

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 ³ | 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 |
|----------------|-------------------|

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.)