

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**Eosin-Methylene blue solution acc. to May-Grünwald, 100 ml**

Print date: 14.04.2015

Product code: 9991308

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**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1. Product identifier**

Eosin-Methylene blue solution acc. to May-Grünwald, 100 ml

**1.2. Relevant identified uses of the substance or mixture and uses advised against****Use of the substance/mixture**

Laboratory chemicals

**1.3. Details of the supplier of the safety data sheet****Seller**

Company name: CONATEX-DIDACTIC Lehrmittel GmbH  
Street: Im Forstgarten 1  
Place: D-66459 Kirkel  
Internet: www.conatex.com

**Supplier**

Company name: Carbolution Chemicals GmbH  
Street: Im Stadtwald, Gebäude A1.2  
Place: D-66123 Saarbrücken  
Contact person: Dr. Michael Bauer Telephone: +49 (0)681 302-71232  
e-mail: michael.bauer@carbolution-chemicals.de  
Internet: www.carbolution-chemicals.de

**1.4. Emergency telephone number:** +49 (0)681 302-71232**SECTION 2: Hazards identification****2.1. Classification of the substance or mixture****Classification according to Directive 67/548/EEC or 1999/45/EC**

Indications of danger: F - Highly flammable, T - Toxic

R phrases:

Highly flammable.

Toxic by inhalation, in contact with skin and if swallowed.

Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.

**Classification according to Regulation (EC) No. 1272/2008 [CLP]**

Hazard categories:

Flammable liquid: Flam. Liq. 2

Acute toxicity: Acute Tox. 3

Acute toxicity: Acute Tox. 3

Acute toxicity: Acute Tox. 3

Specific target organ toxicity - single exposure: STOT SE 1

Hazard Statements:

Highly flammable liquid and vapour.

Toxic if inhaled.

Toxic in contact with skin.

Toxic if swallowed.

Causes damage to organs.

**2.2. Label elements****Hazardous components which must be listed on the label**  
methanol

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Signal word:

Danger

Pictograms:

GHS02-GHS06-GHS08



#### Hazard statements

- H225 Highly flammable liquid and vapour.  
 H301+H311+H331 Toxic if swallowed, in contact with skin or if inhaled.  
 H370 Causes damage to organs.

#### Precautionary statements

- P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
 P280 Wear protective gloves/protective clothing/eye protection/face protection.  
 P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.  
 P307+P311 IF exposed: Call a POISON CENTER or doctor/physician.  
 P501 Dispose of contents/container to Waste management.

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

#### Hazardous components

| EC No        | Chemical name  | Quantity     |
|--------------|--|--------------|
| CAS No       | Classification according to Directive 67/548/EEC   |              |
| Index No     | Classification according to Regulation (EC) No. 1272/2008 [CLP]                                |              |
| 200-659-6    | methanol   | 95 - < 100 % |
| 67-56-1      | F - Highly flammable, T - Toxic R11-23/24/25-39/23/24/25                                       |              |
| 603-001-00-X | Flam. Liq. 2, Acute Tox. 3, Acute Tox. 3, Acute Tox. 3, STOT SE 1; H225 H331 H311 H301 H370 ** |              |
| 241-409-6    | Eosin Y  | < 1 %        |
| 17372-87-1   | Xn - Harmful, Xi - Irritant R22-41-52-53   |              |
|              | Acute Tox. 4, Eye Dam. 1; H302 H318  |              |
| 200-515-2    | Methylene blue   | < 1 %        |
| 7220-79-3    | Xn - Harmful, Xi - Irritant R22-36/37/38   |              |
|              | Acute Tox. 4, Skin Irrit. 2, Eye Irrit. 2, STOT SE 3; H302 H315 H319 H335                      |              |

Full text of R-, H- and EUH-phrases: see section 16.

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

#### General information

First aider: Pay attention to self-protection! Move victim out of danger zone.

