
INDICATOR 1, BROMOPHENOL BLUE

Company Information

Company's Name: REAGENTS, INC.

Company's P. O. Box: 240746

Company's City: CHARLOTTE

Company's State: NC

Company's Country: US

Company's Zip Code: 28224

Company's Info Ph #: 704/554-7474, 800/732-8484

Emergency Ph # for spills: 800/424-9300

Date MSDS Prepared: July 25, 2006

1. Product Identification

Synonyms: 3,3',5,5'-Tetrabromophenol sulfonphthalein solution; 4,4'-(3H-2,1-benzoxathiol-3-ylidene)bis[2,6-dibromophenol]S,S dioxide solution.

CAS No.: See below.

Molecular Weight: Not applicable to mixtures.

Chemical Formula: C₁₉H₁₀Br₄O₅S/NaOH in Water

Product Codes: I-1605; INDI

2. Composition/Information on Ingredients

Ingredient	CAS No	Percent	Hazardous
Bromophenol Blue	CAS 115-39-9	0.04%	Yes
Sodium Hydroxide	CAS 1310-73-2	<0.002%	Yes

Remainder deionized water.

Hazards reported herein are for the dye component only.

3. Hazards Identification

Emergency Overview

CAUTION! MAY BE HARMFUL IF SWALLOWED OR INHALED. MAY CAUSE IRRITATION TO SKIN, EYES, AND RESPIRATORY TRACT.

Health Rating: 1 - Slight

Flammability Rating: 0 - None

Reactivity Rating: 0 - None

Contact Rating: 1 - Slight

Lab Protective Equip: GOGGLES; LAB COAT; VENT HOOD; PROPER GLOVES

Storage Color Code: Green (General Storage)

Potential Health Effects

Inhalation: May cause irritation to the respiratory tract. Symptoms may include coughing and shortness of breath.

Ingestion: Effects not determined. Large oral doses may cause irritation to the gastrointestinal tract.

Skin Contact: May cause irritation with redness and pain.

Eye Contact: May cause irritation, redness and pain.

Chronic Exposure: Not determined.

Aggravation of Pre-existing Conditions: No information found.

4. First Aid Measures

Inhalation: Remove to fresh air. Get medical attention for any breathing difficulty.

Ingestion: Induce vomiting immediately as directed by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention.

Skin Contact: Immediately flush skin with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention if irritation develops.

Eye Contact: Immediately flush eyes with plenty of water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get medical attention if irritation persists.

5. Fire Fighting Measures

Fire: Not expected to be a fire hazard.

Explosion: Not expected to be an explosion hazard.

Fire Extinguishing Media: Use any means suitable for extinguishing surrounding fire. May include water spray, dry chemical, alcohol foam, or carbon dioxide.

Special Information: In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full-facepiece operated in the pressure demand or other positive pressure mode.

6. Accidental Release Measures

Remove all sources of ignition. Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8. Spills: Absorb on inert material such as vermiculite or kitty litter and containerize for reclamation or disposal.

7. Handling and Storage

Keep in a tightly closed container. Protect from physical damage. Containers of this material may be hazardous when empty since they retain product residues (dust, solids); observe all warnings and precautions listed for the product.

8. Exposure Controls/Personal Protection

Airborne Exposure Limits: None established.

Ventilation System: A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, *Industrial Ventilation, A Manual of Recommended Practices*, most recent edition, for details.

Personal Respirators (NIOSH-Approved): For conditions of use where exposure to dust or mist is apparent and engineering controls are not feasible, a particulate respirator (NIOSH type N95 or better filters) may be worn. If oil particles (e.g. lubricants, cutting fluids, glycerin, etc.) are present, use a NIOSH type R or P filter. For emergencies or instances where the exposure levels are not known, use a full-face positive-pressure, air-supplied respirator. **WARNING:** Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.

Skin Protection: Wear protective gloves and clean body-covering clothing.

Eye Protection: Use chemical safety goggles. Maintain eye wash fountain and quick-drench facilities in work area.

9. Physical and Chemical Properties

Appearance: Dark yellow to red liquid.

Odor: Slight to odorless.

Solubility: Complete.

Specific Gravity: No information found.

pH: No information found.

% Volatiles by volume @ 21C (70F): >99

Boiling Point: Approx. 100°C

Melting Point: Approx. 0°C

Vapor Density (Air=1): No information found.

Vapor Pressure (mm Hg): No information found.

Evaporation Rate (BuAc=1): Approx. 0.3(water)

10. Stability and Reactivity

Stability: Stable under ordinary conditions of use and storage.

Hazardous Decomposition Products: Burning may produce very slight amounts of bromine, sulfur and sodium oxides, carbon dioxide, and carbon monoxide.

Hazardous Polymerization: Will not occur.

Incompatibilities: None found for dilute solutions.

Conditions to Avoid: No information found.

11. Toxicological Information

No LD50/LC50 information found relating to normal routes of occupational exposure. Investigated as a mutagen.

Ingredient	---NTP Carcinogen---		IARC Category
	Known	Anticipated	
Bromophenol Blue (115-39-9)	No	No	None

12. Ecological Information

Environmental Fate: No information found.

Environmental Toxicity: No information found.

13. Disposal Considerations

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

14. Transport Information

Not regulated.

15. Regulatory Information

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-----\Chemical Inventory Status - Part 1\-----
Ingredient                                     TSCA  EC   Japan  Australia
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Bromophenol Blue (115-39-9)                   Yes  Yes  Yes    Yes
-----\Chemical Inventory Status - Part 2\-----
Ingredient                                     Korea DSL  NDSL  Phil.
-----
Bromophenol Blue (115-39-9)                   Yes  Yes  No    Yes
-----\Federal, State & International Regulations - Part 1\-----
Ingredient                                     -SARA 302-  -SARA 313-
RQ      TPQ      List  Chemical Catg.
-----
Bromophenol Blue (115-39-9)                   No    No    No    No
-----\Federal, State & International Regulations - Part 2\-----
Ingredient                                     -RCRA-  -TSCA-
CERCLA  261.33  8(d)
-----
Bromophenol Blue (115-39-9)                   No    No    No
Chemical Weapons Convention: No    TSCA 12(b): No    CDTA: No
SARA 311/312: Acute: Yes    Chronic: No    Fire: No    Pressure: No
Reactivity: No    (Pure / liquid)

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WHMIS: *This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.*

16. Other Information

NFPA Ratings: Health: **1** Flammability: **0** Reactivity: **0**

Label Hazard Warning: CAUTION! MAY BE HARMFUL IF SWALLOWED OR INHALED. MAY CAUSE IRRITATION TO SKIN, EYES, AND RESPIRATORY TRACT.

Label Precautions: Avoid contact with eyes, skin and clothing.

Avoid breathing mist.

Keep container closed.

Use with adequate ventilation.

Wash thoroughly after handling.

Label First Aid: If inhaled, remove to fresh air. Get medical attention for any breathing difficulty. If swallowed, induce vomiting immediately as directed by medical personnel. Never give anything by

mouth to an unconscious person. In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes. Get medical attention if irritation develops or persists.

Product Use: *Laboratory Reagent.*

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