

**Buffer pH 10****SECTION 1. IDENTIFICATION**

<b>Product Identifier</b>	Buffer pH 10
<b>Other Means of Identification</b>	None
<b>Product Code(s)</b>	BU1100
<b>Product Family</b>	Inorganic solution
<b>Recommended Use</b>	Laboratory.
<b>Restrictions on Use</b>	None known.
<b>Supplier Identifier</b>	Alphachem Limited, 2485 Milltower Court, Mississauga, Ontario, L5N 5Z6, (905) 821-2995
<b>Emergency Phone No.</b>	CANUTEC CANADA, 613-996-6666, 24 Hours
<b>SDS No.</b>	0050

**SECTION 2. HAZARD IDENTIFICATION****Classification**

Not classified under any hazard class.

**Label Elements**

Not applicable

**Other Hazards**

None known.

**SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Mixture:

<b>Chemical Name</b>	<b>CAS No.</b>	<b>%</b>	<b>Other Identifiers</b>
Water	7732-18-5	<95 - 99	Dihydrogen Oxide
Acetic acid, (ethylenedinitrilo)tetra-, disodium salt, dihydrate	6381-92-6	<1.0 - 1.0	EDTA
Potassium carbonate	584-08-7	<1 - 0.60	Potash, Pearl Ash
Potassium hydroxide	1310-58-3	<0.5 - 0.50	Potassium Hydrate
Potassium Borate	12228-88-5	<0.50	Potassium Tetraborate

**SECTION 4. FIRST-AID MEASURES****First-aid Measures****Inhalation**

Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. Get medical aid if cough or other symptoms appear.

**Skin Contact**

Immediately rinse with lukewarm, gently flowing water for 15-20 minutes. If skin irritation occurs, get medical advice or attention.

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### **Eye Contact**

Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. If irritation develops, get medical aid. Immediately call a Poison Centre or doctor.

### **Ingestion**

Never give anything by mouth if person is rapidly losing consciousness, or is unconscious or convulsing. Do not induce vomiting. Rinse mouth with water. Immediately call a Poison Centre or doctor.

### **First-aid Comments**

If exposed or concerned, get medical advice or attention.

### **Most Important Symptoms and Effects, Acute and Delayed**

None known.

### **Immediate Medical Attention and Special Treatment**

#### **Special Instructions**

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

## **SECTION 5. FIRE-FIGHTING MEASURES**

### **Extinguishing Media**

#### **Suitable Extinguishing Media**

Not combustible. Use extinguishing agent suitable for surrounding fire.

#### **Unsuitable Extinguishing Media**

No information available.

### **Specific Hazards Arising from the Product**

None known.

None known.

### **Special Protective Equipment and Precautions for Fire-fighters**

Fight fire from a safe distance or a protected location. Approach fire from upwind to avoid hazardous vapours or gases. For a massive fire, immediately evacuate the area and use unmanned hose holder or monitor nozzles. Dike and recover contaminated water for appropriate disposal.

Fire-fighters may enter the area if positive pressure SCBA and full Bunker Gear is worn.

## **SECTION 6. ACCIDENTAL RELEASE MEASURES**

### **Personal Precautions, Protective Equipment, and Emergency Procedures**

Do not touch damaged containers or spilled product unless wearing appropriate protective equipment. Increase ventilation to area or move leaking container to a well-ventilated and secure area.

### **Environmental Precautions**

If the spill is inside a building, prevent product from entering drains, ventilation systems and confined areas. Do not allow into any sewer, on the ground or into any waterway.

### **Methods and Materials for Containment and Cleaning Up**

Contain and soak up spill with absorbent that does not react with spilled product. Place used absorbent into suitable, covered, labelled containers for disposal.

## **SECTION 7. HANDLING AND STORAGE**

### **Precautions for Safe Handling**

Wear personal protective equipment to avoid direct contact with this chemical. Do not get in eyes, on skin or on clothing. Only use where there is adequate ventilation. Keep containers tightly closed when not in use or empty.

### **Conditions for Safe Storage**

Store in a closed container. Store in an area that is: cool, dry, well-ventilated.

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## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control Parameters

Chemical Name	ACGIH TLV®		OSHA PEL		AIHA WEEL	
	TWA	STEL	TWA	Ceiling	8-hr TWA	TWA
Potassium carbonate	Not established		Not established			
Potassium hydroxide				2 mg/m <sup>3</sup>		
Water	Not established		Not established			
Acetic acid, (ethylenedinitrilo)tetra-, disodium salt, dihydrate	Not established	Not established				

### Appropriate Engineering Controls

Use local exhaust ventilation and enclosure, if necessary, to control amount in the air. Provide eyewash and safety shower if contact or splash hazard exists.

### Individual Protection Measures

#### Eye/Face Protection

Wear chemical safety goggles and face shield when contact is possible.

#### Skin Protection

Wear chemical protective clothing e.g. gloves, aprons, boots.

#### Respiratory Protection

Not normally required if product is used as directed. For non-routine or emergency situations: wear a NIOSH approved air-purifying respirator with an appropriate cartridge.

