



## Safety Data Sheet

### SECTION 1: Identification

#### 1.1. Product Identifier

**Trade Name or Designation:** Thymol Blue, 0.08% (w/v) in Methanol

**Product Number:** 8420.8

**Other Identifying Product Numbers:** 8420.8-16, 8420.8-4

#### 1.2. Recommended Use and Restrictions on Use

General Laboratory Reagent

#### 1.3. Details of the Supplier of the Safety Data Sheet

**Company:** Ricca Chemical Company

**Address:** 448 West Fork Drive  
Arlington, TX 76012 USA

**Telephone:** 888-467-4222

#### 1.4. Emergency Telephone Number (24 hr)

CHEMTREC (USA) 800-424-9300  
CHEMTREC (International) 1+ 703-527-3887

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## SECTION 2: Hazard(s) Identification

### 2.1. Classification of the Substance or Mixture (in accordance with OSHA HCS 29 CFR 1910.1200)

For the full text of the Hazard and Precautionary Statements listed below, see Section 16.

| Hazard Class   | Category    | Hazard Statement | Precautionary Statements   |
|--|-------------|------------------|--|
| Acute Toxicity - Oral  | Category 3  | H301             | P264, P270, P301+P310, P321, P330, P405, P501  |
| Acute Toxicity - Dermal  | Category 3  | H311             | P280, P302+P352, P312, P321, P361, P405, P501  |
| Acute Toxicity - Inhalation  | Category 3  | H331             | P261, P271, P304+P340, P311, P321, P403+P233, P405, P501                             |
| Eye Damage / Irritation  | Category 2A | H319             | P264, P280, P305+P351+P338, P337+P313  |
| Reproductive Toxicity  | Category 1  | H360             | P201, P202, P280, P308+P313, P405, P501  |
| Specific Target Organs/Systemic Toxicity Following Single Exposure   | Category 1  | H370             | P260, P264, P270, P307+P311, P321, P405, P501  |
| Specific Target Organs/Systemic Toxicity Following Repeated Exposure | Category 1  | H372             | P260, P264, P270, P314, P501   |
| Flammable Liquids  | Category 2  | H225             | P210, P233, P240, P241, P242, P243, P280, P303+P361+P353, P370+P378, P403+P235, P501 |

### 2.2. GHS Label Elements

Pictograms:



Signal Word: **Danger**

Hazard Statements:

| Hazard Number | Hazard Statement  |
|---------------|---|
| H225          | Highly flammable liquid and vapor.                              |
| H301          | Toxic if swallowed.   |
| H311          | Toxic in contact with skin.                                     |
| H319          | Causes serious eye irritation.                                  |
| H331          | Toxic if inhaled.   |
| H360          | May damage fertility or the unborn child.                       |
| H370          | Causes damage to organs.  |
| H372          | Causes damage to organs through prolonged or repeated exposure. |



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### Precautionary Statements:

| Precautionary Number | Precautionary Statement   |
|----------------------|---|
| P201                 | Obtain special instructions before use.   |
| P202                 | Do not handle until all safety precautions have been read and understood.   |
| P210                 | Keep away from heat, sparks and open flame. No smoking.   |
| P233                 | Keep container tightly closed.  |
| P240                 | Ground container and receiving equipment.   |
| P241                 | Use explosion-proof equipment.  |
| P242                 | Use only non-sparking tools.  |
| P243                 | Take precautionary measures against static discharge.   |
| P260                 | Do not breathe dust, fumes or mist.   |
| P261                 | Avoid breathing dust, fumes or mist.  |
| P264                 | Wash arms, hands and face thoroughly after handling.  |
| P270                 | Do not eat, drink or smoke when using this product.   |
| P271                 | Use only outdoors or in a well-ventilated area.   |
| P280                 | Wear protective gloves and eye protection.  |
| P301+P310            | IF SWALLOWED: Immediately call a POISON CENTER or physician.  |
| P302+P352            | IF ON SKIN: Wash with plenty of soap and water.   |
| P303+P361+P353       | IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.                                      |
| P304+P340            | IF INHALED: Remove person to fresh air and keep comfortable for breathing.  |
| P305+P351+P338       | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to d<br>Continue rinsing. |
| P307+P311            | IF exposed: Call a POISON CENTER or physician.  |
| P308+P313            | IF exposed or concerned: Get medical attention.   |
| P311                 | Call a POISON CENTER or physician.  |
| P312                 | Call a POISON CENTER or physician if you feel unwell.   |
| P314                 | Get medical attention if you feel unwell.   |
| P321                 | Specific treatment (Wash areas of contact with water).  |
| P330                 | Rinse mouth.  |
| P337+P313            | If eye irritation persists: Get medical attention.  |
| P361                 | Take off immediately all contaminated clothing and wash it before reuse.  |
| P403+P233            | Store in a well-ventilated place. Keep container tightly closed.  |
| P405                 | Store locked up.  |
| P501                 | Dispose of contents in accordance with local, state, federal and international regulations.                                       |



