

## SAFETY DATA SHEET

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1 Product identifiers

Product name                      Methylene Blue 1% in Ethanol Solution

Synonyms                          None

#### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses                      Laboratory chemicals

#### 1.3 Details of the supplier of the safety data sheet

Company                              Lab Alley, LLC  
12501 Pauls Valley Road  
Austin, Texas 78737  
U.S.A.

Telephone                            512-668-9918  
Fax                                      512-886-4008

#### 1.4 Emergency telephone

<b>Emergency Phone #</b>	US & Canada: 1-800-535-5053	INFOTRAC
	International 1-352-323-3500	INFOTRAC

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

##### GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Eye damage/irritation - Category 2A  
Germ Cell Mutagenicity - Category 1  
Reproductive toxicity - Category 1  
Specific target organs/system toxicity following single exposure - Category 1  
Specific target organs/system toxicity following repeated exposure - Category 1  
Flammable liquids - Category 2

#### 2.2 GHS Label elements, including precautionary statements

Pictogram



Signal Word

Danger

Hazard statements

Flammable liquid and vapor.  
Causes serious eye irritation.  
May cause genetic defects.  
May damage fertility or the unborn child.  
Causes damage to organs.  
Causes damage to organs through prolonged or repeated exposure.

Precautionary statements

Obtain special instructions before use  
Do not handle until all safety precautions have been read and understood.  
Keep away from heat, sparks and open flame. No smoking.  
Keep container tightly closed.  
Ground container and receiving equipment.  
Use explosion-proof equipment.  
Use only non-sparking tools.  
Take precautionary measures against static discharge.  
Do not eat, drink or smoke when using this product.  
Wear protective gloves and eye protection.  
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.  
IF exposed: Call a POISON CENTER or physician.  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
Get medical attention if you feel unwell.  
Specific treatment (Wash areas of contact with water immediately)  
If eye irritation persists: Get medical attention  
Store locked up  
Dispose of contents in accordance with local, state, federal and international regulations.

### 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

No information available

## SECTION 3: Composition/information on ingredients

### 3.1 Components

Chemical name	Common name and synonyms	CAS number	Concentration
Ethyl Alcohol	CH <sub>3</sub> CH <sub>2</sub> OH	64-17-5	94%
Water	H <sub>2</sub> O	7732-18-5	5%
Methylene Blue	C <sub>16</sub> H <sub>18</sub> ClN <sub>3</sub> S 3H <sub>2</sub> O	7220-79-3	1%

## SECTION 4: First aid measures

### 4.1 Description of first-aid measures

#### General advice

<b>If inhaled</b>	Not expected to require first aid. If necessary, remove to fresh air.
<b>In case of skin contact</b>	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Results in drying and cracking which can lead to secondary infections and dermatitis.
<b>In case of eye contact</b>	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. May cause irritation with burning and stinging with possible damage to the cornea and conjunctiva.
<b>If swallowed</b>	Dilute immediately with water or milk. Induce vomiting. Call a physician.

### 4.2 Most important symptoms and effects, both acute and delayed

Flammable liquid. Primarily toxic by ingestion. If ingested, give large quantity of water and induce vomiting. Call a physician. Contact may cause dryness and cracking of the skin. May cause irritation to the eyes. Wash areas of contact with water. May cause irritation of the respiratory system. EYE CONTACT: May cause irritation with burning and stinging with possible damage to the cornea and conjunctiva. SKIN CONTACT: Results in drying and cracking which can lead to secondary infections and dermatitis.

### 4.3 Indication of any immediate medical attention and special treatment needed

Specific treatment (Wash areas of contact with water immediately)

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

<b>Suitable extinguishing media</b>	Use dry chemical, alcohol foam, or carbon dioxide for extinguishing the surrounding fire. Use water as fog in flooding quantities. Water can be used to dilute spills to non-flammable mixtures.
<b>Unsuitable extinguishing media</b>	No information available

### 5.2 Specific hazards arising from the substance or mixture

Flammable liquid and vapor. Vapors can flow along surfaces to distant ignition source and flashback. Use water spray to blanket fire, cool fire exposed containers, and to flush non-ignited spills or vapors away from fire. Explosion hazard when exposed to heat, flame or oxidizers.

### 5.3 Special protective equipment and precautions for firefighters

Wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

#### **5.4 Further information**

No information available.

### **SECTION 6: Accidental release measures**

#### **6.1 Personal precautions, protective equipment and emergency procedures**

Ground container and receiving equipment. Use explosion-proof equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Wear protective gloves and eye protection.

#### **6.2 Environmental precautions**

Do not release into environment.

#### **6.3 Methods and materials for containment and cleaning up**

Remove all sources of ignition. Contain spill. Do not flush to sewer. Absorb with suitable inert material (Vermiculite, dry sand, etc) and place in a chemical waste container for proper disposal in an approved waste disposal facility. Ventilate area of spill. Have extinguishing agent available in case of fire. Use non-sparking tools and equipment. Dispose of in accordance with local regulations.

#### **6.4 Reference to other sections**

See section 2 for full list of hazard and precaution statements.

### **SECTION 7: Handling and storage**

#### **7.1 Precautions for safe handling**

##### **Precautions on safe handling**

Avoid contact with eyes and skin. Protect from freezing and physical damage.

##### **Hygiene measures**

As with all chemicals, wash hands thoroughly after handling.

#### **7.2 Conditions for safe storage, including any incompatibilities**

##### **Storage conditions**

Store in secure, flammable storage area away from all sources of ignition. Empty containers may be hazardous since they retain product residues.

