

## 1. Version History

Version	Date	History
1-26102016	26 <sup>th</sup> October 2016	Initial release
2-21022019	21 <sup>st</sup> February 2019	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 Symbols



### 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.

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

<b>Inhalation</b>	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
<b>Skin Contact</b>	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.
<b>Eye contact</b>	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.
<b>Ingestion</b>	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.
<b>Treatment</b>	Physician should treat symptomatically.

#### 6. Fire-fighting Measures

<b>Flammability</b>	Non Flammable.
<b>Extinguishing Media</b>	Dry chemical powder. Water spray. Carbon dioxide, dry chemical powder, or appropriate foam.
<b>Extinguishing Media to Avoid</b>	None
<b>Hazardous Combustion Products</b>	Hazardous decomposition products formed under fire conditions- Hydrogen chloride gas, Potassium oxides. May result in explosion with potassium permanganate and sulfuric acid. (Potassium chloride)
<b>Fire Fighting Procedures</b>	Evacuate area and contact emergency services. Remain upwind and notify those downwind of hazard. Prevent contamination of drains or waterways.
<b>Fire-fighting equipment</b>	Wear self-contained breathing apparatus for fire-fighting if necessary
<b>HAZCHEM</b>	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

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

## 11. Stability and Reactivity

**Chemical Stability** Stable under recommended storage conditions.

**Conditions to avoid** Hygroscopic. Incompatible with  $\text{KMnO}_4$ ,  $\text{H}_2\text{SO}_4$ ,  $\text{BrF}_3$ , and  $\text{BrCl}_3$ . May react violently with  $\text{BrF}_3$ . (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**

<b>UN Number</b>	None Allocated
<b>Proper Shipping name</b>	None Allocated
<b>DG Class</b>	None Allocated
<b>Packing Group</b>	None Allocated
<b>HAZCHEM code</b>	None Allocated
<b>IMO/IMDG class</b>	None Allocated
<b>ICAO/IATA class</b>	None Allocated
<b>EMS code</b>	None Allocated
<b>Marine pollutant</b>	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 26<sup>th</sup> October 2016

SDS Review 21<sup>st</sup> February 2019

*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.*