

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**Mixed indicator solution acc. to Cooper, 100 ml**

Print date: 14.04.2015

Product code: 9991631

Page 1 of 8

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

Mixed indicator solution acc. to Cooper, 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

R phrases:  
Highly flammable.**Classification according to Regulation (EC) No. 1272/2008 [CLP]**Hazard categories:  
Flammable liquid: Flam. Liq. 2  
Hazard Statements:  
Highly flammable liquid and vapour.**2.2. Label elements**

Signal word: Danger  
Pictograms: GHS02

**Hazard statements**

H225 Highly flammable liquid and vapour.

**Precautionary statements**

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### Mixed indicator solution acc. to Cooper, 100 ml

Print date: 14.04.2015

Product code: 9991631

Page 2 of 8

### SECTION 3: Composition/information on ingredients

#### 3.2. Mixtures

##### 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] |          |
| REACH No     |   |          |
| 200-578-6    | ethanol, ethyl alcohol  |          |
| 64-17-5      | F - Highly flammable R11  |          |
| 603-002-00-5 | Flam. Liq. 2; H225  |          |

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

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

##### After inhalation

Provide fresh air.

##### After contact with skin

Wash with plenty of water. Change contaminated clothing.

##### After contact with eyes

Rinse immediately carefully and thoroughly with eye-bath or water.

##### After ingestion

Rinse mouth immediately and drink plenty of water.

#### 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

In case of fire: Wear self-contained breathing apparatus.

#### Additional information

Use water spray jet to protect personnel and to cool endangered containers. 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.

#### 6.2. Environmental precautions

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

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### Mixed indicator solution acc. to Cooper, 100 ml

Print date: 14.04.2015

Product code: 9991631

Page 3 of 8

#### **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.

##### **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 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**

#### **8.1. Control parameters**

##### **Exposure limits (EH40)**

| CAS No  | Substance | ppm  | mg/m <sup>3</sup> | fibres/ml | Category      | Origin |
|---------|-----------|------|-------------------|-----------|---------------|--------|
| 64-17-5 | Ethanol   | 1000 | 1920              |           | TWA (8 h)     | WEL    |
|         |           | -    | -                 |           | STEL (15 min) | WEL    |

#### **8.2. Exposure controls**

##### **Protective and hygiene measures**

Change contaminated clothing. Wash hands before breaks and after work. 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:         | colourless        |
| Odour:          | No data available |

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### Mixed indicator solution acc. to Cooper, 100 ml

Print date: 14.04.2015

Product code: 9991631

Page 4 of 8

#### 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

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

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### Mixed indicator solution acc. to Cooper, 100 ml

Print date: 14.04.2015

Product code: 9991631

Page 5 of 8

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

#### Toxicokinetics, metabolism and distribution

Toxicological data are not available.

#### Acute toxicity

| CAS No  | Chemical name           |        |            |         |        |
|---------|-------------------------|--------|------------|---------|--------|
|         | Exposure routes         | Method | Dose       | Species | Source |
| 64-17-5 | ethanol, ethyl alcohol  |        |            |         |        |
|         | oral                    | LD50   | 6200 mg/kg | Ratte   |        |
|         | inhalative (4 h) vapour | LC50   | 95,6 mg/l  | Ratte   |        |

#### 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

| CAS No  | Chemical name            |           |              |           |               |        |
|---------|--------------------------|-----------|--------------|-----------|---------------|--------|
|         | Aquatic toxicity         | Method    | Dose         | [h]   [d] | Species       | Source |
| 64-17-5 | ethanol, ethyl alcohol   |           |              |           |               |        |
|         | Acute crustacea toxicity | EC50 mg/l | 9268 - 14221 | 48 h      | Daphnia magna |        |

### 12.2. Persistence and degradability

No data available

### 12.3. Bioaccumulative potential

No data available

#### Partition coefficient n-octanol/water

| CAS No  | Chemical name          | Log Pow |
|---------|------------------------|---------|
| 64-17-5 | ethanol, ethyl alcohol | -0,31   |

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**Mixed indicator solution acc. to Cooper, 100 ml**

Print date: 14.04.2015

Product code: 9991631

Page 6 of 8

**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**

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

**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**

Water (with cleaning agent). Completely emptied packages can be recycled.

**SECTION 14: Transport information****Land transport (ADR/RID)**

**14.1. UN number:** UN1170  
**14.2. UN proper shipping name:** ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)  
**14.3. Transport hazard class(es):** 3  
**14.4. Packing group:** II  
Hazard label: 3  
Classification code: F1  
Special Provisions: 144 601  
Limited quantity: 1 L  
Transport category: 2  
Hazard No: 33  
Tunnel restriction code: D/E

**Other applicable information (land transport)**

E2

**Inland waterways transport (ADN)**

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### Mixed indicator solution acc. to Cooper, 100 ml

Print date: 14.04.2015

Product code: 9991631

Page 7 of 8

|  |   |
|--|---|
| <b>14.1. UN number:</b>                  | UN1170                                    |
| <b>14.2. UN proper shipping name:</b>    | ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION) |
| <b>14.3. Transport hazard class(es):</b> | 3   |
| <b>14.4. Packing group:</b>              | II  |
| Hazard label:                            | 3   |
| Classification code:                     | F1  |
| Special Provisions:                      | 144 601                                   |
| Limited quantity:                        | 1 L                                       |

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

E2

**Marine transport (IMDG)**

|  |   |
|--|---|
| <b>14.1. UN number:</b>                  | UN1170                                    |
| <b>14.2. UN proper shipping name:</b>    | ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION) |
| <b>14.3. Transport hazard class(es):</b> | 3   |
| <b>14.4. Packing group:</b>              | II  |
| Hazard label:                            | 3   |
| Special Provisions:                      | 144                                       |
| Limited quantity:                        | 1 L                                       |
| EmS:                                     | F-E, S-D                                  |

**Other applicable information (marine transport)**

E2

**Air transport (ICAO)**

|  |   |
|--|---|
| <b>14.1. UN number:</b>                  | UN1170                                    |
| <b>14.2. UN proper shipping name:</b>    | ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION) |
| <b>14.3. Transport hazard class(es):</b> | 3   |
| <b>14.4. Packing group:</b>              | II  |
| Hazard label:                            | 3   |
| Special Provisions:                      | A3 A58 A180                               |
| Limited quantity Passenger:              | 1 L                                       |
| IATA-packing instructions - Passenger:   | 353                                       |
| IATA-max. quantity - Passenger:          | 5 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**

2004/42/EC (VOC): 99,89 %

**Additional information**

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

**National regulatory information**

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### Mixed indicator solution acc. to Cooper, 100 ml

Print date: 14.04.2015

Product code: 9991631

Page 8 of 8

Water contaminating class (D): 1 - slightly water contaminating

#### SECTION 16: Other information

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

11 Highly flammable.

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

H225 Highly flammable liquid and vapour.

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*(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)*