Safety Data Sheet



Bluelab Limited, 43 Burrows Street, PO Box 949, Tauranga, New Zealand ph +64 7 578 0849 fax +64 7 578 0847 www.getbluelab.com

# 1. Identification of Substance & Company

**Product** 

**Product name** pH 7.0 Calibration Solution

Other names pH 7.0 Calibration Solution 20mL sachet

pH 7.0 Calibration Solution 250mL bottle pH 7.0 Calibration Solution 500mL bottle

Product code Not assigned

**HSNO approval** Not applicable – non hazardous

UN number Not assigned Packaging group Not applicable

Hazchem code 1T

Poison schedule Not applicable Uses Laboratory agent

**Company Details** 

Company Bluelab Corporation Limited

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 www.getbluelab.com

### 2. Hazard Identification

### **Hazard Classifications**

This product has been assessed as non hazardous according to the criteria of the GHS.

See section 15 – Regulatory Information for further information.

No risk and safety phrases are known to apply.

### **SYMBOLS**

none

#### **Other Classifications**

There are no other classifications that are known to apply.

# 3. Composition / Information on Ingredients

Component	CAS/ Identification	Class for ingredient(s)	Conc (% w/w)
Orthophosphate salts	Proprietary	6.1D (oral), 6.3B, 6.4A, 9.3C	<10%
Preservative	Proprietary	6.1D, 8.2C, 8.3A, 9.1D, 9.3C	<1%
Colouring agent	Proprietary	Non hazardous	<1%
Water	7732-18-5	non hazardous	80 – 100%

This is a commercial product whose exact ratio of components may vary. Trace quantities of impurities are also likely.

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### 4. First Aid

#### **General Information**

You should seek medical advice, if you feel that you may have been poisoned, burned or irritated by this product.

If medical advice is needed, have this MSDS, product container or label at hand.

**Recommended first aid** Ready access to running water is required. Accessible eyewash is recommended.

facilities Emergency shower, hand wash, soap. CPR training, oxygen mask.

**Exposure** 

Swallowed IF SWALLOWED: Do NOT induce vomiting. Rinse mouth. Contact a doctor if you feel

unwell.

Eye contact IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Apply continuous irrigation with water for at least 15 minutes

holding eyelids apart.

**Skin contact** If skin irritation occurs: get medical advice/attention.

**Inhaled** IF INHALED: If breathing is difficult, remove to fresh air and keep at rest in a position

comfortable for breathing. If patient is unconscious, place in the recovery position (on the side) for transport and contact a doctor. If experiencing respiratory symptoms: Call a

POISON CENTER or doctor/physician.

# Advice to Doctor Treat symptomatically

## 5. Firefighting Measures

Fire and explosion hazards:

Suitable extinguishing

substances:

Unsuitable extinguishing

substances:

Products of combustion:

Protective equipment:

Hazchem code:

There are no specific risks for fire/explosion for this chemical. It is non-flammable.

Carbon dioxide, extinguishing powder, foam, fog sprays, water jets.

Unknown.

Carbon dioxide, and if combustion is incomplete, carbon monoxide and smoke. Water.

May form toxic mixtures in air and may accumulate in sumps, pits and other low-lying

spaces, forming potentially explosive mixtures.

Self-contained breathing apparatus. Safety boots, non-flammable overalls, gloves, hat

and eye protection.

# 6. Accidental Release Measures

Emergency procedures In the event of spillage alert the fire brigade to location and give brief description of

nazard.

Wear protective equipment to prevent skin, eye and respiratory exposure.

Clear area of any unprotected personnel. Contain using sand, earth or vermiculite.

Prevent by whatever means possible any spillage from entering drains, sewers, or water

courses.

clean-up of spills, as they may create fire or environmental hazard. Collect and seal in properly labelled containers or drums for disposal. If contamination of crops, sewers or

waterways has occurred advise local emergency services.

**Disposal** Mop up and collect recoverable material into labelled containers for recycling or salvage.

Recycle containers wherever possible. This material may be suitable for approved

landfill. Dispose of only in accord with all regulations.

Precautions Wear protective equipment to prevent skin and eye contamination and the inhalation of

vapours. Work up wind or increase ventilation.

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## 7. Storage & Handling

**Storage** Avoid storage of harmful substances with food. Store out of reach of children.

Containers should be kept closed in order to minimise contamination. Keep from extreme heat and open flames. Avoid contact with incompatible substances as listed in

Section 10.

**Handling** Keep exposure to a minimum, and minimise the quantities kept in work areas. See

section 8 with regard to personal protective equipment requirements. Avoid skin and eye

contact and inhalation of vapour, mist or aerosols.

### 8. Exposure Controls / Personal Protective Equipment

#### **Workplace Exposure Standards**

A workplace exposure standard (WES) has not been established by the NZ Department of Labour for this product. There is a general limit of 10mg/m<sup>3</sup> for dusts and mists when limits have not otherwise been established.

