

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**Buffer solution pH 4, 500 ml**

Print date: 14.04.2015

Product code: 1037601a

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

Buffer solution pH 4, 500 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**

This mixture is not classified as hazardous according to Directive 1999/45/EC.

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

This mixture is not classified as hazardous according to Regulation (EC) No. 1272/2008.

**2.2. Label elements****Additional advice on labelling**

According to EC directives or the corresponding national regulations the product does not have to be labelled.

**SECTION 3: Composition/information on ingredients****3.2. Mixtures****SECTION 4: First aid measures****4.1. Description of first aid measures****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.

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#### 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

Co-ordinate fire-fighting measures to the fire surroundings.

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

The product itself does not burn.

#### 5.3. Advice for firefighters

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

#### Additional information

Contaminated fire-fighting water must be collected separately. Do not allow to enter into surface water or drains.

### SECTION 6: Accidental release measures

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

Avoid generation of dust. Do not breathe dust.

#### 6.2. Environmental precautions

Do not allow to enter into surface water or drains.

#### 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

Only use the material in places where open light, fire and other flammable sources can be kept away.

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

##### Requirements for storage rooms and vessels

Keep container tightly closed.

#### 7.3. Specific end use(s)

No data available

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

#### 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

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#### 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

pH-Value:

Test method

4

#### 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

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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

No data available

##### 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**

Toxicological data are not available.

###### **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

###### **Other observations**

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

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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**

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)****Other applicable information (land transport)**

Not a hazardous material with respect to these transportation regulations.

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

Not a hazardous material with respect to these transportation regulations.

**Marine transport (IMDG)****Other applicable information (marine transport)**

Not a hazardous material with respect to these transportation regulations.

**Air transport (ICAO)****Other applicable information (air transport)**

Not a hazardous material with respect to these transportation regulations.

**14.5. Environmental hazards**

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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): - - not water contaminating

#### 15.2. Chemical safety assessment

For this substance a chemical safety assessment has not been carried out.

### SECTION 16: Other information

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

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

### 1.1. Product identifier

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#### Use of the substance/mixture

Laboratory chemicals

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

#### Seller

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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

This mixture is not classified as hazardous according to Directive 1999/45/EC.

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

This mixture is not classified as hazardous according to Regulation (EC) No. 1272/2008.

### 2.2. Label elements

#### Additional advice on labelling

According to EC directives or the corresponding national regulations the product does not have to be labelled.

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

#### 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.

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#### 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

Co-ordinate fire-fighting measures to the fire surroundings.

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

The product itself does not burn.

#### 5.3. Advice for firefighters

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

#### Additional information

Contaminated fire-fighting water must be collected separately. Do not allow to enter into surface water or drains.

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Avoid generation of dust. Do not breathe dust.

#### 6.2. Environmental precautions

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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

Only use the material in places where open light, fire and other flammable sources can be kept away.

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

##### Requirements for storage rooms and vessels

Keep container tightly closed.

#### 7.3. Specific end use(s)

No data available

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

#### 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



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#### Hand protection

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#### Skin protection

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

#### Respiratory protection

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## SECTION 9: Physical and chemical properties

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

Physical state:	liquid
Colour:	colourless
Odour:	No data available

pH-Value:	7	Test method
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#### 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
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No data available

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###### **Acute toxicity**

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###### **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

###### **Other observations**

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

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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**

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

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**14.5. Environmental hazards**

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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

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#### National regulatory information

Water contaminating class (D): - - not water contaminating

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For this substance a chemical safety assessment has not been carried out.

## SECTION 16: Other information

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