

Page 1 / 7 Creation Date 09-Feb-2011 Revision Date 30-Apr-2024 Version 3

ALFAAA17913

Bromothymol Blue sodium salt

SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

| 产品说明: | 溴百里酚蓝钠盐 |
|----------------------------|--|
| Product Description: | Bromothymol Blue sodium salt |
| Cat No. : | A17913 |
| Synonyms | 3`,3``-Dibromothymolsulfonephthalein, sodium salt; BTB; Bromthymol Blue, sodium salt |
| CAS No | 34722-90-2 |
| Molecular Formula | C27 H27 Br2 Na O5 S |
| Supplier | Avocado Research Chemicals Ltd. (Part of Thermo Fisher Scientific) Shore Road, Heysham Lancashire, LA3 2XY, United Kingdom Office Tel: +44 (0) 1524 850506 Office Fax: +44 (0) 1524 850608 |
| Emergency Telephone Number | For information US call: 001-800-227-6701 / 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 |
| E-mail address | begel.sdsdesk@thermofisher.com |
| Recommended Use | Laboratory chemicals. |
| Uses advised against | No Information available |

SECTION 2. HAZARD IDENTIFICATION

| Physical | State |
|----------|-------|
| Powder | Solid |

Appearance Red brown Odor No information available

Emergency Overview

The product contains no substances which at their given concentration are considered to be hazardous to health.

<u>Classification of the substance or mixture</u> Based on available data, the classification criteria are not met

Label Elements

None required

Physical and Chemical Hazards None identified.

Health Hazards

The product contains no substances which at their given concentration are considered to be hazardous to health.

Environmental hazards

Contains no substances known to be hazardous to the environment or not degradable in waste water treatment plants. Will likely be mobile in the environment due to its water solubility. The product is water soluble, and may spread in water systems.

Bromothymol Blue sodium salt

This product does not contain any known or suspected endocrine disruptors.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

| Component | CAS No | Weight % |
|--|------------|----------|
| Phenol, 4,4'-(3H-2,1-benzoxathiol-3-ylidene)bis[2-bromo-3-methyl-6-(1-methylethyl)-, | 34722-90-2 | 100 |
| S,S-dioxide, monosodium salt | | |

SECTION 4. FIRST AID MEASURES

Eye Contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.

Skin Contact

Wash off immediately with plenty of water for at least 15 minutes. Get medical attention.

Inhalation

Remove to fresh air. If not breathing, give artificial respiration. Get medical attention.

Ingestion

Do NOT induce vomiting. Get medical attention.

Most important symptoms and effects

No information available.

Self-Protection of the First Aider

No special precautions required.

Notes to Physician

Treat symptomatically.

SECTION 5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Water spray. Carbon dioxide (CO 2). Dry chemical. Chemical foam.

Extinguishing media which must not be used for safety reasons No information available.

Specific Hazards Arising from the Chemical

Thermal decomposition can lead to release of irritating gases and vapors.

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.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions

Use personal protective equipment as required. Ensure adequate ventilation. Avoid dust formation.

Environmental Precautions

Prevent further leakage or spillage if safe to do so.

Bromothymol Blue sodium salt

Methods for Containment and Clean Up

Sweep up and shovel into suitable containers for disposal. Avoid dust formation.

Refer to protective measures listed in Sections 8 and 13.

SECTION 7. HANDLING AND STORAGE

Handling

Wear personal protective equipment/face protection. Ensure adequate ventilation. Avoid dust formation. Avoid contact with skin and eyes. Do not breathe dust. Wash hands before breaks and immediately after handling the product.

Storage

Keep in a dry, cool and well-ventilated place. Keep container tightly closed.

Specific Use(s)

Use in laboratories

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

Monitoring methods

BS EN 14042:2003 Title Identifier: Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents. MDHS14/3 General methods for sampling and gravimetric analysis of respirable and inhalable dust

Exposure Controls

Engineering Measures

None under normal use conditions. .

Personal protective equipment

Eye Protection Wear safety glasses with side shields (or goggles) (European standard - EN 166)

Protective gloves

Hand Protection

Glove material
Natural rubber
Nitrile rubber
PVCBreakthrough time
Glove thicknessGlove thickness
EU standard
EN 374Glove comments
(minimum requirement)Neoprene
PVCPVC-EN 374(minimum requirement)

Inspect gloves before use.

