Printing date 05/16/2024

Reviewed on 05/16/2024

## **1** Identification

- · Product identifier
- Trade name: Sulfuric Acid (0.001 N) 0.5 mM Aqueous Solution
- Article number: LY400
- · 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

- *Wear protective gloves / eye protection.*
- 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 accordance with local/regional/national/international regulations.

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

• Health = 0FIRE 0 Fire = 0**REACTIVITY O** Reactivity = 0

· Other hazards

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

(Contd. on page 2)

US

Printing date 05/16/2024

Reviewed on 05/16/2024

### Trade name: Sulfuric Acid (0.001 N) 0.5 mM Aqueous Solution

(Contd. of page 1)

99.995%

0.005%

• **vPvB:** Not applicable.

### 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

CAS: 7664-93-9 Sulfuric Acid 96 - 98%

## 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.

### · Protective Action Criteria for Chemicals

#### • PAC-1:

CAS: 7664-93-9 Sulfuric Acid 96 - 98%

 $0.20 \ mg/m^{3}$ 

(Contd. on page 3)

Printing date 05/16/2024

Reviewed on 05/16/2024

#### Trade name: Sulfuric Acid (0.001 N) 0.5 mM Aqueous Solution

(Contd. of page 2)

 $8.7 \, mg/m^3$ 

 $160 \, mg/m^3$ 

· PAC-3:

· PAC-2:

CAS: 7664-93-9 Sulfuric Acid 96 - 98%

CAS: 7664-93-9 Sulfuric Acid 96 - 98%

## 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: None.
- 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.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation  $\cdot$  *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.

(Contd. on page 4)

\_\_\_\_US

Printing date 05/16/2024

Reviewed on 05/16/2024

(Contd. of page 3)

# Trade name: Sulfuric Acid (0.001 N) 0.5 mM Aqueous Solution

· Body protection: Protective work clothing

Information on basic physical and c	hemical properties	
General Information		
Appearance:		
Form:	Liquid	
Color:	Colorless	
Odor:	Odorless .	
Odor threshold:	Not determined.	
pH-value:	Not determined.	
Change in condition		
Melting point/Melting range:	0 °C (32 °F) 100 °C (212 °F)	
Boiling point/Boiling range:		
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):	1.00002 g/cm <sup>3</sup> (8.34517 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:	Not determined.	
Kinematic:	Not determined.	
Solvent content:		
Water:	100.0 %	
VOC content:		
	0.0 g/l / 0.00 lb/gal	
Solids content:	0.0 %	
Other information	No further relevant information available.	

(Contd. on page 5)

Printing date 05/16/2024

Reviewed on 05/16/2024

Trade name: Sulfuric Acid (0.001 N) 0.5 mM Aqueous Solution

(Contd. of page 4)

## **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)

CAS: 7664-93-9 Sulfuric Acid 96 - 98%

• NTP (National Toxicology Program) CAS: 7664-93-9 Sulfuric Acid 96 - 98%

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

(Contd. on page 6)

1

Κ

Printing date 05/16/2024

Reviewed on 05/16/2024

Trade name: Sulfuric Acid (0.001 N) 0.5 mM Aqueous Solution

(Contd. of page 5)

# **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.

4 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 MARPOL73/78 and the IBC Code	II of 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):

CAS: 7664-93-9 Sulfuric Acid 96 - 98%

 Section 313 (Specific toxic chemical listings): CAS: 7664-93-9 Sulfuric Acid 96 - 98%

• TSCA (Toxic Substances Control Act):

Water

Sulfuric Acid 96 - 98%

· Hazardous Air Pollutants

None of the ingredients is listed.

(Contd. on page 7)

ACTIVE

ACTIVE

US -

Printing date 05/16/2024

· Proposition 65

#### Reviewed on 05/16/2024

(Contd. of page 6)

A2

#### Trade name: Sulfuric Acid (0.001 N) 0.5 mM Aqueous Solution

· 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) CAS: 7664-93-9 Sulfuric Acid 96 - 98% · 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 Wear protective gloves / eye protection. 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 accordance with local/regional/national/international regulations.

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:

· Date of preparation / last revision

Revision 1.2, 05/16/2024: Reviewed SDS for accuracy. MH/STN 05/16/2024 · 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)

(Contd. on page 8)

US

Printing date 05/16/2024

Trade name: Sulfuric Acid (0.001 N) 0.5 mM Aqueous Solution Reviewed on 05/16/2024

(Contd. of page 7)

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.