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

1.1 Product identifier
Commercial Product Name: FIS SB 390/585/1500 S Mortar (Component A)

1.2 Relevant identified uses of the substance or mixture and uses advised against
Relevant identified uses: composite mortar
Recommended restrictions: None under normal processing. Observe technical data sheet.

1.3 Details of the supplier of the safety data sheet
Company designation: fischerwerke GmbH & Co. KG
Klaus–Fischer–Straße 1
D–72178 Waldachtal
Telephone: +49(0)7443 12–0
FAX: +49(0)7443 12–4222
Email: info-sdb@fischer.de
Internet: www.fischer.de

Marketer: Great Britain: Mrs Mirka Valovicova, fischer Fixing (UK) Ltd, Hithercroft Road, Wallingford, Oxfordshire, OX10 9AT, Tel. 01491 827 920, Fax 01491 827 950

1.4 Emergency telephone number
Emergency telephone number: +49(0)6132–84463 (24h)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture
Classification according to Regulation (EC) No. 1272/2008: Skin Irrit. 2; H315 Eye Dam. 1; H318 Skin Sens. 1; H317 STOT SE 3; H335

2.2 Label elements
Hazard pictogram
GHS05
GHS07

Signal word: Danger

Hazardous component(s) to be indicated on label: Cement, portland, chemicals, 2-hydroxypropyl methacrylate

H–statement(s):
H315: Causes skin irritation.
H317: May cause an allergic skin reaction.
H318: Causes serious eye damage.
H335: May cause respiratory irritation.

P–statement(s)

P101: If medical advice is needed, have product container or label at hand.
P102: Keep out of reach of children.
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.
P310: Immediately call a POISON CENTER or doctor/physician.

2.3 Other hazards

Health hazard None known.

Particular information pertaining specific risk for human / environment None known.

Indication of danger None known.

Hazard precautions None known.

SECTION 3: Composition/information on ingredients

Hazardous ingredients

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Classification (EC) 1272/2008</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cement, portland, chemicals</td>
<td>Skin Irrit. 2; H315 Eye Dam. 1; H318 STOT SE 3; H335</td>
<td>25.0 – 50.0 % by weight</td>
</tr>
<tr>
<td>2-hydroxypropyl methacrylate</td>
<td>Skin Sens. 1; H317 Eye Irrit. 2; H319</td>
<td>2.5 – 10.0 % by weight</td>
</tr>
</tbody>
</table>

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice If symptoms persist, call a physician.
Remove/Take off immediately all contaminated clothing.

If inhaled IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

In case of skin contact IF ON SKIN: Gently wash with plenty of soap and water.

In case of eye contact In case of eye contact, remove contact lens and rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
If swallowed, seek medical advice immediately and show this container or label. Clean mouth with water and drink afterwards plenty of water. Drink 1 or 2 glasses of water. Do NOT induce vomiting.

### 4.2 Most important symptoms and effects, both acute and delayed

**Symptoms**

None known.

### 4.3 Indication of any immediate medical attention and special treatment needed

**Immediate medical attention**

No data available

**Special medical treatment**

No data available

### SECTION 5: Firefighting measures

#### 5.1 Extinguishing media

**Suitable extinguishing media**

- Carbon dioxide (CO2)
- Dry powder
- Foam
- Water spray jet

**Extinguishing media which must not be used for safety reasons**

- High volume water jet

#### 5.2 Special hazards arising from the substance or mixture

**Special exposure hazards arising from the substance or preparation itself, its combustion products, or released gases**

Heating or fire can release toxic gas.

#### 5.3 Advice for firefighters

**Special protective equipment for firefighting**

In the event of fire, wear self-contained breathing apparatus. In the event of fire and/or explosion do not breathe fumes.

**Additional information on firefighting**

Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. Keep containers and surroundings cool with water spray.

### SECTION 6: Accidental release measures

#### 6.1 Personal precautions, protective equipment and emergency procedures

**Personal precautions**

Ensure adequate ventilation, especially in confined areas. Keep people away from and upwind of spill/leak.

#### 6.2 Environmental precautions

**Environmental precautions**

The product should not be allowed to enter drains, water courses or the soil.
Prevent spreading over a wide area (e.g. by containment or oil barriers).

6.3 Methods and material for containment and cleaning up
Methods for cleaning up Use mechanical handling equipment.
Treat recovered material as described in the section "Disposal considerations".

