

AUSTRALIAN CHEMICAL REAGENTS  
**SAFETY DATA SHEET**

Date Prepared: October 2022  
Version No: 7

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**1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER**

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Product Name: Potassium Hydroxide 0.5 Normal  
Product Code: 2525  
Other Names: Potassium hydroxide 0.5 Molar  
Uses: Analytical Reagent

Supplier: Australian Chemical Reagents  
38-50 Bedford Street Gillman SA 5013

Contacts: Telephone: 61 08 84402000  
Fax: 61 08 84402001  
Emergency Phone: 61 08 84402000 Mon – Fri 8:30am – 5:00pm

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**2. HAZARDS INFORMATION**

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**GHS Classification** Skin Corrosion/Irritation: Category 1B  
Serious Eye Damage/Irritation: Category 1B  
Acute Toxicity – Oral: Category 4  
Corrosive to metals: Category 1

**Signal Word(s)** DANGER  
**Pictogram(s)**



**Hazard Statement (s)** H290 May be corrosive to metals  
H302 Harmful if swallowed.  
H314 Causes severe skin burns and eye damage.

**Precautionary Statement(s)  
Preventative** P234 Keep only in original container  
P260 Do not breathe dust/fume/gas/mist/vapours/spray.  
P264 Wash thoroughly after handling.  
P270 Do not eat, drink or smoke when handling this product.  
P280 Wear protective gloves/protective clothing/eye  
protection/face protection.

**Response** P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT  
induce vomiting.

P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.  
P363 Wash contaminated clothing before reuse.  
P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
P310 Immediately call a POISON CENTER or doctor/physician.  
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P363 Wash contaminated clothing before reuse.

**Storage** P405 Store locked up.  
P406 Store in corrosive resistant/... container with a resistant inner liner.

**Disposal** P501 Dispose of contents/container to an approved waste disposal plant.

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### 3. COMPOSITION / INFORMATION ON INGREDIENTS

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#### **Ingredients :**

<b>Chemical Entity</b>	<b>CAS No</b>	<b>Proportion</b>
Potassium hydroxide	[1310-58-3]	3%
Water	[7732-18-5]	to 100%

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### 4. FIRST AID MEASURES

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Safety showers and eye wash facilities should be provided.

#### **Swallowed :**

If conscious wash out mouth with water. Seek medical advice. Show this SDS to medical practitioner.

#### **Eye :**

Immediately hold eyelids open and flood with water for at least 15 minutes. Obtain medical aid. Show this SDS to medical practitioner.

#### **Skin :**

Remove contaminated clothing. Immediately wash skin thoroughly with water and mild soap. Seek medical advice if irritation persists. Show this SDS to medical practitioner. Launder clothing before reuse.

#### **Inhaled :**

Remove from contaminated air. Maintain breathing with artificial respiration if necessary. Seek medical assistance. Show this SDS to a doctor.

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### 5. FIRE FIGHTING MEASURES

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#### **Suitable Extinguishing Media:**

Water spray. Carbon dioxide, dry chemical powder, or appropriate foam.

#### **Hazards From Combustion Products:**

Potassium hydroxide and its solutions will not burn or support combustion. However contact with aluminium, zinc or tin may generate explosive hydrogen gas. Decomposition products include potassium oxide.

#### **Precautions For Fire Fighters and Special Protective Equipment:**

Fire fighters and others who may be exposed to combustion products during fire should wear full protective clothing including positive pressure self-contained breathing apparatus (SCBA). Wear SCBA with full face-piece, operated in positive pressure mode when fighting fires.

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### 6. ACCIDENTAL RELEASE MEASURES

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#### **Emergency procedures:**

Prevent from entering waterways. Restrict access to area. Remove chemicals that can react with the spilled material. Spills are slippery.

#### **Methods and materials for containment and clean up:**

Use inert material such as sand or earth to contain spill or leak. Absorb spills with chemical absorber or vermiculite and dispose of in accordance with local regulations.

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## 7. HANDLING AND STORAGE

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### Precautions for Safe Handling:

Do not get in eyes, on skin, on clothing. Avoid prolonged or repeated exposure.

### Conditions for Safe Storage:

Store sealed in original container in a cool well ventilated situation away from foods and other chemicals. Do not store in direct sunlight. Observe good hygiene and housekeeping practices.

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## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

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### National Exposure Standards:

SWA – Potassium hydroxide 2mg/m<sup>3</sup> TWA & Peak Limitation

**Biological Limit Values:** No data available.

### Engineering Controls:

Not required with normal use. If mists are likely to be generated maintain atmospheric concentrations well below exposure standards with extraction ventilation.

### Personal Protective Equipment (PPE):

The use of nitrile or neoprene gloves complying with AS 2161 and the use of faceshield, chemical goggles or safety glasses with side shield protection complying with AS/NZS 1337 is recommended.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

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<b>Appearance :</b>	Clear liquid
<b>Odour:</b>	Nil
<b>pH:</b>	14
<b>Boiling Point (°C) :</b>	100
<b>Freezing/melting Point:</b>	Not applicable
<b>Vapour Pressure (mm of Hg @ 25°C) :</b>	25
<b>Vapour Density:</b>	Not applicable
<b>Specific Gravity :</b>	1
<b>Flash Point (°C) :</b>	Not flammable
<b>Flammability Limits (%) :</b>	Not flammable
<b>Solubility in Water (g/L) :</b>	Soluble

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## 10. STABILITY AND REACTIVITY

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### Chemical stability:

Stable.

### Conditions to avoid:

Exposure to air. Absorbs carbon dioxide

### Incompatible materials:

Acids, organic materials, chlorinated solvents, aluminum, phosphorus, tin and zinc.

### Hazardous decomposition products:

Refer to section 5 (Fire Fighting Measures).

### Hazardous reactions:

Hazardous polymerization will not occur.

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## 11. TOXICOLOGICAL INFORMATION

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### Health Effects:

**Swallowed :** May cause burning of tissue. Ingestion may cause vomiting, diarrhoea, collapse and possibly death For potassium hydroxide LD50 oral - rabbits 273mg/kg.

**Eye :** May cause severe burns and possible permanent damage. For potassium hydroxide 1mg rinse for 24 hrs produced moderate irritation of rabbit eyes.

**.Skin** : May causes burns with possible ulceration. 50mg of potassium hydroxide produced severe irritation of human skin after 24hrs.

**Inhaled** : May be irritating to respiratory tissue. Inhalation of mists may be fatal as a result of spasm, inflammation and oedema of the larynx and bronchi, chemical pneumonitis and pulmonary oedema.

**Chronic Effects:** No data available.

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## 12. ECOLOGICAL INFORMATION

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**Ecotoxicity:**

No data available.

**Persistence and degradability:**

No data available.

**Mobility:**

No data available.

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## 13. DISPOSAL CONSIDERATIONS

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Contact a licensed professional waste disposal service to dispose of this material. Observe all federal, state and local environmental regulations.

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## 14. TRANSPORT INFORMATION

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**UN Number:** 1814

**UN Proper Shipping Name:** POTASSIUM HYDROXIDE SOLUTION

**Class and subsidiary risk(s):** 8

**Packing Group:** 111

**Hazchem Code:** 2R

**Special precautions for user :** Nil

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## 15. REGULATORY INFORMATION

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**Standard for the Uniform Scheduling of Drugs and Poisons (SUSDP):**

Schedule 5

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## 16. OTHER INFORMATION

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