

## 1. Version History

Version	Date	History
1-24102016	24 <sup>th</sup> October 2016	Initial release
2-21022019	21 <sup>st</sup> February 2019	Review

## 2. Product and Company Identification

<b>Product Name</b>	pH Down
<b>Recommended Uses</b>	Use only as directed on the label.
<b>Company</b>	<b>Bluelab Corporation Limited</b>
<b>Street Address</b>	8 Whiore Avenue Tauriko Business Estate Tauranga 3110 New Zealand
<b>Telephone</b>	0064 7 578 0849
<b>Emergency Contact numbers</b>	<b>National Poisons Centre</b>  <b>Urgent</b> 0800 764 766 (0800 POISON) Other countries 0064 3 764766  <b>Non Urgent</b> 0064 3 479 7248  <b>New Zealand Fire Service– 111</b>

## 3. Hazards Identification

### New Zealand HSNO Classifications

6.1D	Acute toxic (Oral, Dermal)
6.1E	Acute toxic (Dermal)
8.1A	Corrosive to metals
8.2C	Corrosive to dermal tissue
8.3A	Corrosive to ocular tissue
9.1D	Slightly harmful in the aquatic environment or are otherwise designed for biocidal action (Other)
9.3C	Harmful to terrestrial vertebrates

### GHS Classifications

Signal word: **Danger**  
Corrosive to metals, category 1  
Serious eye damage, category 1  
Skin corrosion, category 1B

### Hazard Symbols



### Hazard statements:

May be corrosive to metals.  
Causes severe skin burns and eye damage.

### Precautionary statements:

If medical advice is needed have product container or label at hand.  
Keep out of reach of children.

Read label before use.  
 Do not breathe dust/fume/gas/mist/vapours/spray.  
 Wash thoroughly after handling.  
 Wear protective gloves/protective clothing/eye protection/face protection.  
 Keep only in original container.  
 Do not eat, drink or smoke when using this product.  
 Immediately call a POISON CENTER or doctor/physician.  
 Wash contaminated clothing before reuse.  
 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.  
 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.  
 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
 Store locked up.  
 Store in a corrosive resistant container with a resistant inner liner  
 Dispose of contents and container to an approved waste disposal plant.

#### 4. Composition/Information on Ingredients

Chemical Name	CAS no.	Weight %
Water	7732-18-5	65
Phosphoric Acid	7664-38-2	35

#### 5. First Aid

**Inhalation** Seek medical attention immediately. Move exposed individual to fresh air. Loosen clothing as necessary and position individual in a comfortable position.

**Skin Contact** Remove contaminated clothing and wash before reuse or discard. Wash affected area with soap and water. Rinse/flush exposed skin gently using water for 15-20 minutes. Seek medical attention if irritation persists or if concerned.

**Eye contact** Rinse immediately with plenty of water, also under the eyelids, for at least 30 minutes. Remove contact lenses if able to do so during rinsing. Protect unexposed eye. Rinse/flush exposed eye(s) gently using water for 15-20 minutes.

**Ingestion** Seek medical attention immediately. Rinse mouth thoroughly. Do not induce vomiting. Have exposed individual drink sips of water.

**Treatment** Acute and delayed symptoms:  
 Irritation. Nausea. Headache. Shortness of breath.

Physician should treat symptomatically.

#### 6. Fire-fighting Measures

**Flammability** Not determined

**Extinguishing Media** Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**Extinguishing Media to Avoid** None

**Hazardous Combustion Products** Oxides of phosphorus.  
 Hydrogen gas is released in contact with most metals.

**Fire Fighting Procedures** 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

<b>Personal precautions</b>	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. Stop the spill, if possible. Contain spilled material by diking or using inert absorbent. Transfer to a disposal or recovery container.
<b>Environmental precautions</b>	Prevent from reaching drains, sewer or waterway. Collect contaminated soil for characterization per Section 13.
<b>Clean-up Methods</b>	Absorb spillage to prevent material damage due to corrosiveness to metal. If in a laboratory setting, follow Chemical Hygiene Plan procedures. Place into properly labelled containers for recovery or disposal. If necessary, use trained response staff/contractor.

## 8. Handling and Storage

<b>Handling</b>	Wash hands after handling. Avoid splashes or spray in enclosed areas. Avoid contact with eyes, skin, and clothing. Do not mix with bases. Use in a chemical fume hood. Follow good hygiene procedures when handling chemical materials. Do not eat, drink, smoke, or use personal products when handling chemical substances. If in a laboratory setting, follow Chemical Hygiene Plan. Use only in well ventilated areas.
<b>Storage</b>	Store away from oxidizing agents. Store in cool, dry conditions in well-sealed containers. Store with like hazards. Do not store under direct sun light. Do not pile up the containers. Container materials should be made of stainless steel 316-L, high-density polyethylene, or glass. Provide ventilation for containers. Avoid storage near extreme heat, ignition sources or open flame. Store away from foodstuffs.

