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Section I - Product Identification

Product: An aqueous solution of methylene blue.

Intended Uses: This reagent is intended to be used as a stain in bacteriology and histology.

Uses advised against: Not intended for drug use.

Manufacturer Identification

Medical Chemical Corp.
19430 Van Ness Ave.
Torrance, CA 90501

Customer Service: Phone (310)787-6800
Email: Christinaavena@med-chem.com
FAX (310)787-4464

Emergency Telephone Number

CHEMTREC Emergency Response Telephone Number: (800)424-9300. Note: The CHEMTREC phone number is only for emergencies involving spills, leaks, fire, exposure or accident. Please direct all other inquiries to our customer service phone number.



Section II - Hazard Identification

This item is not considered hazardous by 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200). May be harmful if swallowed. May cause skin irritation.

Serious eye damage/eye irritation: Category 2A (H319). Causes serious eye irritation.

Acute toxicity (Oral): Category 4 (H302). May be harmful if swallowed.

Acute toxicity (Dermal): Category 5 (H313). May be harmful in contact with skin.

Sensitization (Skin): Category 1 (H317). May cause an allergic skin reaction.

Signal word: Warning

Hazard statements

The toxicology of this compound have not been completely examined. It is Irritating to the eye, skin and respiratory system.

Precautionary statements

- P102 Keep out of reach of children.
- P220 Keep away from clothing and other combustible materials.
- P260 Do not breathe dust/fume/gas/mist/vapors/spray.
- P264 Wash thoroughly after handling.
- P270 Do not eat, drink or smoke when using this product.
- P273 Avoid release to the environment.
- P281 Use personal protective equipment as required.

Potential Health Effects

The toxicology of this compound have not been completely examined. It is presumed that the toxicity of this item is similar to dilute solutions of other quinone-imine dyes.

Inhalation: Not normally an issue. May be Irritating to respiratory tract.

Ingestion: While the toxicity of this compound is low, large doses may cause nausea, vomiting, diarrhea, etc

Skin contact: Not normally a problem. May cause skin irritation or aggravation of existing dermatitis.

Eye contact: May be irritating.

Chronic Exposure: Unknown.

Aggravation of preexisting conditions: Unknown.

Section III - Composition/Information on Components

Ingredient	CAS#	EU/List #	%
Methylene Blue	61-73-4	200-515-2	1% w/w

Also contains trace amounts of a preservative.

Section IV - First Aid Measures

Inhalation: Unlikely to be an issue. Remove from source of exposure and get medical attention for any breathing difficulty.

Ingestion: Unlikely to be an issue. Get medical advise for exceptional cases.

Skin Contact: Unlikely to be an issue. Wash affected area with soap and water. Get medical advice if irritation develops.

Eye Contact: Rinse thoroughly with running water. Get medical advice if irritation develops.

Section V - Fire Fighting Measures

Flash point: Not applicable.

Flammable Limits: Not applicable.

Fire: Not normally a fire hazard,

Explosion: Not normally an explosion hazard.

Fire Extinguishing Media: Any means suitable for surrounding fire.

Special information: Pyrolysis will release corrosive oxides.

Section VI - Accidental Release Measures

Absorb with a suitable absorbent and store in a suitable container for disposal.

Section VII - Handling and Storage

P403+P233+P102; Store in a well-ventilated place. Keep container tightly closed. Keep out of reach of children.

Section VIII - Exposure Control/Personal Protection

Component	ACGIH TLV	OSHA PEL	NIOSH IDLH
Methylene blue	Not regulated	Not regulated	Not regulated

Legend

ACGIH: American Conference of Governmental Industrial Hygienists.

OSHA: Occupational Safety and Health Administration.

NIOSH: National Institute for Occupational Safety and Health.

IDLH: Immediately dangerous to life or health.

Ventilation System: Usually not required. When required, Refer to the ACGIH document, "Industrial Ventilation, a Manual of Recommended Practices" for details about ventilation.

Personal Respirator: Usually not required. In case of emergency, or when exposure levels are unknown, use a positive pressure, full face piece, air supplied respirator.

Skin protection: Protective gloves are not required but may be used as part of good laboratory practice.

Eye Protection: Laboratory safety goggles or similar products are not required but recommended as part of good laboratory practices

Section IX - Physical and Chemical Properties

Boiling Point: 100 °C

Vapor pressure (mm Hg): 18 @ 20 °C

Vapor Density (air = 1): 0.6

Appearance and Odor: An opaque blue solution.

Density: About 1.0 g/ml

Evaporation Rate (water = 1): 1

Solubility: Infinitely miscible with water

Section X - Stability and Reactivity

Stability: Stable under normal conditions.

Hazardous Decomposition Products: No known hazardous decomposition products..

Hazardous polymerization: Will not occur.

Incompatibilities: Nothing unusual

Conditions to avoid: Nothing unusual.

Section XI - Toxicological Information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Methylene blue	1180 mg/kg (Rat)	No Data	No Data

The product is non-toxic by ingestion or inhalation.

Cancer lists

Ingredient	Known Carcinogenicity?	NTP?	Anticipated?	IARC Category
Methylene Blue	No	No	No	3

Section XII - Ecological Information

This product is not expected to bioaccumulate. The product biodegrades quickly and does not contain endocrine disrupters, persistent organic pollutants or ozone depleters.

Soil Mobility: Unknown

Environmental Fate: Biodegradable

Environmental Toxicity: The manufacturer is unaware of any hazards with this item.

Component	Freshwater Fish	Water Flea	Freshwater algae
Methylene blue	LC50 18 mg/l 96 h	2.26 mg/l 48 h	No data

Section XIII - Disposal Considerations

Not normally restricted but ultimate authority resides with local government agencies. Insure compliance with all government regulations

Section XIV - Transportation Information

Not regulated by DOT or IATA.

Section XV - Regulatory Information

Chemical Inventory Status

Ingredient	TSCA	EC
Methylene Blue	Yes	Yes

Federal, State and International Regulations

Ingredient	SARA 302		SARA 313		RCRA	TSCA	
	RQ	TPQ	List	Category	261.33	8(D)	Ca. Prop 65
Methylene Blue	No	No	No	No	No	No	No

Chemical Weapons Convention: No TSCA 12(b): No CDTA: No

SARA 311/312: Acute: No, Chronic: No, Fire: No, Pressure: No

Section XVI - Other Information

This information is believed to be correct at the time of publication but is not guaranteed as such, nor does it purport to be all inclusive. Medical Chemical Corp. assumes no liability for the accuracy or completeness of the information. The user assumes all responsibility for compliance with federal, state and local laws.

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