Reviewed on 05/16/2023 Printing date 05/16/2023

1 Identification

· Product identifier

· Trade name: pH Blind **QA Standard**

· Article number: CY227

· Details of the supplier of the safety data sheet

· Manufacturer/Supplier: Aqua Solutions, Inc. 6913 Highway 225 DEER PARK, TX 77536 USA800-256-2586

· Information department:

Technical Coordinator

Sherman Nelson shermann@aquasolutions.org

Technical Coordinator

Sherman Nelson shermann@aquasolutions.org

· Emergency telephone number: Chemtrec: 800-424-9300 Canutec: 613-996-6666



2 Hazard(s) identification

· Classification of the substance or mixture



GHS08 Health hazard

Toxic to Reproduction 1B H360 May damage fertility or the unborn child.



Skin Irritation 2 H315 Causes skin irritation.

Eye Irritation 2A H319 Causes serious eye irritation.

- · Label elements
- · GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).
- · Hazard pictograms





GHS07

- · Signal word Danger
- · Hazard-determining components of labeling:

boric acid

· Hazard statements

Causes skin irritation.

Causes serious eye irritation.

May damage fertility or the unborn child.

(Contd. on page 2)

Reviewed on 05/16/2023 Printing date 05/16/2023

Trade name: pH Blind **QA** Standard

(Contd. of page 1)

· Precautionary statements

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Wash thoroughly after handling.

Wear protective gloves / eye protection / face protection.

If on skin: Wash with plenty of water.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

IF exposed or concerned: Get medical advice/attention.

Specific treatment (see on this label).

Take off contaminated clothing and wash it before reuse.

If skin irritation occurs: Get medical advice/attention.

If eye irritation persists: Get medical advice/attention.

Store locked up.

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

- · Classification system:
- · NFPA ratings (scale 0 4)



Health = 2Reactivity = 0

· HMIS-ratings (scale 0 - 4)



Health = 2Fire = 0

- · Other hazards
- · Results of PBT and vPvB assessment
- · **PBT**: Not applicable.
- · vPvB: Not applicable.

3 Composition/information on ingredients

- · Chemical characterization: Mixtures
- · Description: Mixture of the substances listed below with nonhazardous additions.

· Dangerous components:				
CAS: 5949-29-1	Citric Acid Monohydrate	2.026%		
CAS: 1310-73-2	Sodium Hydroxide	0.793%		
CAS: 10043-35-3	boric acid	0.693%		
· Table of Nonhaz	ardous Ingredients			
CAS: 7732-18-5	Water	94.131%		
	Potassium Hydrogen Phthalate	1.021%		
CAS: 7758-11-4	Potassium Phosphate Dibasic Anhydrous	0.793%		
CAS: 7447-40-7	Potassium Chloride	0.373%		
CAS: 7647-01-0	Hydrochloric Acid	0.161%		
CAS: 89-83-8	Thymol	0.01%		

Printing date 05/16/2023 Reviewed on 05/16/2023

Trade name: pH Blind QA Standard

(Contd. of page 2)

4 First-aid measures

- · Description of first aid measures
- · General information: Immediately remove any clothing soiled by the product.
- · After inhalation: In case of unconsciousness place patient stably in side position for transportation.
- · After skin contact: Immediately wash with water and soap and rinse thoroughly.
- · After eve contact:

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

- · After swallowing: If symptoms persist consult doctor.
- · Information for doctor:
- · Most important symptoms and effects, both acute and delayed No further relevant information available.
- $\cdot \textit{Indication of any immediate medical attention and special treatment needed}$

No further relevant information available.

5 Fire-fighting measures

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

6 Accidental release measures

- · Personal precautions, protective equipment and emergency procedures Not required.
- · Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- · Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose contaminated material as waste according to section 13.

· 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.

· Protective Action Criteria for Chemicals

· PAC-1:		
CAS: 877-24-7	Potassium Hydrogen Phthalate	9.6 mg/m ³
CAS: 1310-73-2	Sodium Hydroxide	$0.5 \ mg/m^3$
CAS: 7758-11-4	Potassium Phosphate Dibasic Anhydrous	13 mg/m³
CAS: 10043-35-3	boric acid	6 mg/m³
CAS: 7647-01-0	Hydrochloric Acid	1.8 ppm
CAS: 89-83-8 Thymol		2.9 mg/m ³
· PAC-2:		
CAS: 877-24-7	Potassium Hydrogen Phthalate	110 mg/m^3
CAS: 1310-73-2	Sodium Hydroxide	5 mg/m ³
CAS: 7758-11-4	Potassium Phosphate Dibasic Anhydrous	140 mg/m^3
CAS: 10043-35-3	boric acid	23 mg/m³
CAS: 7647-01-0	Hydrochloric Acid	22 ppm
		(Contd. on page 4

US.

