

SAFETY DATA SHEET

Revision Date 28-Dec-2021

Revision Number 4

| 1. Identification | | | |
|---|---|--|--|
| Product Name | Bromothymol Blue, 0.04% Aqueous Solution | | |
| Cat No. : | AC612400000; AC612405000 | | |
| Synonyms | No information available | | |
| Recommended Use Uses advised against | Laboratory chemicals. Food, drug, pesticide or biocidal product use. | | |
| Details of the supplier of the safety | data sheet | | |
| Company Fisher Scientific Company One Reagent Lane Fair Lawn, NJ 07410 Tel: (201) 796-7100 | Acros Organics One Reagent Lane Fair Lawn, NJ 07410 | | |
| Emergency Telephone Number | For information US call: 001-800-ACROS-01 / Europe call: +32 14 57 52 11 Emergency Number US :001-201-796-7100 / Europe: +32 14 57 52 99 CHEMTREC Tel. No. US :001-800-424-9300 / Europe :001-703-527-3887 | | |

2. Hazard(s) identification

Classification

Classification under 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Label Elements
None required

Hazards not otherwise classified (HNOC) None identified

3. Composition/Information on Ingredients

| Component | CAS No | Weight % |
|--|------------|----------|
| Water | 7732-18-5 | > 99 |
| Phenol, 4,4'-(3H-2,1-benzoxathiol-3-ylidene)bis[2,6-dibromo | 34725-61-6 | 0.04 |
| -, S,S-dioxide, monosodium salt | | |
| Tetrasodium EDTA | 64-02-8 | 0.02 |

| Eye Contact | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. |
|--|--|
| Skin Contact | Wash off immediately with plenty of water for at least 15 minutes. |
| Inhalation | Remove to fresh air. |
| Ingestion | Do NOT induce vomiting. |
| Most important symptoms and effects | No information available. |
| Notes to Physician | Treat symptomatically |

5. Fire-fighting measures

| Unsuitable Extinguishing Media | No information available |
|---|---|
| Flash Point Method - | No information available |
| Autoignition Temperature Explosion Limits | No information available |
| Upper | No data available |
| Lower | No data available |
| Sensitivity to Mechanical Impact Sensitivity to Static Discharge | No information available No information available |

Specific Hazards Arising from the Chemical

Keep product and empty container away from heat and sources of ignition.

Hazardous Combustion Products

None known.

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

| NFPA Health 0 | Flammability 0 | Instability 0 | Physical hazards N/A |
|---|---|--|-------------------------|
| | 6. Accidental re | lease measures | |
| Personal Precautions Environmental Precautions | Ensure adequate ventilatio See Section 12 for additior | on. Use personal protective equip nal Ecological Information. | oment as required. |

Methods for Containment and Clean No information available.

Up

7. Handling and storage

| Handling | Ensure adequate ventilation. | | |
|-------------------------------|---|--|--|
| Storage. | Keep containers tightly closed in a dry, cool and well-ventilated place. | | |
| 8. E | xposure controls / personal protection | | |
| Exposure Guidelines | This product does not contain any hazardous materials with occupational exposure limitsestablished by the region specific regulatory bodies. | | |
| Engineering Measures | Ensure adequate ventilation, especially in confined areas. | | |
| Personal Protective Equipment | | | |
| Eye/face Protection | Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166. | | |
| Skin and body protection | Wear appropriate protective gloves and clothing to prevent skin exposure. | | |
| Respiratory Protection | Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced. | | |
| Hygiene Measures | Handle in accordance with good industrial hygiene and safety practice. | | |

| 9. Physical and chemical properties | | |
|--|--------------------------|--|
| Physical State | Liquid | |
| Appearance | Dark green | |
| Odor | Odorless | |
| Odor Threshold | No information available | |
| рН | | |
| Melting Point/Range | 0°C | |
| Boiling Point/Range | °C | |
| Flash Point | | |
| Evaporation Rate | >1 | |
| Flammability (solid,gas) | No information available | |
| Flammability or explosive limits | | |
| Upper | No data available | |
| Lower | No data available | |
| Vapor Pressure | 14 mmHg @ 20 °C | |
| Vapor Density | No information available | |
| Specific Gravity | 1 | |
| Solubility | Soluble in water | |
| Partition coefficient; n-octanol/water | No data available | |
| Autoignition Temperature | No information available | |
| Decomposition Temperature | No information available | |
| Viscosity | No information available | |
| • | | |

10. Stability and reactivity

| Reactive Hazard | None known, based on information available |
|------------------------|--|
| Stability | Stable under normal conditions. |
| Conditions to Avoid | Incompatible products. |
| Incompatible Materials | Strong oxidizing agents |

Hazardous Decomposition Products None under normal use conditions

Hazardous Polymerization Hazardous polymerization does not occur.