#### After inhalation

Provide fresh air. In case of breathing difficulties administer oxygen. No mouth-to-mouth or mouth-to-nose resuscitation. Use Ambu bag or ventilator. Call a physician immediately.

#### After contact with skin

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Call a physician immediately.

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**After contact with eyes**

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

**After ingestion**

Rinse mouth immediately and drink plenty of water. Induce vomiting when the affected person is not unconscious. Call a physician immediately.

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

No data available

**SECTION 5: Firefighting measures****5.1. Extinguishing media****Suitable extinguishing media**Water. Carbon dioxide (CO<sub>2</sub>). Foam. Extinguishing powder.**5.2. Special hazards arising from the substance or mixture**

Combustible. Vapours may form explosive mixtures with air.

**5.3. Advice for firefighters**

Wear a self-contained breathing apparatus and chemical protective clothing. Full protective suit.

**Additional information**

Use water spray jet to protect personnel and to cool endangered containers. Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

**SECTION 6: Accidental release measures****6.1. Personal precautions, protective equipment and emergency procedures**

Remove all sources of ignition. Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Wear personal protection equipment.

**6.2. Environmental precautions**

Do not allow uncontrolled discharge of product into the environment. Explosion hazard.

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

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

**SECTION 7: Handling and storage****7.1. Precautions for safe handling****Advice on safe handling**

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray.

**Advice on protection against fire and explosion**

Keep away from sources of ignition. - No smoking. Take precautionary measures against static discharges. Vapours may form explosive mixtures with air.

**7.2. Conditions for safe storage, including any incompatibilities****Requirements for storage rooms and vessels**

Keep container tightly closed. Keep locked up. Store in a place accessible by authorized persons only. Provide adequate ventilation as well as local exhaustion at critical locations. Keep in a cool, well-ventilated place. Keep away from sources of ignition. - No smoking.

**Advice on storage compatibility**

Do not store together with: Material, rich in oxygen, oxidizing.

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

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#### 8.1. Control parameters

##### Exposure limits (EH40)

| CAS No  | Substance | ppm | mg/m <sup>3</sup> | fibres/ml | Category      | Origin |
|---------|-----------|-----|-------------------|-----------|---------------|--------|
| 67-56-1 | Methanol  | 200 | 266               |           | TWA (8 h)     | WEL    |
|         |           | 250 | 333               |           | STEL (15 min) | WEL    |

#### 8.2. Exposure controls

##### Appropriate engineering controls

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray.

##### Protective and hygiene measures

Remove contaminated, saturated clothing immediately. Protect skin by using skin protective cream. After work, wash hands and face. When using do not eat or drink.

##### Eye/face protection

Eye protection: Tightly sealed safety glasses. German Industry Norms (DIN) / European Norms (EN): DIN EN 166

##### Hand protection

Hand protection: Single-use gloves. Before using check leak tightness / impermeability. Use gloves only once. German Industry Norms (DIN) / European Norms (EN): DIN EN 374

##### Skin protection

Body protection: Lab apron. Only wear fitting, comfortable and clean protective clothing.

##### Respiratory protection

With correct and proper use, and under normal conditions, breathing protection is not required. If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn. Suitable respiratory protective equipment: particulates filter device (DIN EN 143).

### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

|                 |                   |
|-----------------|-------------------|
| Physical state: | liquid            |
| Colour:         | No data available |
| Odour:          | No data available |

#### Test method

pH-Value: No data available

##### Changes in the physical state

Initial boiling point and boiling range: No data available

Sublimation point: No data available

Softening point: No data available

Flash point: No data available

##### Flammability

Solid: No data available

Gas: No data available

Lower explosion limits: No data available

Upper explosion limits: No data available

Ignition temperature: No data available

##### Auto-ignition temperature

Solid: No data available

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|                          |                   |
|--------------------------|-------------------|
| Gas:                     | No data available |
| Vapour pressure:         | No data available |
| Vapour pressure:         | No data available |
| Density:                 | No data available |
| Water solubility:        | No data available |
| Partition coefficient:   | No data available |
| Viscosity / dynamic:     | No data available |
| Viscosity / kinematic:   | No data available |
| Flow time:               | No data available |
| Vapour density:          | No data available |
| Evaporation rate:        | No data available |
| Solvent separation test: | No data available |
| Solvent content:         | No data available |

