spectrum[®]



SAFETY DATA SHEET

Preparation Date: 7/30/2015	Revision date 3/26/2019	Revision Number: G2
	1. IDENTIFICATION	
Product identifier		
Product code: Product Name:	BR155 BROMOTHYMOL BLUE, WATER SOLUBLE, RE	AGENT, ACS
<u>Other means of identification</u> Synonyms:	Bromothymol Blue, sodium salt Sodium bromothymol blue Phenol, 4,4'-(1,1-dioxido-3H-2,1-benzoxathiol-3-ylidene)bi ethyl)-, monosodium salt Phenol, 4,4'-(1,1-dioxido-3H-2,1-benzoxathiol-3-ylidene)bi ethyl)-, sodium salt (1:1) Phenol, 4,4'-(3H-2,1-benzoxathiol-3-ylidene)bis(2-bromo-3 S,S-dioxide, monosodium salt Sodium alpha-(3-bromo-5-isopropyl-4-oxo-2-methyl-2,5-cy -4-hydroxy-5-isopropyl-2-methylphenyl)toluenesul 3',3"-Dibromothymolsulfonephthalein	is(2-bromo-3-methyl-6-(1-methyl 3-methyl-6-(1-methylethyl)-, yclohexadienylidene)-2-(3-bromo
CAS #:	34722-90-2	
RTECS #	Not available	
CI#:	Not available	
Recommended use of the chem	ical and restrictions on use	
Recommended use:	Acid-Base indicator.	
Uses advised against	No information available	
Supplier:	Spectrum Chemical Mfg. Corp 14422 South San Pedro St. Gardena, CA 90248 (310) 516-8000	
Order Online At: Emergency telephone number Contact Person: Contact Person:	https://www.spectrumchemical.com Chemtrec 1-800-424-9300 Tom Tyner (USA - West Coast) Ibad Tirmiz (USA - East Coast)	

2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)

Product code: BR155

Label elements

Not hazardous

Hazards not otherwise classified (HNOC) Not Applicable

Other hazards

Not available

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component		CAS No	Weight-%		
Bromothymol Blue, Water S	Soluble	34722-90-2	100		
	4.	FIRST AID MEASURES			
First aid measures					
General Advice:		son emergency and need to	Inited States can provide assistance if you talk to a poison specialist. Call		
Skin Contact:			of water removing all contaminated clothing and velops. Consult a physician if necessary.		
Eye Contact:	•	Flush eyes with water for 15 minutes. Get medical attention if irritation occurs. If symptoms persist, call a physician.			
Inhalation:		Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.			
Ingestion:		Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Consult a physician if necessary.			
Most important symptoms and	effects, both acu	ite and delayed			
Symptoms May cause eye/skin/respiratory tract irritation					
Indication of any immediate me	edical attention a	nd special treatment needed			
Notes to Physician:	Treat symptomatically.				
Protection of first-aiders First-Aid Providers: Avoid expos contaminated clothing and equip			er necessary protective clothing. Dispose of		
	5. FI	RE-FIGHTING MEASUR	ES		

Extinguishing Media Suitable Extinguishing Media:

Dry chemical. Carbon dioxide (CO2). Water spray, mist, or foam. The product is not flammable.

Product code: BR155

Unsuitable Extinguishing Media:	No information available.
Specific hazards arising from the chemical	
Hazardous combustion products	Carbon oxides, sulfur oxides, halogenated compounds, sodium oxides
Hazardous combustion products	carbon oxides. Sulfur oxides. Sodium oxides. Bromine. Hydrogen Bromide.
Specific hazards	May be combustible at high temperatures. Fire may produce irritating and/or toxic gases.
Special Protective Actions for Firefighters	
Specific Methods:	No information available
Special Protective Equipment for Firefighters:	As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions:	Ensure adequate ventilation. Use personal protective equipment. Avoid contact with skin, eyes and clothing. Remove all sources of ignition.
Environmental precautions	Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.
Methods and material for contain	inment and cleaning up
Methods for containment	Stop leak if you can do it without risk. Cover with plastic sheet to prevent spreading.
Methods for cleaning up	Sweep up and shovel into suitable containers for disposal. Clean contaminated surface thoroughly.

