

## SAFETY DATA SHEET METHYLENE BLUE CONCENTRATE

According to Regulation (EU) No 453/2010

### SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

#### 1.1. Product identifier

**Product name** METHYLENE BLUE CONCENTRATE  
**Product No.** PL.8006/5, PL.8006/4, PL.8006

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

**Identified uses** Laboratory reagent.

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

**Supplier** Pro-Lab Diagnostics  
3 Bassendale Road  
Wirral  
Merseyside  
CH62 3QL  
Tel: 0151 353 1613  
Fax: 0151 353 1614  
mowen@pro-lab.com

#### 1.4. Emergency telephone number

+44 (0)151 353 1613 Monday to Friday 9.00 to 17.00  
+44 (0)7714 429 646 outside the above hours

### SECTION 2: HAZARDS IDENTIFICATION

#### 2.1. Classification of the substance or mixture

**Classification (1999/45/EEC)** R10.

##### **Human health**

See section 11 for additional information on health hazards.

##### **Physical and Chemical Hazards**

Flammable. Vapours may be ignited by a spark, a hot surface or an ember.

#### 2.2. Label elements

##### **Risk Phrases**

R10 Flammable.

##### **Safety Phrases**

S51 Use only in well-ventilated areas.  
S60 This material and its container must be disposed of as hazardous waste.

#### 2.3. Other hazards

### SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.2. Mixtures

ETHANOL	30-60%
CAS-No.: 64-17-5	EC No.: 200-578-6
Classification (EC 1272/2008) Flam. Liq. 2 - H225	Classification (67/548/EEC) F;R11

# METHYLENE BLUE CONCENTRATE

<b>METHANOL</b> <span style="float: right;">1-5%</span>	
<b>CAS-No.: 67-56-1</b>	<b>EC No.: 200-659-6</b>
Classification (EC 1272/2008) Flam. Liq. 2 - H225 Acute Tox. 3 - H301 Acute Tox. 3 - H311 Acute Tox. 3 - H331 STOT SE 1 - H370	Classification (67/548/EEC) F;R11 T;R23/24/25,R39/23/24/25
<b>METHYLENE BLUE</b> <span style="float: right;">1-5%</span>	
<b>CAS-No.: 61-73-4</b>	<b>EC No.: 200-515-2</b>
Classification (EC 1272/2008) Acute Tox. 4 - H302 Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 STOT SE 3 - H335	Classification (67/548/EEC) Xn;R22. Xi;R36/37/38.

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

## SECTION 4: FIRST AID MEASURES

### 4.1. Description of first aid measures

#### **Inhalation**

Move the exposed person to fresh air at once.

#### **Ingestion**

Do not induce vomiting. Immediately rinse mouth and provide fresh air. Get medical attention if any discomfort continues.

#### **Skin contact**

Wash off promptly and flush contaminated skin with water. Promptly remove clothing if soaked through and flush skin with water.

#### **Eye contact**

Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes. Contact physician if discomfort continues.

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

#### **Ingestion**

May cause discomfort if swallowed.

#### **Skin contact**

Prolonged skin contact may cause redness and irritation.

#### **Eye contact**

May irritate eyes.

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

The severity of the symptoms described will vary dependant of the concentration and the length of exposure.

## SECTION 5: FIREFIGHTING MEASURES

### 5.1. Extinguishing media

#### **Extinguishing media**

Extinguish with alcohol-resistant foam, carbon dioxide or dry powder. Do not use water jet as an extinguisher, as this will spread the fire.

#### **Unsuitable extinguishing media**

Not relevant

### 5.2. Special hazards arising from the substance or mixture

# METHYLENE BLUE CONCENTRATE

## Hazardous combustion products

None under normal conditions.

## Unusual Fire & Explosion Hazards

No unusual fire or explosion hazards noted.

## Specific hazards

The product is non-combustible. If heated, toxic vapours may be formed.

## 5.3. Advice for firefighters

### Special Fire Fighting Procedures

Containers close to fire should be removed immediately or cooled with water.

### Protective equipment for fire-fighters

Self contained breathing apparatus and full protective clothing must be worn in case of fire.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

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

Wear protective clothing as described in Section 8 of this safety data sheet.

### 6.2. Environmental precautions

Avoid discharge to the aquatic environment.

