Trade Name: P2 Buffer Revision Date: 8/10/2017

SECTION 1. IDENTIFICATION OF PRODUCT AND COMPANY:

Product Name: P2 Buffer

Manufacturer or Supplier Details:

Company Name: Bioland Scientific LLC

Address: Bioland Scientific LLC

14925 Paramount Blvd., Suite C

Paramount, CA 90723

USA

Telephone: 1-562-377-2668 Fax: 1-562-733-6008

Emergency Telephone: 1-562-377-2668

Recommended Use of the Chemical and Restrictions on Use:

Recommended Use: For research use only.

SECTION 2. HAZARDS IDENTIFICATION

Hazard Classification:

OSHA Hazards: Corrosive

Health Hazards: Skin corrosion Category 1A Serious eye damage Category 1

GHS Label Element:

Hazard Symbol:

正要

Signal Word: Danger

Hazard Statements: H314 - Causes severe eye burns and eye damage.

H318 - Causes serious éye damage.

Precautionary Statements: P264 - Wash skin thoroughly after handling.

P280 - Wear protective gloves/protective clothing/eye protection/face

protection.

P301 + P330 + P331 - IF SWALLOWED: Rinse mouth. Do NOT induce

vomiting.

P303 + P361 + P353 - IF ON SKIN (or hair): Remove/take off all contaminated clothing. Rinse skin with water/shower.

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Precautionary Statements: P304 + P340 + P310 - IF INHALED: Remove victim to fresh air and keep

at rest in a position comfortable for breathing. Immediately call a

POISON CENTER or doctor/physician.

P305 + P351 + P338 + P310 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/

physician.

P363 - Wash contaminated clothing before reuse.

P501 - Dispose of contents in accordance with local, state, federal and

international regulations.

Potential Health Effects:

Symptoms of Overexposure: Redness, pain, skin burns. Watering and irritation to eyes. Repeated

exposures may cause erosion of exposed front teeth, darkening of the skin and chronic inflammation of the nose, throat and bronchial tubes.

Inhalation: Harmful if inhaled. Inhalation may cause lung and tooth damage.

Skin: Causes severe skin burns.

Eyes: Causes severe eye damage.

Ingestion: May be fatal if swallowed.

Carcinogenicity:

IARC No ingredient of this product present at levels greater than or equal to

0.1% is identified as probable, possible or confirmed human

carcinogen by IARC.

ACGIH No ingredient of this product present at levels greater than or equal to

0.1% is identified as probable, possible or confirmed human

carcinogen by ACGIH.

OSHA No ingredient of this product present at levels greater than or equal to

0.1% is identified as probable, possible or confirmed human

carcinogen by OSHA.

NTP No ingredient of this product present at levels greater than or equal to

0.1% is identified as probable, possible or confirmed human

carcinogen by NTP.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS:

Substance or Mixture: Mixture of the substances listed below with non-hazardous additions.

Synonyms/Common Names:

Chemical Name	CAS No.	Concentration (%)
Acetic acid $C_2H_4O_2$	64-19-7	5-10%

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SECTION 4. FIRST AID MEASURES:

General Advice: Exit to a safe area. Consult a physician. Seek medical attention.

If Inhaled: Move to fresh air. If not breathing, give artificial respiration. Seek

medical attention.

In Case of Skin Contact: Exit to safe area. If on skin or hair, take off contaminated clothing and

shoes immediately. Wash thoroughly with soap and water. Seek

medical attention.

In Case of Eye Contact: Flush eyes with clean water for a minimum of 15 minutes keeping

eyes open. Seek medical attention. Continue rinsing eyes during

transport to hospital.

If Swallowed: Do NOT induce vomiting. Give large quantity of water. Never give

anything by mouth to an unconscious person. Seek medical attention.

Most Important Symptoms and Effects, Acute and Delayed:

Recommendations for Immediate Medical Attention and Special

Treatment:

Treat symptomatically. Symptoms may be delayed.

SECTION 5. FIREFIGHTING MEASURES:

Conditions of Flammability: Not flammable or combustible.

Suitable Extinguishing Media: Dry powder, CO₂, water spray or alcohol-resistant foam.

