

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### Barium chloride solution 0,05 mol/l, 1 l

Print date: 14.04.2015

Product code: 9991116

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

##### 1.1. Product identifier

Barium chloride solution 0,05 mol/l, 1 l

##### 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

###### 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		
233-788-1	barium chloride	1 - < 5 %
10361-37-2	T - Toxic, Xn - Harmful R25-20	
056-004-00-8	Acute Tox. 3, Acute Tox. 4; H301 H332	

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

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**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.

**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

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#### 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
-	Barium compounds, soluble (as Ba)	-	0.5		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

###### 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
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### 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

CAS No	Chemical name				
	Exposure routes	Method	Dose	Species	Source
10361-37-2	barium chloride				
	oral	LD50	118 mg/kg	Ratte	
	inhalative vapour	ATE	11 mg/l		
	inhalative aerosol	ATE	1,5 mg/l		

##### Irritation and corrosivity

No data available

##### Sensitising effects

No data available

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**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

CAS No	Chemical name					
	Aquatic toxicity	Method	Dose	[h]   [d]	Species	Source
10361-37-2	barium chloride					
	Acute fish toxicity	LC50	870 mg/l	96 h	Leuciscus idus	
	Acute crustacea toxicity	EC50	21,9 mg/l	48 h	Daphnia magna	

### 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**

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.

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**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**

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

20 Harmful by inhalation.  
25 Toxic if swallowed.

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

H301 Toxic if swallowed.  
H332 Harmful if inhaled.

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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.)*