

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Barium hydroxide solution, saturated, 1 l

Print date: 14.04.2015

Product code: 9991120

Page 1 of 7

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

Barium hydroxide solution, saturated, 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**

Indications of danger: Xi - Irritant
R phrases:
Irritating to eyes and skin.

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

Hazard categories:
Skin corrosion/irritation: Skin Corr. 1B
Serious eye damage/eye irritation: Eye Dam. 1
Hazard Statements:
Causes severe skin burns and eye damage.

2.2. Label elements**Hazardous components which must be listed on the label**

Barium hydroxide

Signal word: Danger

Pictograms: GHS05

**Hazard statements**

H314 Causes severe skin burns and eye damage.

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Barium hydroxide solution, saturated, 1 l

Print date: 14.04.2015

Product code: 9991120

Page 2 of 7

Precautionary statements

P280 Wear protective gloves/protective clothing/eye protection/face protection.
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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 | | |
| 241-234-5 | Barium hydroxide | 5 - < 10 % |
| 12230-71-6 | C - Corrosive, Xn - Harmful R20/21-34 | |
| | Acute Tox. 4, Acute Tox. 4, Skin Corr. 1B; H302 H332 H314 | |

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

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation occurs: Get medical advice/attention.

After contact with eyes

If product gets into the eye, keep eyelid open and rinse immediately with large quantities of water, for at least 5 minutes. Subsequently consult an ophthalmologist.

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

Wear a self-contained breathing apparatus and chemical protective clothing. Full protective suit.

Additional information

Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Barium hydroxide solution, saturated, 1 l

Print date: 14.04.2015

Product code: 9991120

Page 3 of 7

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.

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.

SECTION 8: Exposure controls/personal protection**8.1. Control parameters****8.2. Exposure controls****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 |

pH-Value:

Test method
No data available

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Barium hydroxide solution, saturated,1 l

Print date: 14.04.2015

Product code: 9991120

Page 4 of 7

Changes in the physical state

| | |
|--|-------------------|
| Melting point: | 0000000 °C |
| 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

No data available

10.5. Incompatible materials

Oxidizing agents, strong. acid, concentrated.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Barium hydroxide solution, saturated,1 l

Print date: 14.04.2015

Product code: 9991120

Page 5 of 7

Toxicokinetics, metabolism and distribution

Toxicological data are not available.

Acute toxicity

| CAS No | Chemical name | | | | |
|------------|--------------------|--------|-----------|---------|--------|
| | Exposure routes | Method | Dose | Species | Source |
| 12230-71-6 | Barium hydroxide | | | | |
| | oral | ATE | 500 mg/kg | | |
| | inhalative vapour | ATE | 11 mg/l | | |
| | inhalative aerosol | ATE | 1,5 mg/l | | |

Irritation and corrosivity

Irritating to eyes. After skin contact: Irritant.

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

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).

SECTION 13: Disposal considerations

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Barium hydroxide solution, saturated, 1 l

Print date: 14.04.2015

Product code: 9991120

Page 6 of 7

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

No dangerous good in sense of these transport regulations.

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

No dangerous good in sense of these transport regulations.

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

No dangerous good in sense of these transport regulations.

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

No dangerous good in sense of these transport 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): 3 - highly water contaminating

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Barium hydroxide solution, saturated, 1 l

Print date: 14.04.2015

Product code: 9991120

Page 7 of 7

SECTION 16: Other information

Relevant R-phrases (Number and full text)

20/21 Harmful by inhalation and in contact with skin.
34 Causes burns.

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

H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.
H332 Harmful if inhaled.

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