

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Barium peroxide, 50 g

Print date: 14.04.2015

Product code: 9991123

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

Barium peroxide, 50 g

CAS No: 1304-29-6
Index No: 056-001-00-1
EC No: 215-128-4

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: O - Oxidizing, Xn - Harmful

R phrases:

Contact with combustible material may cause fire.

Harmful by inhalation and if swallowed.

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

Hazard categories:

Oxidising solid: Ox. Sol. 2

Acute toxicity: Acute Tox. 4

Acute toxicity: Acute Tox. 4

Hazard Statements:

May intensify fire; oxidiser.

Harmful if inhaled.

Harmful if swallowed.

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

barium peroxide

Signal word: Warning
Pictograms: GHS03-GHS07

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Hazard statements

H272 May intensify fire; oxidiser.
H302+H332 Harmful if swallowed or if inhaled.

SECTION 3: Composition/information on ingredients

3.1. Substances

Sum formula: BaO₂
Molecular weight: 169,33

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] | |
| 215-128-4 | barium peroxide | 100 % |
| 1304-29-6 | O - Oxidizing, Xn - Harmful R8-20/22 | |
| 056-001-00-1 | Ox. Sol. 2, Acute Tox. 4, Acute Tox. 4; H272 H332 H302 | |

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. When in doubt or if symptoms are observed, get medical advice.

After contact with skin

Wash with plenty of water. Take off contaminated clothing and wash it before reuse.

After contact with eyes

Rinse immediately carefully and thoroughly with eye-bath or water. In case of eye irritation consult an ophthalmologist.

After ingestion

Rinse mouth immediately and drink plenty of water. Medical treatment necessary.

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.

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5.3. Advice for firefighters

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

Additional information

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. Avoid generation of dust. Do not breathe dust. Avoid contact with skin, eyes and clothes. Use 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

Take up mechanically. 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. Avoid generation of dust. Do not breathe dust.

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

Appropriate engineering controls

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe dust.

Protective and hygiene measures

Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary. 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).

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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: solid
 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
 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

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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

Acute inhalation toxicity. Acute oral toxicity.

| CAS No | Chemical name | Exposure routes | Method | Dose | Species | Source |
|-----------|--------------------|-----------------|-----------|------|---------|--------|
| 1304-29-6 | barium peroxide | | | | | |
| | oral | ATE | 500 mg/kg | | | |
| | inhalative vapour | ATE | 11 mg/l | | | |
| | inhalative aerosol | ATE | 1,5 mg/l | | | |

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

This mixture is classified as hazardous according to 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

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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. Do not allow to enter into soil/subsoil.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Advice on disposal

Do not allow to enter into surface water or drains. 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)

| | |
|--|-----------------|
| <u>14.1. UN number:</u> | UN 1449 |
| <u>14.2. UN proper shipping name:</u> | BARIUM PEROXIDE |
| <u>14.3. Transport hazard class(es):</u> | 5.1 |
| <u>14.4. Packing group:</u> | II |
| Hazard label: | 5.1+6.1 |
| Classification code: | OT2 |
| Limited quantity: | 1 kg |
| Transport category: | 2 |
| Hazard No: | 56 |
| Tunnel restriction code: | E |

Other applicable information (land transport)

E2

Inland waterways transport (ADN)

| | |
|---------------------------------------|-----------------|
| <u>14.1. UN number:</u> | UN 1449 |
| <u>14.2. UN proper shipping name:</u> | BARIUM PEROXIDE |

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14.3. Transport hazard class(es): 5.1
14.4. Packing group: II
 Hazard label: 5.1+6.1
 Classification code: OT2
 Special Provisions: 802
 Limited quantity: 1 kg

Other applicable information (inland waterways transport)
E2

Marine transport (IMDG)

14.1. UN number: UN 1449
14.2. UN proper shipping name: BARIUM PEROXIDE
14.3. Transport hazard class(es): 5.1
14.4. Packing group: II
 Hazard label: 5.1+6.1
 Special Provisions: -
 Limited quantity: 1 kg
 EmS: F-G, S-Q

Other applicable information (marine transport)
E2

Air transport (ICAO)

14.1. UN number: UN 1449
14.2. UN proper shipping name: BARIUM PEROXIDE
14.3. Transport hazard class(es): 5.1
14.4. Packing group: II
 Hazard label: 5.1+6.1
 Limited quantity Passenger: 1 kg
 IATA-packing instructions - Passenger: 558
 IATA-max. quantity - Passenger: 5 kg
 IATA-packing instructions - Cargo: 562
 IATA-max. quantity - Cargo: 25 kg

Other applicable information (air transport)
E2
: Y543

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

SECTION 16: Other information

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Relevant R-phrases (Number and full text)

- 08 Contact with combustible material may cause fire.
- 20/22 Harmful by inhalation and if swallowed.

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

- H272 May intensify fire; oxidiser.
- H302 Harmful if swallowed.
- H302+H332 Harmful if swallowed or if inhaled.
- H332 Harmful if inhaled.