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### 2.3. WHMIS Classification

WHMIS classification is not included based on the recommended option (Option 4) found in the Canada Gazette Part II, Vol. 149, No.3, page 458

### 2.4. Hazards not Otherwise Classified or Covered by GHS

Data not available.

## SECTION 3: Composition / Information on Ingredients

### 3.1. Components of Substance or Mixture

| Chemical Name  | Formula  | Molecular Weight | CAS Number | Weight% |
|----------------|--|------------------|------------|---------|
| Methyl Alcohol | CH <sub>3</sub> OH                               | 32.04 g/mol      | 67-56-1    | 99.90%  |
| Thymol Blue    | C <sub>27</sub> H <sub>30</sub> O <sub>5</sub> S | 466.58 g/mol     | 76-61-9    | 0.10%   |

## SECTION 4: First-Aid Measures

### 4.1. General First Aid Information

**Eye Contact:** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. May cause irritation with burning and stinging with possible damage to the cornea and conjunctiva.

**Inhalation:** IF INHALED: Remove person to fresh air and keep comfortable for breathing.

**Skin Contact:** IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Results in drying and cracking which can lead to secondary infections and dermatitis. Dermal absorption causes many of the symptoms of inhalation.

**Ingestion:** IF SWALLOWED: Immediately call a POISON CENTER or physician. Dilute immediately with water or milk. Induce vomiting. Call a physician.

### 4.2. Most Important Symptoms and Effects, Acute and Delayed

DANGER! Flammable. Keep away from heat, sparks and open flames. Keep container closed. Use with adequate ventilation. Avoid prolonged breathing of vapor or contact with skin, eyes, or clothing. Harmful if swallowed. Do not pipet by mouth. If ingested, dilute with water and induce vomiting. Call a physician. Wash areas of contact with plenty of water. For eyes, get medical attention. EYE CONTACT: May cause irritation with burning and stinging with possible damage to the cornea and conjunctiva. SKIN CONTACT: Results in drying and cracking which can lead to secondary infections and dermatitis. Dermal absorption causes many of the symptoms of inhalation.

### 4.3. Medical Attention or Special Treatment Needed

Specific treatment (Wash areas of contact with water).

## SECTION 5: Fire-Fighting Measures

### 5.1. Extinguishing Media

Use any means suitable for extinguishing surrounding fire.



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### 5.2. Specific Hazards Arising from the Substance or Mixture

Highly flammable liquid and vapor. Moderate explosion hazard and dangerous fire hazard when exposed to heat, sparks and open flames. Above flash point, vapor-air mixtures are explosive within flammable limits noted above. Sensitive to static discharge.

### 5.3. Special Protective Equipment for Firefighters

Wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

## SECTION 6: Accidental Release Measures

### 6.1. Personal Precautions, Protective Equipment and Emergency Procedures

Ground container and receiving equipment. Use explosion-proof equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Wear protective gloves and eye protection.

