according to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

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1 Identification

· Product identifier

· Trade name: <u>Buffer, pH8</u> · Product code: BU6808SS

· Recommended use and restriction on use

· Recommended use: Laboratory chemicals

Restrictions on use: No relevant information available.

Details of the supplier of the Safety Data Sheet

· Manufacturer/Supplier:

AquaPhoenix Scientific, Inc.

860 Gitts Run Road

Hanover, PA 17331 USA

Tel +1 (717)632-1291

Toll-Free: (866)632-1291

info@aquaphoenixsci.com

Distributor:

AquaPhoenix Scientific 860 Gitts Run Road,

Hanover, PA 17331 (717) 632-1291

· Emergency telephone number:

ChemTel Inc.

(800)255-3924 (North America)

+1 (813)248-0585 (International)

2 Hazard(s) identification

· Classification of the substance or mixture

The product is not classified as hazardous according to the Globally Harmonized System (GHS).

- · Label elements
- · GHS label elements Not regulated.
- · Hazard pictograms: None.
- · Signal word: None.
- · Hazard statements: None.
- · Precautionary statements: None.
- Other hazards There are no other hazards not otherwise classified that have been identified.

3 Composition/information on ingredients

· Chemical characterization: Mixtures

· Components:		
7732-18-5	Water	>99%
7447-40-7	Potassium chloride Eye Irrit. 2B, H320	0.1-0.5%
10043-35-3	Boric acid Repr. 1B, H360	0.15%

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1310-73-2 Sodium hydroxide	<0.1%
♦ Met. Corr.1, H290; Skin Corr. 1A, H314; Eye Dam. 1, H318	
26628-22-8 sodium azide	<0.1%
Acute Tox. 2, H300; Acute Tox. 1, H310; Acute Tox. 2, H330 STOT SE 1, H370-H371; STOT RE 2, H373	
Skin Irrit. 2, H315; Eye Irrit. 2A, H319 • Additional information: Total boron content is less than 0.1%	

4 First-aid measures

- Description of first aid measures
- · After inhalation: Seek medical treatment in case of complaints.
- · After skin contact:

Wash with soap and water.

If skin irritation is experienced, consult a doctor.

· After eye contact:

Remove contact lenses if worn.

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· After swallowing:

Rinse out mouth and then drink plenty of water.

Do not induce vomiting; immediately call for medical help.

Most important symptoms and effects, both acute and delayed:

Gastric or intestinal disorders when ingested.

- Danger: No relevant information available.
- · Indication of any immediate medical attention and special treatment needed:

No relevant information available.

5 Fire-fighting measures

- Extinguishing media
- · Suitable extinguishing agents: Use fire fighting measures that suit the environment.
- · For safety reasons unsuitable extinguishing agents: No relevant information available.
- · Special hazards arising from the substance or mixture No relevant information available.
- Advice for firefighters
- · Protective equipment:

Wear self-contained respiratory protective device.

Wear fully protective suit.

6 Accidental release measures

- Personal precautions, protective equipment and emergency procedures Ensure adequate ventilation.
- · Environmental precautions No special measures required.
- · Methods and material for containment and cleaning up

Wipe up small spills with paper towel and discard.

For larger spills, add sawdust, chalk or other inert binding material, then sweep up and discard.

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Dispose of the collected material according to regulations.

Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and storage

- ·Handling
- · Precautions for safe handling: No special measures required.
- Information about protection against explosions and fires: No special measures required.
- · Conditions for safe storage, including any incompatibilities
- Requirements to be met by storerooms and receptacles: No special requirements.
- · Information about storage in one common storage facility: No relevant information available.
- · Further information about storage conditions: Keep containers tightly sealed.
- · Specific end use(s) No relevant information available.

8 Exposure controls/personal protection

- · Control parameters
- Components with limit values that require monitoring at the workplace:

The following constituent is the only constituent of the product which has a PEL, TLV or other recommended exposure limit.

10043-35-3 Bor	10043-35-3 Boric acid	
TLV (USA)	Short-term value: 6* mg/m³ Long-term value: 2* mg/m³ *as inhalable fraction	
EL (Canada)	Short-term value: 6 mg/m³ Long-term value: 2 mg/m³	
EV (Canada)	Short-term value: 6 mg/m³ Long-term value: 2 mg/m³ inorganic, inhalable	
LMPE (Mexico)	Short-term value: 6* mg/m³ Long-term value: 2* mg/m³ A4;*fracción inhalable	

- Exposure controls
- General protective and hygienic measures:

The usual precautionary measures for handling chemicals should be followed.

Keep away from foodstuffs, beverages and feed.

Engineering controls:

No relevant information available.

Provide adequate ventilation.

- Breathing equipment: Not required under normal conditions of use.
- · Protection of hands:

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Protective gloves

· Material of gloves

Nitrile rubber, NBR Butyl rubber, BR Neoprene gloves Natural rubber, NR

Sensibilization by the components in the glove materials is possible.

· Eye protection:



Safety glasses

Follow relevant national guidelines concerning the use of protective eyewear.

- · Body protection: Protection may be required for spills.
- · Limitation and supervision of exposure into the environment No special requirements.
- · Risk management measures No special requirements.

Information on basic physical and chemical properties					
Appearance:	and one model proportion				
Form:	Liquid				
Color:	Colorless				
Odor:	Odorless				
Odor threshold:	Not determined.				
pH-value at 20 °C (68 °F):	9.0				
Melting point/Melting range:	0 °C (32 °F)				
Boiling point/Boiling range:	100 °C (212 °F)				
Flash point:	Not applicable.				
Flammability (solid, gaseous):	Not applicable.				
Auto-ignition temperature:	Not determined.				
Decomposition temperature:	Not determined.				
Danger of explosion:	Product does not present an explosion hazard.				
Explosion limits					
Lower:	Not determined.				
Upper:	Not determined.				
Oxidizing properties:	Non-oxidizing.				
Vapor pressure:	Not determined.				
Density at 20 °C (68 °F):	1 g/cm³ (8.35 lbs/gal)				
Relative density:	Not determined.				
Vapor density:	Not determined.				