Printing date 05/16/2023 Reviewed on 05/16/2023

Trade name: pH Blind QA Standard

CAS: 89-83-8	Thymol	(Contd. of page 3) 32 mg/m ³
· PAC-3:		
CAS: 877-24-7	Potassium Hydrogen Phthalate	630 mg/m³
CAS: 1310-73-2	Sodium Hydroxide	50 mg/m ³
CAS: 7758-11-4	Potassium Phosphate Dibasic Anhydrous	830 mg/m³
CAS: 10043-35-3	boric acid	830 mg/m³
CAS: 7647-01-0	Hydrochloric Acid	100 ppm
CAS: 89-83-8	Thymol	190 mg/m³

7 Handling and storage

- · Handling:
- · Precautions for safe handling Open and handle receptacle with care.
- · Information about protection against explosions and fires: Keep respiratory protective device available.
- · Conditions for safe storage, including any incompatibilities
- · Storage:
- Requirements to be met by storerooms and receptacles: No special requirements.
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: Keep receptacle tightly sealed.
- · Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

- · Additional information about design of technical systems: No further data; see section 7.
- · Control parameters
- · Components with limit values that require monitoring at the workplace:

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit.

At this time, the remaining constituent has no known exposure limits.

CAS:	1310-73-2 Sodium Hydroxide
PEL	Long-term value: 2 mg/m³
REL	Ceiling limit value: 2 mg/m³
TLV	Ceiling limit value: 2 mg/m³
CAS:	2 10043-35-3 boric acid
TLV	Short-term value: 6* mg/m³
	Long-term value: 2* mg/m³
	*as inhalable fraction, A4

- · Additional information: The lists that were valid during the creation were used as basis.
- · Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Store protective clothing separately.

Avoid contact with the eyes and skin.

(Contd. on page 5)

Printing date 05/16/2023 Reviewed on 05/16/2023

Trade name: pH Blind QA Standard

(Contd. of page 4)

- · Breathing equipment: Not required.
- · Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection:



Tightly sealed goggles

· Body protection: Protective work clothing

9 Physical and chemical properties

· Information	on hasic	nhysical	and che	mical r	ronortios
· Injoination	on vasic	pnysicui	ини спе	тиси р	n oper ues

· General Information

· Appearance:

Form: Fluid

Color: According to product specification

Odor: Characteristic
 Odor threshold: Not determined.
 pH-value: Not determined.

· Change in condition

Melting point/Melting range: Undetermined.
Boiling point/Boiling range: 100 °C (212 °F)

· Flash point: Not applicable.

· Flammability (solid, gaseous): Not applicable.

· Decomposition temperature: Not determined.

• Danger of explosion: Product does not present an explosion hazard.

Product is not selfigniting.

· Explosion limits:

· Ignition temperature:

Lower: Not determined. Upper: Not determined.

(Contd. on page 6)

Printing date 05/16/2023 Reviewed on 05/16/2023

Trade name: pH Blind QA Standard

		(Contd. of page
· Vapor pressure at 20 °C (68 °F):	23 hPa (17.3 mm Hg)	
Density at 20 °C (68 °F):	1.04366 g/cm³ (8.70934 lbs/gal)	
· Relative density	Not determined.	
· Vapor density	Not determined.	
· Evaporation rate	Not determined.	
· Solubility in / Miscibility with		
Water:	Not miscible or difficult to mix.	
· Partition coefficient (n-octanol/wate	e r): Not determined.	
· Viscosity:		
Dynamic:	Not determined.	
Kinematic:	Not determined.	
· Solvent content:		
Water:	94.1 %	
VOC content:	0.00 %	
	0.0 g/l / 0.00 lb/gal	
Solids content:	5.7 %	
Other information	No further relevant information available.	