**9.2. Other information**

|                |                   |
|----------------|-------------------|
| Solid content: | No data available |
|----------------|-------------------|

**SECTION 10: Stability and reactivity****10.1. Reactivity**

No data available

**10.3. Possibility of hazardous reactions**

No data available

**10.4. Conditions to avoid**

Keep away from heat. Ignition hazard.

**10.5. Incompatible materials**

Oxidizing agents, strong.

**10.6. Hazardous decomposition products**

No data available

**SECTION 11: Toxicological information****11.1. Information on toxicological effects****Toxicokinetics, metabolism and distribution**

Toxicological data are not available.

**Acute toxicity**

Very toxic. Acute toxicity, oral. Acute toxicity, inhalant. Acute toxicity, dermal. Danger of very serious irreversible effects.

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| CAS No     | Chemical name      |        |           |         |        |
|------------|--------------------|--------|-----------|---------|--------|
|            | Exposure routes    | Method | Dose      | Species | Source |
| 67-56-1    | methanol           |        |           |         |        |
|            | oral               | ATE    | 100 mg/kg |         |        |
|            | dermal             | ATE    | 300 mg/kg |         |        |
|            | inhalative vapour  | ATE    | 3 mg/l    |         |        |
|            | inhalative aerosol | ATE    | 0,5 mg/l  |         |        |
| 17372-87-1 | Eosin Y            |        |           |         |        |
|            | oral               | ATE    | 500 mg/kg |         |        |
| 7220-79-3  | Methylene blue     |        |           |         |        |
|            | oral               | ATE    | 500 mg/kg |         |        |

#### Irritation and corrosivity

No data available

#### Sensitising effects

No data available

#### Severe effects after repeated or prolonged exposure

No data available

#### Carcinogenic/mutagenic/toxic effects for reproduction

Due to missing data no statement can be made whether the substance fulfills the criteria of CMR categories 1 or 2. Practical experiences do not give any evidence for CMR activity of categories 1 or 2.

#### Specific effects in experiment on an animal

No data available

#### Additional information on tests

The classification was carried out according to the calculation method of the Preparations Directive (1999/45/EC).

#### Practical experience

#### Observations relevant to classification

No data available

### SECTION 12: Ecological information

#### 12.1. Toxicity

No data available

#### 12.2. Persistence and degradability

No data available

#### 12.3. Bioaccumulative potential

No data available

#### 12.4. Mobility in soil

No data available

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

No data available

#### 12.6. Other adverse effects

No data available

#### Further information

Do not allow to enter into surface water or drains. The classification was carried out according to the calculation method of the Preparations Directive (1999/45/EC).

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#### SECTION 13: Disposal considerations

##### 13.1. Waste treatment methods

###### Advice on disposal

Dispose of waste according to applicable legislation.

###### Waste disposal number of waste from residues/unused products

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; laboratory chemicals, consisting of or containing dangerous substances, including mixtures of laboratory chemicals  
Classified as hazardous waste.

###### Waste disposal number of used product

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; laboratory chemicals, consisting of or containing dangerous substances, including mixtures of laboratory chemicals  
Classified as hazardous waste.

###### Waste disposal number of contaminated packaging

150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by dangerous substances  
Classified as hazardous waste.

###### Contaminated packaging

Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.

