

1. Version History

Version	Date	History
1-26102016	26 th October 2016	Initial release
2-21022019	21 st February 2019	Review
3-03042024	3 rd April 2024	Review

2. Product and Company Identification

Product Name	pH probe KCl Storage Solution
Recommended Uses	Use only as directed on the label.
Company	Bluelab Corporation Limited
Street Address	8 Whiore Avenue Tauriko Business Estate Tauranga 3110 New Zealand
Telephone	0064 7 578 0849
Emergency Contact numbers	National Poisons Centre Urgent 0800 764 766 (0800 POISON) Other countries 0064 3 764766 Non Urgent 0064 3 479 7248 New Zealand Fire Service– 111

3. Hazards Identification

New Zealand HSNO Classifications

- 6.1E Acutely toxic (Oral)
- 6.3B Mildly irritating to the skin
- 6.4A Irritating to the eye
- 9.3C Harmful to terrestrial vertebrates

GHS Classifications

Signal word: **WARNING**
Acute toxicity: Oral, category 5
Skin corrosion/irritation, category 3
Serious eye damage/eye irritation, category 2A
Ecotoxic to terrestrial vertebrates

Hazard statements:

May be harmful if swallowed.
Causes mild skin irritation.
Causes serious eye irritation.
Harmful to terrestrial vertebrates.

Precautionary statements:

If medical advice is needed have product container or label at hand.
Keep out of reach of children.

Hazard Symbols



Read label before use.

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

If skin irritation occurs: Get medical advice/ attention.

Wash hands thoroughly after handling.

Wear protective gloves/protective clothing/eye protection/face protection.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If eye irritation persists: Get medical advice/attention.

Avoid release to the environment.

Dispose of contents/container in accordance with local/regional/national/international regulations.

4. Composition/Information on Ingredients

Chemical Name	CAS no.	Weight %
Water	7732-18-5	To 100
Potassium chloride	7447-40-7	>10-25

5. First Aid

Inhalation	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
Skin Contact	In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Cold water may be used. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.
Eye contact	Check for and remove any contact lenses if able to do so. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention.
Ingestion	Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms appear.
Treatment	Physician should treat symptomatically.

6. Fire-fighting Measures

Flammability	Non Flammable.
Extinguishing Media	Dry chemical powder. Water spray. Carbon dioxide, dry chemical powder, or appropriate foam.
Extinguishing Media to Avoid	None
Hazardous Combustion Products	Hazardous decomposition products formed under fire conditions- Hydrogen chloride gas, Potassium oxides. May result in explosion with potassium permanganate and sulfuric acid. (Potassium chloride)
Fire Fighting Procedures	Evacuate area and contact emergency services. Remain upwind and notify those downwind of hazard. Prevent contamination of drains or waterways.
Fire-fighting equipment	Wear self-contained breathing apparatus for fire-fighting if necessary
HAZCHEM	Not Specified

7. Accidental Release Measures

Personal precautions	Wear protective equipment. Use respiratory protective device against the effects of fumes/dust/aerosol. Keep unprotected persons away. Ensure adequate ventilation. Keep away from ignition sources. Protect from heat.
Environmental precautions	Prevent from reaching drains, sewer or waterway. Collect contaminated soil for characterization per Section 13.
Clean-up Methods	Small Spill: Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements. Large Spill: Absorb with an inert material and put the spilled material in an appropriate waste disposal. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

8. Handling and Storage

Handling	Do not ingest. Do not breathe gas/fumes/vapour/spray. Wear suitable protective clothing. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes. Use in a well ventilated area.
Storage	Keep container tightly closed. Keep container in a cool, well-ventilated area.

9. Exposure Controls / Personal Protection

Workplace Exposure Standards	None available
Engineering controls	Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use/handling. Provide exhaust ventilation.
Personal Protection	Splash goggles. Lab coat. Gloves.

