

Section 1: Identification		
Common Name/Trade Name	METHYLENE BLUE PENTAHYDRATE	
Supplier Information	Letco Medical, LLC 1316 Commerce Drive NW Decatur, AL 35601 1 (800) 239-5288 +1 (734) 843-4693	IN CASE OF EMERGENCY: Chemtrec 1 (800) 424-9300 (24 hours) Outside USA and Canada: +1 703-527-3887 NSW Poisons Information Centre: 131 126 (24 hours)
Distributor Name	Bella Corp Trading Pty Ltd 6/34 Dominions Road, Ashmore QLD 4214, Australia Telephone: 07 5597 4169 Email: <u>bellacorp@bellacorp.com.au</u>	
Product Synonym(s)	Tetramethylthionine chloride; Methylthioninium chloride 3, Methylene blue pentahydrate	7-bis (Dimethylamino) phenazathionium chloride Basic Blue 9;
Relevant Use(s) of Product	Manufacture or Compounding of Substances	

## Section 2: Hazards Identification

Classification of Substance or Mixture	Acute toxicity, Oral (Category 4)	
Signal Word	Warning	
Hazard Statement(s)	H302	Harmful if swallowed
Pictogram(s)		
Precautionary Statement(s)	P264 P270 P301+P312 P330 P501	Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product. IF SWALLOWED Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth. Dispose of contents/container to an approved waste disposal plant.
Hazards Not Otherwise Classified	This substance/mixture contains no components considered to be either persistent, bio accumulative and toxic (PBT), or very persistent and very bio accumulative (vPvB) at levels of 0.1% or higher.	
Ingredient(s) with Unknown Toxicity	Not available	

	Section 3: Composition/Information on Ingredients
Chemical Name	Methylene Blue Pentahydrate
Common Name	Methylene Blue Pentahydrate
CAS Number	32680-41-4
Impurities and/or Stabilizing Additives	Not available.

Section 4: First Aid Measures	
General Advice	Consult a physician. Show this safety data sheet to the doctor in attendance.
If Inhaled	If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
In Case of Skin Contact	In case of skin contact Wash off with soap and plenty of water. Consult a physician
In Case of Eye Contact	In case of eye contact Flush eyes with water as a precaution.
If Swallowed	If swallowed. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.
Most Important Symptoms and Effects	The most important known symptoms and effects are described in the labelling (see section 2.) and/or in section 11.

Section 5: Fire Fighting Measures	
Suitable Extinguishing Media	Suitable extinguishing media. Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Special Hazards Arising From the Substance/Mixture	Carbon oxides, Nitrogen oxides (NO <sub>x</sub> ), Sulphur oxides, Hydrogen chloride gas. Development of hazardous combustion gases or vapours possible in the event of fire.
Special PPE and/or Precautions for Firefighters	Advice for firefighters: Wear self-contained breathing apparatus for firefighting if necessary.

Section 6: Accidental Release Measures	
Personal Precautions, Protective Equipment and Emergency Procedures	Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist, or gas. Ensure adequate ventilation. Avoid breathing dust. For personal protection see section 8.
Methods and Materials Used for Containment	Do not let product enter drains.
Cleanup Procedures	Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

Section 7: Handling and Storage	
Precautions for Safe Handling	Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. For precautions see section 2.
Conditions for Safe Storage	Store in an airtight container protected from light.

	Section 8: Exposure Controls/Personal Protection
Components with Workplace Control Parameters	No data available.
Appropriate Engineering Controls	Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.
PPE - Eye/Face Protection	Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested & approved under appropriate government standards such as NIOSH (US)/ EN 166(EU)
PPE - Skin Protection	Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it. Material: Nitrile rubber Minimum layer thickness: 0,11 mm Break through time: 480 min Splash contact Material: Nitrile rubber Minimum layer thickness: 0,11 mm Break through time: 480 min fl used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.
PPE - Body Protection	Complete suit protecting against chemicals, the type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
PPE - Respiratory Protection	For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle r (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) orCEN (EU).

