Buffer pH 13

SECTION 1. IDENTIFICATION

Product Identifier	Buffer pH 13
Other Means of Identification	None
Product Code(s)	ZLC12565
Product Family	Inorganic solution
Recommended Use	Laboratory and industrial use.
Restrictions on Use	None known.
Supplier Identifier	Alphachem Limited, 2485 Milltower Court, Mississauga, Ontario, L5N 5Z6, (905) 821-2995
Emergency Phone No.	CANUTEC CANADA, 613-996-6666, 24 Hours
SDS No.	0225

SECTION 2. HAZARD IDENTIFICATION

Classified according to Canada's Hazardous Products Regulations (WHMIS 2015) and the US Hazard Communication Standard (HCS 2012).

Classification

Skin corrosion - Category 1; Serious eye damage - Category 1

Label Elements

Signal Word:

Danger

Hazard Statement(s):
Causes severe skin burns and eye damage.

Precautionary Statement(s):
Do not breathe dust/fume/gas/mist/vapours/spray.
Wash hands thoroughly after handling.
Wear protective gloves/protective clothing/eye protection/face protection.
Avoid release to the environment.
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
IF ON SKIN: Wash with plenty of water.
Immediately call a POISON CENTRE or doctor.

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

Other Hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixture:

Chemical Name	CAS No.	%	Other Identifiers
Water	7732-18-5	99.24	Dihydrogen Oxide
Potassium chloride	7447-40-7	0.37	Potassium Monochloride, Potassium Muriate
Sodium hydroxide	1310-73-2	0.34	Sodium Hydrate, Caustic Soda
Thymol	89-83-8	0.05	2-Isopropyl-5-Methylphenol, m-Thymol

SECTION 4. FIRST-AID MEASURES

First-aid Measures

Inhalation

Remove source of exposure or move to fresh air. Move to fresh air. Keep at rest in a position comfortable for breathing. If breathing is difficult, trained personnel should administer emergency oxygen if advised to do so by Poison Centre or doctor.

Skin Contact

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

Eye Contact

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately rinse the contaminated eye(s) with lukewarm, gently flowing water for 15-20 minutes, while holding the eyelid(s) open. Immediately call a Poison Centre or doctor.

Ingestion

Do not induce vomiting. Rinse mouth with water. If vomiting occurs naturally, lie on your side in the recovery position. Rinse mouth with water again. Avoid mouth-to-mouth contact by using a barrier device.

First-aid Comments

Some of the first-aid procedures recommended here require advanced first-aid training. If exposed or concerned, get medical advice or attention.

Most Important Symptoms and Effects, Acute and Delayed

Contact causes severe burns with redness, swelling, pain and blurred vision. Permanent damage including blindness can result. May burn the skin. Permanent scarring may result.

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

Carbon dioxide, dry chemical powder, appropriate foam, water spray or fog.

Unsuitable Extinguishing Media

Do not use a solid (straight) water stream as it may scatter and spread fire.

Specific Hazards Arising from the Product

Closed containers may rupture violently when heated releasing contents.
In a fire, the following hazardous materials may be generated: very toxic carbon monoxide, carbon dioxide.

Special Protective Equipment and Precautions for Fire-fighters

Approach fire from upwind to avoid hazardous vapours or gases. Fight fire from a protected, explosion-resistant location or maximum distance possible. Knock down vapours or gases with water fog or fine water spray.
Fire-fighters may enter the area if positive pressure SCBA and full Bunker Gear is worn. Chemical protective clothing (e.g. chemical splash suit) and positive pressure SCBA may be necessary.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment, and Emergency Procedures

Use the personal protective equipment recommended in Section 8 of this safety data sheet. Evacuate the area immediately. Isolate the hazard area. Keep out unnecessary and unprotected personnel. Increase ventilation to area or move leaking container to a well-ventilated and secure area. Remove or isolate incompatible materials as well as other hazardous materials. Do not touch damaged containers or spilled product unless wearing appropriate protective equipment.

Environmental Precautions

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. Prevent accidental contact with incompatible chemicals. Only use where there is adequate ventilation. Do not get in eyes, on skin or on clothing. Wash hands thoroughly after handling this material.