10. Physical and Chemical Properties

Appearance	Clear Liquid
Colour	Colourless
Odour	Odourless
pH (5% Solution in Water)	5-8
Vapour pressure	Not Available
Vapour density	Not Available
Boiling Point	100°C (Approximately)
Melting/Freezing Point	0°C (Approximately)
Solubility (water)	Soluble
Specific Gravity/Density	1.0 (Approximately)
Flash Point	Not Available
Flammable Limits	Not Available
Auto-ignition	Not Available

11. Stability and Reactivity

Chemical Stability	Stable under recommended storage conditions.
Conditions to avoid	Hygroscopic. Incompatible with KMnO_4 , H_2SO_4 , BrF_3 , and BrCl_3 . May react violently with BrF_3 . (Potassium chloride)

Materials to avoid	Strong oxidizing agents, Strong acids
Hazardous	Not available
Decomposition Products	

12. Toxicological Information

Routes of Entry: Absorbed through skin. Eye contact.

Toxicity to Animals: Acute oral toxicity (LD50): 6726 mg/kg (Mouse) (Calculated value for the mixture).

Chronic Effects on Humans: MUTAGENIC EFFECTS: Mutagenic for mammalian somatic cells. [Potassium chloride]. Mutagenic for bacteria and/or yeast. [Potassium chloride]. Contains material which may cause damage to the following organs: blood, cardiovascular system.

Other Toxic Effects on Humans: Hazardous in case of skin contact (irritant). Slightly hazardous in case of skin contact (permeator), of ingestion, of inhalation.

Special Remarks on Toxicity to Animals: Not available.

Special Remarks on Chronic Effects on Humans: May affect genetic material. Passes through the placental barrier in animal. (Potassium chloride)

Special Remarks on other Toxic Effects on Humans:

Acute Potential Health Effects: Skin: May cause skin irritation Eye: Dust may cause eye irritation. Inhalation: Dust may cause respiratory tract irritation. Low hazard for usual industrial handling. Ingestion: May affect behaviour (coma, change in motor activity, listlessness, vertigo, mental confusion, paresthesias, general weakness, flaccid paralysis), metabolism, blood (change in clotting factor, electrolytic imbalance), cardiovascular (hypotension, circulatory disturbances, cardiac arrhythmias, heart block), and respiratory, gastrointestinal (irritation of GI tract, nausea, vomiting, diarrhoea, abdominal discomfort, purging), and urinary (impairment of renal function) systems. Acute potassium intoxication by mouth is rare because large single doses usually induce vomiting, and because in the absence of pre-existing kidney damage potassium is rapidly excreted. Maximal nontoxic oral dose of KCl in man varies from 0.2g to 1 g of potassium/kg/day depending upon efficiency of individual excretory mechanism; lower doses sometimes cause impairment of renal function as shown by reduced inulin, and urea clearance. Chronic Potential Health Effects: May affect blood and cardiovascular system. (Potassium chloride)

13. Ecological Information

Ecotoxicity: Not available.

BOD5 and COD: Not available.

Products of Biodegradation: Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation: The product itself and its products of degradation are not toxic.

Special Remarks on the Products of Biodegradation: Not available

14. Disposal Considerations

DO NOT DUMP INTO ANY SEWERS, ON THE GROUND, OR INTO ANY BODY OF WATER. All disposal methods must be in compliance with all Federal, State/Provincial and local laws and regulations.

For unused and uncontaminated product, contact a licensed professional waste disposal service.

Dispose of empty containers as unused product.

Product or containers must not be disposed together with household garbage.

15. Transport Information

NOT CLASSIFIED AS A DANGEROUS GOOD ACCORDING TO LAND TRANSPORT RULE: DANGEROUS GOODS 2005: NZS 5433:2007, UN, IMDG OR IATA

Road, Rail, Sea and Air Transport - ADR, ADN, DOT, IMDG, IATA

UN Number	None Allocated
Proper Shipping name	None Allocated
DG Class	None Allocated
Packing Group	None Allocated
HAZCHEM code	None Allocated
IMO/IMDG class	None Allocated
ICAO/IATA class	None Allocated
EMS code	None Allocated
Marine pollutant	None Allocated

16. Regulatory Information

New Zealand:

Hazardous Substances and New Organisms (HSNO) Act 1996: Registered
Approval Number: HSR006659

Other Countries:

Australian Inventory of Chemical Substances (AICS): Substance is listed.

USA: Not considered to be hazardous by OSHA

European Chemicals Agency: Substance is listed as non-hazardous according to REACH

17. Other Information

SDS Date of preparation 26th October 2016
SDS Review 21st February 2019
SDS Review 3rd April 2024

*The information provided in this safety data sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed **only** as guide and is not to be considered a guarantee of safety. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in text.*