Printing date 07/01/2024

Reviewed on 07/01/2024

### **1** Identification

- · Product identifier
- Trade name: Bromothymol Blue 0.2% w/v Solution
- Article number: 1412

· 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 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 dry place.

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

· Classification system:

· NFPA ratings (scale 0 - 4)



Health = 0Fire = 0Reactivity = 0

· HMIS-ratings (scale 0 - 4)



· Other hazards

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

(Contd. on page 2)



Printing date 07/01/2024

Reviewed on 07/01/2024

Trade name: Bromothymol Blue 0.2% w/v Solution

· vPvB: Not applicable.

(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	99.8%
CAS: 34722-90-2	Bromothymol Blue Sodium Salt	0.2%
CAS: 1310-73-2	Sodium Hydroxide	0.0001%

### 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: 1310-73-2 Sodium Hydroxide

 $\frac{0.5 \text{ mg/m}^3}{(\text{Contd. on page 3})}$ 

Printing date 07/01/2024

Reviewed on 07/01/2024

Trade name: Bromothymol Blue 0.2% w/v Solution

(Contd. of page 2)

 $5 mg/m^3$ 

 $50 \text{ mg/m}^3$ 

· PAC-3:

· PAC-2:

CAS: 1310-73-2 Sodium Hydroxide

CAS: 1310-73-2 Sodium Hydroxide

## 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: Store in cool, dry conditions in well sealed receptacles.
- *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)

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US

Printing date 07/01/2024

Reviewed on 07/01/2024

(Contd. of page 3)

Trade name: Bromothymol Blue 0.2% w/v Solution

· Body protection: Protective work clothing

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Information on basic physical and c	hemical properties	
General Information		
Appearance:	T · · · 1	
Form: Color:	Liquid Dark blue	
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 g/cm <sup>3</sup> (8.345 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	<b>r</b> ): Not determined.	
Viscosity:		
Dynamic:	Not determined.	
Kinematic:	Not determined.	
Solvent content:		
Water:	99.8 %	
VOC content:	0.00~%	
	0.0 g/l / 0.00 lb/gal	
Solids content:	0.2 %	
Other information	No further relevant information available.	

(Contd. on page 5)

Printing date 07/01/2024

Reviewed on 07/01/2024

# Trade name: Bromothymol Blue

0.2% w/v 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)

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:
- · 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)

Printing date 07/01/2024

Reviewed on 07/01/2024

Trade name: Bromothymol Blue 0.2% w/v 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: • Marine pollutant:	No
· Special precautions for user	Not applicable.
• Transport in bulk according to Annex I 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):

None of the ingredients is listed.

· Section 313 (Specific toxic chemical listings):

None of the ingredients is listed.

• TSCA (Toxic Substances Control Act):

Water

Bromothymol Blue Sodium Salt

Sodium Hydroxide

· Hazardous Air Pollutants

None of the ingredients is listed.

(Contd. on page 7)

ACTIVE

ACTIVE

ACTIVE

US

Printing date 07/01/2024

· Proposition 65

Reviewed on 07/01/2024

## Trade name: Bromothymol Blue

0.2% w/v Solution

(Contd. of page 6)

#### · 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 present and easy to do. Continue rinsing.

Store in a dry place.

- 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 07/01/2024: Reviewed SDS for accuracy. MH/STN 07/01/2024 / 1.1 · Abbreviations and acronvms:
- 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

Printing date 07/01/2024

Trade name: Bromothymol Blue 0.2% w/v Solution Reviewed on 07/01/2024

(Contd. of page 7)

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.