NZ WorkplaceIngredientWES-TWAWES-STELExposure StdsorthophosphateData unavailableData unavailable(OSH 2002)IndicatorData unavailableData unavailableColouring agentData unavailableData unavailable

#### **Engineering Controls**

In industrial situations, it is expected that employee exposure to hazardous substances will be controlled to a level as far below the WES as practicable by applying the hierarchy of control required by the Health and Safety in Employment Act 1992 (HSE). Exposure can be reduced by process modification, use of local exhaust ventilation, capturing substances at the source, or other methods. If you believe air borne concentrations of mists, dusts or vapours are high, you are advised to modify processes or increase ventilation.

#### **Personal Protective Equipment**

Eyes Protective eyewear is not normally necessary when using this product. However, it

always prudent to use protective eyewear if splashes are likely.

**Skin** If discomfort is felt (e.g., if pre-existing conditions exist, such as dermatitis, cuts or

sensitive skin), gloves may be helpful. If you suffer from dermatitis type skin conditions,

use gloves.

Respiratory A respirator when airborne concentrations approach the WES (section 8) should be used.

If using a respirator, ensure that the cartridges are correct for the potential air

contamination and are in good working order.

## **WES Additional Information**

Not applicable

## 9. Physical & Chemical Properties

Appearance Yellow coloured liquid

Odour
pH 7.0 @ 25°C
Vapour pressure
Viscocity
Boiling point
Volatile materials

No odour
7.0 @ 25°C
Not available
Like water
~100°C
Not applicable

Freezing / melting point Not available

**Solubility** Completely water soluble

Specific gravity / density
Flash point

Danger of explosion
Auto-ignition temperature
Upper and lower flammable

~1.0 g/mL
Non flammable
Non flammable

limits

Corrosiveness Non corrosive to metals

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## 10. Stability & Reactivity

Stability This product is unlikely to react or decompose under normal storage conditions. This

product will not undergo polymerisation reactions.

Conditions to be avoided Containers should be kept closed in order to avoid contamination. Keep from extreme

heat and open flames.

Incompatible groups Strong oxidisers, strong acids, strong bases

**Substance Specific** There are no specific incompatibilities for this chemical.

Incompatibility

Hazardous decomposition

Hazardous reactions

products

Carbon dioxide, and if combustion is incomplete, carbon monoxide and smoke. Nitrogen, and under some circumstances, oxides of nitrogen, water.

No specific hazards.

## 11. Toxicological Information

#### Summary

Chronic

No specific data is available for this product. Where available, toxicological data has been researched and data for the mixture calculated. The results of these calculations are presented below. The product is considered to have the following

**Supporting Data** 

Acute Oral No data for mixture is available. Using LD50's for ingredients, the calculated LD50 (oral,

rat) for the mixture is > 5,000 mg/kg. Data considered includes:

Potassium dihydrogen orthophosphate: 1700mg/kg (rat), Di-sodium hydrogen orthophosphate: >5000mg/kg, Indicator: 880 mg/kg (guinea pig), Colouring agent: no

Dermal No data for mixture is available. Using LD<sub>50</sub>'s for ingredients, the estimated LD<sub>50</sub> (dermal,

> rat) for the mixture is >2,000 mg/kg. data considered includes: Potassium dihydrogen orthophosphate: no data, Di-sodium hydrogen orthophosphate: no data, Indicator: no

data, Colouring agent: no data.

Inhaled No data for mixture is available. Using LC<sub>50</sub>'s for ingredients, the estimated LC<sub>50</sub>

(inhalation, rat) for the mixture is >5,000 ppm. Data considered includes:

Potassium dihydrogen orthophosphate: no data, Di-sodium hydrogen orthophosphate: no

data, Indicator: no data, Colouring agent: no data.

Eye The mixture is not considered to be irritating to the eye, because none the ingredients,

present at >10% is considered to be eye irritants in more concentrated form.

Skin The mixture is not considered to be irritating to the skin, because none of the ingredients

present at >10% are considered to be skin irritants in more concentrated form. The mixture is not considered to be a sensitizer, because none of the ingredients present

in greater than 0.1% are known to be sensitizers. Mutagenicity

No data for mixture is available. No ingredient present at concentrations > 0.1% is

considered a mutagen.

Carcinogenicity No data for mixture is available. No ingredient present at concentrations > 0.1% is

considered a carcinogen.

Reproductive / No data for mixture is available. No ingredient present at concentrations > 0.1% is **Developmental** considered a reproductive or developmental toxicant or have any effects on or via

**Systemic** The mixture is not considered to be a target organ toxicant, because none of the

ingredients present in greater than 1% are suspected to be a target organ toxicant.

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Aggravation of None known.

existing conditions

Sensitisation

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## 12. Ecological Data

#### Summary

No specific data is available for this product. Where available, ecotoxicological data has been researched and data for the mixture calculated. The results of these calculations are presented below. The product is considered to have the following ecotoxicity groups:

**Supporting Data** 

Aquatic No data for mixture is available. Using EC<sub>50</sub>'s for ingredients, the estimated EC<sub>50</sub> for the

mixture is > 100 mg/L. Data considered includes: Potassium dihydrogen

orthophosphate: no data, Di-sodium hydrogen orthophosphate: no data, Indicator: no

data, Colouring agent: no data.