6.4 Reference to other sections
Reference to other sections See chapter 8/13

6.5 Additional information
Other information Dispose of in accordance with local regulations.

SECTION 7: Handling and storage

7.1 Precautions for safe handling
Advice on safe handling None under normal processing.
Caution: During machining in cured state dust is formed.
Advice on protection against fire and explosion No special precautions required.

7.2 Conditions for safe storage, including any incompatibilities
Storage space and container requirements Keep containers tightly closed in a cool, well-ventilated place.
Store in accordance with local regulations.
Keep only in original container.
Hints on storage assembly Store in accordance with the particular national regulations.
German storage class 10–13 (TRGS 510)

7.3 Specific end use(s)
Specific use(s) composite mortar
Further information: see technical data sheet.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

<table>
<thead>
<tr>
<th>Cement, portland, chemicals</th>
<th>Long–term exposure value/ mg/m³</th>
<th>Remarks</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Great Britain</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>inhalable dust</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>respirable dust</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

Source : 100 – Company data
8.2 Exposure controls

Respiratory protection
No personal respiratory protective equipment normally required.

Hand protection
not required under normal use

Suitable material: butyl-rubber, Chloroprene, Nitrile rubber

Unsuitable material: PVC disposable gloves

Material thickness: adjust to application and duration of use

Break through time: adjust to application and duration of use

Remarks: Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact).

Reference substance: Replace when worn.

Eye protection
Tightly fitting safety goggles

Skin and body protection
Wear suitable protective equipment.

Note: Choose body protection according to the amount and concentration of the dangerous substance at the work place.

General protective and hygiene measures
Smoking, eating and drinking should be prohibited in the application area.

Avoid contact with skin, eyes and clothing.

Take off all contaminated clothing immediately.

Wash hands before breaks and at the end of workday.

Keep away from food, drink and animal feedingstuffs.

Use protective skin cream before handling the product.

Information on environmental protection regulations
No special environmental precautions required.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Form: paste

Colour: light grey

Odour: characteristic

Odour threshold: not determined

pH: No data available

Melting point [°C] / Freezing point [°C]: No data available

Boiling point [°C]: no data available

Flash point [°C]: > 100
Evaporation rate \([\text{kg}/(\text{s} \times \text{m}^2)]\)  
No data available

Flammability (solid, gas)  
No data available

Explosion limits [Vol-%]
- Lower limit: not determined
- Upper limit: not determined

Vapour pressure [kPa]  
No data available

Vapour density  
No data available

Density [g/cm\(^3\)]  
1.7 – 1.8

Temperature:  
20 °C

Relative density  
No data available

Solubility  
No data available

Water solubility [g/l]  
not determined

Solubility [g/l]  
No data available

Partition coefficient n-octanol / water (log P \(\text{O/W}\))  
No data available

Autoinflammability  
not auto-flammable

Decomposition temperature [°C]  
not determined

Viscosity, dynamic [kg/(m*s)]  
120 – 160

Temperature:  
20 °C

Explosive properties  
Not explosive

Risk of explosion.  
Not explosive

Oxidising properties  
No

9.2 Other information
Relative vapour density (air=1)  
not determined

SECTION 10: Stability and reactivity

10.1 Reactivity
Thermal decomposition  
No decomposition if stored and applied as directed.

10.2 Chemical stability
Chemical stability  
Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions
Hazardous reactions  
No dangerous reaction known under conditions of normal use.
10.4 Conditions to avoid
Conditions to avoid No decomposition if used as directed.

10.5 Incompatible materials
Materials to avoid Not applicable.

10.6 Hazardous decomposition products
Hazardous decomposition products No decomposition if used as directed.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Hazardous ingredients

Cement, portland, chemicals

<table>
<thead>
<tr>
<th>Oral toxicity [mg/kg]</th>
<th>Test criterion</th>
<th>Remarks</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt; 2000</td>
<td>LD50</td>
<td>literature value</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: 100 – Company data

<table>
<thead>
<tr>
<th>Dermal toxicity [mg/</th>
<th>Test criterion</th>
<th>Test species</th>
<th>Remarks</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt; 2000</td>
<td>LD50</td>
<td>rabbit</td>
<td>Limit test 2000 mg/kg</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: 100 – Company data

<table>
<thead>
<tr>
<th>Inhalative toxicity [mg/l]</th>
<th>Test criterion</th>
<th>Test species</th>
<th>Note</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt; 5</td>
<td>LC50</td>
<td>rat</td>
<td>Limit Test 5 g/m³</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: 100 – Company data

Sensitization May cause an allergic skin reaction.

Carcinogenic effects Not applicable.

Mutagenicity Not applicable.

Reproduction toxicity Not applicable.

