



SAFETY DATA SHEET

according to 29CFR1910/1200 and GHS Rev. 3

1. Identification:

Product Identifier: Methylene Blue, USP, 1% (w/v)
Product code: BM8341
Synonym(s): Basic Blue 9 1% (w/v); methylthionium chloride 1% (w/v)
Recommended use: Manufacture of other chemical products, professional, scientific, and technical activities
Recommended restrictions: None known.
Chemical family: Not applicable
Formula: Not applicable

Manufacturer/Supplier/Distributor Information

Company name: Biopharm Inc.
Address: 187 South Tilley Road
Hatfield, AR 71945
Telephone: (870) 389-6114
Website: www.bphchem.com
E-mail: support@bphchem.com
Emergency phone number: Chemtrec: 800-424-9300

2. Hazard(s) identification:

GHS US classification: Acute toxicity (oral, dermal, inhalation) Category 4
Hazardous to the aquatic environment – Acute Hazard Category 2
H302 Harmful if swallowed.
H401 Toxic to aquatic life.

Signal word (GHS US): Warning

Hazard Pictograms:



Hazard statement (GHS US): H302 – Harmful if swallowed.
H401 – Toxic to aquatic life.

Precautionary statement (GHS US):

Prevention P264 – Wash exposed skin thoroughly after handling.
P270 – Do not eat, drink or smoke when using this product.
P273 – Avoid release to the environment.
P310 – Immediately call a poison center or doctor/physician.
P501 – Dispose of contents/container to comply with local, state and federal regulations.
P301+P330+P331 – IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

Response No data available.

Storage Store bottles tightly capped and upright. Keep in a cool place away from direct sunlight.

Disposal Prevent entry into sewers, watercourses, basements or confined areas. Contain and collect spillage with an absorbent material and place in container for disposal according to local regulations.

Hazard(s) not otherwise classified (HNOC): Not classified.

Supplemental information: No data available.

3. Composition/information on ingredients

Mixtures

| <u>Chemical Name</u> | <u>CAS number</u> | <u>%</u> |
|----------------------|-------------------|----------|
| Methylene Blue | 61-73-4 | 1 |
| Water | 7732-18-5 | Balance |

4. First-aid measures

Inhalation: Allow victim to breathe fresh air. Allow the victim to rest.

Ingestion: Rinse mouth. Do NOT induce vomiting. If an unintended amount is ingested or if symptoms occur, obtain emergency medical attention.

Skin contact: Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm rinse.

Eye contact: Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persists.

Most important symptoms/effects, acute and delayed: Not expected to present a significant hazard under anticipated conditions of normal use.
May stain the skin.

General information: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice.

5. Fire-fighting measures

Suitable extinguishing media: Any media necessary for extinguishing the surrounding fire.

Unsuitable extinguishing media: None.

Specific hazards arising from the chemical: Not considered to be a fire or explosion hazard.

Special protective equipment and precautions for firefighters: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment. Do not enter fire area without proper protective equipment, including respiratory protection.

6. Accidental release measures

Personal precautions, protective equipment, and emergency procedures: Evacuate unnecessary personnel.
Equip cleanup crew with proper protection.
Ventilate area.

Methods and materials for containment and cleaning up: Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

Environmental precautions: Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

7. Handling and storage

| | |
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| Precautions for safe handling: | Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor. |
| Conditions for safe storage, including any incompatibilities: | Keep container closed when not in use. Strong bases. Strong acids. Sodium hypochlorite. Sources of ignition. Direct sunlight. |

8. Exposure controls/personal protection

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|---------------------------------------|--|
| Exposure Guidelines: | No exposure limits noted for ingredient(s). |
| Engineering measures: | Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. |
| Personal protective equipment: | Avoid all unnecessary exposure. |
| Eye/face protection: | Chemical goggles or safety glasses. |
| Skin and body protection: | Wear protective gloves. |
| Respiratory protection: | Wear appropriate mask. |
| Other Information: | Do not eat, drink, or smoke during use. |

