

# SAFETY DATA SHEET



Revision date: 14-May-2024

Revision Number 7

## Section 1: Identification

### Product identifier

**Product Name** POTASSIUM HYDROXIDE - LIQUID

**Product Code(s)** 000031007101

### Other means of identification

**UN number or ID number** 1814

**Synonyms** Potassium hydroxide liquor; Caustic potash liquid; Potassium hydrate; Liquid caustic potash 49%; Caustic potash 50% liquid; Potassium hydroxide liquid; KOH liquid; Caustic Potash 49% low chlorate; Potassium hydroxide 45%.

### Recommended use of the chemical and restrictions on use

**Recommended use** Glass production, cleaner, process cleaner, petroleum industry.

**Uses advised against** No information available.

### Details of manufacturer or importer

#### Supplier

Ixom Operations Pty Ltd  
ABN: 51 600 546 512  
Level 8, 1 Nicholson Street  
Melbourne 3000  
Australia

Telephone Number: +61 3 9906 3000

### Emergency telephone number

Emergency telephone number **1 800 033 111 (ALL HOURS)**

Please ensure you refer to the limitations of this Safety Data Sheet as set out in the "Other Information" section at the end of this Data Sheet.

## Section 2: Hazard identification

Classified as a hazardous substance in accordance with the criteria of Safe Work Australia - Globally Harmonized System (GHS).  
Classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for Transport by Road and Rail; DANGEROUS GOODS.

### GHS Classification

<b>Corrosive to metals</b>	Category 1
<b>Acute toxicity - Oral</b>	Category 4
<b>Skin corrosion/irritation</b>	Category 1 Sub-category A
<b>Serious eye damage/eye irritation</b>	Category 1

### Label elements

Corrosion  
Exclamation mark



**Signal word**  
DANGER

**Hazard statements**

H290 - May be corrosive to metals  
H302 - Harmful if swallowed  
H314 - Causes severe skin burns and eye damage  
H318 - Causes serious eye damage

**Precautionary Statements - Prevention**

Keep only in original packaging.  
Do not breathe dust/fume/gas/mist/vapors/spray.  
Wash face, hands and any exposed skin thoroughly after handling.  
Do not eat, drink or smoke when using this product.  
Wear protective gloves/clothing and eye/face protection.

**Precautionary Statements - Response**

Specific treatment (see First aid on this SDS).  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.  
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse.  
IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.  
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.  
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.  
Absorb spillage to prevent material damage.

**Precautionary Statements - Storage**

Store locked up.  
Store in corrosion resistant container with a resistant inner liner.

**Precautionary Statements - Disposal**

Dispose of contents/container in accordance with local, regional, national, and international regulations as applicable.

**Other hazards which do not result in classification**

### Section 3: Composition and information on ingredients

Chemical name	CAS No.	Weight-%
Potassium hydroxide	1310-58-3	45-50%
Water	7732-18-5	to 100%

### Section 4: First aid measures

**Description of first aid measures**

**General advice**

For advice, contact a Poisons Information Centre (e.g. phone Australia 13 11 26; New Zealand 0800 764 766) or a doctor. Show this safety data sheet to the doctor in attendance.

**Inhalation**

Remove to fresh air. (Call a physician if symptoms occur).

<b>Eye contact</b>	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.
<b>Skin contact</b>	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a POISON CENTER or doctor/physician.
<b>Ingestion</b>	Rinse mouth thoroughly with water. Do NOT induce vomiting. Drink 1 or 2 glasses of water. Get immediate medical attention.

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

<b>Symptoms</b>	Irritation/Corrosion. May cause redness and tearing of the eyes. Erythema (skin redness). Burning.
<b>Effects of Exposure</b>	No information available.

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

<b>Note to physicians</b>	Treat symptomatically. Probable mucosal damage may contraindicate the use of gastric lavage. Can cause corneal burns.
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**Section 5: Firefighting measures****Suitable Extinguishing Media**

**Suitable extinguishing media** Dry chemical, CO2, water spray or regular foam.

**Unsuitable extinguishing media** No information available.

**Specific hazards arising from the chemical**

**Specific hazards arising from the chemical** Corrosive hazard. Wear protective gloves/clothing and eye/face protection. Contact with metals may evolve flammable hydrogen gas.

**Special protective actions for fire-fighters**

**Special protective equipment and precautions for fire-fighters** Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

**Hazchem code** 2R

**Section 6: Accidental release measures****Personal precautions, protective equipment and emergency procedures**

**Personal precautions** Avoid contact with skin and eyes. Do not breathe vapor or mist. Evacuate personnel to safe areas. Ensure adequate ventilation. Stop leak if you can do it without risk. Do not touch or walk through spilled material. Use personal protective equipment as required. Wash thoroughly after handling.