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· Evaporation rate: Not determined.

· Solubility in / Miscibility with

Water: Fully miscible.

· Partition coefficient (n-octanol/water): Not determined.

· Viscosity

Dynamic: Not determined. **Kinematic:** Not determined.

• Other information No relevant information available.

10 Stability and reactivity

- · Reactivity: No relevant information available.
- · Chemical stability: Stable under normal temperatures and pressures.
- Thermal decomposition / conditions to be avoided:

No decomposition if used and stored according to specifications.

- · Possibility of hazardous reactions No dangerous reactions known.
- · Conditions to avoid No relevant information available.
- · Incompatible materials No relevant information available.
- · Hazardous decomposition products

Under fire conditions only:

Possible in traces.

11 Toxicological information

- Information on toxicological effects
- · Acute toxicity: Based on available data, the classification criteria are not met.
- · LD/LC50 values that are relevant for classification:

10043-35-3 Boric acid

Oral LD50 2660 mg/kg (rat)

- · Primary irritant effect:
- On the skin: Based on available data, the classification criteria are not met.
- · On the eye: Based on available data, the classification criteria are not met.
- Sensitization: Based on available data, the classification criteria are not met.
- IARC (International Agency for Research on Cancer):

None of the ingredients are listed.

NTP (National Toxicology Program):

None of the ingredients are listed.

· OSHA-Ca (Occupational Safety & Health Administration):

None of the ingredients are listed.

· Probable route(s) of exposure:

Ingestion.

Inhalation.

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Eye contact. Skin contact.

- · Acute effects (acute toxicity, irritation and corrosivity): No relevant information available.
- · Repeated dose toxicity: No relevant information available.
- · Germ cell mutagenicity: Based on available data, the classification criteria are not met.
- · Carcinogenicity: Based on available data, the classification criteria are not met.
- · Reproductive toxicity: Based on available data, the classification criteria are not met.
- STOT-single exposure: Based on available data, the classification criteria are not met.
- STOT-repeated exposure: Based on available data, the classification criteria are not met.
- · Aspiration hazard: Based on available data, the classification criteria are not met.

12 Ecological information

- · Toxicity
- · Aquatic toxicity No relevant information available.
- · Persistence and degradability No relevant information available.
- · Bioaccumulative potential: No relevant information available.
- · Mobility in soil: No relevant information available.
- · Additional ecological information
- · General notes:

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

· Other adverse effects No relevant information available.

13 Disposal considerations

- · Waste treatment methods
- · Recommendation:

Smaller quantities can be disposed of with household waste.

The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes.

- Uncleaned packagings
- · Recommendation: Disposal must be made according to official regulations.

14 Transport information

- · UN-Number
- · DOT, ADR/RID/ADN, IMDG, IATA Not regulated.
- UN proper shipping name
- · DOT, ADR/RID/ADN, IMDG, IATA Not regulated.
- Transport hazard class(es)
- · DOT, ADR/RID/ADN, IMDG, IATA

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Not regulated.	
Not regulated.	
No	
Not applicable.	
II of Not applicable.	
	Not regulated. No Not applicable.

15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
- · United States (USA)
- ·SARA
- · Section 302 (extremely hazardous substances):

None of the ingredients are listed.

Section 313 (Specific toxic chemical listings):

None of the ingredients are listed.

TSCA (Toxic Substances Control Act)

All ingredients are listed or exempt.

- · Proposition 65 (California)
- · Chemicals known to cause cancer:

None of the ingredients are listed.

· Chemicals known to cause developmental toxicity for females:

None of the ingredients are listed.

· Chemicals known to cause developmental toxicity for males:

None of the ingredients are listed.

· Chemicals known to cause developmental toxicity:

None of the ingredients are listed.

· EPA (Environmental Protection Agency):

10043-35-3 Boric acid

I (oral)

· IARC (International Agency for Research on Cancer):

None of the ingredients are listed.

· Canadian Domestic Substances List (DSL):

All ingredients listed on DSL or NDSL.

16 Other information

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This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Abbreviations and acronyms:

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation IATA: International Air Transport Association

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

OSHA: Occupational Safety & Health Administration

Met. Corr.1: Corrosive to metals - Category 1

Acute Tox. 2: Acute toxicity - Category 2

Acute Tox. 1: Acute toxicity - Category 1

Skin Corr. 1A: Skin corrosion/irritation - Category 1A

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Dam. 1: Serious eye damage/eye irritation – Category 1

Eye Irrit. 2A: Serious eye damage/eye irritation - Category 2A

Eye Irrit. 2B: Serious eye damage/eye irritation – Category 2B

Repr. 1B: Reproductive toxicity - Category 1B

STOT SE 1: Specific target organ toxicity (single exposure) - Category 1

STOT RE 2: Specific target organ toxicity (repeated exposure) - Category 2

Sources

Website, European Chemicals Agency (echa.europa.eu)

Website, US EPA Substance Registry Services (ofmpub.epa.gov/sor internet/registry/substreg/home/overview/home.do)

Website, Chemical Abstracts Registry, American Chemical Society (www.cas.org)

Patty's Industrial Hygiene, 6th ed., Rose, Vernon, ed. ISBN: 978-0-470-07488-6

Casarett and Doull's Toxicology: The Basic Science of Poisons, 8th Ed., Klaasen, Curtis D., ed., ISBN: 978-0-07-176923-5.

Safety Data Sheets, Individual Manufacturers

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