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. (Refer to manufacturer/supplier for information)

Ensure gloves are suitable for the task: Chemical compatability, Dexterity, Operational conditions, User susceptibility, e.g. sensitisation effects, also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion.

Remove gloves with care avoiding skin contamination.

| Skin and body protection | Wear appropriate protective gloves and clothing to prevent skin exposure |
|----------------------------|---|
| Respiratory Protection | No protective equipment is needed under normal use conditions. |
| Large scale/emergency use | Use a NIOSH/MSHA or European Standard EN 136 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced Recommended Filter type: Particle filter |
| Small scale/Laboratory use | Maintain adequate ventilation |

Bromothymol Blue sodium salt

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice.

Environmental exposure controls

No information available.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

| Appearance | Red brown Powder Solid | |
|--------------------------------------|---------------------------|-----------------------------------|
| Physical State | Powder Solid | |
| Odor | No information available | |
| Odor Threshold | No data available | |
| рН | No information available | |
| Melting Point/Range | No data available | |
| Softening Point | No data available | |
| Boiling Point/Range | No information available | |
| Flash Point | No information available | Method - No information available |
| Evaporation Rate | Not applicable | Solid |
| Flammability (solid,gas) | No information available | |
| Explosion Limits | No data available | |
| Vapor Pressure | No data available | |
| Vapor Density | Not applicable | Solid |
| Specific Gravity / Density | No data available | |
| Bulk Density | No data available | |
| Water Solubility | Soluble | |
| Solubility in other solvents | No information available | |
| Partition Coefficient (n-octanol/wat | er) | |
| Autoignition Temperature | No data available | |
| Decomposition Temperature | No data available | |
| Viscosity | Not applicable | Solid |
| Explosive Properties | No information available | |
| Oxidizing Properties | No information available | |
| Molecular Formula | C27 H27 Br2 Na O5 S | |
| Molecular Weight | 646.35 | |

SECTION 10. STABILITY AND REACTIVITY

| Stability | Stable under normal conditions. |
|---|---|
| Hazardous Reactions Hazardous Polymerization | No information available. Hazardous polymerization does not occur. |
| Conditions to Avoid | Incompatible products. Avoid dust formation. |
| Materials to avoid | Strong oxidizing agents. |

Hazardous Decomposition Products Carbon monoxide (CO). Carbon dioxide (CO2). Hydrogen halides. Sulfur oxides.

SECTION 11. TOXICOLOGICAL INFORMATION

Product Information

No acute toxicity information is available for this product

(a) acute toxicity;

Bromothymol Blue sodium salt

| | Bromothymor Blac Soulain Sait | | | | | |
|--|---|--|--|--|--|--|
| (b) skin corrosion/irritation; | No data available | | | | | |
| (c) serious eye damage/irritation; | No data available | | | | | |
| (d) respiratory or skin sensitization; Respiratory Skin | No data available No data available | | | | | |
| (e) germ cell mutagenicity; | No data available | | | | | |
| (f) carcinogenicity; | No data available | | | | | |
| | There are no known carcinogenic chemicals in this product | | | | | |
| (g) reproductive toxicity; | No data available | | | | | |
| (h) STOT-single exposure; | No data available | | | | | |
| (i) STOT-repeated exposure; | No data available | | | | | |
| Target Organs | No information available. | | | | | |
| (j) aspiration hazard; | Not applicable Solid | | | | | |
| Other Adverse Effects | The toxicological properties have not been fully investigated. | | | | | |
| Symptoms / effects,both acute and delayed | No information available | | | | | |
| | SECTION 12. ECOLOGICAL INFORMATION | | | | | |
| Ecotoxicity effects | Contains no substances known to be hazardous to the environment or that are not degradable in waste water treatment plants. | | | | | |
| Persistence and Degradability Persistence | Soluble in water, Persistence is unlikely, based on information available. | | | | | |
| Bioaccumulative Potential | Bioaccumulation is unlikely | | | | | |
| Mobility in soil | The product is water soluble, and may spread in water systems Will likely be mobile in the environment due to its water solubility Highly mobile in soils | | | | | |
| Endocrine Disruptor Information Persistent Organic Pollutant Ozone Depletion Potential | This product does not contain any known or suspected endocrine disruptors This product does not contain any known or suspected substance This product does not contain any known or suspected substance | | | | | |