Caustic effect No data available

Specific target organ toxicity (single exposure) [mg/kg] Specific effects Source

Irritating to respiratory system. (dust) 100

Source: 100 – Company data

Specific target organ toxicity (repeated exposure) [mg/kg] Remarks Source

Not applicable. 100

Source: 100 – Company data
2-hydroxypropyl methacrylate

<table>
<thead>
<tr>
<th>Oral toxicity [mg/kg]</th>
<th>Test criterion</th>
<th>Test species</th>
<th>Remarks</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt; 2000</td>
<td>LD50</td>
<td>rat</td>
<td>OECD 401 Limit Test.</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: 100 – Company data

<table>
<thead>
<tr>
<th>Dermal toxicity [mg/kg]</th>
<th>Test criterion</th>
<th>Test species</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt; 5000</td>
<td>LD50</td>
<td>rabbit</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: 100 – Company data

<table>
<thead>
<tr>
<th>Inhalative toxicity [mg/l]</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>No data available</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: 100 – Company data

Sensitization: Skin sensitizer
Carcinogenic effects: Not applicable.
Mutagenicity: Not applicable.
Remarks: OECD 471 (Ames Test) / OECD 476.
Reproduction toxicity: Not applicable.
Remarks: OECD 422.
Caustic effect: Not applicable.

<table>
<thead>
<tr>
<th>Specific target organ toxicity (single exposure) [mg/kg]</th>
<th>Remarks</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Not applicable.</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: 100 – Company data

<table>
<thead>
<tr>
<th>Specific target organ toxicity (repeated exposure) [mg/kg]</th>
<th>Remarks</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Not applicable.</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: 100 – Company data

Irritant effect on skin: Irritating to skin and mucous membranes
Irritant effect on eyes: Irritating to eyes.

11.2 Additional information
Other information (chapter 11.) The product itself has not been tested.

SECTION 12: Ecological information

12.1 Toxicity
Hazardous ingredients

Cement, portland, chemicals

<table>
<thead>
<tr>
<th>Toxicity to fish [mg/l]</th>
<th>Test criterion</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt; 100</td>
<td>LC50</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: 100 – Company data
Toxicity to daphnia [mg/l] | Test criterion | Test species | Source
--- | --- | --- | ---
> 100 | LC50 | Daphnia magna (Water flea) | 100

Source: 100 - Company data

Toxicity to algae [mg/l] | Test criterion | Source
--- | --- | ---
> 100 | EC50 | 100

Source: 100 - Company data

**Biodegradability**  
Not applicable. (inorganic)

**2-hydroxypropyl methacrylate**

Toxicity to fish [mg/l] | Test criterion | Test species | Measuring method | Exposure duration | Source
--- | --- | --- | --- | --- | ---
493 | LC50 | Leuciscus idus (Golden orfe) | DIN 38412 | 48 h | 100

Source: 100 - Company data

Toxicity to daphnia [mg/l] | Test criterion | Test species | Exposure duration | Measuring method | Source
--- | --- | --- | --- | --- | ---
> 130 | EC50 | Daphnia magna (Water flea) | 48 h | OECD Test Guide-line 202 | 100

Source: 100 - Company data

Toxicity to algae [mg/l] | Test criterion | Test species | Exposure duration | Measuring method | Source
--- | --- | --- | --- | --- | ---
> 97,2 | EC50 | Selenastrum capricornutum | 72 h | OECD Test Guide-line 201 | 100

Source: 100 - Company data

**NOEC (daphnia) [mg/l]** | Test criterion | Test species | Measuring method | Exposure duration | Source
--- | --- | --- | --- | --- | ---
24,1 | NOEC | Daphnia magna (Big water flea) | OECD 202 | 21 d | 100

Source: 100 - Company data

Biodegradability  
Readily biodegradable.

Biodegradability  
Readily degradable.

**12.2 Persistence and degradability**

Elimination and distribution mechanisms  
There is no data available for this product.

Elimination in purification plant  
There is no data available for this product.

**12.3 Bioaccumulative potential**

Bioaccumulation  
There is no data available for this product.

Bioconcentration factor (BCF)  
There is no data available for this product.
12.4 Mobility in soil

Distribution in the environment

There is no data available for this product.

Mobility

Mobility : 

There is no data available for this product.

12.5 Results of PBT and vPvB assessment

Results of PBT characteristics determination

This preparation contains no substance considered to be very persistent nor very bioaccumulating (vPvB).