### 6.2. Cleanup and Containment Methods and Materials

Remove all sources of ignition. Contain spill. Do not flush to sewer. Absorb with suitable inert material (vermiculite, dry sand, etc) and place in a chemical waste container for proper disposal in an approved waste disposal facility. Ventilate area of spill. Have extinguishing agent available in case of fire. Use non-sparking tools and equipment. Dispose of in accordance with local regulations.

## SECTION 7: Handling and Storage

### 7.1. Precautions for Safe Handling and Storage Conditions

Store locked up. As with all chemicals, wash hands thoroughly after handling. Avoid contact with eyes and skin. Protect from freezing and physical damage. Store in secure, flammable storage area away from all sources of ignition. Empty containers may be hazardous since they retain product residues.

## SECTION 8: Exposure Controls / Personal Protection

### 8.1. Control Parameters

| Chemical Name            | Limit Type | Country | Exposure Limit                           | Information Source   |
|--------------------------|------------|---------|--|--|
| Methyl Alcohol (67-56-1) | TWA        | USA     | 200 ppm TWA<br>260 mg/m <sup>3</sup> TWA | U.S. - OSHA - Final PELs - Time Weighted Averages (TWAs)               |
| Methyl Alcohol (67-56-1) | TLV-STEL   | USA     | 250 ppm STEL                             | ACGIH - Threshold Limit Values - Short Term Exposure Limits (TLV-STEL) |
| Methyl Alcohol (67-56-1) | TLV-TWA    | USA     | 200 ppm TWA                              | ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA)      |

### 8.2. Exposure Controls

**Engineering Controls:** Use only outdoors or in a well-ventilated area. A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limit.

**Respiratory Protection:** If engineering controls do not maintain airborne concentrations below recommended exposure limits, an approved atmosphere supplied respirator must be worn.

**Skin Protection:** Wear protective gloves and eye protection. Chemical resistant gloves.



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**Eye Protection:** Wear protective gloves and eye protection. Safety glasses or goggles.

### 8.3. Personal Protective Equipment

Wear protective gloves and eye protection. If engineering controls do not maintain airborne concentrations below recommended exposure limits, an approved atmosphere supplied respirator must be worn. Chemical resistant gloves. Safety glasses or goggles.

## SECTION 9: Physical and Chemical Properties

### 9.1. Basic Physical and Chemical Properties

**Appearance:** Dark green liquid

**Physical State:** Liquid

**Odor:** Slight, alcohol-like

**Odor Threshold:** Data not available.

**pH:** Data not available.

**Melting/Freezing Point:** -98°C

**Initial Boiling Point /Range:** Approximately 64.5°C - Approximately 64.5°C

**Flash Point:** 11°C

**Evaporation Rate:** 2.1 (butyl acetate = 1)

**Flammability:** Data not available.

**Flammability/Explosive Limits:** Data not available.

**Vapor Pressure:** 128 hPa at 20°C

**Vapor Density:** 1.1

**Relative Density:** 0.8

**Solubility:** Miscible at 20°C

**Partition Coefficient (n-Octanol/Water):** -0.77

**Auto-Ignition Temperature:** Data not available.

**Decomposition Temperature:** Data not available.

**Viscosity:** Data not available.

**Explosive Properties:** Data not available.

**Oxidizing Properties:** Data not available.

## SECTION 10: Stability and Reactivity

### 10.1. Reactivity and Chemical Stability

Stable under normal conditions of use and storage.

### 10.2. Possibility of Hazardous Reactions

Data not available.



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### 10.3. Conditions to Avoid and Incompatible Materials

Keep away from heat, sparks and open flame. No smoking. Keep container tightly closed. Strong oxidizing agents such as Nitrates, Perchlorates or

### 10.4. Hazardous Decomposition Products

Will not occur.

## SECTION 11: Toxicological Information

### 11.1. Information on Toxicological Effects

#### Acute Toxicity - Oral Exposure:

Toxic if swallowed. Wash arms, hands and face thoroughly after handling. Do not eat, drink or smoke when using this product. IF SWALLOWED: Immediately call a POISON CENTER or physician. Specific treatment (Wash areas of contact with water). Rinse mouth. Store locked up. Dispose of contents in accordance with local, state, federal and international regulations.