7. HANDLING AND STORAGE

Precautions for safe handling

Technical Measures/Precautions:

Provide sufficient air exchange and/or exhaust in work rooms. Avoid dust formation. Keep away from incompatible materials.

Safe Handling Advice

Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Do not ingest. Do not breathe dust. Keep away from heat and sources of ignition. Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Technical Measures/Storage Conditions:

Product code: BR155

Keep container tightly closed in a dry and well-ventilated place. Store at room temperature in the original container. Store away from incompatible materials.

Incompatible Materials:

Oxidizing agents

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

National occupational exposure limits

United States

Component	CAS No	OSHA	NIOSH	ACGIH	AIHA WEEL
Bromothymol Blue, Water Soluble	34722-90-2	None	None	None	None

Canada

Component	CAS No	Canada - Alberta	Canada - British Columbia	Canada - Ontario	Canada - Quebec
Bromothymol Blue, Water Soluble	34722-90-2	None	None	None	None

Australia and Mexico

Component	CAS No	Australia	Mexico
Bromothymol Blue, Water Soluble	34722-90-2	None	None

Appropriate engineering controls

Engineering measures to reduce exposure:

Ensure adequate ventilation, especially in confined areas. Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Individual protection measures, such as personal protective equipment

Personal Protective Equipment

Eye protection:	Safety glasses with side-shields. or Goggles				
Skin and body protection:	Long sleeved clothing Chemical resistant apron Gloves				
Respiratory protection:	Effective dust mask. or. Wear respirator with dust filter. Use a dust respirator under conditions where exposure to the substance is apparent (e.g. generation of high concentration of dust (dust clouds), inadequate ventilation, development of respiratory tract irritation), and engineering controls are not feasible. Be sure to use an approved/certified respirator or equivalent.				
Hygiene measures:	Avoid contact with skin, eyes and clothing. When using, do not eat, dri	ink or			
Product code: BR155	Product name: BROMOTHYMOL BLUE, WATER SOLUBLE, REAGENT,	Page 4/11			

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Solid	Appearance: Crystalline.	Color: Pink. Orange. Black.			
Odor: No information available.	Taste No information available.	Formula C27H27O5SBr2Na			
Molecular/Formula weight (g/mol 646.38 g/mol	e): Flammability (solid, gas) no data available	Flashpoint (°C/°F): No information available			
Flash Point Tested according to: Not available	Autoignition Temperature (°C/°F): No information available	Lower Explosion Limit (%): No information available			
Upper Explosion Limit (%): No information available	Melting point/range(°C/°F): ~349°C/660°F	Decomposition temperature(°C/°F): No information available			
Boiling point/range(°C/°F): ~900°C/1652°F	Bulk density: No information available	Density (g/cm3): No information available			
Specific gravity: No information available	pH No information available	Vapor pressure @ 20°C (kPa): No information available			
Evaporation rate: No information available	Vapor density: No information available	VOC content (g/L): No information available			
Odor threshold (ppm): No information available	Partition coefficient (n-octanol/water): 3.85	Viscosity: No information available			
Miscibility: No information available	Solubility: Easily soluble in cold water				
	10. STABILITY AND REACTIVIT	Y			
Reactivity Reactive with oxidizing agents					
Chemical stability					
Stability:	Stable under recommended storage condition	s.			
Possibility of Hazardous Reactions:	Hazardous polymerization does not occur				
Conditions to avoid:	Heat. Avoid dust formation. Incompatible	materials.			

Incompatible Materials: Oxidizing agents

Hazardous decomposition products:

Other Information Corrosivity:

No information available

Product code: BR155

Product name: BROMOTHYMOL BLUE, WATER SOLUBLE, REAGENT, ACS

carbon oxides. Sodium oxides. Sulfur oxides. Bromine. Hydrogen bromide gas.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Principal Routes of Exposure: Ingestion. Inhalation.