**For emergency responders** Use personal protection recommended in Section 8.

**Environmental precautions**

**Environmental precautions** Local authorities should be advised if significant spillages cannot be contained.

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

<b>Methods for containment</b>	Prevent further leakage or spillage if safe to do so.
<b>Methods for cleaning up</b>	Soak up with inert absorbent material. Pick up and transfer to properly labeled containers. After cleaning, flush away traces with water.

**Section 7: Handling and storage****Precautions for safe handling**

<b>Advice on safe handling</b>	Avoid contact with skin and eyes. Do not breathe vapor or mist. Do not eat, drink or smoke when using this product. Use personal protection equipment. Wash thoroughly after handling. Keep out of reach of children.
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**Conditions for safe storage, including any incompatibilities**

<b>Storage Conditions</b>	Keep containers tightly closed in a dry, cool and well-ventilated place. Keep container closed when not in use. Store away from foodstuffs. Do not store in aluminium or galvanised containers nor use die-cast zinc or aluminium bungs; steel bungs should be used.
<b>Incompatible materials</b>	Acids. Sodium hypochlorite. Aluminum. Zinc. Ammonium salts. Tin.

**Section 8: Exposure controls and personal protection****Control parameters**

<b>Exposure Limits</b>	No value assigned for this specific material by Safe Work Australia. However, Workplace Exposure Standard(s) for constituent(s):
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Chemical name	Australia	New Zealand	ACGIH TLV
Potassium hydroxide 1310-58-3	Peak: 2 mg/m <sup>3</sup>	Ceiling: 2 mg/m <sup>3</sup>	Ceiling: 2 mg/m <sup>3</sup>
Chemical name	European Union	United Kingdom	Germany DFG
Potassium hydroxide 1310-58-3	-	STEL: 2 mg/m <sup>3</sup>	-

As published by Safe Work Australia Workplace Exposure Standards for Airborne Contaminants.

Peak Limitation - a maximum or peak airborne concentration of a particular substance determined over the shortest analytically practicable period of time which does not exceed 15 minutes.

These Workplace Exposure Standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept to as low a level as is workable. These workplace exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.

**Appropriate engineering controls**

<b>Engineering controls</b>	Ensure that eyewash stations and safety showers are close to the workstation location. Apply technical measures to comply with the occupational exposure limits.
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**Individual protection measures, such as personal protective equipment**

The selection of PPE is dependent on a detailed risk assessment. The risk assessment should consider the work situation, the physical form of the chemical, the handling methods, and environmental factors.

OVERALLS, CHEMICAL GOGGLES, FACE SHIELD, GLOVES (Long), APRON, RUBBER BOOTS.



<b>Eye/face protection</b>	Tight sealing safety goggles. If splashes are likely to occur: Face protection shield.
<b>Skin and body protection</b>	Rubber boots. Apron. Overalls.
<b>Hand protection</b>	Elbow-length impervious gloves.
<b>Respiratory protection</b>	If determined by a risk assessment an inhalation risk exists, wear a suitable mist respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716.
<b>Environmental exposure controls</b>	No information available.
<b>Thermal hazards</b>	No information available.

## Section 9: Physical and chemical properties

### Information on basic physical and chemical properties

<b>Physical state</b>	Liquid
<b>Appearance</b>	Clear
<b>Color</b>	Colourless
<b>Odor</b>	Odourless
<b>Odor threshold</b>	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
<b>pH</b>	12-14	None known
<b>pH (as aqueous solution)</b>	No data available	None known
<b>Melting point / freezing point</b>	No data available	None known
<b>Boiling point / boiling range</b>	133-143°C	None known
<b>Flash point</b>	Not applicable	None known
<b>Evaporation rate</b>	No data available	None known
<b>Flammability (solid, gas)</b>	No data available	None known
<b>Flammability Limit in Air</b>		None known
<b>Upper flammability or explosive limits</b>	Not applicable	
<b>Lower flammability or explosive limits</b>	Not applicable	
<b>Vapor pressure</b>	No data available	None known
<b>Vapor density</b>	No data available	None known
<b>Relative density</b>	ca. 1.5	None known
<b>Water solubility</b>	Miscible in water	None known
<b>Solubility(ies)</b>	No data available	None known
<b>Partition coefficient</b>	No data available	None known
<b>Autoignition temperature</b>	Not applicable	None known
<b>Decomposition temperature</b>	No data available	None known
<b>Kinematic viscosity</b>	No data available	None known
<b>Dynamic viscosity</b>	No data available	None known