9. Physical and chemical properties

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|---|----------------------------|
| Appearance: | Blue liquid |
| Odor: | Odorless. |
| Odor threshold: | No data available. |
| Vapor Pressure (mm Hg): | 14 |
| Vapor density (Air = 1): | No data available |
| pH: | 3-4.5 |
| Relative density: | No data available |
| Melting point/freezing point: | No data available |
| Solubility in Water: | Methylene Blue: 2.5g/100ml |
| Boiling Point (°C): | 100 °C |
| Flash point: | No data available |
| Evaporative Rate (H₂O = 1): | No data available |
| Flammability (solid, gas): | Non-flammable. |
| Upper/lower flammability or explosive limits | |
| Flammability limit - lower | No data available |
| Flammability limit - upper | No data available |
| Explosive limit - lower | No data available |
| Explosive limit - upper | No data available |
| Partition coefficient: n-octanol/water | No data available. |
| Auto-ignition temperature: | No data available. |

Decomposition temperature: No data available

Viscosity: No data available

Other information:

Specific Gravity (H₂O = 1): No data available

Percent Volatile by Volume: No data available

*Varies with specific value. See **chemical Handbook**.

10. Stability and reactivity

Reactivity: No data available.

Chemical stability: No data available.

Possibility of hazardous reactions: Not established.

Conditions to avoid: Direct sunlight. Extremely high or low temperatures.

Incompatible materials: Strong acids. Strong bases.

Hazardous decomposition products: Carbon monoxide. Carbon dioxide. Toxic chloride fumes

11. Toxicological information

Information on likely routes of exposure:

Ingestion: None indicated.

Inhalation: None indicated.

Skin Contact: None indicated.

Eye Contact: None indicated.

Information on toxicological effects

Acute toxicity Low hazard for usual industrial handling.

| Component | LD50 Oral | LD50 Dermal | LC50 Inhalation |
|------------------|------------------|--------------------|------------------------|
| Methylene Blue | 1180 mg/kg (rat) | No data available | No data available |

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation May cause irritation to skin on contact.

Serious eye damage/irritation May cause irritation to eyes on contact.

Respiratory Sensitization No data available.

Skin sensitization No data available.

Carcinogenicity This product is not considered to be a carcinogen by IARC, NTP, or OSHA.

Mutagenic effects No data available.

Reproductive effects No data available.

STOT – single exposure No data available.

| | |
|---------------------------------|--------------------|
| STOT – repeated exposure | No data available. |
| Aspiration hazard | No data available. |
| Chronic effects | No data available. |

12. Ecological information

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|---------------------------------------|--------------------|
| Ecotoxicity: | No data available. |
| Persistence and degradability: | No data available. |
| Bioaccumulation/ Accumulation: | No data available. |
| Mobility in soil: | No data available |
| Other adverse effects: | No data available |

13. Disposal considerations

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| Waste disposal methods: | Dispose in a safe manner in accordance with local/national regulations. Avoid release to the environment. |
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14. Transport information

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| DOT: | Not regulated as a hazardous material by DOT. |
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15. Regulatory information

U.S. Federal regulations

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| TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D) | Not regulated |
| U.S. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050) | Not regulated |
| CERCLA Hazardous Substances List (40 CFR 302.4) | Not listed. |

Superfund Amendments and Reauthorization Act of 1986 (SARA)

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|--------------------------|------------------------|
| Hazard Categories | Immediate Hazard – No |
| | Delayed Hazard – No |
| | Fire Hazard – No |
| | Pressure Hazard – No |
| | Reactivity Hazard – No |

Other Federal regulations

| | |
|---------------------------|---|
| Clean Air Act | Not applicable. |
| Clean Water Act | Not regulated. |
| California Prop 65 | This product does not contain any Proposition 65 chemicals. |

16. Other information, including date of preparation or last revision**Revision date** October 15, 2025**Disclaimer** The statements contained herein are offered as informational data only and are believed to be correct. However, this product should be handled by persons having related technical skills, and at their own discretion and risk. Since seller has no control over the use of this product, no warranty, expressed or implied, is made and seller assumes no liability in connection with any use of this information or from contact and/or handling of this product.