10 Stability and reactivity

- · Reactivity No further relevant information available.
- · Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions No dangerous reactions known.
- · Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:
- · Primary irritant effect:
- · on the skin: Irritant to skin and mucous membranes.
- · on the eye: Irritating effect.
- · Sensitization: No sensitizing effects known.
- · Additional toxicological information:

The product shows the following dangers according to internally approved calculation methods for preparations: Irritant

· Carcinogenic categories

· IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

· NTP (National Toxicology Program)

None of the ingredients is listed.

(Contd. on page 7)

Printing date 05/16/2023 Reviewed on 05/16/2023

Trade name: pH Blind QA Standard

(Contd. of page 6)

· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

12 Ecological information

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

Water hazard class 1 (Self-assessment): slightly hazardous for water

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

- · Results of PBT and vPvB assessment
- · **PBT**: Not applicable.
- · vPvB: Not applicable.
- · Other adverse effects No further relevant information available.

13 Disposal considerations

- · Waste treatment methods
- · Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

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

UN-Number DOT, ADN, IMDG, IATA	Not regulated
UN proper shipping name DOT, ADN, IMDG, IATA	Not regulated
Transport hazard class(es)	
DOT, ADN, IMDG, IATA	
Class	Not regulated
Packing group	
DOT, IMDG, IATA	Not regulated
Environmental hazards:	
Marine pollutant:	No
Special precautions for user	Not applicable.
Transport in bulk according to Annex	II of
MARPOL73/78 and the IBC Code	Not applicable.

(Contd. on page 8)

Printing date 05/16/2023 Reviewed on 05/16/2023

Trade name: pH Blind QA Standard

(Contd. of page 7)

· UN "Model Regulation":

Not regulated

15 Regulatory information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture No further relevant information available.
- · Sara

· Section	355 (extrem	ely hazardous	substances):

None of the ingredients is listed.

· Section 313 (Specific toxic chemical listings):

None of the ingredients is listed.

$\cdot TSCA$ (7	<i>Toxic</i>	Substances	Control Act	:(:
-----------------	---------------------	-------------------	-------------	-----

-2(
Water	ACTIVE
Potassium Hydrogen Phthalate	ACTIVE
Sodium Hydroxide	ACTIVE
Potassium Phosphate Dibasic Anhydrous	ACTIVE
boric acid	ACTIVE
Potassium Chloride	ACTIVE
Hydrochloric Acid	ACTIVE
Thymol	ACTIVE

· Hazardous Air Pollutants

CAS: 7647-01-0 Hydrochloric Acid

- · Proposition 65
- · Chemicals known to cause cancer:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

· Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

- · Carcinogenic categories
- · EPA (Environmental Protection Agency)

CAS: 10043-35-3 boric acid

I (oral)

· TLV (Threshold Limit Value)

CAS: 10043-35-3 boric acid

A4

· NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

· GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).

(Contd. on page 9)

Printing date 05/16/2023 Reviewed on 05/16/2023

Trade name: pH Blind **QA** Standard

(Contd. of page 8)

· Hazard pictograms





GHS07

GHS08

· Signal word Danger

· Hazard-determining components of labeling:

boric acid

· Hazard statements

Causes skin irritation.

Causes serious eye irritation.

May damage fertility or the unborn child.

· Precautionary statements

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Wash thoroughly after handling.

Wear protective gloves / eye protection / face protection.

If on skin: Wash with plenty of water.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

IF exposed or concerned: Get medical advice/attention.

Specific treatment (see on this label).

Take off contaminated clothing and wash it before reuse.

If skin irritation occurs: Get medical advice/attention.

If eye irritation persists: Get medical advice/attention.

Store locked up.

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

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

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.

- · Department issuing SDS: Environment protection department.
- · Contact:

· Date of preparation / last revision

Revision 1.0 05/15/2023, reviewed SDS for accuracy. S.T.N.

Revision 1.0 01-10-2022, removed fluoride and sulfate from ingredients. STN

Creation date for SDS 07-27-2018. STN

05/16/2023

· Abbreviations and acronyms:

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

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

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

VOC: Volatile Organic Compounds (USA, EU) PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

(Contd. on page 10)

Reviewed on 05/16/2023 Printing date 05/16/2023

Trade name: pH Blind QA Standard

(Contd. of page 9)

NIOSH: National Institute for Occupational Safety OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit REL: Recommended Exposure Limit

Skin Irritation 2: Skin corrosion/irritation – Category 2

Eye Irritation 2A: Serious eye damage/eye irritation – Category 2A Toxic to Reproduction 1B: Reproductive toxicity – Category 1B

* Data compared to the previous version altered.