#### Acute Toxicity - Dermal Exposure:

Toxic in contact with skin. Wear protective gloves and eye protection. IF ON SKIN: Wash with plenty of soap and water. Call a POISON CENTER or physician if you feel unwell. Specific treatment (Wash areas of contact with water). Take off immediately all contaminated clothing and wash it before reuse. Store locked up. Dispose of contents in accordance with local, state, federal and international regulations.

#### Acute Toxicity - Inhalation Exposure:

Toxic if inhaled. Avoid breathing dust, fumes or mist. Use only outdoors or in a well-ventilated area. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or physician. Specific treatment (Wash areas of contact with water). Store in a well-ventilated place. Keep container tightly closed. Store locked up. Dispose of contents in accordance with local, state, federal and international regulations.

#### Acute Toxicity - Other Information:

LD50, Oral, Rat: (Methanol) 5628 mg/kg, details of toxic effects not reported other than lethal dose value.

#### Skin Corrosion and Irritation:

Not applicable.

#### Serious Eye Damage and Irritation:

Causes serious eye irritation. Wash arms, hands and face thoroughly after handling. Wear protective gloves and eye protection. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.

#### Respiratory Sensitization:

Not applicable.

#### Skin Sensitization:

Not applicable.

#### Germ Cell Mutagenicity:

Not applicable.

#### Carcinogenicity:

Not applicable.



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### **Reproductive Toxicity:**

May damage fertility or the unborn child. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves and eye protection. IF exposed or concerned: Get medical attention. Store locked up. Dispose of contents in accordance with local, state, federal and international regulations.

### **Specific Target Organ Toxicity from Single Exposure:**

Causes damage to organs. Do not breathe dust, fumes or mist. Wash arms, hands and face thoroughly after handling. Do not eat, drink or smoke when using this product. IF exposed: Call a POISON CENTER or physician. Specific treatment (Wash areas of contact with water). Store locked up. Dispose of contents in accordance with local, state, federal and international regulations.

### **Specific Target Organ Toxicity from Repeated Exposure:**

Causes damage to organs through prolonged or repeated exposure. Do not breathe dust, fumes or mist. Wash arms, hands and face thoroughly after handling. Do not eat, drink or smoke when using this product. Get medical attention if you feel unwell. Dispose of contents in accordance with local, state, federal and international regulations.

### **Aspiration Hazard:**

Not applicable.

### **Additional Toxicology Information:**

Data not available.

## SECTION 12: Ecological Information

### **12.1. Ecotoxicity**

Not applicable.

### **12.2. Persistence and Degradability**

Data not available.

### **12.3. Bioaccumulative Potential**

Data not available.

### **12.4. Mobility in Soil**

Data not available.

### **12.5. Other Adverse Ecological Effects**

Data not available.

## SECTION 13: Disposal Considerations

### **13.1. Waste Treatment Methods**

Data not available.





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### SECTION 14: Transportation Information

#### 14.1. Transportation by Land - Department of Transportation (DOT, United States of America)

**UN Number:** UN1993

**Proper Shipping Name:** Flammable Liquid, n.o.s., (Methanol)

**Hazard Class:** 3

**Packing Group:** II

**Hazard Placard Labels:**



#### 14.2. Transportation by Air - International Air Transport Association (IATA)

**UN Number:** UN1993

**Proper Shipping Name:** Flammable Liquid, n.o.s., (Methanol)

**Hazard Class:** 3

**Packing Group:** II

**Hazard Placard Labels:**



### SECTION 15: Regulatory Information

#### 15.1. Occupational Safety and Health Administration (OSHA) Hazards

Not listed.

#### 15.2. Superfund Amendments and Reauthorization Act (SARA) 302 Extremely Hazardous Substances

Not listed.