12.6 Other adverse effects

Further information on ecology

The product itself has not been tested.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Disposal considerations

The product should not be allowed to enter drains, water courses or the soil.

Dispose of waste according to applicable legislation.

Empty remaining contents.

Waste Code

According to the European Waste Catalogue, Waste Codes are not product specific, but application specific.

The following Waste Codes are only suggestions:

Product (Mortar and Curing agent)

200127 – paint, inks, adhesives and resins containing dangerous substances

080409 – waste adhesives and sealants containing organic solvents or other dangerous substances

cured material and completely squeezed cartridges

200000 – MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS

SECTION 14: Transport information

<table>
<thead>
<tr>
<th>14.1 UN-No</th>
<th>Land transport ADR/RID</th>
<th>Marine transport IMDG</th>
<th>Air transport ICAO/IATA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not applicable.</td>
<td>Not applicable.</td>
<td>Not applicable.</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>14.2 Description of the goods</td>
<td>No dangerous good according to ADR</td>
<td>No dangerous good according to IMDG</td>
<td>No dangerous good according to IATA</td>
</tr>
<tr>
<td>14.2 UN proper shipping name</td>
<td>Non dangerous good</td>
<td>Non dangerous good</td>
<td>Non dangerous good</td>
</tr>
<tr>
<td>14.3 Transport hazard class(es)</td>
<td>Not applicable.</td>
<td>Not applicable.</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>14.4 Packaging group</td>
<td>Not applicable.</td>
<td>Not applicable.</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>14.5 Environmental hazards</td>
<td>Not applicable.</td>
<td>Not applicable.</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Danger releasing substance</td>
<td>Not applicable.</td>
<td>Not applicable.</td>
<td>Not applicable.</td>
</tr>
</tbody>
</table>
14.6 Special precautions for user
Precautions not required under normal use

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code
Transport in bulk according to Annex II of MARPOL and the IBC Code not applicable

14.8 Additional information
Other information (chapter 14.) Not dangerous goods in the meaning of ADR/RID, ADNR, IMDG-Code, ICAO/IATA-DGR

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
Decopaint regulation Exempt
Carcinogenic hazardous substance as per Annex II GefStoffV no
Restriction of occupation. Exempt
Water Hazard Class (Ger.) 1
Classification in compliance with the Industrial Safety Regulation Exempt

15.2 Chemical safety assessment
Safety assessment Not relevant. Chemical safety assessments for substances in this mixture were not carried out.
Additional regulations Not applicable.

SECTION 16: Other information

Relevant H-phrases
H315: Causes skin irritation.
H317: May cause an allergic skin reaction.
H318: Causes serious eye damage.
H319: Causes serious eye irritation.
H335: May cause respiratory irritation.

Wording of the hazard classes
Skin Irrit.: Skin irritation
Eye Dam.: Serious eye damage
Skin Sens.: Skin sensitization
STOT SE: Specific target organ toxicity – single exposure
Eye Irrit.: Serious eye irritation
**Classification for mixtures and used evaluation method according to regulation (EC) 1272/2008 [CLP]**

<table>
<thead>
<tr>
<th>Classification</th>
<th>Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin Irrit. 2; H315</td>
<td>Calculated</td>
</tr>
<tr>
<td>Eye Dam. 1; H318</td>
<td>Calculated</td>
</tr>
<tr>
<td>Skin Sens. 1; H317</td>
<td>Calculated</td>
</tr>
<tr>
<td>STOT SE 3; H335</td>
<td>Calculated</td>
</tr>
</tbody>
</table>

**Recommended restrictions**

None under normal processing. Observe technical data sheet.

Modifications of the previous version are denoted with an asterisk (*).

This information is provided in accordance with the current status of our knowledge and experience. The Safety Data Sheet describes products with a view to relevant safety requirements. This information does not constitute a warranty of properties, features or qualities.
SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier
Commercial Product Name: FIS SB 390/585/1500 S Hardener (Component B)

1.2 Relevant identified uses of the substance or mixture and uses advised against
Relevant identified uses: composite mortar
Recommended restrictions: None under normal processing. Observe technical data sheet.

