



SDS #: 524

Revision Date: March 21, 2014

## Methylene Blue Safety Data Sheet (SDS)

### SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

#### Methylene Blue

Signal Word  
**WARNING**

Flinn Scientific, Inc. P.O. Box 219, Batavia, IL 60510 (800) 452-1261

Chemtrec Emergency Phone Number: (800) 424-10011

Pictograms

### SECTION 2 — HAZARDS IDENTIFICATION

Hazard class: Acute toxicity, oral (Category 4). Harmful if swallowed (H302). Do not eat, drink or smoke when using this product (P270).



Hazard class: Skin and serious eye damage, corrosion or irritation (Category 2, 2A). Causes skin and serious eye irritation (H315+H319).

Hazard class: Specific target organ toxicity, single exposure; Respiratory tract irritation (Category 3). May cause respiratory irritation (H335). Avoid breathing dust or fumes (P261).

### SECTION 3 — COMPOSITION, INFORMATION ON INGREDIENTS

Component Name	CAS Number	Formula	Formula Weight	Concentration
Methylene blue trihydrate	7220-79-3	$C_{16}H_{18}ClN_3S \cdot 3H_2O$	373.9	
Synonyms: 3,7-bis(Dimethylamino)phenazathionium chloride; Basic Blue 9; Tetramethylthionine chloride; C.I. 52015				

### SECTION 4 — FIRST AID MEASURES

**If exposed or concerned:** Get medical advice or attention (P308+P313).

**If inhaled:** Remove victim to fresh air and keep at rest in a position comfortable for breathing (P304+P340).

**If in eyes:** Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so.

Continue rinsing (P305+P351+P338). **If eye irritation persists eyes:** Get medical advice or attention (P337+P313).

**If on skin:** Rinse cautiously with water for several minutes (P351).

**If swallowed:** Rinse mouth. Call a POISON CENTER or physician if you feel unwell (P301+P330+P312).

### SECTION 5 — FIRE FIGHTING MEASURES

Nonflammable solid.

When heated to decomposition, may emit toxic fumes.

In case of fire: Use a tri-class dry chemical fire extinguisher.

**NFPA Code**  
None established

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**SECTION 6 — ACCIDENTAL RELEASE MEASURES**

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Sweep up the spill, place in a sealed bag or container, and dispose. Ventilate area and wash spill site after material pickup is complete. See Sections 8 and 13 for further information.

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**SECTION 7 — HANDLING AND STORAGE**

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Flinn Suggested Chemical Storage Pattern: Organic #9. Store with dyes, indicators and stains.

Protect from heat and moisture. Store in a cool, dry place. Keep container tightly closed (P233). Use only in a hood or well-ventilated area (P271).

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**SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION**

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Wear protective gloves, protective clothing, and eye protection (P280). Wash hands thoroughly after handling (P264). Use only in a hood or well-ventilated area (P271). Will stain skin, clothing, and surfaces.

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**SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES**

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Dark green with bronze-like luster crystals or powder. Absorbance maximum: 660nm  
Slight odor. Biological stain and redox indicator.  
Soluble: Water, alcohol, and chloroform

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**SECTION 10 — STABILITY AND REACTIVITY**

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Avoid contact with strong oxidizers, reducers, and strong bases.  
Shelf life: Indefinite, if stored properly.

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**SECTION 11 — TOXICOLOGICAL INFORMATION**

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Acute effects: Severe eye irritant, stomach pains, vomiting, diarrhea, nausea, dizziness, headache  
Chronic effects: Possible mutagen  
Target organs: Blood  
ORL-RAT LD<sub>50</sub>: 1180 mg/kg  
IHL-RAT LC<sub>50</sub>: N.A.  
SKN-RBT LD<sub>50</sub>: N.A.

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**SECTION 12 — ECOLOGICAL INFORMATION**

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Data not yet available.

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**SECTION 13 — DISPOSAL CONSIDERATIONS**

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Please review all federal, state and local regulations that may apply before proceeding.  
Flinn Suggested Disposal Method #26a is one option.

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**SECTION 14 — TRANSPORT INFORMATION**

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Shipping name: Not regulated. Hazard class: N/A. UN number: N/A.

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**SECTION 15 — REGULATORY INFORMATION**

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TSCA-listed.

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**SECTION 16 — OTHER INFORMATION**

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USE OR DISPOSAL OF THIS PRODUCT(S).

N.A. = Not available, not all health aspects of this substance have been fully investigated.

N/A = Not applicable

**Consult your copy of the Flinn Science Catalog/Reference Manual for additional information about laboratory chemicals.**

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