#### 15.3. Superfund Amendments and Reauthorization Act (SARA) 311/312 Hazardous Chemicals

Methyl Alcohol (CAS # 67-56-1): 5000 lb final RQ; 2270 kg final RQ

#### 15.4. Superfund Amendments and Reauthorization Act (SARA) 313 Toxic Release Inventory (TRI)

Methyl Alcohol (CAS # 67-56-1): 1.0 % de minimis concentration

#### 15.5. Massachusetts Right-to-Know Substance List

Methyl Alcohol (CAS # 67-56-1): Present



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### 15.6. Pennsylvania Right-to-Know Hazardous Substances

Methyl Alcohol (CAS # 67-56-1): Environmental hazard

Methyl Alcohol (CAS # 67-56-1): Present

### 15.7. New Jersey Worker and Community Right-to-Know Components

Methyl Alcohol (CAS # 67-56-1): flammable - third degree; teratogen

Methyl Alcohol (CAS # 67-56-1): sn 1222

Methyl Alcohol (CAS # 67-56-1): SN 1222 TPQ: 500 lb

### 15.8. California Proposition 65

Methyl Alcohol (CAS # 67-56-1): developmental toxicity, initial date 3/16/12

### 15.9. Canada Domestic Substances List / Non-Domestic Substances List (DSL/NDSL)

Methyl Alcohol (CAS # 67-56-1): Present

Thymol Blue (CAS # 76-61-9): Present

### 15.10. United States of America Toxic Substances Control Act (TSCA) List

Methyl Alcohol (CAS # 67-56-1): Present

Thymol Blue (CAS # 76-61-9): Present

### 15.11. European Inventory of Existing Commercial Chemical Substances (EINECS), European List of Notified Chemical Substances (ELINCS), and No Longer Polymers (NLP)

Not listed.

## SECTION 16: Other Information

### 16.1. Full Text of Hazard Statements and Precautionary Statements

Highly flammable liquid and vapor. Toxic if swallowed. Toxic in contact with skin. Causes serious eye irritation. Toxic if inhaled. May damage fertility or the unborn child. Causes damage to organs. Causes damage to organs through prolonged or repeated exposure.

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat, sparks and open flame. No smoking. Ground container and receiving equipment. Use explosion-proof equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Do not breathe dust, fumes or mist. Wash arms, hands and face thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Wear protective gloves and eye protection.

IF SWALLOWED: Immediately call a POISON CENTER or physician. IF ON SKIN: Wash with plenty of soap and water. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF exposed: Call a POISON CENTER or physician. Get medical attention if you feel unwell. Specific treatment (Wash areas of contact with water). Rinse mouth. If eye irritation persists: Get medical attention. In case of fire: Use dry chemical, foam or carbon dioxide to extinguish.

Store in a well-ventilated place. Keep container tightly closed. Store in a well-ventilated place. Keep cool. Store locked up.

Dispose of contents in accordance with local, state, federal and international regulations.



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### 16.2. Miscellaneous Hazard Classes

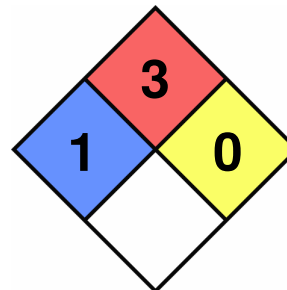
**Canadian Carcinogenicity Hazard Class:** Not Applicable.

**Physical Hazards Not Otherwise Classified (PHNOC):** Not Applicable.

**Health Hazards Not Otherwise Classified (HHNOC):** Not Applicable.  
Not Applicable.

### 16.3. National Fire Protection Association (NFPA) Rating

**Health:** 1  
**Flammability:** 3  
**Reactivity:** 0  
**Special Hazard:**





## Safety Data Sheet

### 16.4. Document Revision

**Last Revision Date:** 5/1/2015

#### DISCLAIMER

When handled properly by qualified personnel, the product described herein does not present a significant health or safety hazard. Alteration of its characteristics by concentration, evaporation, addition of other substances, or other means may present hazards not specifically addressed herein and which must be evaluated by the user. The information furnished herein is believed to be accurate and represents the best data currently available to us. No warranty, expressed or implied, is made and RICCA CHEMICAL COMPANY assumes no legal responsibility or liability whatsoever resulting from its use.