## 9. Exposure Controls / Personal Protection

<b>Workplace Exposure Standards</b>	7664-38-2, Phosphoric Acid., ACGIH TLV: 1 mg/m <sup>3</sup> as TWA. 7664-38-2, Phosphoric Acid., ACGIH TLV 3 mg/m <sup>3</sup> as STEL. 7664-38-2, Phosphoric Acid., OSHA PEL: TWA 1 mg/m <sup>3</sup> . 7664-38-2, Phosphoric Acid., NIOSH REL: TWA 1 mg/m <sup>3</sup> . 7664-38-2, Phosphoric Acid., NIOSH REL ST: 3 mg/m <sup>3</sup> . 7664-38-2, Phosphoric Acid., NIOSH IDLH: 1000 mg/m <sup>3</sup> .
<b>Engineering controls</b>	Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use/handling. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapour or mists below the applicable workplace exposure limits (Occupational Exposure Limits-OELs) indicated above.
<b>Personal Protection</b>	<b>Respiratory</b> - Use NIOSH approved respirator if not being used in a fume hood. <b>Hand</b> - The glove material has to be impermeable and resistant to the product/the substance/ the preparation being used/handled. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation. <b>Skin</b> - Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. <b>Eye</b> - Safety glasses with side shields or goggles. <b>General Hygiene</b> - The usual precautionary measures are to be adhered to when handling chemicals. Keep away from food, beverages and feed sources. Immediately remove all soiled

and contaminated clothing. Wash hands before breaks and at the end of work. Do not inhale gases/fumes/dust/mist/vapour/aerosols. Avoid contact with the eyes and skin.

## 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>	Acidic
<b>Vapour pressure</b>	Not determined
<b>Vapour density</b>	3.4
<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 determined
<b>Flammable Limits</b>	Not determined
<b>Auto-ignition</b>	Not determined

## 11. Stability and Reactivity

<b>Chemical Stability</b>	This hygroscopic substance pulls moisture from air. No decomposition if used and stored according to specifications.
<b>Conditions to avoid</b>	Exposure to moist air or water. Excess heat. Store away from oxidizing agents, strong acids or bases.
<b>Materials to avoid</b>	Metals. Bases. Alcohols. Amines. Halogenated agents. Organic peroxides. Amides. Azo. Diazo. Hydrazines. Chlorates. Carbamates. Esters. Fluorides. Phenols. Cresols. Organophosphates. Phosphothioates. Epoxides. Combustible and flammable materials. Explosives. Alkalines. Nitromethane. Sodium tetrahydroborate. Mercaptans. Aldehydes. Ketones. Glycols. Cyanides. Sulfides. Caustics. Strong acids. Carbides. Strong bases. Fulminates. Reducing agents. Nitrates. Acetic acid. Oxidizing agents
<b>Hazardous Decomposition Products</b>	Phosphine. Oxides of phosphorus. Hydrogen gas is released in contact with most metals. Carbon oxides (CO, CO <sub>2</sub> ).

## 12. Toxicological Information

### Acute Toxicity:

6.1D Oral - SPECIES: Rat ENDPOINT: LD50 VALUE: 1530 mg/kg

6.1E Dermal - SPECIES: Rabbit ENDPOINT: LD50 VALUE: 2740 mg/kg

Reference Source: New Zealand Environmental Protection Authority

**Chronic Toxicity:** No additional information.

### Skin corrosion/irritation:

8.2 C Skin - SPECIES: Rabbit RESULT: Corrosive.

Reference Source: New Zealand Environmental Protection Authority

### Serious eye damage/irritation:

8.3A Eyes - SPECIES: Rabbit RESULT: Severely irritating.

Reference Source: New Zealand Environmental Protection Authority

**Respiratory or skin sensitization:** No additional information.

**Carcinogenicity:** No additional information.

**Germ cell mutagenicity:** No additional information.

**Reproductive Toxicity:** No additional information.  
**STOT-single and repeated exposure:** No additional information.  
**Additional toxicological information:** No additional information.

### 13. Ecological Information

**Ecotoxicity:**

Do not release to water. May release phosphates which will result in algae growth, increased turbidity, and depleted oxygen in the marine environment; at extremely high concentrations and/or quantities, this may be hazardous to fish or other marine organisms.

Slightly harmful in the aquatic environment or are otherwise designed for biocidal action (Other) (HSNO 9.1D)  
Harmful to terrestrial vertebrates (HSNO 9.3C)  
LpH50 (median lethal pH) (96h) phosphoric acid (bluegill sunfish), 3-3.25.

Adult brook trout survived 5 months exposure to pH levels of 5.0 and above. Total egg production was not affected, but viability was significantly less at pH 5.0. Hatchability was significantly less at levels below pH 6.5.

Growth and survival of alevins was reduced at the lower pH levels. , The data indicate that continuous exposure to pH levels below 6.5 result in significant reductions in egg hatchability and growth.

Algae: NOEC (EC50 >100 mg/l, the upper limit of toxic range) *D. subspicatus*. 100 mg/l.

**Persistence and degradability:** Readily degradable in the environment.

**Bioaccumulative potential:** The phosphorus element is an essential nutrient for flora and fauna.

**Mobility in soil:** Aqueous solution has high mobility in soil.

**Other adverse effects:** No additional information.

**Marine Pollutant:** No additional information.

### 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

**Road, Rail, Sea and Air Transport - ADR, ADN, DOT, IMDG, IATA**

<b>UN Number</b>	UN1805
<b>Proper Shipping name</b>	Phosphoric Acid Solution
<b>DG Class</b>	8
<b>Packing Group</b>	III
<b>HAZCHEM code</b>	None Allocated
<b>IMO/IMDG class</b>	8
<b>ICAO/IATA class</b>	8
<b>EMS code</b>	None Allocated
<b>Marine pollutant</b>	No

### 16. Regulatory Information

**New Zealand:**

Hazardous Substances and New Organisms (HSNO) Act 1996: Registered  
Approval Number: HSR001545

**Other Countries:**

Australian Inventory of Chemical Substances (AICS): Substance is listed.

USA: Registered.

OSHA IMIS Code Number: 2085.

NIOSH Registry of Toxic Effects of Chemical Substances (RTECS) Identification Number: TB6300000

Department of Transportation Regulation: 1805 154

European Chemicals Agency: Substance is listed as dangerous

**17. Other Information**

SDS Date of preparation 24<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.*