MATERIAL SAFETY DATA SHEET

1 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product name: InstaStain Methylene Blue
Catalogue No: 2003, 2004, 2006

CAS No: 61-73-4
Synonym:
Chemical name: Methylene Blue
Chemical formulae: 3.7 Bis (Dimethylamino) Phenothiazin 5 IUM Chloride
Application of the substance / the preparation: Laboratory chemical used for staining DNA electrophoresis gels.

Contact information:

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2 COMPOSITION AND INFORMATION ON INGREDIENTS

Composition: Consists of the following components:

Name	CAS No	% by Weight
Methylene Blue USP	61-73-4	100

3 HAZARDS IDENTIFICATION

Hazards description: Slightly hazardous in case of skin contact (irritant), of eye contact (irritant), or ingestion, or inhalation.
Carcinogenic effects: Not available.
Mutagenic effects: Mutagenic for mammalian somatic cells.
Teratogeneic effects: Not available
Developmental toxicity: Not available

4 FIRST AID MEASURES

General information: No special measures required.
Inhalation: Supply fresh air. Give artificial respiration if not breathing. Give oxygen if breathing difficult. Get medical attention.
Skin contact: Wash with soap and water. Cover irritated skin with an emollient. Get medical attention if irritation develops.
Eye contact: Rinse opened eye for several minutes under running water. Get medical attention.
Ingestion: Do NOT induce vomiting unless directed to by medical staff. Never give anything by mouth to unconscious person. If large amount swallowed seek medical help immediately. Loosen tight clothing such as tie, belt, waistband.

5 FIRE-FIGHTING MEASURES

Flammability of Product: May be combustible at high temperature.
Auto-ignition temperature: Not available
Flash point: Not available
Flammable limits: Not available

Products of combustion: Carbon oxides (CO, CO2), nitrogen oxides (NO, NO2…), sulphur oxides (SO2, SO3…), halogenated compounds.
Fire hazards in presence of various substances: Slightly flammable in presence of open flames and sparks, or heat. Non-flammable in presence of shocks.
Explosion hazard in presence of various substances: May be slightly explosive in presence of open flames and sparks.
Suitable extinguishing agents: SMALL FIRE: Use dry chemical powder. LARGE FIRE: Use water spray, fog or foam. Do not use water jet.
Protective equipment: Suitable breathing apparatus.

6 ACCIDENTAL RELEASE MEASURES

Small spill: Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.
Large spill: Use a shovel to put material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

7 HANDLING AND STORAGE

Precautions: Keep away from heat. Keep away from sources of ignition. Ground all equipment containing material. Do not breathe dust. Do not ingest. Avoid contact with eyes. Wear suitable protective clothing. If ingested, seek medical advice immediately and show the container or label. Keep away from incompatibles such as oxidizing agents.
Storage: Keep container tightly closed. Keep container in cool, well-ventilated area.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering controls: Use process enclosed, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.
Personal protection: Safety glasses. Lab coat. Gloves.
Personal protection in case of large spill: Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of product.
Exposure limits: Not available.

9 PHYSICAL AND CHEMICAL PROPERTIES

Physical state and appearance: Solid chemical bound to paper.
Odour: None
Taste: Not available
Molecular weight: 373.9 g/mole
Colour: Dark blue.
pH: Not available
Boiling point: Not available
Melting point: 190°C (374°F)
Flash point: Not available
Specific gravity: Not available
Vapour pressure: Not applicable
Vapour density: Not available
Volatility: Not available
Odour threshold: Not available
Solubility: Soluble in cold water; soluble in chloroform; sparingly soluble in alcohol.

10 STABILITY AND REACTIVITY

Stability: The product is stable
Instability temperature: Not available
Conditions of instability: Excess heat, light, air, incompatible materials.
Incompatibility: Reactive with oxidizing agents.
Corrosivity: Not available
Special remarks on reactivity: Light sensitive, air sensitive.

11 TOXICOLOGICAL INFORMATION

Routes of entry: Ingestion. Inhalation. Skin.
Skin: May cause skin irritation.
Eyes: May cause eye irritation.
Inhalation: Cyanosis**.**
Carcinogenicity: Meets criteria for OSHA medical records rule PEREAC 47.30420.82

12 ECOLOGICAL INFORMATION

Ecotoxicity: Not available
Products of Biodegradation: Toxic fumes of carbon monoxide, carbon dioxide, nitrogen oxide, sulphur dioxides, hydrogen, chloride gas.
Toxicity of products of biodegradation: Products of degradation are as toxic as the product itself.

13 DISPOSAL CONSIDERATIONS

Waste disposal: Mix material with a combustible solvent and burn in chemical incinerator equipped with afterburner and scrubber. Check and follow local rules and regulations.

14 TRANSPORT INFORMATION

General consideration: No special transport requirements.

15 REGULATORY INFORMATION

EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances.

16 OTHER INFORMATION

This information is based on our present knowledge and shall be used only as a guide. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship. Edvotek is not held liable for any damage resulting from handling or from contact with the above mentioned products. MSDS has been prepared in accordance with EU directives 67/548/EEC, 91/155/EEC and other European Union legislation in force.