1.3 Details of the supplier of the safety data sheet
Company designation: fischerwerke GmbH & Co. KG
Klaus-Fischer-Straße 1
D-72178 Waldachtal
Telephone: +49(0)7443 12-0
FAX: +49(0)7443 12-4222
Email: info-sdb@fischer.de
Internet: www.fischer.de

Marketer: Great Britain: Mrs Mirka Valovicova, fischer Fixing (UK) Ltd, Hithercroft Road, Wallingford, Oxfordshire, OX10 9AT, Tel. 01491 827 920, Fax 01491 827 950

1.4 Emergency telephone number
Emergency telephone number: +49(0)6132-84463 (24h)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture
Classification according to Regulation (EC) No. 1272/2008: Skin Sens. 1; H317 Aquatic Chronic 2; H411

2.2 Label elements
Hazard pictogram:
- GHS07
- GHS09

Signal word: Warning

Hazardous component(s) to be indicated on label: dibenzoyl peroxide

H-Statement(s):
- H317: May cause an allergic skin reaction.
- H411: Toxic to aquatic life with long lasting effects.
P-statement(s)  
P101: If medical advice is needed, have product container or label at hand.  
P102: Keep out of reach of children.  
P280: Wear protective gloves/protective clothing/eye protection/face protection.

2.3 Other hazards

Health hazard  
None known.

Particular information pertaining specific risk for human / environment  
None known.

Indication of danger  
None known.

Hazard precautions  
None known.

SECTION 3: Composition/information on ingredients

Hazardous ingredients

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Classification (EC) 1272/2008</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>ethanediol, ethylene glycol</td>
<td>Acute Tox. 4; H302 STOT RE 2; H373</td>
<td>&lt; 10.0 % by weight</td>
</tr>
<tr>
<td></td>
<td>CAS No.: 107-21-1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EC-No.: 203-473-3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Index-No.: 603-027-00-1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>REACH No.: 01-2119456816-28</td>
<td></td>
</tr>
<tr>
<td>dibenzoyl peroxide</td>
<td>Org. Perox. B; H241 Eye Irrit. 2; H319 Skin Sens. 1; H317 Aquatic Acute 1; H400</td>
<td>2.5 – 10.0 % by weight</td>
</tr>
<tr>
<td></td>
<td>CAS No.: 94-36-0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EC-No.: 202-327-6</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Index-No.: 617-008-00-0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>REACH No.: 01-2119511472-50</td>
<td></td>
</tr>
</tbody>
</table>

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice  
If symptoms persist, call a physician.  
Remove/Take off immediately all contaminated clothing.

If inhaled  
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

In case of skin contact  
IF ON SKIN: Gently wash with plenty of soap and water.

In case of eye contact  
In case of eye contact, remove contact lens and rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

If swallowed  
If swallowed, seek medical advice immediately and show this container or label.  
Clean mouth with water and drink afterwards plenty of water. Drink 1 or 2 glasses of water.  
Do NOT induce vomiting.
4.2 Most important symptoms and effects, both acute and delayed
Symptoms: None known.

4.3 Indication of any immediate medical attention and special treatment needed
Immediate medical attention: No data available
Special medical treatment: No data available

SECTION 5: Firefighting measures

5.1 Extinguishing media
Suitable extinguishing media:
- Carbon dioxide (CO2)
- Dry powder
- Foam
- Water spray jet

Extinguishing media which must not be used for safety reasons:
- High volume water jet

5.2 Special hazards arising from the substance or mixture
Special exposure hazards arising from the substance or preparation itself, its combustion products, or released gases:
- Heating or fire can release toxic gas.

5.3 Advice for firefighters
Special protective equipment for firefighting:
- In the event of fire, wear self-contained breathing apparatus.
- In the event of fire and/or explosion do not breathe fumes.

Additional information on firefighting:
- Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
- Keep containers and surroundings cool with water spray.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Personal precautions:
- Ensure adequate ventilation, especially in confined areas.
- Keep people away from and upwind of spill/leak.

6.2 Environmental precautions
Environmental precautions:
- The product should not be allowed to enter drains, water courses or the soil.
- Prevent spreading over a wide area (e.g. by containment or oil barriers).

6.3 Methods and material for containment and cleaning up
Methods for cleaning up:
- Use mechanical handling equipment.
6.4 Reference to other sections
Reference to other sections: See chapter 8/13

6.5 Additional information
Other information: Dispose of in accordance with local regulations.

SECTION 7: Handling and storage

7.1 Precautions for safe handling
Advice on safe handling: None under normal processing.
Caution: During machining in cured state dust is formed.

Advice on protection against fire and explosion:
No special precautions required.

7.2 Conditions for safe storage, including any incompatibilities
Storage space and container requirements:
Keep containers tightly closed in a cool, well-ventilated place.
Store in accordance with local regulations.
Keep only in original container.

Hints on storage assembly:
Store in accordance with the particular national regulations.