#### SECTION 14: Transport information

##### Land transport (ADR/RID)

|  |          |
|--|----------|
| <b>14.1. UN number:</b>                  | UN1230   |
| <b>14.2. UN proper shipping name:</b>    | METHANOL |
| <b>14.3. Transport hazard class(es):</b> | 3        |
| <b>14.4. Packing group:</b>              | II       |
| Hazard label:                            | 3+6.1    |
| Classification code:                     | FT1      |
| Special Provisions:                      | 279      |
| Limited quantity:                        | 1 L      |
| Transport category:                      | 2        |
| Hazard No:                               | 336      |
| Tunnel restriction code:                 | D/E      |

###### Other applicable information (land transport)

E2

##### Inland waterways transport (ADN)

|  |          |
|--|----------|
| <b>14.1. UN number:</b>                  | UN1230   |
| <b>14.2. UN proper shipping name:</b>    | METHANOL |
| <b>14.3. Transport hazard class(es):</b> | 3        |
| <b>14.4. Packing group:</b>              | II       |
| Hazard label:                            | 3+6.1    |
| Classification code:                     | FT1      |
| Special Provisions:                      | 279 802  |
| Limited quantity:                        | 1 L      |

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#### Other applicable information (inland waterways transport)

E2

#### Marine transport (IMDG)

|  |          |
|--|----------|
| <b>14.1. UN number:</b>                  | UN1230   |
| <b>14.2. UN proper shipping name:</b>    | METHANOL |
| <b>14.3. Transport hazard class(es):</b> | 3        |
| <b>14.4. Packing group:</b>              | II       |
| Hazard label:                            | 3+6.1    |
| Special Provisions:                      | 279      |
| Limited quantity:                        | 1 L      |
| EmS:                                     | F-E, S-D |

#### Other applicable information (marine transport)

E2

#### Air transport (ICAO)

|  |           |
|--|-----------|
| <b>14.1. UN number:</b>                  | UN1230    |
| <b>14.2. UN proper shipping name:</b>    | METHANOL  |
| <b>14.3. Transport hazard class(es):</b> | 3         |
| <b>14.4. Packing group:</b>              | II        |
| Hazard label:                            | 3+6.1     |
| Special Provisions:                      | A104 A113 |
| Limited quantity Passenger:              | 1 L       |
| IATA-packing instructions - Passenger:   | 352       |
| IATA-max. quantity - Passenger:          | 1 L       |
| IATA-packing instructions - Cargo:       | 364       |
| IATA-max. quantity - Cargo:              | 60 L      |

#### Other applicable information (air transport)

E2

: Y341

#### 14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

### SECTION 15: Regulatory information

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

##### EU regulatory information

##### Additional information

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)

##### National regulatory information

Water contaminating class (D): 3 - highly water contaminating

### SECTION 16: Other information

#### Relevant R-phrases (Number and full text)

|             |   |
|-------------|---|
| 11          | Highly flammable.   |
| 22          | Harmful if swallowed.   |
| 23/24/25    | Toxic by inhalation, in contact with skin and if swallowed.   |
| 36/37/38    | Irritating to eyes, respiratory system and skin.  |
| 39/23/24/25 | Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed. |



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- |    |   |
|----|---|
| 41 | Risk of serious damage to eyes.                                 |
| 52 | Harmful to aquatic organisms.                                   |
| 53 | May cause long-term adverse effects in the aquatic environment. |

**Relevant H- and EUH-phrases (Number and full text)**

- |                |   |
|----------------|---|
| H225           | Highly flammable liquid and vapour.                     |
| H301           | Toxic if swallowed.                                     |
| H301+H311+H331 | Toxic if swallowed, in contact with skin or if inhaled. |
| H302           | Harmful if swallowed.                                   |
| H311           | Toxic in contact with skin.                             |
| H315           | Causes skin irritation.                                 |
| H318           | Causes serious eye damage.                              |
| H319           | Causes serious eye irritation.                          |
| H331           | Toxic if inhaled.                                       |
| H335           | May cause respiratory irritation.                       |
| H370           | Causes damage to organs.                                |