Special Protective Equipment for

Firefighters:

Wear self-contained breathing apparatus, if necessary.

Hazardous Combustion Products: Carbon oxides (formed under fire conditions).

Further Information: Prevent firefighting water from entering surface water or

groundwater.

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SECTION 6. ACCIDENTAL RELEASE MEASURES:

Personal Precautions: Wear respiratory protection if inadequate ventilation. Avoid breathing

vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. See Section 8: Exposure Controls/Personal Protection for

more details.

Environmental Precautions: Prevent further leakage if area is safe. Do not let product enter drains.

Avoid discharge into the environment.

Emergency Procedures: Evacuate personnel to safe areas and follow emergency response

protocols.

Methods and Materials for Containment and Cleaning Up:

Use inert absorbent material to soak up spill. Dispose of hazardous

waste. Do not flush with water.

SECTION 7. HANDLING AND STORAGE:

Precautions for Safe Handling: Handle in accordance with good chemical hygiene and safety

practices. Protect from moisture. Avoid contact with eyes, skin and

clothing. Avoid inhalation of vapors or mist.

Conditions for Safe Storage: Keep containers tightly closed in a dry, cool and well-ventilated place.

Containers which are opened must be carefully resealed and kept

upright to prevent leakage.

Incompatible Products:

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION:

Appropriate Engineering Controls: Adequate ventilation and access to eye washing stations are required.

Recommendations for Personal Protective Measures:

Hand Protection: Use gloves when handling this product. Inspect gloves prior to use for

any visible damage. Use proper glove removal technique to prevent contact with skin. Dispose of gloves in accordance with applicable

laws. Wash and dry hands after use.

Eye Protection: Use a face shield and/or safety goggles when handling this product.

Use eyewear that has been approved by NIOSH.

Skin and Body Protection: Wear appropriate laboratory attire when handling this product, such

as gloves, long pants, closed-toe shoes and a laboratory coat.

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Respiratory Protection: If engineering controls do not maintain airborne concentrations

below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been

established), an approved respirator must be used.

Hygiene Measures: Avoid contact with eyes, skin and clothing. Wash hands thoroughly

after using this product. Do not eat, drink or smoke when handling

this product.

Special Requirements for Personal Protective Equipment, Protective Clothing, Respirators, etc:

Components with Workplace Control Parameters:

Components	CAS No.	Value	Control Parameters	Basis	
Acetic acid	64-19-7	TWA	10 ppm	USA. ACGIH Threshold Limit Values (TLV)	
Remarks:	Eye and upper respiratory tract irritation pulmonary function				
		STEL	15 ppm	USA. ACGIH Threshold Limit Values (TLV)	
	Eye and upper respiratory tract irritation, pulmonary function				
		TWA	10 ppm 25 mg/m³	USA. OSHA - TABLE Z-1 for Air Contaminants - 1910.1000	
	The value in mg/m3 is approximate.				
		TWA	10 ppm 25 mg/m³	USA. NIOSH recommended exposure limits	
		ST	10ppm 25 mg/m³	USA. NIOSH recommended exposure limits	

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES:

Appearance:

Form: Liquid

Color: Colorless

Odor: Vinegar-like.

Odor Threshold: No data available

pH: 4.0-6.0

Melting Point/Freezing Point: No data available Initial Boiling Point/Boiling Range: No data available

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Flash Point:

Evaporation Rate:

No data available

No data available

No data available

No data available

Upper/Lower Limits on Flammability and Explosive Limits:

Flammability Limit (Upper):

Flammability Limit (Lower):

Explosive Limit (Upper):

Explosive Limit (Lower):

No data available

No data available

Vapor Pressure:

Vapor Density:

No data available

No data available

No data available

No data available

Solubility:

Solubility in Water: No data available Solubility (Other): No data available

Partition Coefficient (n-octanol/

water):

No data available

Auto-Ignition Temperature:No data availableDecomposition Temperature:No data availableViscosity:No data available

SECTION 10. STABILITY AND REACTIVITY:

Reactivity: No dangerous reaction known under conditions of normal use.

