Camlab Limited – Material Safety Data Sheet 1110980

1. Identification

Product Code **1110980**

Product Name **POTASSIUM HYDROXIDE SOLUTION 70% w/v (50% w/w)**

Molecular Formula **KOH =56.11**

CAS Number **1310-58-3**

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2. Composition

Component	CAS No	EEC No	Conc w/w	Classification & Risk Phrases	Exp (See 8.1)
Potassium hydroxide	1310-58-3	215-181-7	70.0%	C : R22,R35	N/A

3. Hazards Identification

Harmful if swallowed. Causes severe burns.

4. First Aid Measures

Eyes: Irrigate thoroughly with plenty of water for at least 10 minutes, holding the eye open. OBTAIN MEDICAL ATTENTION URGENTLY.

Skin: Wash off skin thoroughly with water. Remove contaminated clothing immediately and wash before re-use. If irritation persists or there is any sign of skin damage, seek IMMEDIATE MEDICAL ASSISTANCE

Inhalation: Remove from exposure. Keep warm and at rest. Remove from exposure. If there is difficulty in breathing give oxygen if available. If breathing stops or shows signs of failing, apply artificial resuscitation.

Ingestion: If conscious give plenty of water to drink. Do not induce vomiting. OBTAIN MEDICAL ATTENTION URGENTLY.

5. Fire Fighting Measures

Hazards: Presents no specific fire danger.

Extinguishing Media: Consider what other flammable materials are present and act accordingly.

Unsuitable Media: Nothing specified.

6. Accidental Release Measures

Personal Protection	Avoid breathing vapour. Use approved personal protective equipment. Evacuate area immediately. Do not allow other people to enter area. Do not allow general use of area until it is safe to do so.
Enviromental	Keep non-neutralised material out of sewers, storm drains, surface waters and soil. Notify the Environmental Agency and local Environmental Health Officer if major spillage occurs.
Major Spillage	Contain spill with inert material. Neutralise with 5M hydrochloric acid. Wash area down with copious amounts of water.
Minor Spillage	Wash area down with copious amounts of water.

7. Storage & Handling

Handling Precautions	Avoid contact with skin and eyes. Do not breath vapours. Do not allow to contaminate clothing. Ensure Local Exhaust Ventilation maintains vapour concentrations below the recommended limits.
Storage Conditions	Store in a dry place protected against moisture and water. Keep well separated from acids, metals, explosives, organic peroxides and ignitable materials.

8.1 Workplace Exposure Limits

No prescribed exposure limits available

8.2 Personal Protection

Respiratory	In cases where a spray or mist may be formed, use L.E.V. or natural ventilation to maintain vapour concentrations below exposure limits. If not, use a well maintained chemical cartridge respirator, or use self contained breathing apparatus.
Hands	Use nitrile gloves or PVC gauntlets.
Eyes	Use chemical full face shield.
Skin	If skin contact or contamination of clothing is likely, protective clothing must be worn. Wear PVC oversuit.

9. Physical & Chemical Properties

Appearance	Clear colourless liquid.
Odour	Odourless.
pH	12 (1% solution)
Boiling point	Aqueous solution
Melting point	Aqueous solution
Flash point	Not available
Upper Flammable Limit	Not available
Lower Flammable Limit	Not available
Auto Ignition	Not available
Explosive properties	No.
Oxidising Properties	No.
Vapour Presure	Not applicable
Relative Density	1.5010 °C
Water Solubility	Completely soluble in water.

10. Stability & Reactivity

Chemical Stability	Stable under normal conditions
Conditions to Avoid	No specific conditions.
Materials to Avoid	Acids. Reacts with aluminium and zinc to produce extremely flammable hydrogen gas.
Hazardous Decomposition Products	Toxic and acidic dense white fumes.

11. Toxicological Information

Eyes	The liquid and solutions will cause severe burns. Damage can range from severe irritation and corneal scarring to permanent blindness.
Skin	Contact with the liquid or solutions will not lead to immediate pain but damage begins at once. Severe ulceration and scarring may occur in serious cases.
LD50 Skin	Not available
Ingest	Ingestion will cause severe mouth burns, and if swallowed extensive damage to the oesophagus.
LD50 Ingest	Rabbit 500ml/Kg
Inhalation	Presents no significant health hazard by inhalation.
Carcinogenicity	Not considered to be a carcinogen.
Mutagenicity	Not considered to be a mutagen.
Reproductive Effects	None identified.

12. Ecological

Small amounts present no specific environmental hazard. Neutralised material presents no specific environmental hazard.

13. Disposal Considerations

Disposal Methods	Dilute in a large excess of water and carefully neutralise with an acid, then wash to drain with copious amounts of water
Contaminated Packaging	Wash out containers with water. Use a licensed waste disposer.

14. Transport Information

Proper Shipping Name	Potassium Hydroxide Solution
UN Number	1814
UN Classification	8 Corrosive
Subsidiary Risk	None
Flash Point	Not available
Packing Group	II
Transport Category	2
Marine pollutant	No
ADR Hazard ID	80

15. Regulatory Information

Labelling Classification	Corrosive.
Label Symbols	C

Risk & safety Phrases	Harmful if swallowed. Causes severe burns. Keep locked up and out of reach of children. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing,gloves and eye/face protection. In case of accident or if you feel unwell, seek medical advice immediately (show the label).
EEC Number	215-181-7

16. Other Information

Document Information

This document has been prepared in accordance with directive 88/379/EEC.

The information contained in this document only covers the hazards presented by this material, it DOES NOT constitute a workplace risk assessment.

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