

SAFETY DATA SHEET METHYLENE BLUE

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
Product No. PL.7027, PL.7028, PL.7029, PL.7027/25

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) Not classified.

Human health

See section 11 for additional information on health hazards.

2.2. Label elements

Risk Phrases

NC Not classified.

Safety Phrases

NC Not classified.

2.3. Other hazards

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

| | |
|--|--------------------------------------|
| ETHANOL | 10-30% |
| 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

| | | |
|---|--|----------------|
| METHANOL | | < 1% |
| CAS-No.: 67-56-1 | EC No.: 200-659-6 | |
| 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 | |

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

Use fire-extinguishing media appropriate for surrounding materials.

Unsuitable extinguishing media

Not relevant

5.2. Special hazards arising from the substance or mixture

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

No specific fire fighting procedure given.

Protective equipment for fire-fighters

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

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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

Absorb in vermiculite, dry sand or earth and place into containers. Flush with plenty of water to clean spillage area. Containers with collected spillage must be properly labelled with correct contents and hazard symbol.

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

Read and follow manufacturer's recommendations. Avoid spilling, skin and eye contact. Wash hands after handling.

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

9.1. Information on basic physical and chemical properties

| | |
|------------|-------------------|
| Appearance | Liquid |
| Colour | Deep blue. |
| Odour | Odour of alcohol. |
| Solubility | Soluble in water. |

9.2. Other information

Not determined.

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

METHYLENE BLUE

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

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

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity

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

METHYLENE BLUE

12.1. Toxicity

Ecological information on ingredients.

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

METHANOL (CAS: 67-56-1)

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

12.2. Persistence and degradability

Degradability

There are no data on the degradability of this product.

Ecological information on ingredients.

Biodegradation

Water Degradation (71.5%) 5 days

REACH dossier information

Degradation (95%) 20 days

REACH dossier information

METHANOL (CAS: 67-56-1)

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

METHYLENE BLUE

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

General The product is not covered by international regulation on the transport of dangerous goods (IMDG, IATA, ADR/RID).

14.1. UN number

Not applicable.

14.2. UN proper shipping name

Not applicable.

14.3. Transport hazard class(es)

Not applicable.

14.4. Packing group

Not applicable.

14.5. Environmental hazards

Environmentally Hazardous Substance/Marine Pollutant

No.

14.6. Special precautions for user

Not applicable.

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 3

Supersedes date 02-2010

METHYLENE BLUE

Risk Phrases In Full

| | |
|--------------|---|
| R11 | Highly flammable |
| NC | Not classified. |
| 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>>. |
| H225 | Highly flammable liquid and vapour. |
| 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.