### Other information

## Section 10: Stability and reactivity

**Reactivity****Reactivity** Reacts violently with acids. Corrosive to metals.**Chemical stability****Stability** Stable under normal conditions.**Explosion data****Sensitivity to mechanical impact** None.**Sensitivity to static discharge** None.**Possibility of hazardous reactions****Possibility of hazardous reactions** Contact with metals may evolve flammable hydrogen gas. Reacts readily with various reducing sugars (i.e. fructose, galactose, maltose, dry whey solids) to produce carbon monoxide. Take precautions including monitoring the tank atmosphere for carbon monoxide to ensure safety of personnel before vessel entry.**Conditions to avoid****Conditions to avoid** Do not contaminate food or feed stuffs. Contact with foodstuffs.**Incompatible materials****Incompatible materials** Acids. Sodium hypochlorite. Aluminum. Zinc. Ammonium salts. Tin.**Hazardous decomposition products****Hazardous decomposition products** None known based on information supplied.**Section 11: Toxicological information****Information on likely routes of exposure****Product Information** No adverse health effects expected if the chemical is handled in accordance with this Safety Data Sheet and the chemical label. Symptoms or effects that may arise if the chemical is mishandled and overexposure occurs are:**Inhalation** May cause irritation.**Eye contact** Causes serious eye damage.**Skin contact** Causes severe burns.**Ingestion** Can burn mouth, throat, and stomach.**Symptoms** Irritation/Corrosion. May cause redness and tearing of the eyes. Erythema (skin redness). Burning.**Acute toxicity****Numerical measures of toxicity - Product Information**

No information available

**Component Information**

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50

Potassium hydroxide	= 284 mg/kg ( Rat )	-	-
Water	> 90 mL/kg ( Rat )	-	-

See section 16 for terms and abbreviations

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

<b>Skin corrosion/irritation</b>	Causes severe burns. Classification is based on mixture calculation methods based on component data.
<b>Serious eye damage/eye irritation</b>	Causes serious eye damage. Classification is based on mixture calculation methods based on component data.
<b>Respiratory or skin sensitization</b>	No information available.
<b>Germ cell mutagenicity</b>	Not classified.
<b>Carcinogenicity</b>	Not classified.
<b>Reproductive toxicity</b>	Not classified.
<b>STOT - single exposure</b>	Not classified.
<b>STOT - repeated exposure</b>	Not classified.
<b>Aspiration hazard</b>	Not classified.

## **Section 12: Ecological information**

### Ecotoxicity

<b>Aquatic ecotoxicity</b>	Keep out of waterways.
<b>Terrestrial ecotoxicity</b>	There is no data for this product.

### Persistence and degradability

<b>Persistence and degradability</b>	Biodegradation is not an applicable endpoint since the product is an inorganic substance.
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### Bioaccumulative potential

<b>Bioaccumulation</b>	There is no data for this product.
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### **Component Information**

Chemical name	Partition coefficient
Potassium hydroxide	0.83

**Mobility**

**Mobility** No information available.

**Other adverse effects**

**Other adverse effects** No information available.

**Section 13: Disposal considerations****Waste treatment methods**

**Waste from residues/unused products** Refer to Waste Management Authority. Dispose of material through a licensed waste contractor.

**Contaminated packaging** Empty containers should be taken to an approved waste handling site for recycling or disposal.

See section 8 for more information

**Section 14: Transport information**

**ADG** Classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for Transport by Road and Rail; DANGEROUS GOODS.

**UN number or ID number** 1814  
**Proper shipping name** POTASSIUM HYDROXIDE SOLUTION  
**Transport hazard class(es)** 8  
**Packing group** II  
**Hazchem code** 2R

**IATA** Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air; DANGEROUS GOODS.

**UN number** 1814  
**UN proper shipping name** POTASSIUM HYDROXIDE SOLUTION  
**Transport hazard class(es)** 8  
**Packing group** II

**IMDG** Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea; DANGEROUS GOODS.

**UN number** 1814  
**UN proper shipping name** POTASSIUM HYDROXIDE SOLUTION  
**Transport hazard class(es)** 8  
**Packing group** II  
**IMDG EMS Fire** F-A  
**IMDG EMS Spill** S-B  
**Marine pollutant** Not applicable

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

No information available

**Section 15: Regulatory information**



**Safety, health and environmental regulations/legislation specific for the substance or mixture****National regulations****Australia**

Classified as a hazardous substance in accordance with the criteria of Safe Work Australia - Globally Harmonized System (GHS).  
Classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for Transport by Road and Rail; DANGEROUS GOODS.