Acute Toxicity

Component Information

Bromothymol Blue, Water Soluble	1					
CAS No LD50/oral/rat = No informatio LD50/oral/mouse = No inform LD50/dermal/rabbit = No information LD50/dermal/rat = No information LC50/inhalation/rat = No information LC50/inhalation/mouse = No Other LD50 or LC50information	nation available ormation available ation available rmation available					
Product Information						
LD50/oral/rat = Value - Acute Tox = No informat	ion available					
LD50/oral/mouse = Value - Acute Tox Oral = No inf	ormation available					
LD50/dermal/rabbit Value - Acute Tox = No informat	ion available					
LD50/dermal/rat VALUE - Acute Tox Dermal = N	o information available					
LC50/inhalation/rat VALUE-Vapor = No information av VALUE-Gas = No information av VALUE-Dust/Mist = No information	ailable					
LC50/Inhalation/mouse VALUE-Vapor = No information a VALUE - Gas = No information a VALUE - Dust/Mist = No informa	vailable					
Symptoms_						
Skin Contact:	May cause skin irritation.					
Eye Contact:	Eye Contact: May cause eye irritation.					
Inhalation	May cause respiratory tract irritation.					
Ingestion	Health injuries are not known or expected under normal use.					
Product code: BR155	Product name: BROMOTHYMOL BLUE, WATER SOLUBLE, REAGENT, ACS	Page	6 / 11			

Aspiration hazard	No information available.
Delayed and immediate effects	as well as chronic effects from short and long-term exposure
Chronic Toxicity	No information available.
Sensitization:	No information available.
Mutagenic Effects:	No information available

Carcinogenic effects:

Not considered carcinogenic.

Component	CAS No	IARC	ACGIH - Carcinogens	NTP	OSHA HCS - Carcinogens	Australia - Notifiable Carcinogenic Substances	Australia - Prohibited Carcinogenic Substances
Bromothymol Blue, Water Soluble	34722-90-2	Not listed	Not listed	Not listed	Not listed	Not listed	Not listed

ACGIH (American Conference of Governmental Industrial Hygienists)

IARC (International Agency for Research on Cancer)

NTP (National Toxicology Program)

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

Reproductive toxicity	No data is available		
Reproductive Effects:	No information available		
Developmental Effects:	No information available		
Teratogenic Effects:	No information available		

Specific Target Organ Toxicity

STOT - single exposure	No information available.
STOT - repeated exposure	No information available.
Target Organs:	No information available.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicity effects:	No data available.
Persistence and degradability:	No information available
Bioaccumulative potential:	No information available.
Mobility in soil Other adverse effects	No information available No information available.

13. DISPOSAL CONSIDERATIONS

Disposal Methods

Waste from residues / unused products:

Waste must be disposed of in accordance with Federal, State and Local regulation.

Contaminated packaging:

Empty containers should be taken for local recycling, recovery or waste disposal. Do not re-use empty containers Dispose of as unused product.

Component	CAS No	RCRA - F Series Wastes	RCRA - K Series Wastes	RCRA - P Series Wastes	RCRA - U Series Wastes
Bromothymol Blue, Water Soluble	34722-90-2	None	None	None	None

14. TRANSPORT INFORMATION

DOT

DOT	
UN-No:	Not Regulated
Proper Shipping Name:	No information available
Hazard Class	No information available
Subsidiary Class	No information available
Packing group:	No information available
Emergency Response Guide	No information available
Number	
Marine Pollutant	No data available
DOT RQ (lbs):	No information available
Special Provisions	No Information available
Symbol(s):	No information available
Description:	No information available
TDG (Canada)	Net Degulated
UN-No:	Not Regulated
Proper Shipping Name:	No information available
Hazard Class	No information available
Subsidiary Risk:	No information available
Packing Group:	No information available
Marine Pollutant	No Information available
Description:	No information available
ADR	
UN Number	Not regulated
Proper Shipping Name:	No information available
Transport hazard class(es)	No information available
Packing group	No information available
Subsidiary Risk:	No information available
IMDG	
UN-No:	Not Regulated
Proper Shipping Name:	No information available
Hazard Class:	No information available
Subsidiary Risk:	No information available
Packing Group:	No information available
Marine Pollutant	No information available
RID	
UN Number	Not Regulated
Proper Shipping Name:	No information available
Broduct code: DD455	Dreduct serves DDOM
Product code: BR155	Product name: BROM