Hazardous Reactions

None under normal processing.

11. Toxicological information

Acute Toxicity

Product Information

| component information | | | |
|-----------------------|--------------------------------|-------------|-----------------|
| Component | LD50 Oral | LD50 Dermal | LC50 Inhalation |
| Water | - | - | - |
| Tetrasodium EDTA | LD50 = 1780 - 2000 mg/kg (Rat) | Not listed | Not listed |

 Toxicologically Synergistic
 No information available

Products

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Irritation

No information available

Sensitization

No information available

Carcinogenicity

The table below indicates whether each agency has listed any ingredient as a carcinogen.

| Component | CAS No | IARC | NTP | ACGIH | OSHA | Mexico |
|--|----------------|--|------------|------------|------------|------------|
| Water | 7732-18-5 | Not listed | Not listed | Not listed | Not listed | Not listed |
| Phenol, 4,4'-(3H-2,1-benzoxath iol-3-ylidene)bis[2,6-di bromo-, S,S-dioxide, monosodium salt | 34725-61-6 | Not listed | Not listed | Not listed | Not listed | Not listed |
| Tetrasodium EDTA | 64-02-8 | Not listed | Not listed | Not listed | Not listed | Not listed |
| Mutagenic Effects Reproductive Effects | S | No information available No information available. | | | | |
| Developmental Effect | cts | No information available. | | | | |
| Teratogenicity | | No information available. | | | | |
| STOT - single expos STOT - repeated exp | | None known None known | | | | |
| Aspiration hazard | | No information available | | | | |
| Symptoms / effects, delayed | both acute and | d No information available | | | | |
| Endocrine Disruptor | Information | No information ava | ailable | | | |
| Other Adverse Effec | ts | The toxicological properties have not been fully investigated. | | | | |

12. Ecological information

Ecotoxicity

Do not empty into drains.

| Component | Freshwater Algae | Freshwater Fish | Microtox | Water Flea |
|------------------|------------------------|--------------------------|------------|----------------------|
| Tetrasodium EDTA | EC50: = 1.01 mg/L, 72h | LC50: = 121 - 1592 mg/L, | Not listed | EC50: = 140mg/l, 48h |

| | · · · · | nodesmus spicatus) | 96h static (Lepomis macrochirus) | (Daphnia magna) |
|--------------------------------------|---------|-----------------------|-------------------------------------|-----------------|
| Persistence and Degradability | | No information | on available | |
| Bioaccumulation/ Accumulation | | No information | on available. | |
| Mobility No informa | | No informatio | on available. | |

13. Disposal considerations

Waste Disposal Methods Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

| | 14. Transport information | | | | |
|--------------------|----------------------------|--|--|--|--|
| DOT | Not regulated | | | | |
| DOT TDG IATA | Not regulated | | | | |
| ΙΑΤΑ | Not regulated | | | | |
| IMDG/IMO | Not regulated | | | | |
| | 15. Regulatory information | | | | |

United States of America Inventory

| Component | CAS No | TSCA | TSCA Inventory notification - Active-Inactive | TSCA - EPA Regulatory Flags |
|--|------------|------|--|--------------------------------|
| Water | 7732-18-5 | Х | ACTIVE | - |
| Phenol, 4,4'-(3H-2,1-benzoxathiol-3-yliden e)bis[2,6-dibromo-, S,S-dioxide, monosodium salt | 34725-61-6 | Х | ACTIVE | - |
| Tetrasodium EDTA | 64-02-8 | Х | ACTIVE | - |

Legend:

TSCA US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710) X - Listed

'-' - Not Listed

TSCA 12(b) - Notices of Export Not applicable

International Inventories

Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Japan (ISHL), Australia (AICS), China (IECSC), Korea (KECL).

