

## SAFETY DATA SHEET

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

#### 1.1 Product identifiers

Product name            Methylene Blue Trihydrate  
CAS number            7220-79-3  
Synonyms                C.I. 52015 trihydrate; Basic Blue 9 trihydrate

#### 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)

Acute Oral Toxicity    Category 4

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

Pictogram



Signal Word

Warning

Hazard statements

Harmful if swallowed.

Precautionary statements

Prevention: Wash face, hands, and any exposed skin 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.

Disposal: Dispose of contents/container to an approved waste disposal plant.

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

None identified.

## SECTION 3: Composition/information on ingredients

### 3.1 Components

Chemical name	Common name and synonyms	CAS number	Concentration
Methylene blue trihydrate	C.I. 52015 trihydrate; Basic Blue 9 trihydrate	7220-79-3	>95%
Methylene blue	-	61-73-4	-

## SECTION 4: First aid measures

### 4.1 Description of first-aid measures

#### General advice

<b>If inhaled</b>	Remove to fresh air. If not breathing, give artificial respiration. Get medical attention if symptoms occur.
<b>In case of skin contact</b>	Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a physician.
<b>In case of eye contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.
<b>If swallowed</b>	Clean mouth with water and drink afterwards plenty of water. Get medical attention if symptoms occur.

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

None reasonably foreseeable.

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

If symptoms persist, call a physician. Treat symptomatically.

### SECTION 5: Firefighting measures

#### 5.1 Extinguishing media

**Suitable extinguishing media** Water spray, Carbon dioxide (CO<sub>2</sub>), dry chemical, alcohol-resistant foam.

**Unsuitable extinguishing media** No information available.

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

Thermal decomposition can lead to release of irritating gases and vapors. Keep product and empty container away from heat and sources of ignition.

Hazardous Combustion Products: Nitrogen oxides (NO<sub>x</sub>). Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>). Hydrogen chloride gas.

#### 5.3 Special protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

#### 5.4 Further information

**Flash Point** No information available.

**Autoignition Temperature** No information available.

##### Explosion limits

**Upper** No data available.

**Lower** No data available.

**Sensitivity to Mechanical Impact** No information available.

**Sensitivity to Static Discharge** No information available.

##### NFPA

Health	Flammability	Instability	Physical hazards
2	1	0	N/A

### SECTION 6: Accidental release measures

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

Use personal protective equipment as required. Ensure adequate ventilation. Avoid dust formation.

#### **6.2 Environmental precautions**

Should not be released into the environment.

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

Sweep up and shovel into suitable containers for disposal. Keep in suitable, closed containers for disposal.

#### **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**

Wear personal protective equipment/face protection. Ensure adequate ventilation. Avoid dust formation. Do not get in eyes, on skin, or on clothing. Avoid ingestion and inhalation.

##### **Hygiene measures**

Handle in accordance with good industrial hygiene and safety practice.

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

##### **Storage conditions**

Keep containers tightly closed in a dry, cool, and well-ventilated place.

##### **Incompatibilities**

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

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

This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

#### **8.2 Exposure controls**

##### **Appropriate engineering controls**

Ensure that eyewash stations and safety showers are close to the workstation location.  
Ensure adequate ventilation, especially in confined areas.

## Personal protective equipment

### Eye/face protection

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

### Skin protection

Wear appropriate protective gloves and clothing to prevent skin exposure.

### Body Protection

Wear appropriate protective gloves and clothing to prevent skin exposure.

### Respiratory protection

No protective equipment is needed under normal use conditions.

### Control of environmental exposure

No information available.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Physical State	Solid
Appearance	Dark Blue, Crystalline powder
Odor	Odorless
Odor Threshold	No information available
pH	3 at 10 g/l at 20 °C
Melting Point/Range	180 °C
Boiling Point/Range	No information available
Evaporation Rate	Not applicable
Flammability (solid)	No information available
Flammability or explosive limit	No data available
Upper	
Lower	
Vapor Pressure	Negligible
Vapor Density	Not applicable
Density	No information available
Solubility	aqueous: 50 g/l at 20°C
Partition coefficient; n-octanol/water	5.85 - (lit.). Potential Bioaccumulation
Autoignition Temp	No information available
Decomposition Temp	190 °C
Viscosity	Not applicable
Molecular Formula	C16H18ClN3S
Molecular Weight	373.89 g/mol

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

No information available.

### 10.2 Chemical stability

Stable under normal conditions.

### 10.3 Possibility of hazardous reactions

None under normal processing.

### 10.4 Conditions to avoid

Avoid dust formation. Incompatible products. Excess heat.

### 10.5 Incompatible materials

Strong oxidizing agents.

### 10.6 Hazardous decomposition products

Nitrogen oxides (NO<sub>x</sub>), Carbon monoxide (CO), Carbon dioxide (CO<sub>2</sub>), Hydrogen chloride gas.

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Product Information, Component Information

##### Acute toxicity

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Methylene blue	1180 mg/kg (Rat)	-	-

##### Skin corrosion/irritation

Irritating to skin.

##### Serious eye damage/eye irritation

Irritating to eyes.

##### Respiratory or skin sensitization

Irritating to respiratory system.

##### Germ cell mutagenicity

No information available.

### **Carcinogenicity**

Component	CAS	IARC	NTP	ACGIH	OSHA	Mexico
Methylene blue trihydrate	7220-79-3	Not listed	Not listed	Not listed	Not listed	Not listed
Methylene blue	61-73-4	Not listed	Not listed	Not listed	Not listed	Not listed

### **Specific target organ toxicity - single exposure**

None known.

### **Specific target organ toxicity - repeated exposure**

None known.

### **Reproductive toxicity**

No information available.

### **Chronic effects**

No information available.

## **11.2 Additional Information**

The toxicological properties have not been fully investigated.

## **SECTION 12: Ecological information**

### **12.1 Toxicity**

Do not empty into drains.

### **12.2 Persistence and degradability**

Soluble in water. Persistence is unlikely based on information available.

### **12.3 Bio accumulative potential**

No information available.

### **12.4 Mobility in soil**

Will likely be mobile in the environment due to its water solubility.

### **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)** Not regulated.

**IMDG** Not regulated.

**IATA** Not regulated.

### 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)**  
Not applicable.

**CERCLA Hazardous Substance List (40 CFR 302.4)**  
Not 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**  
See Section 2 for more information.

**SARA 313 (TRI reporting)**  
Not regulated.

**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**

Not listed.

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

Not listed.

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

Not listed.

**California Proposition 65**

Not listed.

**SECTION 16: Other information**

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**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.