

according to Regulation (EC) No 1907/2006

# Formaldehyde solution approx. 35%, 250 ml

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

#### 1.1. Product identifier

Formaldehyde solution approx. 35%, 250 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** +49 (0)681 302-71232

number:

# **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: T+ - Very toxic, T - Toxic, C - Corrosive

R phrases:

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

Causes burns.

Danger of very serious irreversible effects.

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

swallowed.

Limited evidence of a carcinogenic effect. May cause sensitisation by skin contact.

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

Hazard Statements:

Toxic if swallowed.

Toxic in contact with skin.

Toxic if inhaled.

May cause respiratory irritation.

Causes severe skin burns and eye damage.

May cause an allergic skin reaction.

Suspected of causing cancer.

Causes damage to organs.

# 2.2. Label elements

Signal word: Danger

Pictograms: GHS05-GHS06-GHS08



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#### **Hazard statements**

H301	Toxic if swallowed.
H311	Toxic in contact with skin
	Tc

H331 Toxic if inhaled.

H335 May cause respiratory irritation.

H314 Causes severe skin burns and eye damage.

H317 May cause an allergic skin reaction.
 H351 Suspected of causing cancer.
 H370 Causes damage to organs.

#### **Precautionary statements**

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER/doctor.

### **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		
200-001-8	Formaldehyde %	35 - < 40 %
50-00-0	Carc. Cat. 2, Muta. Cat. 3, T - Toxic, C - Corrosive R45-68-23/24/25-34-43	
605-001-00-5	Carc. 1B, Muta. 2, Acute Tox. 3, Acute Tox. 3, Acute Tox. 3, Skin Corr. 1B, Skin Sens. 1; H350 H341 H301 H311 H331 H314 H317	
200-659-6	methanol	10 - < 15 %
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 **	

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 flowing water for 10 to 15 minutes holding eyelids apart. Subsequently consult an ophthalmologist.

#### After ingestion

Rinse mouth immediately and drink plenty of water. Do NOT induce vomiting. Potential hazards: Stomach perforation. 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

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. 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

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 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. Do not breathe gas/fumes/vapour/spray.

#### 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. Keep locked up. Store in a place accessible by authorized persons only. Provide adequate ventilation as well as local exhaustion at critical locations.

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

### 8.1. Control parameters



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

CAS No	Substance	ppm	mg/m³	fibres/ml	Category	Origin
50-00-0	Formaldehyde	2	2.5		TWA (8 h)	WEL
		2	2.5		STEL (15 min)	WEL
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: colourless
Odour: No data available

Test method

pH-Value: No data available

Changes in the physical state

Initial boiling point and boiling range:

Sublimation point:

No data available

Softening point:

No data available

No data available

No data available

Flash point:

64 °C

**Flammability** 

Solid:

Gas:

No data available

No data available

No data available

No data available

T vol. %

Upper explosion limits:

73 vol. %

Ignition temperature:

No data available



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**Auto-ignition temperature** 

Solid: No data available
Gas: No data available
pour pressure: 69 hPa

Vapour pressure: (at 37 °C) Vapour pressure: No data available 1,016 g/cm<sup>3</sup> Density: Water solubility: No data available No data available Partition coefficient: Viscosity / dynamic: No data available Viscosity / kinematic: No data available Flow time: No data available Vapour density: 1.04

Evaporation rate:

Solvent separation test:

No data available

No data available

No data available

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

No data available

# 10.5. Incompatible materials

Oxidizing agents, strong.

# **SECTION 11: Toxicological information**

# 11.1. Information on toxicological effects

# Toxicocinetics, 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
50-00-0	Formaldehyde %				
	oral	ATE	100 mg/kg		
	dermal	ATE	300 mg/kg		
	inhalative vapour	ATE	3 mg/l		
	inhalative aerosol	ATE	0,5 mg/l		
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		

#### Irritation and corrosivity

after ingestion: Irritant and corrosive effects. Potential hazards: Stomach perforation.

#### Sensitising effects

May cause sensitisation by skin contact.

#### Severe effects after repeated or prolonged exposure

No data available

### Carcinogenic/mutagenic/toxic effects for reproduction

May cause cancer.

### 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)

14.1. UN number:	UN2209
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14.2. UN proper shipping name: FORMALDEHYDE SOLUTION with not less than 25% formaldehyde

14.3. Transport hazard class(es): 8
14.4. Packing group: |||

14.4. Packing group:IIIHazard label:8Classification code:C9Special Provisions:533Limited quantity:5 LTransport category:3Hazard No:80Tunnel restriction code:E

#### Other applicable information (land transport)

F1

### Inland waterways transport (ADN)

Limited quantity:

14.1. UN nu	ımber:	UN2209

14.2. UN proper shipping name: FORMALDEHYDE SOLUTION with not less than 25% formaldehyde

5 L

14.3. Transport hazard class(es): 8
14.4. Packing group:

Hazard label: 8
Classification code: C9
Special Provisions: 533

 Revision No: 1,00
 GB - EN
 Revision date: 07.04.2015



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Other applicable information (inland waterways transport)

E1

Marine transport (IMDG)

**14.1. UN number:** UN 2209

14.2. UN proper shipping name: FORMALDEHYDE SOLUTION with not less than 25 % formaldehyde

14.3. Transport hazard class(es):814.4. Packing group:IIIHazard label:8Special Provisions:-Limited quantity:5 LEmS:F-A. S-B

Other applicable information (marine transport)

E1

Air transport (ICAO)

**14.1. UN number:** UN 2209

14.2. UN proper shipping name: FORMALDEHYDE SOLUTION with not less than 25 % formaldehyde

14.3. Transport hazard class(es):814.4. Packing group:IIIHazard label:8Special Provisions:A803Limited quantity Passenger:1 L

IATA-packing instructions - Passenger:852IATA-max. quantity - Passenger:5 LIATA-packing instructions - Cargo:856IATA-max. quantity - Cargo:60 L

Other applicable information (air transport)

E1 : Y841

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): 35 %

**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.

23/24/25 Toxic by inhalation, in contact with skin and if swallowed.

34 Causes burns.

39/23/24/25 Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if



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	swallowed.				
43	May cause sensitisation by skin contact.				
45	May cause cancer.				
68	Possible risks of irreversible effects.				
Relevant H- and E	UH-phrases (Number and full text)				
H225	Highly flammable liquid and vapour.				
H301	Toxic if swallowed.				
H311	Toxic in contact with skin.				
H314	Causes severe skin burns and eye damage.				
H317	May cause an allergic skin reaction.				
H331	Toxic if inhaled.				
H335	May cause respiratory irritation.				
H341	Suspected of causing genetic defects.				
H350	May cause cancer.				
H351	Suspected of causing cancer.				
H370	Causes damage to organs.				

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