Chemical Stability: Stable under recommended storage conditions.

Possibility of Hazardous Reactions: No data available.

Conditions to Avoid: Heating

Materials to Avoid: Oxidizing agents, metals, amines, alcohols, peroxides, permanganates

(e.g. potassium permanganates), soluble carbonates and phosphates,

hydroxides

Hazardous Decomposition Products: Carbon oxides (formed under fire conditions).

SECTION 11. TOXICOLOGICAL INFORMATION:

Information on Likely Routes of Exposure:

Inhalation: Harmful if inhaled. Inhalation may cause lung and tooth damage.

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Ingestion: May be fatal if swallowed.

Skin: Causes severe skin burns.

Eyes: Causes severe eye damage.

Information on Toxicological Effects:

Acute Toxicity:

Oral LD50: 3,310 mg/kg (Rat)
Inhalation LC50: No data available
Dermal LD50: 1.06 L/kg (Rabbit)
Other Information: No data available
Skin Corrosion/Irritation: No data available
Serious Eye Damage/Irritation: No data available
Respiratory or Skin Sensitization: No data available
Germ Cell Mutagenicity: No data available

Carcinogenicity:

IARC: No component of this product that is present at 0.1% is identified as

probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product that is present at 0.1% is identified as

probable, possible or confirmed human carcinogen by ACGIH.

NTP: No component of this product that is present at 0.1% is identified as

probable, possible or confirmed human carcinogen by NTP.

OSHA: No component of this product that is present at 0.1% is identified as

probable, possible or confirmed human carcinogen by OSHA.

Reproductive Toxicity:No data available **Teratogenicity:**No data available

Specific Target Organ Toxicity -

Single Exposure:

No data available

Specific Target Organ Toxicity -

Repeated Exposures:

No data available

Aspiration Hazard: No data available

Signs and Symptoms of Exposure: Redness, pain, skin burns. Watering and irritation to eyes. Repeated

exposures may cause erosion of exposed front teeth, darkening of the skin and chronic inflammation of the nose, throat and bronchial tubes.

Synergistic Effects: No data available

Additional Information: No data available

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SECTION 12. ECOLOGICAL INFORMATION:

Toxicity:

Persistence and Degradability:

Bioaccumulative Potential:

Mobility in Soil:

PBT and vPvB Assessment:

Other Adverse Effects:

No data available.

No data available.

No data available.

No data available.

SECTION 13. DISPOSAL CONSIDERATIONS:

Product: Disposal should be in accordance with applicable regional, national and

local laws and regulations.

S29 - Do not empty into drains.

S57 - Use appropriate container to avoid environmental contamination.

Refer to Section 7: Handling and Storage and Section 8: Exposure Control/Personal Protection for additional handling information and protection of

employees.

Contaminated Packaging: Disposal must be made according to official regulations.

To minimize exposure, please refer to Section 8: Exposure Control/Personal

Protection of this SDS.

SECTION 14. TRANSPORT INFORMATION:

DOT: Not considered dangerous goods.

IMDG: Not considered dangerous goods.

IATA: Not considered dangerous goods.

US State Regulations:

California Prop. 65: No ingredient regulated by CA Prop 65 present.

Component(s) CAS-No.

Massachusetts RTK: Acetic acid 64-19-7

New Jersey RTK: Acetic acid 64-19-7

Pennsylvania RTK: Acetic acid 64-19-7

Rhode Island RTK: Acetic acid 64-19-7

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SECTION 15. REGULATORY INFORMATION:

US Federal Regulations:

OSHA Hazards: Corrosive

Aggravated Medical

Conditions:
Symptoms of Overexposure:

Inhalation: Harmful if inhaled. Inhalation may cause lung and tooth damage.

Skin: Causes severe skin burns.

Eyes: Causes severe eye damage.

Ingestion: May be fatal if swallowed.

SARA 302 Components: None present or none present in regulated quantities.

SARA 313 Components: None present or none present in regulated quantities.

SARA 311/312 Hazards: Acute health hazard, chronic health hazard

SECTION 16. OTHER INFORMATION:

Disclaimer:

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