Conditions for Safe Storage

Store in an area that is: dry, well-ventilated. Store in a closed container. Keep amount in storage to a minimum. Comply with all applicable health and safety regulations, fire and building codes.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

	ACGIH TLV®		OSHA PEL		AIHA WEEL	
Chemical Name	**TWA**	**STEL**	**TWA**	**Ceiling**	**8-hr TWA**	**TWA**
Thymol	Not established		Not established			
Sodium hydroxide		2 mg/m3	2 mg/m3			
Potassium chloride	Not established		Not established			
Water	Not established		Not established			

ACGIH® = American Conference of Governmental Industrial Hygienists.
TWA = Time-Weighted Average.
TLV® = Threshold Limit Value.
STEL = Short-term Exposure Limit.
C = Ceiling limit.

OSHA = US Occupational Safety and Health Administration.
PEL = Permissible Exposure Limits.

Appropriate Engineering Controls

General ventilation is usually adequate. Use local exhaust ventilation, if general ventilation is not adequate 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 usually required when working with small quantities. 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

Appearance	Colourless liquid.
Odour	Not available
Odour Threshold	Not available
pH	13
Melting Point/Freezing Point	Not available (melting); Not available (freezing)
Initial Boiling Point/Range	Not available
Flash Point	Not available
Evaporation Rate	Not available
Flammability (solid, gas)	Not available
Upper/Lower Flammability or Explosive Limit	Not available (upper); Not available (lower)
Vapour Pressure	Not available
Vapour Density (air = 1)	Not available
Relative Density (water = 1)	Not available
Solubility	Soluble in water; Not available (in other liquids)
Partition Coefficient, n-Octanol/Water (Log Kow)	Not available
Auto-ignition Temperature	Not available
Decomposition Temperature	Not available
Viscosity	Not available (kinematic); Not available (dynamic)

Other Information

Physical State	Liquid

SECTION 10. STABILITY AND REACTIVITY

Reactivity

Not reactive under normal conditions of use.

Chemical Stability

Normally stable.

Possibility of Hazardous Reactions

None known.

Conditions to Avoid

Incompatible materials. High temperatures. Low temperatures.

Incompatible Materials

Strong oxidizing agents (e.g. perchloric acid), strong acids (e.g. hydrochloric acid).

Hazardous Decomposition Products

Corrosive phosphorous oxides; corrosive phosgene; very toxic carbon monoxide, carbon dioxide.

SECTION 11. TOXICOLOGICAL INFORMATION

Likely Routes of Exposure

Inhalation; skin contact; eye contact; ingestion.

Acute Toxicity

Chemical Name	LC50	LD50 (oral)	LD50 (dermal)
Thymol		980 mg/kg (rat)	> 2000 mg/kg (rat)
Sodium hydroxide	Not available	Not available	1350 mg/kg (rabbit)
Potassium chloride		~ 2430 mg/kg (rat)	
Water	Not available	> 89840 mg/kg (rat)	Not available

Skin Corrosion/Irritation

Contact can cause pain, redness, burns, and blistering. Permanent scarring can result.

Serious Eye Damage/Irritation

Contact causes severe burns with redness, swelling, pain and blurred vision. Permanent damage including blindness can result.

STOT (Specific Target Organ Toxicity) - Single Exposure

Inhalation

No information was located.

Skin Absorption

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.

Respiratory and/or Skin Sensitization

No information was located.

Carcinogenicity

Chemical Name	IARC	ACGIH®	NTP	OSHA
Thymol	Not evaluated	Not Listed	Not Listed	
Sodium hydroxide	Not Listed	Not Listed	Not Listed	Not Listed
Potassium chloride	Not Listed	Not Listed		
Water	Not Listed	Not Listed	Not Listed	Not Listed

Key to Abbreviations

IARC = International Agency for Research on Cancer.
ACGIH® = American Conference of Governmental Industrial Hygienists.
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.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal Methods

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

SECTION 14. TRANSPORT INFORMATION

Not regulated under US DOT Regulations. Not regulated under IATA Regulations.

Environmental Hazards	Not applicable
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

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

Listed on the DSL.

SECTION 16. OTHER INFORMATION

SDS Prepared By	Alphachem Limited
Phone No.	(905)-821-2995
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