German storage class:
10–13 (TRGS 510)

7.3 Specific end use(s)
Specific use(s): composite mortar
Further information: see technical data sheet.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters
ethanediol, ethylene glycol

<table>
<thead>
<tr>
<th>Country</th>
<th>Long-term exposure value / ppm</th>
<th>Long-term exposure value / mg/m3</th>
<th>Short-term exposure value / ppm</th>
<th>Short-term exposure value / mg/m3</th>
<th>Remarks</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Great Britain</td>
<td>10</td>
<td>10</td>
<td>40</td>
<td>104</td>
<td>particulate; Can be absorbed through the skin</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>20</td>
<td>52</td>
<td>104</td>
<td>19</td>
<td>vapour; Can be absorbed through the skin</td>
<td>19</td>
</tr>
</tbody>
</table>

Europe

<table>
<thead>
<tr>
<th>Long-term exposure value/ mg/m³</th>
<th>Long-term exposure value/ ppm</th>
<th>Short-term exposure value/ mg/m³</th>
<th>Short-term exposure value/ ppm</th>
<th>Note</th>
<th>Issuing date</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>52</td>
<td>20</td>
<td>104</td>
<td>40</td>
<td>Skin</td>
<td>2000/39</td>
<td>24</td>
</tr>
</tbody>
</table>

Source: 24 – DIRECTIVE 2009/161/EU

dibenzoyl peroxide

Great Britain

<table>
<thead>
<tr>
<th>Long-term exposure value/ mg/m³</th>
<th>Remarks</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>R2, 36, 43</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: 100 – Company data

8.2 Exposure controls

Respiratory protection

No personal respiratory protective equipment normally required.

Hand protection

Not required under normal use

Suitable material:

butyl-rubber, Chloroprene, Nitrile rubber

Unsuitable material:

PVC disposable gloves

Material thickness:

Adjust to application and duration of use

Break through time:

Adjust to application and duration of use

Remarks:

Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact).

Reference substance:

Replace when worn.

Eye protection

Tightly fitting safety goggles

Skin and body protection

Wear suitable protective equipment.

Note:

Choose body protection according to the amount and concentration of the dangerous substance at the work place.

General protective and hygiene measures

Smoking, eating and drinking should be prohibited in the application area.

Avoid contact with skin, eyes and clothing.

Take off all contaminated clothing immediately.

Wash hands before breaks and at the end of workday.

Keep away from food, drink and animal feedstuffs.

Use protective skin cream before handling the product.

Information on environmental protection regulations

No special environmental precautions required.
SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form</td>
<td>paste</td>
</tr>
<tr>
<td>Colour</td>
<td>black</td>
</tr>
<tr>
<td>Odour</td>
<td>characteristic</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>not determined</td>
</tr>
<tr>
<td>pH</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting point °C / Freezing point °C</td>
<td>No data available</td>
</tr>
<tr>
<td>Boiling point °C</td>
<td>no data available</td>
</tr>
<tr>
<td>Flash point °C</td>
<td>&gt; 100</td>
</tr>
<tr>
<td>Evaporation rate kg/(s*m²)</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosion limits Vol-%</td>
<td></td>
</tr>
<tr>
<td>Lower limit</td>
<td>not determined</td>
</tr>
<tr>
<td>Upper limit</td>
<td>not determined</td>
</tr>
<tr>
<td>Vapour pressure kPa</td>
<td>No data available</td>
</tr>
<tr>
<td>Density g/cm³</td>
<td>1.7 – 1.9</td>
</tr>
<tr>
<td>Temperature</td>
<td>20 °C</td>
</tr>
<tr>
<td>Water solubility g/l</td>
<td>not determined</td>
</tr>
<tr>
<td>Solubility g/l</td>
<td>No data available</td>
</tr>
<tr>
<td>Partition coefficient n–octanol / water (log P O/W)</td>
<td>No data available</td>
</tr>
<tr>
<td>Autoinflammability</td>
<td>not auto-flammable</td>
</tr>
<tr>
<td>Decomposition temperature °C</td>
<td>not determined</td>
</tr>
<tr>
<td>Viscosity, dynamic kg/(m*s)</td>
<td>70 – 110</td>
</tr>
<tr>
<td>Temperature</td>
<td>20 °C</td>
</tr>
<tr>
<td>Risk of explosion.</td>
<td>Not explosive</td>
</tr>
</tbody>
</table>

9.2 Other information

Relative vapour density (air=1) not determined
SECTION 10: Stability and reactivity

10.1 Reactivity
Thermal decomposition No decomposition if stored and applied as directed.

10.2 Chemical stability
Chemical stability Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions
Hazardous reactions No dangerous reaction known under conditions of normal use.

