

U.S. DEPARTMENT OF LABOR
Occupational Safety and Health Administration

Form Approved
OMB No. 44-R13287

MATERIAL SAFETY DATA SHEET

Required under USDL Safety and Health Regulations for Ship Repairing,
Shipbuilding, and Shipbreaking (29 CFR 1915, 1916, 1917)

SECTION I

MANUFACTURER'S NAME UNITED STATES BIOCHEMICAL CORPORATION		EMERGENCY TELEPHONE NO. 216-765-8217
ADDRESS (Number, Street, City, State, and ZIP Code) P.O. BOX 22400 Cleveland, Ohio 44122 216-765-5000		
CHEMICAL NAME AND SYNONYMS Methylene Blue (Chloride)	TRADE NAME AND SYNONYMS BASIC BLUE 9, Swiss blue	
CHEMICAL FAMILY Thionine	FORMULA C16 H18 Cl N3	

SECTION II - HAZARDOUS INGREDIENTS

PAINTS, PRESERVATIVES, & SOLVENTS	%	TLV (Units)	ALLOYS AND METALLIC COATINGS	%	TLV (Units)
PIGMENTS			BASE METAL		
CATALYST			ALLOYS		
VEHICLE			METALLIC COATINGS		
SOLVENTS			FILLER METAL PLUS COATING OR CORE FLUX		
ADDITIVES			OTHERS		
OTHERS					
HAZARDOUS MIXTURES OF OTHER LIQUIDS, SOLIDS, OR GASES				%	TLV (Units)
Section II not applicable					

SECTION III - PHYSICAL DATA

BOILING POINT (°F.)	No data	SPECIFIC GRAVITY (H ₂ O=1)	No data
VAPOR PRESSURE (mm Hg.)	No data	PERCENT VOLATILE BY VOLUME (%)	No data
VAPOR DENSITY (AIR=1)	No data	EVAPORATION RATE (_____ = 1)	No data
SOLUBILITY IN WATER	1g/25ml		
APPEARANCE AND ODOR	dark green odorless crystals		

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method used)	No data	FLAMMABLE LIMITS	LC ₅₀	LD ₅₀
EXTINGUISHING MEDIA	Suitable to extinguish supporting fire			
SPECIAL FIRE FIGHTING PROCEDURES	Wear self contained breathing apparatus			
UNUSUAL FIRE AND EXPLOSION HAZARDS	May form sulfur dioxide if involved in fire			
As with all organic dusts, may be explosive if mixed with air in critical proportions.				

SECTION V - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE

Lowest published toxic level dose (1974) LDLo100 mg/kg intraperitoneal mouse

EFFECTS OF OVEREXPOSURE

Unknown- see attached.

EMERGENCY AND FIRST AID PROCEDURES

Wash infected area/contact physician. See attached.

SECTION VI - REACTIVITY DATA

STABILITY	UNSTABLE		CONDITIONS TO AVOID
		X	
	STABLE		

INCOMPATIBILITY (Materials to avoid)

caustic alkali;dichromates;alkali iodides; reducing agents

HAZARDOUS DECOMPOSITION PRODUCTS

possible SO2; NOx; aromatics

HAZARDOUS POLYMERIZATION	MAY OCCUR		CONDITIONS TO AVOID
		X	
	WILL NOT OCCUR		

SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Wear appropriate protective clothing. Sweep or vacuum up material.

WASTE DISPOSAL METHOD

Bury in landfill, in accordance with local, state and federal regulations.

SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION (Specify type)

Dust Mask

VENTILATION	LOCAL EXHAUST	SPECIAL
	MECHANICAL (General)	OTHER
	X	

PROTECTIVE GLOVES

Recommended

EYE PROTECTION

Safety glasses

OTHER PROTECTIVE EQUIPMENT

SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING

Normal care required for chemical reagents.

OTHER PRECAUTIONS

USE PRODUCT INFORMATION

This bulletin is for your guidance and is based upon information and facts believed to be reliable. USB makes no guarantee of the accuracy or completeness of the data and shall not be liable for any damage resulting therefrom. The user is advised to take your own considerations, investigation, and verification. This information should not be confused with either state, provincial or interstate regulations and with national safety codes and **CONTINUE TO WORK SAFELY**. All information and information must be obtained by the user to be its own responsibility. Federal, State and local laws and regulations apply.

METHYLENE BLUE

MSDS DATA

HEALTH EFFECTS

SKIN: No toxicity data found, but contact may cause bluish skin, irritation and/or allergic reaction.

EYES: No toxicity data found, but contact may cause irritation and slight corneal injury.

INHALATION: No toxicity data found, but excessive dust may cause irritation if inhaled.

INGESTION: May cause nausea, abdominal pain, chest pain, headache, profuse sweating, mental confusion, painful urination and bluish skin, urine, feces and saliva. Glucose - 6 - phosphate dehydrogenase patients may be susceptible to delayed hemolysis and methemoglobinemia.

FIRST AID

INHALATION: Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Keep victim quiet and warm. Call the poison control center or physician immediately.

SKIN: Flush with water, then wash thoroughly with soap and water. Remove contaminated clothing and wash before reuse. Call physician if irritation persists.

EYES: Flush with water for 15 minutes and call physician if irritation persists.

INGESTION: Drink water and call collect (216)765-8217 or consult a physician immediately. Avoid alcoholic beverages. Never give anything by mouth to an unconscious person.

FOR 24 HOUR EMERGENCY MEDICAL INFORMATION CALL COLLECT (216)765-8217