Printing date 05/15/2023

Reviewed on 05/15/2023

### **1 Identification**

- · Product identifier
- Trade name: Boric Acid 2% w/v Solution APHA for Nitrogen (Absorbent Solution)
- Article number: CY145
- · Application of the substance / the mixture Laboratory chemicals
- 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: techservices@ofite.com 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



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

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



- · Signal word Danger
- Hazard-determining components of labeling: boric acid
- boric acia
- *Hazard statements 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.
- Wear protective gloves/protective clothing/eye protection/face protection.
- IF exposed or concerned: Get medical advice/attention.
- Store locked up.

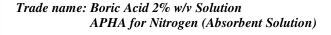
Dispose of contents/container in accordance with local/regional/national/international regulations.

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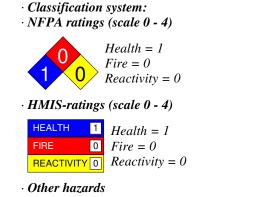
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1.986%

98.014%



· 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: 10043-35-3 boric acid

· Table of Nonhazardous Ingredients

CAS: 7732-18-5 Water

### 4 First-aid measures

- · Description of first aid measures
- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- After skin contact: Generally the product does not irritate the skin.
- · After eye contact: Rinse opened eye for several minutes under running water.
- 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.

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	ons, protective equipment and emergency procedures Not required.	
	recautions: Dilute with plenty of water.	
	erial for containment and cleaning up:	
	l-binding material (sand, diatomite, acid binders, universal binders, sawdust).	
Dispose contamine	ated material as waste according to section 13.	
· Reference to other	r sections	
See Section 7 for i	nformation on safe handling.	
See Section 8 for i	nformation on personal protection equipment.	
See Section 13 for	disposal information.	
See Section 15 jor	aisposai injormanon.	
	Criteria for Chemicals	
· Protective Action	Criteria for Chemicals	6 mg/m
• Protective Action • PAC-1:	Criteria for Chemicals	6 mg/m
• Protective Action • PAC-1: CAS: 10043-35-3	Criteria for Chemicals boric acid	6 mg/m 23 mg/m

### 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:

#### CAS: 10043-35-3 boric acid

- TLV Short-term value: 6\* mg/m<sup>3</sup>
  - Long-term value: 2\* mg/m<sup>3</sup>
    - \*as inhalable fraction, A4

• Additional information: The lists that were valid during the creation were used as basis.

- · Exposure controls
- · Personal protective equipment:
- $\cdot$  General protective and hygienic measures:
- Keep away from foodstuffs, beverages and feed.
- Wash hands before breaks and at the end of work.
- Store protective clothing separately.

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- · 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: Goggles recommended during refilling.* 

· Body protection: Protective work clothing

# 9 Physical and chemical properties

General Information		
· Appearance:	· · · · ·	
Form:	Liquid	
Color:	Clear	
• 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):	1.007 g/cm <sup>3</sup> (8.40341 lbs/gal)	
· Relative density	Not determined.	
· Vapor density	Not determined.	

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		(Contd. of page
• Evaporation rate	Not determined.	
· Solubility in / Miscibility with		
Water:	Fully miscible.	
· Partition coefficient (n-octanol/w	ater): Not determined.	
· Viscosity:		
Dynamic:	Not determined.	
Kinematic:	Not determined.	
· Solvent content:		
Water:	98.0 %	
VOC content:	0.00~%	
	0.0 g/l / 0.00 lb/gal	
Solids content:	2.0 %	
• 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 shows the following dangers according to internally approved calculation methods for preparations:

#### · 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.

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## **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: 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:

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.
- Recommended cleansing agent: Water, if necessary with cleansing agents.

TINT NT		
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.	
UN "Model Regulation":	Not regulated	

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# **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.

· TSCA (Toxic Substances Control Act):

Water

boric acid

• *Hazardous Air Pollutants* None of the ingredients is listed.

· 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

• TLV (Threshold Limit Value)

CAS: 10043-35-3 boric acid

·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). • *Hazard pictograms* 



· Signal word Danger

- Hazard-determining components of labeling: boric acid
- · Hazard statements
- May damage fertility or the unborn child.
- **Precautionary statements** Obtain special instructions before use.

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#### Trade name: Boric Acid 2% w/v Solution **APHA** for Nitrogen (Absorbent Solution)

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Do not handle until all safety precautions have been read and understood. Wear protective gloves/protective clothing/eye protection/face protection. IF exposed or concerned: 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. STN Revision 1.0, 01-12-2023: Reviewed SDS for Accuracy. STN 05/15/2023 • 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 NIOSH: National Institute for Occupational Safety OSHA: Occupational Safety & Health TLV: Threshold Limit Value

PEL: Permissible Exposure Limit **REL:** Recommended Exposure Limit

Toxic to Reproduction 1B: Reproductive toxicity - Category 1B

 $\cdot$  \* Data compared to the previous version altered.