| Component | CAS No | DSL | NDSL | EINECS | PICCS | ENCS | ISHL | AICS | IECSC | KECL |
|--|------------|-----|------|-----------|-------|------|------|------|-------|----------|
| Water | 7732-18-5 | Х | - | 231-791-2 | Х | Х | | Х | Х | KE-35400 |
| Phenol, 4,4'-(3H-2,1-benzoxathiol-3-yliden e)bis[2,6-dibromo-, S,S-dioxide, monosodium salt | 34725-61-6 | - | Х | 252-170-2 | - | - | | - | - | - |
| Tetrasodium EDTA | 64-02-8 | Х | - | 200-573-9 | Х | Х | Х | Х | Х | KE-13654 |

KECL - NIER number or KE number (http://ncis.nier.go.kr/en/main.do)

U.S. Federal Regulations

SARA 313

Not applicable

SARA 311/312 Hazard Categories See section 2 for more information

| CWA (Clean Water Act) | Not applicable |
|---|---|
| Clean Air Act | Not applicable |
| OSHA - Occupational Safety and Health Administration | Not applicable |
| CERCLA | Not applicable |
| California Proposition 65 | This product does not contain any Proposition 65 chemicals. |
| U.S. State Right-to-Know Regulations | Not applicable |

| Component | Massachusetts | New Jersey | Pennsylvania | Illinois | Rhode Island |
|-----------|---------------|------------|--------------|----------|--------------|
| Water | - | - | Х | - | - |

U.S. Department of Transportation

| Reportable Quantity (RQ): | Ν |
|-----------------------------|---|
| DOT Marine Pollutant | Ν |
| DOT Severe Marine Pollutant | Ν |

| U.S. Department of Homela | and |
|----------------------------------|-----|
| Security | |

This product does not contain any DHS chemicals.

Other International Regulations

Mexico - Grade

No information available

Authorisation/Restrictions according to EU REACH

| Component | REACH (1907/2006) - Annex XIV - Substances Subject to Authorization | REACH (1907/2006) - Annex XVII - Restrictions on Certain Dangerous Substances | REACH Regulation (EC 1907/2006) article 59 - Candidate List of Substances of Very High Concern (SVHC) |
|------------------|---|---|--|
| Tetrasodium EDTA | - | Use restricted. See item 75. | - |
| | | (see link for restriction details) | |

https://echa.europa.eu/substances-restricted-under-reach

Safety, health and environmental regulations/legislation specific for the substance or mixture

| Component | CAS No | OECD HPV | Persistent Organic Pollutant | Ozone Depletion Potential | Restriction of Hazardous Substances (RoHS) |
|---------------------------------|------------|----------------|---------------------------------|------------------------------|--|
| Water | 7732-18-5 | Listed | Not applicable | Not applicable | Not applicable |
| Phenol, | 34725-61-6 | Not applicable | Not applicable | Not applicable | Not applicable |
| 4,4'-(3H-2,1-benzoxathiol-3-yli | | | | | |
| dene)bis[2,6-dibromo-, | | | | | |
| S,S-dioxide, monosodium salt | | | | | |
| Tetrasodium EDTA | 64-02-8 | Listed | Not applicable | Not applicable | Not applicable |

| Component | CAS No | Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification | Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements | Rotterdam Convention (PIC) | Basel Convention (Hazardous Waste) |
|--|-----------|---|--|-------------------------------|---------------------------------------|
| Water | 7732-18-5 | Not applicable | Not applicable | Not applicable | Not applicable |
| Phenol, 4,4'-(3H-2,1-benzoxathiol-3-yli dene)bis[2,6-dibromo-, S,S-dioxide, monosodium salt | | Not applicable | Not applicable | Not applicable | Not applicable |

| Tetrasodium EDTA | 64-02-8 | Not applicable | Not applicable | Not applicable | Not applicable | |
|---|--|--|---------------------|--|----------------|--|
| | | | | | | |
| | | 16. Other inf | ormation | | | |
| Prepared By | Regulatory Affairs Thermo Fisher Scientific Email: EMSDS.RA@thermofisher.com | | | | | |
| Revision Date Print Date Revision Summary | replacing | 2021 ument has been upd the current legislatio | on under 29 CFR 191 | he US OSHA HazCo 0.1200 to align with 9 of Chemicals (GHS) | the Globally | |

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

End of SDS