Transport hazard class(es) Subsidiary Risk: Packing group	No information available No information available No information available
ICAO (air)	
UN-No:	Not Regulated
Proper Shipping Name:	No information available
Hazard Class	No information available
Subsidiary Risk:	No information available
Packing Group:	No information available
ΙΑΤΑ	
UN Number	Not Regulated
Proper Shipping Name:	No information available
Transport hazard class(es)	No information available
Subsidiary Risk:	No information available
Packing group	No information available
Precautionary Statements -	No information available
Response	
Special Provisions	No information available

15. REGULATORY INFORMATION

International Inventories

Component	CAS No	U.S. TSCA	KOREA KECL	Philippines (PICCS)	Japan ENCS	China IECSC	Australia (AICS)	EINECS-No.
Bromothymol Blue, Water Soluble	34722-90-2	PresentACTIV E	Not present	Present	Not present	Present	Present	Present 252-169-7

U.S. Regulations

California Prop. 65: Safe Drinking Water and Toxic Enforcement Act of 1986.

Chemicals Known to the State of California to Cause Cancer:

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

Chemicals Known to the State of California to Cause Reproductive Toxicity:

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

Component	CAS No	Carcinogen	Developmental Toxicity		Female Reproductive
				Toxicity	Toxicity:
Bromothymol Blue, Water Soluble	34722-90-2	Not Listed	Not Listed	Not Listed	Not Listed

CERCLA/SARA

Component	CAS No	CERCLA - Hazardous Substances and their Reportable Quantities	Section 302 Extremely Hazardous Substances and TPQs	Section 302 Extremely Hazardous Substances and RQs	Section 313 - Chemical Category	Section 313 - Reporting de minimis
Bromothymol Blue, Water Soluble	34722-90-2	None	None	None	None	None

U.S. TSCA

Product code: BR155

Component		TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS)	
Bromothymol Blue, Water Soluble	34722-90-2	Not Applicable	Not Applicable

Canada

WHIMIS 2015 - GHS Classifications

WHMIS 2015 Hazard Classification Not a dangerous product according to HPR classification criteria. Information:

Canada Hazardous Products Regulation This product has been classified according to the hazard criteria of the HPR (Hazardous Products Regulation) and the SDS contains all of the information required by the HPR

DSL/NDSL

Component	CAS No	Canada (DSL)	Canada (NDSL)
Bromothymol Blue, Water Soluble	34722-90-2	Present	Not Listed

Component	CAS No	CEPA Schedule I - Toxic Substances
Bromothymol Blue, Water Soluble	34722-90-2	Not listed
Component	CAS No	CEPA - 2010 Greenhouse Gases Subject
		to Mandatory Reporting
Bromothymol Blue, Water Soluble	34722-90-2	Not listed

EU Classification

EU GHS - SV - CLP 1272/2008

Component	CAS No	EU GHS - SV - CLP (1272/2008)
Bromothymol Blue, Water Soluble	34722-90-2	

EU - CLP (1272/2008)

R-phrase(s)

not determined (not applicable)

S -phrase(s)

none

Component	CAS No	 Concentration Limits:	Safety Phrases
Bromothymol Blue, Water Soluble	34722-90-2	No information	

The product is classified in accordance with Annex VI to Directive 67/548/EEC

Indication of danger:

None

16. OTHER INFORMATION

Preparation Date:	7/30/2015
Revision date	3/26/2019
Prepared by:	Sonia Owen
Disclaimer:	All chemicals may pose unknown hazards and should be used with caution. This Safety Data Sheet (SDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this SDS. The physical properties reported in this SDS are obtained from the literature and do not constitute product specifications. Information contained herein does not constitute a warranty, whether expressed or implied, as to the safety, merchantability or fitness of the goods for a particular purpose. Spectrum Chemicals & Laboratory Products, Inc. assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this SDS is based on technical data judged to be reliable, Spectrum assumes no responsibility for the completeness or accuracy of the information contained herein.

End of Safety Data Sheet