**Bioaccumulation** This product is biodegradable.

**Degradability** It will not accumulate in the soil or water or cause long term problems.

Soil No data available for the mixture. This product is not classified as ecotoxic in the soil

environment. The soil toxicity value for the mixture is estimated to be  $\geq$  100 mg/kg. This product is not considered harmful to terrestrial vertebrates. No LC<sub>50</sub> (diet) data for

ingredients are available and the classification is based on the  $\ensuremath{\mathsf{LD}}_{50}$  (oral) – see section

11 – oral toxicity.

Terrestrial invertebrate

**Biocidal** 

Terrestrial vertebrate

The mixture is not considered harmful to terrestrial invertebrates. Not applicable

Environmental effect levels: Ingredients

**EEL** Data unavailable

Potassium dihydrogen orthophosphate Di-sodium hydrogen orthophosphate Indicator Colouring agent

Data unavailable Data unavailable Data unavailable

13. Disposal Considerations

**Restrictions** There are no product-specific restrictions, however, local council and resource consent

conditions may apply, including requirements of trade waste consents.

**Disposal method**Disposal of this product must comply with the requirements of the Resource Management

Act for which approval should be sought from the Regional Authority. The substance must be treated and therefore rendered non-hazardous before discharge to the

environment.

Contaminated packaging Rinse containers with water before disposal. Preferably re-cycle container, otherwise

send to landfill or similar.

### 14. Transport Information

Not regulated for transport of dangerous goods: UN, IATA, IMDG.

UN number:Not assignedProper shipping name:Not applicableClass(es):Not applicablePacking group:Not applicable

Precautions: Not applicable Hazchem code: 1T

### 15. Regulatory Information

#### **NEW ZEALAND:**

Not considered a hazardous substance according to the criteria of the New Zealand Hazardous Substances and New Organisms Act (HSNO) legislation. No hazard and precautionary phrases apply.

### Specific Workplace Controls (as per HSNO approval referenced to Controls Matrix)

Key workplace requirements are:

MSDS Not required
Labelling Not required.
Emergency plan Not required.
Approved handler/Tracking Not required.
Signage Not required.
Test certificate Not required.

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#### Other Legislation

AUSTRALIA:

Non-hazardous substance. Non dangerous goods according to the criteria of NOHSC and the ADG code.

Not considered a hazardous substance according to OSHA 29 CFR 1910.1200.

Not considered a dangerous substance according to directive 1999/45/EC and its amendments. The ingredients of this substance are not listed in the Annex I of Regulation (EC) No 689/2008.

### 16. Other Information

**Abbreviations** 

**ADG** Australian Dangerous Goods code (Australia)

**Approval Code** Not applicable.

**CAS Number** Unique Chemical Abstracts Service Registry Number

**Controls Matrix** List of default controls linking regulation numbers to Matrix code (e.g. T1, I16). Ecotoxic Concentration 50% – concentration in water which is fatal to 50% of a test EC<sub>50</sub>

population (e.g. daphnia, fish species). **ERMA Environmental Risk Management Authority** 

Emergency action code of numbers and letters that provide information to emergency **HAZCHEM Code** 

services, especially fire fighters

**HSNO** Hazardous Substances and New Organisms (Act and Regulations)

**IARC** International Agency for Research on Cancer **IATA** International Air Transport Association **IMDG** International Maritime Dangerous Goods

Lethal Dose 50% – dose which is fatal to 50% of a test population (usually rats).  $LD_{50}$ 

Lethal Concentration 50% - concentration in air which is fatal to 50% of a test population LC<sub>50</sub>

(usually rats).

**MSDS** Material Safety Data Sheet (or Safety Data Sheet)

**NOHSC** National Occupational Health & Safety Commission (Australia)

OSH The Occupational Safety and Health Service of the Department of Labour (NZ)

**OSHA** Occupational Safety and Health Administration (USA)

**UN Number United Nations Number WES** Workplace Exposure Standard

References

Unless otherwise stated comes from the ERMA HSNO chemical classification information Data

database (CCID) http://www.ermanz.govt.nz/hs/compliance/chemicals.html , for specific

chemicals.

**ERMA Transfer Gazettes** Classifications and controls assigned for specific ingredients (consolidated gazette, 2004)

> Part of the ERMA New Zealand User Guide to the HSNO Control Regulations The NZ Workplace Exposure Standards Effective from 2002, published by OSH and

**WES 2002** available on their web site - www.osh.dol.govt.nz.

Other References: ChemIDplus – United States National Library of Medicine

**Controls Matrix** 

This MSDS was prepared by Datachem LTD and is based on our current state of knowledge, including information obtained from suppliers. The MSDS is given in good faith and constitutes a guideline (not a guarantee of safety). The level of risk each substance poses is relevant to its properties (as summarised in the MSDS) AND HOW THE SUBSTANCE IS USED. While guidelines are given for personal protective equipment, such precautions must be relevant to the use. The likely HSNO classifications, are based on our experience, ERMA Guidelines and international classifications. This MSDS is copyright Datachem and must not be copied, edited or used for other than intended purpose. To contact the MSDS author, email info@datachem.co.nz or phone: +64 9 940 30 80.

