

# pH probe KCl Storage Solution

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## 1. Product and Company Identification

Product Name pH probe KCI 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** National Poisons Centre

numbers

Urgent

0800 764 766 (0800 POISON) Other countries 0064 3 764766

Non Urgent 0064 3 479 7248

New Zealand Fire Service- 111

#### 2. 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.

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.

**Hazard Symbols** 



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.

## 3. Composition/Information on Ingredients

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

#### 4. 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.

## 5. Fire-fighting Measures

Flammability Non Flammable.

**Extinguishing** Dry chemical powder. Water spray. Carbon dioxide, dry chemical powder, or appropriate

Media foam. Extinguishing None

Media to Avoid

Hazardous Hazardous decomposition products formed under fire conditions- Hydrogen chloride gas,

**Combustion** Potassium oxides.

**Products** May result in explosion with potassium permanganate and sulfuric acid. (Potassium

chloride)

Fire Fighting Evacuate area and contact emergency services. Remain upwind and notify those downwind

**Procedures** of hazard.

Prevent contamination of drains or waterways.

Fire-fighting equipment

Wear self-contained breathing apparatus for fire-fighting if necessary

HAZCHEM Not Specified

#### 6. 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.

## 7. 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.

## 8. Exposure Controls / Personal Protection

Workplace

None available

**Exposure Standards** 

Engineering controls

Emergency eye wash fountains and safety showers should be available in the immediate

vicinity of use/handling. Provide exhaust ventilation.

Personal

Splash goggles. Lab coat. Gloves.

Protection

# 9. 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	

# 10. Stability and Reactivity

Chemical Stability

Stable under recommended storage conditions.

Conditions to avoid

Hygroscopic. Incompatible with KMnO<sub>4</sub>, H<sub>2</sub>SO<sub>4</sub>, BrF<sub>3</sub>, and BrCl<sub>3</sub>. May react violently

with BrF<sub>3</sub>. (Potassium chloride)

Materials to avoid

Strong oxidizing agents, Strong acids

Hazardous

Not available

Decomposition

**Products** 

### 11. 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 KCI 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)

#### 12. 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

# 13. 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.

# 14. 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

# 15. 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

## 16. Other Information

SDS Date of preparation 26 October 2016

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.