Printing date 06/10/2024 Reviewed on 06/10/2024

1 Identification

· Product identifier

· Trade name: <u>Bromocresol Green in Ethanol</u>

For TLC Stain

· Article number: SPX767

· 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



GHS02 Flame

Flammable Liquids 2 H225 Highly flammable liquid and vapor.

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



- · Signal word Danger
- · Hazard statements

Highly flammable liquid and vapor.

· Precautionary statements

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

Keep container tightly closed.

Ground/bond container and receiving equipment.

Use explosion-proof electrical/ventilating/lighting/equipment.

Use only non-sparking tools.

Take precautionary measures against static discharge.

Wear protective gloves/protective clothing/eye protection/face protection.

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

In case of fire: Use CO2, powder or water spray to extinguish.

Store in a well-ventilated place. Keep cool.

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

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



Health = 0 Fire = 3Reactivity = 0

· HMIS-ratings (scale 0 - 4)



- · 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: 64-17-5 Ethyl Alcohol, Absolute 200 Proof | 99.949% |
| · Table of Nonhazardous Ingredients | |
| CAS: 76-60-8 Bromocresol Green | 0.051% |

4 First-aid measures

- · Description of first aid measures
- General information: Immediately remove any clothing soiled by the product.
- · 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.
- · 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:

CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

- · 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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6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

· Environmental precautions:

Dilute with plenty of water.

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.

Ensure adequate ventilation.

· 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: 64-17-5 | Ethyl Alcohol, Absolute 200 Proof | 1,800 ppm | | |
| CAS: 76-60-8 | Bromocresol Green | 13 mg/m³ | | |
| · PAC-2: | | | | |
| CAS: 64-17-5 | Ethyl Alcohol, Absolute 200 Proof | 3300* ppm | | |
| CAS: 76-60-8 | Bromocresol Green | 140 mg/m³ | | |
| · PAC-3: | | | | |
| CAS: 64-17-5 | Ethyl Alcohol, Absolute 200 Proof | 15000* ppm | | |
| CAS: 76-60-8 | Bromocresol Green | 840 mg/m³ | | |
| | | | | |

7 Handling and storage

- · Handling:
- · Precautions for safe handling No special precautions are necessary if used correctly.
- · Information about protection against explosions and fires:

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

- · Conditions for safe storage, including any incompatibilities
- · Storage.
- · Requirements to be met by storerooms and receptacles: Store in a cool location.
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions:

Keep receptacle tightly sealed.

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.

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· Control parameters

· Components with limit values that require monitoring at the workplace:

CAS: 64-17-5 Ethyl Alcohol, Absolute 200 Proof

PEL Long-term value: 1900 mg/m³, 1000 ppm REL Long-term value: 1900 mg/m³, 1000 ppm

TLV Short-term value: 1000 ppm

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

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

- · 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 basic physical and chemical properties
- · General Information
- · Appearance:

Form: Liquid
Color: Blue-Green
Odor: Alcohol-like
Odor threshold: Not determined.

· pH-value: Not determined.

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| | (Contd. of page |
|---------------------------------------|--|
| Change in condition | |
| Melting point/Melting range: | -114 °C (-173.2 °F) |
| Boiling point/Boiling range: | 78.3 °C (172.9 °F) |
| Flash point: | 13 °C (55.4 °F) |
| Flammability (solid, gaseous): | Highly flammable. |
| Auto igniting: | 425 °C (797 °F) |
| Decomposition temperature: | Not determined. |
| Ignition temperature: | Product is not selfigniting. |
| Danger of explosion: | Product is not explosive. However, formation of explosive air/vap mixtures are possible. |
| Explosion limits: | |
| Lower: | 3.5 Vol % |
| Upper: | 19 Vol % |
| Vapor pressure at 20 °C (68 °F): | 59 hPa (44.3 mm Hg) |
| Vapor pressure at 50 °C (122 °F): | 280 hPa (210 mm Hg) |
| Density at 20 °C (68 °F): | $0.78934 \ g/cm^3 \ (6.58704 \ lbs/gal)$ |
| Relative density | Not determined. |
| Vapor density | Not determined. |
| Evaporation rate | Not determined. |
| Solubility in / Miscibility with | |
| Water at 20 °C (68 °F): | 1,000 g/l |
| Partition coefficient (n-octanol/wate | r): Not determined. |
| Viscosity: | |
| Dynamic at 20 °C (68 °F): | 1.2 mPas |
| Kinematic: | Not determined. |
| Solvent content: | |
| Organic solvents: | 99.9 % |
| VOC content: | 99.95 % |
| | 788.9 g/l / 6.58 lb/gal |
| Solids content: | 100.0 % |
| 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.

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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:
- · Carcinogenic categories
- · IARC (International Agency for Research on Cancer)

CAS: 64-17-5 Ethyl Alcohol, Absolute 200 Proof

- 1

· 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:

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

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| Transport information | |
|---|---|
| UN-Number DOT, IMDG, IATA | UN1170 |
| UN proper shipping name DOT IMDG, IATA | Ethanol solution ETHANOL solution |
| Transport hazard class(es) | |
| DOT | |
| RAMMASIE LIGID | |
| Class Label | 3 Flammable liquids |
| IMDG, IATA | <u> </u> |
| | |
| Class Label | 3 Flammable liquids 3 |
| Packing group DOT, IMDG, IATA | II |
| Environmental hazards: | Not applicable. |
| Special precautions for user Hazard identification number (Kemler code): | |
| EMS Number: Stowage Category | F-A,S-G B |
| Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code | Not applicable. |
| Transport/Additional information: | |
| DOT Quantity limitations | On passenger aircraft/rail: 15 kg On cargo aircraft only: 50 kg |
| · IMDG · Limited quantities (LQ) · Excepted quantities (EQ) | 1 kg Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml |
| UN "Model Regulation": | UN 1170 ETHANOL SOLUTION, 3, II |

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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 (extrem | elv hazardous | s substances). |
|-----------|-------------|---------------|----------------|
| | | | |

None of the ingredients is listed.

· Section 313 (Specific toxic chemical listings):

None of the ingredients is listed.

· TSCA (Toxic Substances Control Act):

Ethyl Alcohol, Absolute 200 Proof ACTIVEBromocresol Green **ACTIVE**

· 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:

CAS: 64-17-5 Ethyl Alcohol, Absolute 200 Proof

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

None of the ingredients is listed.

· TLV (Threshold Limit Value)

CAS: 64-17-5 Ethyl Alcohol, Absolute 200 Proof

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· 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 statements

Highly flammable liquid and vapor.

· Precautionary statements

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

Keep container tightly closed.

Ground/bond container and receiving equipment.

Use explosion-proof electrical/ventilating/lighting/equipment.

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Trade name: Bromocresol Green in Ethanol For TLC Stain

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Use only non-sparking tools.

Take precautionary measures against static discharge.

Wear protective gloves/protective clothing/eye protection/face protection.

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

In case of fire: Use CO2, powder or water spray to extinguish.

Store in a well-ventilated place. Keep cool.

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, 06/10/2024: Reviewed SDS for accuracy. MH/STN

Revision 0.0, 05-29-2024: Creation date for SDS. STN

06/10/2024 / 1.0

· 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

Flammable Liquids 2: Flammable liquids – Category 2

* Data compared to the previous version altered.

US