

# Material Safety Data Sheet

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RE-ISSUED by CHEMSUPP

Product Name: **BROMOTHYMOL BLUE**

**Not classified as hazardous according to criteria of NOHSC**

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## COMPANY DETAILS

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**Company Name** CHEM-SUPPLY PTY LTD (ABN 19 008 264 211)  
**Address** 50 Bedford Street GILLMAN  
SA 5013 Australia  
**Tel/Fax** Tel: (08) 8440-2000 Fax: (08) 8440-2001  
**Other Information** Chem-Supply Pty Ltd does not warrant that this product is suitable for any use or purpose. The user must ascertain the suitability of the product before use or application intended purpose. Preliminary testing of the product before use or application is recommended. Any reliance or purported reliance upon Chem-Supply Pty Ltd with respect to any skill or judgement or advice in relation to the suitability of this product of any purpose is disclaimed. Except to the extent prohibited at law, any condition implied by any statute as to the merchantable quality of this product or fitness for any purpose is hereby excluded. This product is not sold by description. Where the provisions of Part V, Division 2 of the Trade Practices Act apply, the liability of Chem-Supply Pty Ltd is limited to the replacement of supply of equivalent goods or payment of the cost of replacing the goods or acquiring equivalent goods.

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## IDENTIFICATION

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**Product Name** BROMOTHYMOL BLUE  
**Other Names**

<u>Name</u>	<u>Mancode</u>
Dibromothymolsulphonphthalein	
3',3''-Dibromothymolsulfonphthalein	
BROMOTHYMOL BLUE	BL053
Bromthymol blue	
BTB	

  
**UN Number** None Allocated  
**DG Class** None Allocated  
**Packing Group** None Allocated  
**Hazchem Code** None Allocated  
**Poisons Schedule** Not Scheduled  
**Product Use** pH indicator: pH 6.0 (yellow) to pH 7.6 (blue).  
**Other Information** To prepare a solution for use as pH indicator:  
-dissolve 0.10 g in 8.0 ml N/50 NaOH and dilute with water to 250 ml; or  
-dissolve 0.10 g in 100 ml 50% alcohol.

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## Physical Data

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<b>Appearance</b>	Yellow, cream-coloured, slight-pink or green crystals.
<b>Melting Point</b>	204 °C
<b>Solubility in Water</b>	Sparingly soluble.

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## Other Properties

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<b>Solubility in Organic Solvents</b>	Soluble in alcohol, ether and alkaline solution. Less soluble in benzene, toluene and xylene.
<b>Odour</b>	Odourless.
<b>Form</b>	Solid
<b>Stability</b>	Stable in air.
<b>Haz.</b>	Will not occur.
<b>Polymerization</b>	
<b>Materials to Avoid</b>	Strong acids and bases, strong reducing agents and strong oxidising agents.
<b>Formula</b>	C <sub>27</sub> H <sub>28</sub> Br <sub>2</sub> O <sub>5</sub> S
<b>Molecular Weight</b>	624.40
<b>Other Information</b>	Acidity: pK = 7.1

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## Ingredients

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<b>Ingredients</b>	<b><u>Name</u></b>	<b><u>CAS</u></b>	<b><u>Proportion</u></b>
	Bromothymol blue	76-59-5	100 %
<b>Other Information</b>	Commonly used as the water-soluble sodium salt [34722-90-2] or as a solution in dilute sodium hydroxide or alcohol/water.		

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## HEALTH HAZARD INFORMATION

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### Health Effects

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<b>Acute - Swallowed</b>	Large doses may cause nausea, vomiting and diarrhoea.
<b>Acute - Eye</b>	Dusts or mists might be irritating.
<b>Acute - Skin</b>	Dusts or mists might be irritating.
<b>Acute - Inhaled</b>	Dusts or mists might be irritating.
<b>Chronic</b>	Very rarely, allergic reactions occur to a related chemical, phenolphthalein. Allergic reactions to bromothymol blue might occur.

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### First Aid

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<b>Swallowed</b>	Give water to drink. DO NOT induce vomiting. If vomiting occurs give further water to achieve effective dilution. Seek immediate medical assistance.
<b>Eye</b>	Immediately irrigate with copious quantity of water for at least 15 minutes. Eyelids to be held open. Seek medical advice.

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<b>Skin</b>	Wash affected areas with copious quantities of water immediately. Remove contaminated clothing and wash before re-use. Seek medical advice.
<b>Inhaled</b>	Remove victim to fresh air. Seek medical advice if effects persist.
<b>First Aid Facilities</b>	Maintain eyewash fountain and drench facilities in work area.

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#### **Advice to Doctor**

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**Advice to Doctor**    Treat symptomatically.

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#### **Other Health Hazard Information**

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### **PRECAUTIONS FOR USE**

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**Other Exposure Info.**    A time weighted average (TWA) concentration for an 8 hour day, and 5 day week has not been established by NOHSC Australia for this product. There is a blanket limit of 10 mg/m<sup>3</sup> for dusts or mists when limits have not otherwise been established.