Section 9: Physical and Chemical Properties		
Appearance	Dark green or blue crystals or crystalline powder having bronze-like luster	
Upper/Lower Flammability or Explosive Limits	No data available	
Odor	Odorless	
Vapor Pressure	No data available	
Odor Threshold	No data available	
Vapor Density	No data available	
рН	3-5 (1% solution)	
Relative Density	No data available	
Melting Point/Freezing Point	190°C.	
Solubility	No data available	
Initial Boiling Point and Boiling Range	No data available	
Flash Point	No data available	
Evaporation Rate	No data available	
Flammability (Solid, Gas)	Combustible	
Partition Coefficient	No data available	
Auto-Ignition Temperature	No data available	
Decomposition Temperature	No data available	
Viscosity	No data available	

Section 10: Stability and Reactivity	
Reactivity	No data available
Chemical Stability	Stable under recommended storage conditions
Possibility of Hazardous Reactions	No data available
Conditions to Avoid	No data available
Incompatible Materials	Strong oxidizing agents
Hazardous Decomposition Products	Hazardous decomposition products formed under fire conditions. Carbon oxides, Nitrogen oxides (NO <sub>x</sub> ), Sulphur oxides, Hydrogen chloride gas

Section 11: Toxicological Information	
Acute Toxicity - LD50 Oral	LD50 Oral- Rat: 1180 mg/kg. LOSO Oral- Mouse: 3500 mg/kg
Acute Toxicity - Inhalation	No data available
Acute Toxicity - Dermal	No data available
Acute Toxicity - Eye	No data available
Skin Corrosion/Irritation	No data available
Serious Eye Damage/Irritation	No data available
Respiratory or Skin Sensitization	No data available
Germ Cell Mutagenicity	No data available
Carcinogenicity IARC	This product is not considered to be a carcinogen by IARC, ACGIH, NTP or OSHA
Carcinogenicity ACGIH	This product is not considered to be a carcinogen by IARC, ACGIH, NTP or OSHA
Carcinogenicity NTP	This product is not considered to be a carcinogen by IARC, ACGIH, NTP or OSHA
Carcinogenicity OSHA	This product is not considered to be a carcinogen by IARC, ACGIH, NTP or OSHA
Reproductive Toxicity	No data available
Specific Target Organ Toxicity - Single Exposure	No data available
Specific Target Organ Toxicity - Repeated Exposure	No data available
Aspiration Hazard	No data available

Section 12: Ecological Information	
Toxicity	No data available
Persistence and Degradability	No data available
Bio-accumulative Potential	No data available
Mobility in Soil	This substance /mixture contains no components considered to be persistent, bio-accumulative and toxic (PBT), or very persistent and very bio-accumulative (vPvB) at levels of 0.1% or higher.
Other Adverse Effects	No data available

Section 13: Disposal Considerations		
Waste Treatment Methods Product	Offer surplus and non-recyclable solutions to a licensed disposal company. Dissolve or mix the material with a combustible solvent and burn in a chem scrubber.	
Waste Treatment Methods Packaging	Dispose of as unused product.	
Special Precautions Landfill or Incinerations	No data available	
Other Information	No data available	

Section 14: Transport Information	
UN Number	Not dangerous goods.
UN Proper Shipping Name	N/A
Transport Hazard Class(es)	N/A
Packaging Group	N/A
Environmental Hazards	N/A. Marine pollutant: no

## Section 15: Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture. This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.

Section 16: Other Information	
Additional Information	N/A
Prepared By	Scarlotte Smith
Revision Date	03/13/2025 14:09

## Disclaimer

Letco Medical, LLC believes that the above information is correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. If the product is used as a component in another product, this information may not be applicable. NO WARRANTY OF FITNESS FOR ANY PARTICULAR PURPOSE, WARRANTY OF MERCHANTABILITY OR ANY OTHER WARRANTY, EXPRESSED OR IMPLIED, IS MADE CONCERNING THE INFORMATION PROVIDED ABOVE. Letco Medical shall not be held liable for any loss or damage resulting from handling, storage, use or from contact with the above product.