10.4 Conditions to avoid
Conditions to avoid No decomposition if used as directed.

10.5 Incompatible materials
Materials to avoid Not applicable.

10.6 Hazardous decomposition products
Hazardous decomposition products No decomposition if used as directed.

SECTION 11: Toxicological information

11.1 Information on toxicological effects
Hazardous ingredients
ethanediol, ethylene glycol

<table>
<thead>
<tr>
<th>Oral toxicity [mg/kg]</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Harmful if swallowed.</td>
<td>100</td>
</tr>
<tr>
<td>Source : 100 – Company data</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Dermal toxicity [mg/kg]</th>
<th>Test criterion</th>
<th>Test species</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt; 3500</td>
<td>LD50</td>
<td>rabbit</td>
<td>100</td>
</tr>
<tr>
<td>Source : 100 – Company data</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Inhalative toxicity [mg/l]</th>
<th>Test criterion</th>
<th>Test species</th>
<th>Note</th>
<th>Exposure duration</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt; 2,5</td>
<td>LC50</td>
<td>rat</td>
<td>(as aerosol)</td>
<td>6 h</td>
<td>100</td>
</tr>
<tr>
<td>Source : 100 – Company data</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Sensitization not sensitising.
Carcinogenic effects Contains no ingredient listed as a carcinogen
Mutagenicity Not applicable.
Reproduction toxicity Not applicable.
Caustic effect No data available
### Specific target organ toxicity (repeated exposure) [mg/kg]

<table>
<thead>
<tr>
<th>Route of exposure</th>
<th>Organs affected</th>
<th>Specific effects</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ingestion</td>
<td>Causes damage to kidneys if swallowed.</td>
<td>Causes damage to organs through prolonged or repeated exposure.</td>
<td>100</td>
</tr>
<tr>
<td>Skin contact</td>
<td>May cause damage to kidneys in contact with skin.</td>
<td>Causes damage to organs through prolonged or repeated exposure.</td>
<td>100</td>
</tr>
</tbody>
</table>

**Source:** 100 – Company data

#### dibenzoyl peroxide

<table>
<thead>
<tr>
<th>Oral toxicity [mg/kg]</th>
<th>Test criterion</th>
<th>Test species</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt; 5000</td>
<td>LD50</td>
<td>rat</td>
<td>100</td>
</tr>
</tbody>
</table>

**Source:** 100 – Company data

<table>
<thead>
<tr>
<th>Inhalative toxicity [mg/l]</th>
<th>Test criterion</th>
<th>Test species</th>
<th>Note</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>24300</td>
<td>LC50</td>
<td>rat</td>
<td>(dust)</td>
<td>100</td>
</tr>
</tbody>
</table>

**Source:** 100 – Company data

### Irritant effect on skin
- Irritating to skin and mucous membranes

### Irritant effect on eyes
- Irritating to eyes

### 11.2 Additional information

Other information (chapter 11.)  The product itself has not been tested.

### SECTION 12: Ecological information

#### 12.1 Toxicity

**Hazardous ingredients**

#### ethanediol, ethylene glycol

<table>
<thead>
<tr>
<th>Toxicity to fish [mg/l]</th>
<th>Test criterion</th>
<th>Test species</th>
<th>Exposure duration</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>72860</td>
<td>LC50</td>
<td>Pimephales promelas (Pimephales promelas (fathead minnow))</td>
<td>96 h</td>
<td>100</td>
</tr>
</tbody>
</table>

**Source:** 100 – Company data

<table>
<thead>
<tr>
<th>Toxicity to daphnia [mg/l]</th>
<th>Test criterion</th>
<th>Test species</th>
<th>Exposure duration</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt; 100</td>
<td>EC50</td>
<td>Daphnia magna (Water flea)</td>
<td>48 h</td>
<td>100</td>
</tr>
</tbody>
</table>

**Source:** 100 – Company data
<table>
<thead>
<tr>
<th>Toxicity to algae [mg/l]</th>
<th>Test criterion</th>
<th>Test species</th>
<th>Exposure duration</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt; 6500</td>
<td>EC50</td>
<td>Selenastrum capricornutum</td>
<td>96 h</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: 100 – Company data

<table>
<thead>
<tr>
<th>NOEC (fish) [mg/l]</th>
<th>Test criterion</th>
<th>Test species</th>
<th>Exposure duration</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>15380</td>
<td>NOEC</td>
<td>Pimephales promelas (fathead minnow)</td>
<td>7 d</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: 100 – Company data