SECTION 13. DISPOSAL CONSIDERATIONS

Bromothymol Blue sodium salt

| Waste from Residues/Unused Products | Chemical waste generators must determine whether a discarded chemical is classified as hazardous waste. Consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification. | | | | |
|--|---|--|--|--|--|
| Contaminated Packaging | Empty remaining contents. Dispose of in accordance with local regulations. Do not re-use empty containers. | | | | |
| Other Information | Waste codes should be assigned by the user based on the application for which the produce was used. | | | | |
| | SECTION 14. TRANSPORT INFORMATION | | | | |
| Road and Rail Transport | Not Regulated | | | | |
| IMDG/IMO_ | Not regulated | | | | |
| IATA | Not regulated | | | | |
| Special Precautions for User | No special precautions required | | | | |
| | SECTION 15. REGULATORY INFORMATION | | | | |

International Inventories

X = listed, China (IECSC), Europe (EINECS/ELINCS/NLP), U.S.A. (TSCA), Canada (DSL/NDSL), Philippines (PICCS), Japan (ENCS), Japan (ISHL), Australia (AICS), Korea (KECL).

| Component | The Inventory of Hazardous Chemicals (2015 Edition) | goods GB | TCSI | IECSC | EINECS | TSCA | DSL | PICCS | ENCS | ISHL | AICS | KECL |
|---|--|----------|------|-------|-----------|------|-----|-------|------|------|------|------|
| Phenol, 4,4'-(3H-2,1-benzoxath iol-3-ylidene)bis[2-bro mo-3-methyl-6-(1-meth ylethyl)-, S,S-dioxide, monosodium salt | | - | Х | Х | 252-169-7 | Х | X | Х | - | | X | - |

National Regulations

SECTION 16. OTHER INFORMATION

Prepared By Creation Date Revision Date Revision Summary Health, Safety and Environmental Department 09-Feb-2011 30-Apr-2024 New emergency telephone response service provider.

Training Advice

Chemical hazard awareness training, incorporating labelling, Safety Data Sheets (SDS), Personal Protective Equipment (PPE) and hygiene.

Bromothymol Blue sodium salt

Legend

| CAS - Chemical Abstracts Service EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances PICCS - Philippines Inventory of Chemicals and Chemical Substances IECSC - Chinese Inventory of Existing Chemical Substances KECL - Korean Existing and Evaluated Chemical Substances | TSCA - United States Toxic Substances Control Act Section 8(b) Inventory DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List ENCS - Japanese Existing and New Chemical Substances AICS - Australian Inventory of Chemical Substances NZIOC - New Zealand Inventory of Chemicals |
|---|---|
| WEL - Workplace Exposure Limit ACGIH - American Conference of Governmental Industrial Hygienists DNEL - Derived No Effect Level RPE - Respiratory Protective Equipment LC50 - Lethal Concentration 50% NOEC - No Observed Effect Concentration PBT - Persistent, Bioaccumulative, Toxic | TWA - Time Weighted Average IARC - International Agency for Research on Cancer PNEC - Predicted No Effect Concentration LD50 - Lethal Dose 50% EC50 - Effective Concentration 50% POW - Partition coefficient Octanol:Water vPvB - very Persistent, very Bioaccumulative |
| ICAO/IATA - International Civil Aviation Organization/International Air Transport Association ADR - European Agreement Concerning the International Carriage of Dangerous Goods by Road OECD - Organisation for Economic Co-operation and Development BCF - Bioconcentration factor | IMO/IMDG - International Maritime Organization/International Maritime Dangerous Goods Code MARPOL - International Convention for the Prevention of Pollution from Ships ATE - Acute Toxicity Estimate VOC - (Volatile Organic Compound) |

Key literature references and sources for data

https://echa.europa.eu/information-on-chemicals Suppliers safety data sheet, Chemadvisor - LOLI, Merck index, RTECS

Disclaimer

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End of Safety Data Sheet