### 6.3. Methods and material for containment and cleaning up

Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate. Absorb in vermiculite, dry sand or earth and place into containers. Flush with plenty of water to clean spillage area.

### 6.4. Reference to other sections

Wear protective clothing as described in Section 8 of this safety data sheet. See section 11 for additional information on health hazards. For waste disposal, see section 13.

## SECTION 7: HANDLING AND STORAGE

### 7.1. Precautions for safe handling

Keep away from heat, sparks and open flame. Avoid spilling, skin and eye contact.

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

Store in tightly closed original container in a dry and cool place.

### 7.3. Specific end use(s)

The identified uses for this product are detailed in Section 1.2.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1. Control parameters

Name	STD	TWA - 8 Hrs		STEL - 15 Min		Notes
ETHANOL	WEL	1000 ppm	1920 mg/m3			
METHANOL	WEL	200 ppm	266 mg/m3	250 ppm	333 mg/m3	Sk

WEL = Workplace Exposure Limit.

Sk = Can be absorbed through skin.

### 8.2. Exposure controls

#### Hand protection

For prolonged or repeated skin contact use suitable protective gloves. The most suitable glove must be chosen in consultation with the gloves supplier, who can inform about the breakthrough time of the glove material.

#### Eye protection

Wear approved, tight fitting safety glasses where splashing is probable.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

# METHYLENE BLUE CONCENTRATE

## 9.1. Information on basic physical and chemical properties

Appearance	Liquid
Colour	Deep blue.
Odour	Odour of alcohol.
Solubility	Soluble in water.
Flash point	~ 25°C CC (Closed cup).

## 9.2. Other information

Not determined.

## SECTION 10: STABILITY AND REACTIVITY

### 10.1. Reactivity

There are no known reactivity hazards associated with this product.

### 10.2. Chemical stability

Stable under normal temperature conditions and recommended use.

### 10.3. Possibility of hazardous reactions

#### **Hazardous Polymerisation**

Will not polymerise.

### 10.4. Conditions to avoid

Avoid heat, flames and other sources of ignition.

### 10.5. Incompatible materials

#### **Materials To Avoid**

No incompatible groups noted.

### 10.6. Hazardous decomposition products

None at ambient temperatures.

## SECTION 11: TOXICOLOGICAL INFORMATION

### 11.1. Information on toxicological effects

#### **Inhalation**

No specific health warnings noted.

#### **Ingestion**

May cause discomfort if swallowed. May cause stomach pain or vomiting.

#### **Skin contact**

Prolonged contact may cause redness and irritation.

#### **Eye contact**

May irritate eyes.

#### Toxicological information on ingredients.

#### METHANOL (CAS: 67-56-1)

##### Acute toxicity:

##### **Acute Toxicity (Oral LD50)**

> 1187 mg/kg Rat

REACH dossier information

##### **Acute Toxicity (Inhalation LC50)**

> 115.9 mg/l (vapours) Rat 4 hours

REACH dossier information

# METHYLENE BLUE CONCENTRATE

ETHANOL (CAS: 64-17-5)

**Acute toxicity:**

**Acute Toxicity (Oral LD50)**

10470 mg/kg Rat

REACH dossier information

**Acute Toxicity (Inhalation LC50)**

116.9 mg/l (vapours) Rat 4 hours

REACH dossier information

**METHYLENE BLUE (CAS: 61-73-4)**

**Toxic Dose 1 - LD 50**

1180 mg/kg (oral rat)

**Toxic Dose 2 - LD 50**

3500 mg/kg (oral-mouse)

## SECTION 12: ECOLOGICAL INFORMATION

**Ecotoxicity**

The product is not expected to be hazardous to the environment.

**12.1. Toxicity**

**Ecological information on ingredients.**

**METHANOL (CAS: 67-56-1)**

96 hours 15400 mg/l Lepomis macrochirus (Bluegill)

REACH dossier information

**Acute Toxicity - Aquatic Invertebrates**

EC50 48 hours > 10000 mg/l Daphnia magna

REACH dossier information

**Acute Toxicity - Aquatic Plants**

EC50 96 hours ~ 22000 mg/l Freshwater algae

REACH dossier information

**ETHANOL (CAS: 64-17-5)**

**Acute Toxicity - Fish**

LC50 96 hours 14.2 mg/l Pimephales promelas (Fat-head Minnow)

REACH dossier information

**Acute Toxicity - Aquatic Invertebrates**

EC50 48 hours 5012 mg/l Daphnia magna

REACH dossier information

**Acute Toxicity - Aquatic Plants**

EC50 72 hours 275 mg/l Freshwater algae

REACH dossier information

**METHYLENE BLUE (CAS: 61-73-4)**

**LC 50, 96 Hrs, Fish mg/l**

100

**12.2. Persistence and degradability**

**Degradability**

There are no data on the degradability of this product.

