Printing date 06/05/2024

Reviewed on 06/05/2024

1 Identification

- · Product identifier
- · Trade name: Buffer QC Check Standard
- · Article number: MLU-075
- · Details of the supplier of the safety data sheet

• Manufacturer/Supplier: Aqua Solutions, Inc. 6913 Highway 225 DEER PARK, TX 77536 USA 800-256-2586

- Information department: 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
- The product is not classified, according to the Globally Harmonized System (GHS).
- · Label elements
- · GHS label elements Not Applicable
- · Hazard pictograms Not Applicable
- · Signal word Not Applicable
- · Hazard statements Not Applicable
- · Precautionary statements

If swallowed: Call a poison center/doctor if you feel unwell.

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.

Store in a closed container.

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

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



· HMIS-ratings (scale 0 - 4)

HEALTH \bigcirc Health = 0FIRE \bigcirc Fire = 0REACTIVITY \bigcirc Reactivity = 0

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

(Contd. on page 2)



Printing date 06/05/2024

Reviewed on 06/05/2024

Trade name: Buffer QC Check Standard

(Contd. of page 1)

3 Composition/information on ingredients

· Chemical characterization: Mixtures

• Description: Mixture of the substances listed below with nonhazardous additions.

· Dangerous components: Not Applicable

· Table of Nonhazardous Ingredients		
CAS: 7732-18-5	Water	99.041%
	Potassium Chloride	0.279%
	Hydrochloric Acid	0.247%
CAS: 1310-73-2	Sodium Hydroxide	0.238%
CAS: 77-92-9	citric acid	0.192%
CAS: 89-83-8	Thymol	0.002%

4 First-aid measures

- · Description of first aid measures
- · General information: No special measures required.
- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact: Immediately rinse with water.
- After eye contact: Rinse opened eye for several minutes under running water. Then 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.
- · 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: Dilute with plenty of 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.

(Contd. on page 3)

US

Printing date 06/05/2024

Reviewed on 06/05/2024

Trade name: Buffer QC Check Standard

· Protective Action	Criteria for Chemicals	(Contd. of page 2)
· PAC-1:		
CAS: 7647-01-0	Hydrochloric Acid	1.8 ppm
CAS: 1310-73-2	Sodium Hydroxide	$0.5 mg/m^3$
CAS: 89-83-8	Thymol	$2.9 mg/m^3$
· PAC-2:		
CAS: 7647-01-0	Hydrochloric Acid	22 ppm
CAS: 1310-73-2	Sodium Hydroxide	5 mg/m ³
CAS: 89-83-8	Thymol	32 mg/m ³
· PAC-3:		
CAS: 7647-01-0	Hydrochloric Acid	100 ppm
CAS: 1310-73-2	Sodium Hydroxide	50 mg/m ³
CAS: 89-83-8	Thymol	190 mg/m ³

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
- · 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 product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- Additional information: The lists that were valid during the creation were used as basis.
- · Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures:
- The usual precautionary measures for handling chemicals should be followed.
- · 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.

(Contd. on page 4)

US

Printing date 06/05/2024

*

Reviewed on 06/05/2024

Trade name: Buffer QC Check Standard

(Contd. of page 3)

- 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: Goggles recommended during refilling.
- · Body protection: Protective work clothing

Information on basic physical and c	chemical properties	
General Information		
Appearance: Form:	Linuid	
Form: Color:	Liquid Colorless	
Odor:	Odorless	
Odor threshold:	Not determined.	
pH-value:	Not determined.	
Change in condition		
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.	
Decomposition temperature:	Not determined.	
Ignition temperature:	Product is not selfigniting.	
Danger of explosion:	Product does not present an explosion hazard.	
Explosion limits:		
Lower:	Not determined.	
Upper:	Not determined.	
Vapor pressure at 20 °C (68 °F):	23 hPa (17.3 mm Hg)	
Density at 20 °C (68 °F):	1.00352 g/cm ³ (8.37437 lbs/gal)	
Relative density	Not determined.	
Vapor density	Not determined.	
Evaporation rate	Not determined.	
Solubility in / Miscibility with		
Water:	Fully miscible.	
Partition coefficient (n-octanol/wate	r): Not determined.	
Viscosity:		
Dynamic: Kinematic:	Not determined. Not determined.	