##### **Incompatibilities**

No information available

### **SECTION 8: Exposure controls/personal protection**

#### **8.1 Occupational exposure limits**

**US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)**

Component	Type	Value
Ethyl Alcohol	TWA	1000 ppm 1900 mg/m3

**US. ACGIH Threshold Limit Values**

Component	Type	Value
Ethyl Alcohol	TLV-STEL	1000 ppm STEL

## 8.2 Exposure controls

**Appropriate engineering controls**

A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limit.

**Personal protective equipment****Eye/face protection**

Wear protective gloves and eye protection. Safety glasses or goggles.

**Skin protection**

Wear protective gloves and eye protection. Chemical resistant gloves.

**Body Protection**

No information available

**Respiratory protection**

Normal room ventilation is adequate. If the exposure limit is exceeded, a full facepiece respirator with organic vapor.

**Control of environmental exposure**

No information available

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Physical State	Liquid
Appearance	Blue liquid
Odor	No information available
Odor Threshold	No information available
pH	No information available
Melting Point/Range	Approximately 0°C
Boiling Point/Range	Approximately 77°C - Approximately 77°C
Evaporation Rate	No information available

Flammability (solid)	No information available
Flammability or explosive limit	No information available
Upper	
Lower	
Vapor Pressure	No information available
Vapor Density	No information available
Density	0.8
Solubility	Miscible
Partition coefficient; n-octanol/water	No information available
Autoignition Temp	No information available
Decomposition Temp	No information available
Viscosity	No information available
Molecular Formula	No information available
Molecular Weight	No information available
VOC Content(%)	No information available
Oxidizing properties	No information available

## 9.2 Other safety information

No information available

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

Stable under normal conditions of use and storage.

### 10.2 Chemical stability

No information available

### 10.3 Possibility of hazardous reactions

No information available

### 10.4 Conditions to avoid

Keep away from heat, sparks and open flame. No smoking. Keep container tightly closed.

### 10.5 Incompatible materials

Oxidizers, platinum, sodium, potassium dioxide, bromine pentafluoride, acetyl bromide, acetyl chloride, heat, sparks, open flame.

### 10.6 Hazardous decomposition products

Will not occur.

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Product Information, Component Information

#### Acute toxicity

LD50, Oral

Ethanol: 7060 mg/kg

Methylene Blue: 1180 mg/kg

**Skin corrosion/irritation**

Not applicable

**Serious eye damage/eye irritation**

No information available

**Respiratory or skin sensitization**

No information available

**Germ cell mutagenicity**

May cause genetic defects. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves and eye protection. IF exposed or concerned: Get medical attention. Store locked up. Dispose of contents in accordance with local, state, federal and international regulations.

**Carcinogenicity**

Not applicable

**Specific target organ toxicity - single exposure**

Causes damage to organs. Do not breathe dust, fumes or mist. Wash arms, hands and face thoroughly after handling. Do not eat, drink or smoke when using this product. IF exposed: Call a POISON CENTER or physician. Specific treatment (Wash areas of contact with water immediately). Store locked up. Dispose of contents in accordance with local, state, federal and international regulations.

**Specific target organ toxicity - repeated exposure**

Causes damage to organs through prolonged or repeated exposure. Do not breathe dust, fumes or mist. Wash arms, hands and face thoroughly after handling. Do not eat, drink or smoke when using this product. Get medical attention if you feel unwell. Dispose of contents in accordance with local, state, federal and international regulations.

**Reproductive toxicity**

May damage fertility or the unborn child. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves and eye protection. IF exposed or concerned: Get medical attention. Store locked up. Dispose of contents in accordance with local, state, federal and international regulations.

**Chronic effects**

No information available

**11.2 Additional Information**

No information available

## SECTION 12: Ecological information

### 12.1 Toxicity

Not applicable

### 12.2 Persistence and degradability

No information available

### 12.3 Bio accumulative potential

No information available

### 12.4 Mobility in soil

No information available

### 12.5 Results of PBT and vPvB assessment

No information available

### 12.6 Endocrine disrupting properties

No information available

### 12.7 Other adverse effects

No information available

## SECTION 13: Disposal considerations

### 13.1 Waste Disposal Methods

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

## SECTION 14: Transport information

### DOT (US)

UN Number: UN1170

Proper shipping name: Ethanol Solution

Hazard Class: 3

Packing Group: II

Hazard placard labels:



### IMDG

UN Number: UN1170

Proper shipping name: Ethanol Solution

Hazard Class: 3

Packing Group: II



Hazard placard labels:



**IATA**

**UN Number: UN1170**

**Proper shipping name: Ethanol Solution**

**Hazard Class: 3**

**Packing Group: II**

Hazard placard labels:



## SECTION 15: Regulatory information

**US federal regulations** This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

### **TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

Listed

### **CERCLA Hazardous Substance List (40 CFR 302.4)**

Listed

### **SARA 304 Emergency release notification**

Not regulated

### **OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)**

Not regulated.

### **Superfund Amendments and Reauthorization Act of 1986 (SARA)**

#### **SARA 302 Extremely hazardous substance**

Not listed.

#### **SARA 311/312 Hazardous**

Listed; 5000 lb final RQ

#### **SARA 313 (TRI reporting)**

Listed

### **Other federal regulations**

#### **Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Not regulated

#### **Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

Not regulated.

#### **Safe Drinking Water Act**

Not regulated

#### **FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace**

Not listed

**US state regulations**

**US. Massachusetts RTK - Substance List**

Listed

**US. New Jersey Worker and Community Right-to-Know Act**

Listed

**US. Pennsylvania Worker and Community Right-to-Know Law**

Listed

**California Proposition 65**

Listed

**SECTION 16: Other information**

Revision date: 8/19/2025

**SECTION 17: Disclaimer**

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.