

Methylene Blue Stock Solution

1. Identification

Product Name: Methylene Blue Stock Solution

Item #: SSC1096

Synonyms: N/A

Recommended Use: Staining Solution

Restrictions on Use: Not a beverage

Manufacturer:

Cancer Diagnostics, Inc.

116 Page Point Circle

Durham, NC 27703

1-877-846-5393

In Case of Emergency:

Chemtec US 1-800-424-9300

Infotrac International 1-352-323-3500

2. Hazards Identification

OSHA Hazard Classification(s):

Skin Irritation - Category 2

Eye Irritation - Category 2A

Specific Target Organ Toxicity (single exposure) - Category 1

Specific Target Organ Toxicity (repeated exposure) - Category 2

Flammable Liquids - Category 2

Signal Word: Danger

Hazard Statement(s): Causes skin irritation. Causes serious eye irritation. Causes damage to organs (respiratory system). May cause damage to organs (respiratory system, central nervous system, liver, blood) through prolonged or repeated exposure. Highly flammable liquid and vapor.

Pictogram(s):

Precautionary Statement(s): Prevention: Wash body thoroughly after handling. Wear approved protective gloves made of neoprene, nitrile or equivalent. Wear approved eye protection/face protection. Do not breathe vapors. Do not eat, drink or smoke when using this product. Keep away from heat, sparks, open flames, hot surfaces.— No smoking. Keep container tightly closed. Ground/Bond container and receiving equipment. Use explosion-proof electrical, ventilating, and lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge.

Response: If on skin (or hair): Take off immediately all contaminated clothing and wash before reuse. Wash with plenty of water. If skin irritation occurs: Get medical advice/attention. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. If exposed: Call a doctor. Get medical advice/attention if you feel unwell. In case of fire: Use water, dry chemical, carbon dioxide to extinguish.

Storage: Store locked up. Store in a well-ventilated place. Keep cool.

Disposal: Dispose of contents in accordance with local regulations.

Descriptions of Hazards not otherwise classified: N/A

Percent of mixture with unknown acute toxicity: N/A

3. Composition and Information on Ingredients

Chemical Name	Common Name	CAS #	Concentration %
Denatured Ethanol Blend	Ethyl Alcohol Denatured	64-17-5	Trade Secret
Water		7732-18-5	Trade Secret
Methylene Blue		7220-79-3	Trade Secret

4. First Aid Measures

Eye Contact: If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

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Continue rinsing. If eye irritation persists: Get medical advice/attention.

Skin Contact: If on skin (or hair): Take off immediately all contaminated clothing and wash before reuse. Wash with plenty of water. If skin irritation occurs: Get medical advice/attention.

Inhalation: Vapor harmful. Remove to fresh air; give artificial respiration if breathing has stopped. Get medical advice/attention if you feel unwell.

Ingestion: Do not induce vomiting. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into the lungs. Get medical attention.

Symptoms: Irritation eyes, nose, throat; headache, dizziness

Recommendations for immediate medical care/special treatment: Get medical advice/attention if you feel unwell.

5. Fire- Fighting Measures

Extinguishing Media: Dry chemical, carbon dioxide, alcohol foam.

Fire Hazards (Chemical): Vapors are flammable. Flammable Liquid OSHA Category 2

Special Protective Equipment: Fire fighters should use self-contained breathing apparatus and protective clothing.

Precautions for Firefighters: Carbon monoxide and unidentified organic compounds may be formed during combustion.

6. Accidental Release Measures

Emergency Procedures: Evacuate the area of all unnecessary personnel. Wear suitable protective equipment. Eliminate all sources of ignition and provide ventilation.

Protective Equipment: See section 8

Environmental Precautions: Prevent release to the environment by using barriers.

Containment and Clean-Up Procedures: Use barriers to prevent spreading. Collect spill in container. Call waste authorities.

7. Handling and Storage

Handling: Do not breathe vapors. Do not eat, drink or smoke when using this product. Keep away from heat, sparks, open flames, hot surfaces. No smoking. Keep container tightly closed. Ground/Bond container and receiving equipment. Use explosion-proof electrical, ventilating and lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge.

Storage: Store locked up. Store in a well-ventilated place. Keep cool.

8. Exposure Controls/Personal Protection

OSHA Permissible Exposure Limits (PELs):

Reagent	CAS #	OSHA PEL TWA
Ethyl Alcohol	64-17-5	1000 ppm
Isopropyl Alcohol	67-63-0	400 ppm
Methyl Alcohol	67-56-1	200 ppm
Methyl Isobutyl Ketone	108-10-1	100 ppm

ACGIH Threshold Limit Values (TLVs):

Reagent	CAS #	ACGIH PEL TLV	ACGIH STEL
Ethyl Alcohol	64-17-5	1000 ppm	
Isopropyl Alcohol	67-63-0	400 ppm	500 ppm
Methyl Alcohol	67-56-1	200 ppm	250 ppm
Methyl Isobutyl Ketone	108-10-1	50 ppm	75 ppm

Engineering Controls: Use in a well ventilated area to prevent exposure. Maintain eyewash fountain and quick-drench facilities in work areas.