Printing date 06/05/2024

Reviewed on 06/05/2024

Trade name: Buffer QC Check Standard

	(Contd. of page 4)
· Solvent content:		
Water:	99.0 %	
VOC content:	0.00~%	
	0.0 g/l / 0.00 lb/gal	
Solids content:	0.7 %	
• 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: No irritant effect.
- on the eye: No irritating effect.
- Sensitization: No sensitizing effects known.
- · Additional toxicological information:

The product is not subject to classification according to internally approved calculation methods for preparations:

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

· 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.

· 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:
- $\cdot \textit{Bioaccumulative potential No further relevant information available}.$
- *Mobility in soil* No further relevant information available.

(Contd. on page 6)

- US

Printing date 06/05/2024

Reviewed on 06/05/2024

Trade name: Buffer QC Check Standard

(Contd. of page 5)

- \cdot Additional ecological information:
- \cdot General notes: Not hazardous for water.
- · 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: Smaller quantities can be disposed of with household waste.
- · Uncleaned packagings:
- Recommendation: Disposal must be made according to official regulations.
- Recommended cleansing agent: Water, if necessary with cleansing agents.

14 Transport information

· UN-Number · DOT, ADN, IMDG, IATA	Not regulated
· UN proper shipping name · DOT, ADN, IATA · IMDG	Not regulated Not Regulated Not regulated
· Transport hazard class(es)	
· DOT, ADN, IMDG, IATA · Class	Not regulated
· Packing group · DOT, IMDG, IATA	Not regulated
· Environmental hazards:	Not applicable.
· Special precautions for user	Not applicable.
• Transport in bulk according to Annex II oj MARPOL73/78 and the IBC Code	r Not applicable.
· 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 (extremely hazardous substances):

None of the ingredients is listed.

• Section 313 (Specific toxic chemical listings):

None of the ingredients is listed.

(Contd. on page 7)

US -

Printing date 06/05/2024

Reviewed on 06/05/2024

Trade name: Buffer QC Check Standard

	(Contd. of page
TSCA (Toxic Substances Control Act):	
Water	ACTIV
Potassium Chloride	ACTIV
Hydrochloric Acid	ACTIV
Sodium Hydroxide	ACTIV
citric acid	ACTIV
Thymol	ACTIV
· 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)	
None of the ingredients is listed.	
· TLV (Threshold Limit Value)	
None of the ingredients is listed.	
• NIOSH-Ca (National Institute for Occupational Safety and Health)	
None of the ingredients is listed.	
• GHS label elements Not Applicable	
• Hazard pictograms Not Applicable	
• Signal word Not Applicable	
• Hazard statements Not Applicable	
· Precautionary statements	
If swallowed: Call a poison center/doctor if you feel unwell.	
If on skin: Wash with plenty of water.	
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if p	present and easy to a
Continue rinsing.	
Store in a closed container.	
Dispose of contents/container in accordance with local/regional/national/international reg	uiations.
• 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:

(Contd. on page 8)

US

Printing date 06/05/2024

Reviewed on 06/05/2024

Trade name: Buffer QC Check Standard

	(Contd. of page
Date of preparation / last revision	
Revision 1.2, 06/05/2024: Reviewed SDS for accuracy. MH/STN	
Revision 0.0, 05-29-2024: Creation date for SDS. STN	
06/05/2024	
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	
NIOSH: National Institute for Occupational Safety	
OSHA: Occupational Safety & Health	
TLV: Threshold Limit Value	
PEL: Permissible Exposure Limit	
REL: Recommended Exposure Limit	
* Data compared to the previous version altered.	
Dum comparen io me previous version uneren.	