See section 8 for national exposure control parameters

**Standard for Uniform Scheduling of Medicines and Poisons (SUSMP)**

Classified as a scheduled poison according to the Standard for Uniform Scheduling of Medicines and Poisons (SUSMP)

**Poison Schedule Number** 6

**Australian Industrial Chemicals Introduction Scheme (AICIS)**

Contact supplier for inventory compliance status

Chemical name	Australian Industrial Chemicals Introduction Scheme (AICIS)	Additional information
Potassium hydroxide - 1310-58-3	Present	-
Water - 7732-18-5	Present	-

**Illicit Drug Precursors/Reagents**

This product does not contain any substance(s) on the Illicit Drug Precursors/Reagents list.

**International Inventories****AIIC**

All the constituents of this material are listed on the Australian Inventory of Industrial Chemicals.

**NZIoC**

All the constituents of this material are listed on the New Zealand Inventory of Chemicals.

**TSCA**

Contact supplier for inventory compliance status.

**DSL/NDSL**

Contact supplier for inventory compliance status.

**EINECS/ELINCS**

Contact supplier for inventory compliance status.

**ENCS**

Contact supplier for inventory compliance status.

**IECSC**

Contact supplier for inventory compliance status.

**KECL**

Contact supplier for inventory compliance status.

**PICCS**

Contact supplier for inventory compliance status.

**Legend:**

**AIIC** - Australian Inventory of Industrial Chemicals

**NZIoC** - New Zealand Inventory of Chemicals

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

**ENCS** - Japan Existing and New Chemical Substances

**IECSC** - China Inventory of Existing Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances

**International Regulations**

**The Montreal Protocol on Substances that Deplete the Ozone Layer** Not applicable

**The Stockholm Convention on Persistent Organic Pollutants** Not applicable

**The Rotterdam Convention** Not applicable

## Section 16: Other information

**Reason(s) For Issue:** 5 Yearly Revised Primary SDS

**Prepared By** This Safety Data Sheet has been prepared by Ixom Operations Pty Ltd (Toxicology and SDS Services).

**Revision date:** 14-May-2024

### Revision Note:

The symbol (\*) in the margin of this SDS indicates that this line has been revised.

### Key or legend to abbreviations and acronyms used in the safety data sheet

#### Legend

SVHC: Substances of Very High Concern for Authorization:  
PBT: Persistent, Bioaccumulative, and Toxic (PBT) Substances  
vPvB: Very Persistent and very Bioaccumulative (vPvB) Substances  
STOT: Specific Target Organ Toxicity  
ATE: Acute Toxicity Estimate  
LC50: 50% Lethal Concentration  
LD50: 50% Lethal Dose

#### Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation
C	Carcinogen		

#### Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)  
U.S. Environmental Protection Agency ChemView Database  
European Food Safety Authority (EFSA)  
Environmental Protection Agency  
Acute Exposure Guideline Level(s) (AEGl(s))  
U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act  
U.S. Environmental Protection Agency High Production Volume Chemicals  
Food Research Journal  
Hazardous Substance Database  
International Uniform Chemical Information Database (IUCLID)  
National Institute of Technology and Evaluation (NITE)  
Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)  
Australian Industrial Chemicals Introduction Scheme (AICIS)  
NIOSH (National Institute for Occupational Safety and Health)  
National Library of Medicine's ChemID Plus (NLM CIP)  
National Library of Medicine's PubMed database (NLM PUBMED)  
U.S. National Toxicology Program (NTP)  
New Zealand's Chemical Classification and Information Database (CCID)  
Organization for Economic Co-operation and Development Environment, Health, and Safety Publications  
Organization for Economic Co-operation and Development High Production Volume Chemicals Program  
Organization for Economic Co-operation and Development Screening Information Data Set  
World Health Organization

**Disclaimer**

This SDS summarises to our best knowledge at the date of issue, the chemical health and safety hazards of the material and general guidance on how to safely handle the material in the workplace. Since Ixom Operations Pty Ltd cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, assess and control the risks arising from its use of the material.

If clarification or further information is needed, the user should contact their Ixom representative or Ixom Operations Pty Ltd at the contact details on page 1.

Ixom Operations Pty Ltd's responsibility for the material as sold is subject to the terms and conditions of sale, a copy of which is available upon request.

**End of Safety Data Sheet**