	: Potassium Hydroxide
Product Number	: P291841
Brand	: aladdin
CAS-No.	: 1310-58-3(solution)

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

Identified uses	: Laboratory chemicals,Manufacture of substances.

1.3 Company

Company	: ALADDIN SCIENTIFIC CORPORATION
Address	: 14078 Meridian Parkway,
Riverside, CA. 92518	
Telephone	: +1 (833) 552-7181
Fax	: no data available

1.4 Emergency telephone number

CHEMTREC®, Inside the USA	: 1-800-424-9300
CHEMTREC®, Outside the USA	:

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

Flammable liquid (Class 2), H225
Severe eye injury/eye irritation (Category 2A), H319
Specific target organ systemic toxicity (single exposure) (Category 3), anesthetic effects, H336

2.2 GHS Label elements, including precautionary statements

ALADDIN SCIENTIFIC CORPORATION
14078 Meridian Parkway, Riverside, CA. 92518

Pictogram	
Signal word	Danger
Hazard statement(s)	
H225	Highly Flammable liquid and vapor
H290	May be corrosive to metals
H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage
H319	Causes serious eye irritation
H336	May cause drowsiness or dizziness
H402	Harmful to aquatic life
Precautionary statement(s)	
P210	Keep away from heat, hot surface, sparks, open flames and other ignition sources. - No smoking.
P233	Keep container tightly closed.
P234	Keep only in original container.
P240	Ground/bond container and receiving equipment.
P241	Use explosion-proof [electrical/ventilating/lighting/.../] equipment.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
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

ALADDIN SCIENTIFIC CORPORATION
14078 Meridian Parkway, Riverside, CA. 92518

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Synonyms	: no data available
Formula	: KOH
Molecular weight	: 56.11

Component	Classification	Concentration
Propanol		
CAS-No. : 71-23-8 EC-No. : 200-746-9	Flammable liquid category 2; acute toxicity category No 5; serious eye damage/eye irritation Sex category 1; specific target organ system Toxicity (single exposure) category 3; H225, H313, H318, H336	
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;	

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

Carbon oxides Flammable Be careful of backfire. Vapor is heavier than air, so it can diffuse along the ground. When a fire occurs, it may cause the generation of hazardous gases or vapors Forming explosive mixtures with air at mild temperatures

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.

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.

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 substance at the specific workplace.

Respiratory protection

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

no data available

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

a) Appearance	form: Liquid color: Colorless
b) Odour	no data available
c) Odour Threshold	no data available
d) pH	no data available
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) Vapour pressure	no data available
l) Vapour 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 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

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 5840 mg/kg
(OECD Testing Guidelines 401)
LC50 inhalation - rats - males and females -4 hours -37.5 mg/l - vapor
(OECD Testing Guidelines 403)
LD50 percutaneous rabbit -12800 mg/kg
Remarks: (RTECS)

Skin corrosion/irritation
Skin - Rabbit Result: No skin irritation -4 hours (OECD Testing Guidelines 404)
Serious eye damage/eye irritation
Eye Rabbit Results: Eye Irritation (OECD Test Guideline 405) Remarks: (Appendix VI of Regulation (EC) No 1272/2008)
Respiratory or skin sensitisation
Buehler Guinea Pig Trial - Guinea Pig Result: Negative (OECD Testing Guidelines 406)
Germ cell mutagenicity
Test type: Ames test Testing system: Salmonella Typhimurium Metabolic activation: with or without metabolic activation effect Method: OECD Testing Guidelines 471 Result: Negative Test type: In vitro mammalian cell gene mutation test Testing system: Chinese hamster ovarian cells Metabolic activation: with or without metabolic activation effect Method: OECD Testing Guidelines 476 Result: Negative Test type: In vivo micronucleus test Species: Mice Cell type: Bone marrow Poisoning route: intraperitoneal injection Method: OECD Testing Guidelines 474 Result: Negative
Carcinogenicity
This product is not or does not contain components classified as carcinogens by IARC, ACGIH, EPA, and NTP
Reproductive toxicity
no data available
Specific target organ toxicity - single exposure
Inhalation, through the mouth - may cause drowsiness or dizziness- central nervous system Note: Classified according to EU CLP Regulation 1272/2008, Annex 6 (Tables 3.1/3.2)
Specific target organ toxicity - repeated exposure
no data available
Aspiration hazard
no data available
Additional Information
Registration of toxic effects of chemical substances: NT8050000 Central nervous system inhibition, long-term or frequent exposure can cause nausea, headache, vomiting, anesthesia, drowsiness, overexposure may cause moderate and reversible liver effects, inhalation can cause:, pulmonary edema, pneumonia. To our knowledge, this chemical, physical, and toxic property has not been fully studied. After absorption: Headache, dizziness, dizziness, loss of consciousness, anesthesia. After taking a large amount of anesthesia, coma should be handled in accordance with good industrial hygiene and safety regulations. Kidney irregularity based on human evidence

SECTION 12: Ecological information

12.1 Toxicity

Toxicity to Fish LC50- Pimephales promelas -9640 mg/l -96 h (OECD Test Guideline 203)
Toxicity to Daphnia magna and other aquatic invertebrates EC50- Daphnia magna -13299 mg/l -48 hours Remarks: (IUCLID)
Toxicity to algae IC50- Desmodesmus subspicatus (green algae) ->1000 mg/l -72 hours Remarks: (IUCLID)
Toxicity to bacteria EC5- Pseudomonas putida -1050 mg/l -16 h Remarks: (Lit.)

12.2 Persistence and degradability

Biodegradable aerobic - exposure time 5 days Result: 53% - rapidly biodegradable. (Directive 67/548/EEC, Appendix V, C.6.) Theoretical oxygen demand 2400 mg/g Remarks: (Lit.) Biochemical Oxygen Demand and Theoretical Biochemistry Oxygen demand ratio 49% Remarks: (IUCLID)

12.3 Bioaccumulative potential

no data available

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 data available

SECTION 13:

13.1 Disposal considerations

Product
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

DOT (US)

UN number: 1219	Packing group: II	Class: 3（8）
Proper shipping name: Potassium hydroxide standard solution	Reportable Quantity(RQ): no data available	Poison Inhalation Hazard: no data available
Environmental Hazards: no		

IMDG

UN number: 1219	Packing group: II	EMS-No: no data available

ALADDIN SCIENTIFIC CORPORATION
14078 Meridian Parkway, Riverside, CA. 92518

Proper shipping name: Potassium hydroxide standard solution

IATA

UN number: 1219 Packing group: II Class: 3（8）

Proper shipping name: Potassium hydroxide standard solution

SECTION 15: Regulatory information

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

SECTION 16: Other information

Prepared By	Regulatory Affairs ALADDIN SCIENTIFIC CORPORATION Email: QualityAssurance@aladdinsci.com
Creation Date	12-Oct-2023
Revision Date	16-Jan-2024
Print Date	23-Jan-2024
Revision Summary	SDS sections updated v1

Disclaimer

 The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Aladdin Co. Ltd. and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product.