**Eng. Controls**    In industrial situations maintain the concentrations values below the TWA. This may be achieved by process modification, use of local exhaust ventilation, capturing substances at the source, or other methods.

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#### **Personal Protection**

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**Respirator Type (AS 1716)**    Where ventilation is not adequate, respiratory protection may be required. Avoid breathing dust, vapours or mists. Respiratory protection should comply with AS 1716 - Respiratory Protective Devices and be selected in accordance with AS 1715 - Selection, Use and Maintenance of Respiratory Protective Devices. Filter capacity and respirator type depends on exposure levels. In event of emergency or planned entry into unknown concentrations a positive pressure, full-facepiece SCBA should be used. If respiratory protection is required, institute a complete respiratory protection program including selection, fit testing, training, maintenance and inspection.

**Eye Protection**    The use of a face shield, chemical goggles or safety glasses with side shield protection as appropriate. Must comply with Australian Standards AS 1337 and be selected and used in accordance with AS 1336.

**Glove Type**    Hand protection should comply with AS 2161, Occupational protective gloves - Selection, use and maintenance.

**Clothing**    Wear suitable protective clothing to prevent skin contact. Clean clothing or protective clothing should be worn, preferably with an apron. Clothing for protection against chemicals should comply with AS 3765 Clothing for Protection Against Hazardous Chemicals.

**Work/Hygienic Practices**    Always wash hands before smoking, eating or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using.

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#### **Flammability**

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**Fire Hazards**          Non combustible.

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## **SAFE HANDLING INFORMATION**

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### **Storage and Transport**

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**Storage**                  Store in a cool,dry place. Store in well ventilated area. Keep containers securely sealed and protected against physical damage.  
**Precautions**  
**Handling**                Avoid generating and inhaling dust. Where possible, use solution.

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### **Spills and Disposal**

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**Spills & Disposal**      Do NOT touch or walk through this product. Stop leak if safe to do so. Prevent entry into waterways, drains, confined areas. Prevent dust cloud. Use clean non-sparking tools to collect material and place it into loosely-covered plastic containers for later disposal. **SEEK EXPERT ADVICE ON HANDLING AND DISPOSAL.**

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### **Fire/Explosion Hazard**

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**Fire/Explos. Hazard**      May burn but do not ignite readily. Containers may explode when heated. Runoff may pollute waterways. Fire may produce irritating, poisonous and/or corrosive gases. In sufficient quantity and reduced particle size is capable of creating a dust explosion.

**Hazardous**                Oxides of sulfur and carbon, and hydrogen bromide.

### **Decomposition or Byproducts**

**Fire Fighting Procedures**      Small fire: Use dry chemical, CO<sub>2</sub>, water spray or foam.  
Large fire: Use water spray, fog or foam.  
If safe to do so, move undamaged containers from the fire area. Cool containers with flooding quantities of water until well after the fire is out.

**Fire Fighting Precautions**      Wear SCBA and structural firefighter's uniform.

**Hazchem Code**          None Allocated

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## **OTHER INFORMATION**

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## References

- Commonwealth Department of Health and Aged Care, 'Standard for the Uniform Scheduling of Drugs and Poisons No. 18', Commonwealth of Australia, Canberra 2002.
- Lewis, Richard J. Sr. 'Hawley's Condensed Chemical Dictionary 13th. Ed.', Rev., John Wiley & Sons, Inc., NY, 1997.
- National Road Transport Commission, 'Australian Dangerous Goods Code 6th. Ed.', AGPS, Canberra, 1998.
- South Australia Government, 'Approved Code of Practice for the Labelling of Workplace Substances', 1995.
- Standards Australia, 'SAA/SNZ HB76:1997 Dangerous Goods - Initial Emergency Response Guide', Standards Australia/Standards New Zealand, 1997.
- Worksafe Australia, 'Approved Criteria for Classifying Hazardous Substances [NOHSC:1008(1999)]', AusInfo, Canberra 1999.
- Worksafe Australia, 'List of Designated Hazardous Substances [NOHSC:10005(1999)]', AusInfo, Canberra 1999.
- Worksafe Australia, 'National Code of Practice for the Labelling of Workplace Substances [NOHSC:2012(1994)]', AGPS, Canberra 1994.
- Worksafe Australia, 'National Exposure Standards for Atmospheric Contaminants in the Occupational Environment [NOHSC:1003(1995)]', AusInfo, Canberra 1995.

## User Codes

CAS No.

User Code  
76-59-5

**Empirical Formula & Structural Formula**  
C27 H28 Br2 O5 S

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## CONTACT POINT

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### Contact

Paul McCarthy Ph. (08) 8440 2000    **DISCLAIMER STATEMENT:**  
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**...End Of MSDS...**