# METHYLENE BLUE CONCENTRATE

## Ecological information on ingredients.

### METHANOL (CAS: 67-56-1)

#### **Biodegradation**

Water Degradation (71.5%) 5 days

REACH dossier information

Degradation (95%) 20 days

REACH dossier information

### ETHANOL (CAS: 64-17-5)

#### **Biodegradation**

Water Degradation (96%) 20 days

REACH dossier information

## **12.3. Bioaccumulative potential**

### **Bioaccumulative potential**

No data available on bioaccumulation.

## **12.4. Mobility in soil**

### **Mobility:**

The product is soluble in water.

## **12.5. Results of PBT and vPvB assessment**

Not determined.

## **12.6. Other adverse effects**

Not determined.

## **SECTION 13: DISPOSAL CONSIDERATIONS**

### **13.1. Waste treatment methods**

Dispose of waste and residues in accordance with local authority requirements. Recover and reclaim or recycle, if practical.

## **SECTION 14: TRANSPORT INFORMATION**

### **14.1. UN number**

UN No. (ADR/RID/ADN) 1993

UN No. (IMDG) 1993

UN No. (ICAO) 1993

### **14.2. UN proper shipping name**

Proper Shipping Name FLAMMABLE LIQUID, N.O.S. (ETHANOL, METHANOL)

### **14.3. Transport hazard class(es)**

ADR/RID/ADN Class 3

ADR/RID/ADN Class Class 3: Flammable liquids.

ADR Label No. 3

IMDG Class 3

ICAO Class/Division 3

Transport Labels

# METHYLENE BLUE CONCENTRATE



## 14.4. Packing group

ADR/RID/ADN Packing group	III
IMDG Packing group	III
ICAO Packing group	III

## 14.5. Environmental hazards

Environmentally Hazardous Substance/Marine Pollutant

No.

## 14.6. Special precautions for user

EMS	F-E, S-E
Emergency Action Code	+3YE
Hazard No. (ADR)	30
Tunnel Restriction Code	(D/E)

## 14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable.

## SECTION 15: REGULATORY INFORMATION

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

#### **Statutory Instruments**

The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (S.I 2009 No. 716).

#### **Approved Code Of Practice**

Classification and Labelling of Substances and Preparations Dangerous for Supply.

#### **Guidance Notes**

Workplace Exposure Limits EH40.

#### **EU Legislation**

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 with amendments.

### 15.2. Chemical Safety Assessment

No chemical safety assessment has been carried out.

## SECTION 16: OTHER INFORMATION

#### **Revision Comments**

Supplier's contact details amended. Reissued according to Regulation (EU) No 453/2010.

Revision Date	11-2011
Revision	4
Supersedes date	02-2010

## METHYLENE BLUE CONCENTRATE

### Risk Phrases In Full

R10	Flammable.
R22	Harmful if swallowed.
R11	Highly flammable
R36/37/38	Irritating to eyes, respiratory system and skin.
R23/24/25	Toxic by inhalation, in contact with skin and if swallowed.
R39/23/24/25	Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.

### Hazard Statements In Full

H370	Causes damage to organs <<Organs>>.
H319	Causes serious eye irritation.
H315	Causes skin irritation.
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H225	Highly flammable liquid and vapour.
H335	May cause respiratory irritation.
H331	Toxic if inhaled.
H301	Toxic if swallowed.
H311	Toxic in contact with skin.

### Disclaimer

The information in this safety data sheet was obtained from current and reliable sources. However, the data is provided without warranty, expressed or implied, regarding its correctness or accuracy. Since the conditions for use, handling, storage and disposal of this product are beyond Pro-Lab Diagnostics control, it is the users responsibility to perform thorough testing of this product when used in combination with any other product. It is suggested that users familiarise themselves with this safety data sheet before handling the product.