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

### Basic Physical and Chemical Properties

<b>Appearance</b>	Clear colourless liquid. Particle Size: Not available
<b>Odour</b>	Odourless
<b>Odour Threshold</b>	Not available
<b>pH</b>	10.0
<b>Melting Point/Freezing Point</b>	Not available (melting); Not available (freezing)
<b>Initial Boiling Point/Range</b>	Not available
<b>Flash Point</b>	Not available
<b>Evaporation Rate</b>	Not available
<b>Flammability (solid, gas)</b>	Not available
<b>Upper/Lower Flammability or Explosive Limit</b>	Not available (upper); Not available (lower)
<b>Vapour Pressure</b>	Not available
<b>Vapour Density (air = 1)</b>	Not available
<b>Relative Density (water = 1)</b>	Not available
<b>Solubility</b>	Soluble in water; Not available (in other liquids)
<b>Partition Coefficient, n-Octanol/Water (Log Kow)</b>	Not available
<b>Auto-ignition Temperature</b>	Not available
<b>Decomposition Temperature</b>	Not available
<b>Viscosity</b>	Not available (kinematic); Not available (dynamic)
<b>Other Information</b>	
<b>Physical State</b>	Liquid

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<b>Molecular Formula</b>	Not applicable
<b>Molecular Weight</b>	Not applicable
<b>Bulk Density</b>	Not available
<b>Surface Tension</b>	Not available
<b>Vapour Pressure at 50 deg C</b>	Not available
<b>Saturated Vapour Concentration</b>	Not available

## SECTION 10. STABILITY AND REACTIVITY

### Reactivity

None known.

### Chemical Stability

Normally stable.

### Possibility of Hazardous Reactions

None known.

### Conditions to Avoid

None known.

### Incompatible Materials

None known.

### Hazardous Decomposition Products

None known.

## SECTION 11. TOXICOLOGICAL INFORMATION

### Likely Routes of Exposure

Inhalation; skin contact; eye contact; ingestion.

### Acute Toxicity

Chemical Name	LC50	LD50 (oral)	LD50 (dermal)
Potassium carbonate		1870 mg/kg (rat)	
Potassium hydroxide	Not available	273 mg/kg (rat)	> 1260 mg/kg (rabbit)
Water	Not available	> 89840 mg/kg (rat)	Not available
Acetic acid, (ethylenedinitrilo)tetra-, disodium salt, dihydrate	2000 mg/kg (rat)		

### Skin Corrosion/Irritation

No information was located.

### Serious Eye Damage/Irritation

No information was located.

### STOT (Specific Target Organ Toxicity) - Single Exposure

#### Inhalation

No information was located.

#### Ingestion

No information was located.

### Aspiration Hazard

No information was located.

### STOT (Specific Target Organ Toxicity) - Repeated Exposure

No information was located.

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## Respiratory and/or Skin Sensitization

No information was located.

## Carcinogenicity

Chemical Name	IARC	ACGIH®	NTP	OSHA
Potassium carbonate	Not Listed	Not Listed	Not Listed	Not Listed
Potassium hydroxide	Not Listed	Not Listed	Not Listed	Not Listed
Water	Not Listed	Not Listed	Not Listed	Not Listed
Acetic acid, (ethylenedinitrilo)tetra-, disodium salt, dihydrate	Not Listed	Not Listed	Not Listed	Not Listed

Key to Abbreviations

ACGIH® = American Conference of Governmental Industrial Hygienists. IARC = International Agency for Research on Cancer. NTP = National Toxicology Program. OSHA = US Occupational Safety and Health Administration.

## Reproductive Toxicity

### Development of Offspring

No information was located.

### Sexual Function and Fertility

No information was located.

### Effects on or via Lactation

No information was located.

## Germ Cell Mutagenicity

No information was located.

## Interactive Effects

No information was located.

## SECTION 12. ECOLOGICAL INFORMATION

This section is not required by WHMIS. This section is not required by OSHA HCS 2012.

### Ecotoxicity

No information was located.

## SECTION 13. DISPOSAL CONSIDERATIONS

### Disposal Methods

This product is a non-hazardous waste. Contact local environmental authorities for approved disposal or recycling methods in your jurisdiction. Treat waste in an approved waste disposal facility.

## SECTION 14. TRANSPORT INFORMATION

Not regulated under Canadian TDG regulations. Not regulated under US DOT Regulations. Not regulated under IATA Regulations.

**Special Precautions** Not applicable

**Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code**

Not applicable

## SECTION 15. REGULATORY INFORMATION

### Safety, Health and Environmental Regulations

#### Canada

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**Domestic Substances List (DSL) / Non-Domestic Substances List (NDSL)**

Listed on the DSL.

**USA**

**Toxic Substances Control Act (TSCA) Section 8(b)**

Listed on the TSCA Inventory.

**SECTION 16. OTHER INFORMATION**

**SDS Prepared By** Alphachem Limited

**Phone No.** (905)-821-2995

**Date of Preparation** December 12, 2016

**Date of Last Revision** December 21, 2016

**References** CHEMINFO database. Canadian Centre for Occupational Health and Safety (CCOHS).

**Disclaimer** This document is offered only as a guide in the safe handling of the above product, and has been prepared from the best information currently available. It is not intended to be all-inclusive and the conditions of use may involve other additional considerations. Since Alphachem Limited cannot anticipate or control the conditions under which the product may be used, it will not be liable for any claims, damages or losses which may result from the use or reliance on any information herein.