Personal Protective Measures: Wear gloves, lab coat, eye protection and impervious footwear. Contact lenses should not be worn when working with this material.

Special PPE Requirements: If ventilation hood not available wear respirator.

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9. Physical and Chemical Properties Section

Appearance: Dark Blue, Blue Liquid
Molecular Weight: N/A
Molecular Formula: N/A
pH: N/A
Boiling Point and Boiling Range: 173°F
Melting Point/Freezing Point: N/A
Flash Point: 55°F
Specific Gravity/Relative Density: N/A
Odor: Vinous
Odor Threshold: N/A
Color: Dark Blue
Flammability (solid/gas): Flammable liquid, emits flammable vapors
Vapor Density: N/A
Upper/Lower flammability or explosive limits: N/A
Vapor Pressure: N/A
Evaporation Rate: N/A
Partition Coefficient: n-octanol/water: N/A
Viscosity: N/A
Auto-ignition temperature: N/A
Solubility: Miscible in water
Decomposition Temperature: N/A

10. Stability and Reactivity

Reactivity:
Chemical Stability: Stable
Conditions of Stability/Instability: N/A
Stabilizers needed: None
Safety issue indicated by appearance change: N/A
Other: N/A
Hazardous Reactions: N/A
Hazardous Polymerization: Does not occur
Conditions to avoid: Heat source, open flame
Classes of Incompatible Materials: Oxidizers, Strong Acids, Strong Bases, potassium dioxide, bromine pentafluoride, acetyl bromide, acetyl chloride, platinum, sodium.
Hazardous Decomposition Products: Thermal-oxidation degradation can produce oxides of carbon. Toxic gases and vapors (I.e. Carbon monoxide) may be released in a fire.

11. Toxicological Information

Likely Routes of Exposure

Eyes: Irritation.

Skin: Irritation.

Inhalation: Dizziness, headache. may cause nausea and narcosis.

Ingestion: May cause blindness, nausea, damage to gastrointestinal tract, liver, kidneys and cardiovascular system. Carcinogenic if ingested repeatedly over time (IARC List 1 - Ethanol in alcoholic beverages)

Signs or Symptoms of Exposure: Irritation to the eyes, skin, nose. Headache, drowsiness, lassitude (weakness, exhaustion), narcosis; cough; liver damage; anemia; reproductive, teratogenic effects.

Effects from short term exposure (delayed, immediate, chronic): May cause blindness, nausea, damage to gastrointestinal tract, liver, kidneys and cardiovascular system

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Acute Toxicity (Numerical Measures): N/A

Carcinogenicity (NTP, IARC, OSHA): If consumed Ethanol is considered a carcinogen. IARC List 1 - Ethanol in alcoholic beverages

12. Ecological Information

Ecotoxicity:

Persistence and degradability:

Bioaccumulation Potential (octanol-water partition coefficient, BCF):

Mobility in the soil:

Adverse Environmental Effects:

13. Disposal Considerations

Recommended Disposal Containers: Check with your local waste authorities.*

Recommended Disposal Methods: Do not dispose of in drains, check with your local waste authorities.*

Physical/Chemical Properties affecting Disposal: See section 2 and section 9 applicable information.*

Special Precautions for Landfill and Incineration Activities: Check with your local waste authorities.*

Waste Stream: Consult your local or regional authorities.*

14. Transport Information

UN Number: UN1170

UN Proper Shipping Name: Ethanol Solutions

Transport Hazard Class(es): 3

Packing Group Number: II

Environmental Hazards (IMDG code):

Marine Pollutant: No

Transport in Bulk (IBC Code): N/A

Special Transport Precautions: N/A

15. Regulatory Information

OSHA:

DOT:

EPA:

CPSC:

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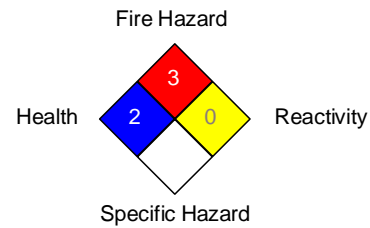
16. Other Information

Revision Date: 2019-01-11

NFPA

Health	2
Fire Hazard	3
Reactivity	0
Specific Hazard	

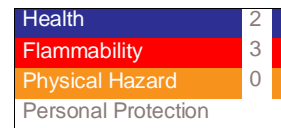
National Fire Protection Association (USA) NFPA



HMIS

Health	2
Flammability	3
Physical Hazard	0
Personal Protection	

Hazardous Material Information System HMIS



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