

# IDENTITY: Methylene Blue Chloride

## Section I – Manufacturer Information

EM Science  
A Division of EM Industries  
480 Democrat Road  
Gibbstown, NJ 08027

Telephone Number for Information:  
(609) 423-6300  
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**Emergency Telephone: (800) 424-9300 (Chemtrec)**

## Section II – Hazard Ingredients/Identity Information

Methylene Blue Trihydrate 100%

Trade names: Basic Blue 9; Methylene Blue; C.I. #52015

Formula:  $C_{16}H_{18}ClN_3S \cdot 3H_2O$

Molecular weight – 373.92

## Section III – Physical/Chemical Characteristics

Boiling Point: N/A

Vapor Pressure: N/A

Vapor Density: N/A

Specific Gravity: N/A

Melting Point: 190°C

Evaporation Rate: N/A

Solubility in Water: 3.8%

Appearance and Odor: Dark green odorless crystals with bronze

## Section IV – Fire and Explosion Hazard Data

Flash Point (Method Used): None

LEL: N/A

Flammable Limits: N/A

UEL: N/A

Extinguishing Media: Use any suitable for adjacent material

Special Fire Fighting Procedures: Wear self-contained breathing apparatus.

Unusual Fire and Explosion Hazards: Thermal decomposition produces highly toxic fumes.

## Section V – Reactivity Data

Stable or Unstable? Stable

Incompatibility (Materials to Avoid): Caustic alkali, dichromates, reducing agents, alkali iodides  
Hazardous Decomposition or Byproducts: NO<sub>x</sub>, SO<sub>x</sub>, CO<sub>x</sub>, Chlorine compounds  
Hazardous Polymerization May Occur or Will Not Occur? Will Not Occur  
Conditions to Avoid: Extreme heat

## Section VI – Health Hazard Data

### Routes of Entry

Inhalation: Yes

Ingestion: Yes

Skin:

Eye:

### Carcinogenicity:

NTP: No

IARC Monographs: No

OSHA Regulated: No

Health Hazards: GET MEDICAL ASSISTANCE FOR ALL CASES OF OVEREXPOSURE.

Signs and Symptoms of Exposure: No harmful effects indicated from available information. Handling care generally in keeping with safe laboratory practices is recommended.

Medical Conditions Generally Aggravated by Exposure: Data not available

### Emergency and First Aid Procedure:

Inhalation – Remove to fresh air; give artificial respiration if breathing has stopped.

Ingestion – Get immediate medical attention. If conscious, give water freely.

Skin – Wash thoroughly with plenty of soap and water.

Eyes – Immediately flush thoroughly with water for at least 15 minutes.

## Section VII – Precautions for Safe Handling and Use

Steps to be Taken in Case Material is Released or Spilled: Evacuate the area of all unnecessary personnel. Wear suitable protective equipment. Eliminate any ignition sources until the area is determined to be free from explosion or fire hazards. Contain the release and eliminate its source, if this can be done without risk. Take up and containerize for proper disposal. Comply with federal, state and local regulations on reporting releases.

Waste Disposal Method: Ensure compliance with local, state and federal regulations.

Precautions to be Taken in Handling and Storing: Keep container closed. Store at controlled room temperature. Do not breathe dust. Do not get in eyes. Avoid prolonged, or repeated, skin contact.

Other Precautions:

## Section VIII – Control Measures

### Respiratory Protection:

Ventilation – Material should be handled or transferred in an approved fume hood or with adequate ventilation.

Local Exhaust:

Mechanical:

Special:

Other:

Protective Gloves: Polyethylene, PVC or equivalent

Eye Protection: Safety glasses with side shields should be worn at all times.

Other Protective Clothing or Equipment:

Work/Hygiene Practices: Wash thoroughly after handling. Do not take internally. Eye wash and safety equipment should be readily available.

## Section IX – Additional Information

The information provided in this Material Safety Data Sheet represents data from the manufacturer and/or vendor and is accurate to the best of our knowledge. By providing this information, Delta Education LLC makes no guarantee or warranty, expressed or implied, concerning the safe use, storage, handling, precautions, and/or disposal of the products covered or the accuracy of the information contained in this fact sheet. It is the responsibility of the user to comply with local, state, and federal laws and regulations concerning the safe use, storage, handling, precautions, and/or disposal of products covered in this fact sheet.