Biodegradability
90 – 100 %

Ready degradability
dibenzoyl peroxide

<table>
<thead>
<tr>
<th>Toxicity to fish [mg/l]</th>
<th>Test criterion</th>
<th>Exposure duration</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>0,06</td>
<td>LC50</td>
<td>96 h</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: 100 – Company data

<table>
<thead>
<tr>
<th>Toxicity to daphnia [mg/l]</th>
<th>Test criterion</th>
<th>Test species</th>
<th>Exposure duration</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>0,11</td>
<td>EC50</td>
<td>Daphnia magna (Water flea)</td>
<td>48 h</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: 100 – Company data

<table>
<thead>
<tr>
<th>Toxicity to algae [mg/l]</th>
<th>Test criterion</th>
<th>Exposure duration</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>0,06</td>
<td>EC50</td>
<td>72 h</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: 100 – Company data

NOEC (daphnia) [mg/l]

<table>
<thead>
<tr>
<th>Value</th>
<th>Test species</th>
<th>Measuring method</th>
<th>Exposure duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Daphnia magna (Big water flea).</td>
<td>OECD 202</td>
<td>48 h</td>
</tr>
</tbody>
</table>

NOEC (algae) [mg/l]

<table>
<thead>
<tr>
<th>Value</th>
<th>Test species</th>
<th>Measuring method</th>
<th>Exposure duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>0,5</td>
<td>Pseudokirchneriella subcapitata</td>
<td>OECD 201</td>
<td>72 h</td>
</tr>
</tbody>
</table>

12.2 Persistence and degradability

Elimination and distribution: There is no data available for this product.

Elimination in purification plant: There is no data available for this product.

12.3 Bioaccumulative potential

Bioaccumulation: There is no data available for this product.
Bioconcentration factor (BCF) There is no data available for this product.

12.4 Mobility in soil
Distribution in the environment There is no data available for this product.
Mobility Mobility: There is no data available for this product.

12.5 Results of PBT and vPvB assessment
Results of PBT characteristics determination This preparation contains no substance considered to be very persistent nor very bioaccumulating (vPvB).

12.6 Other adverse effects
Further information on ecology The product should not be allowed to enter drains, water courses or the soil.

SECTION 13: Disposal considerations

13.1 Waste treatment methods
Disposal considerations The product should not be allowed to enter drains, water courses or the soil.
Dispose of waste according to applicable legislation.
Empty remaining contents.

Waste Code According to the European Waste Catalogue, Waste Codes are not product specific, but application specific.
The following Waste Codes are only suggestions:
Product (Mortar and Curing agent)
200127 – paint, inks, adhesives and resins containing dangerous substances
080409 – waste adhesives and sealants containing organic solvents or other dangerous substances
cured material and completely squeezed cartridges
200000 – MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS

SECTION 14: Transport information

<table>
<thead>
<tr>
<th></th>
<th>Land transport ADR/RID</th>
<th>Marine transport IMDG</th>
<th>Air transport ICAO/IATA</th>
</tr>
</thead>
<tbody>
<tr>
<td>14.1 UN-No</td>
<td>3077</td>
<td>3077</td>
<td>3077</td>
</tr>
<tr>
<td>14.2 Description of the goods</td>
<td>ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (dibenzoyl peroxide)</td>
<td>ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (dibenzoyl peroxide)</td>
<td>ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (dibenzoyl peroxide)</td>
</tr>
<tr>
<td>14.2 UN proper shipping name</td>
<td>ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (dibenzoyl peroxide)</td>
<td>Environmentally hazardous substance, solid, n.o.s. (dibenzoyl peroxide)</td>
<td>Environmentally hazardous substance, solid, n.o.s. (dibenzoyl peroxide)</td>
</tr>
</tbody>
</table>
### 14.6 Special precautions for user

Precautions not required under normal use

### 14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code

Transport in bulk according to Annex II of MARPOL and the IBC Code not applicable

### SECTION 15: Regulatory information

#### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Restriction of occupation. –

Water Hazard Class (Ger.) 1

#### 15.2 Chemical safety assessment

Safety assessment Not relevant. Chemical safety assessments for substances in this mixture were not carried out.

Additional regulations Not applicable.

### SECTION 16: Other information

<table>
<thead>
<tr>
<th>Relevant H-phrases</th>
<th>Wording of the hazard classes</th>
</tr>
</thead>
<tbody>
<tr>
<td>H241: Heating may cause a fire or explosion.</td>
<td>Skin Sens.: Skin sensitization</td>
</tr>
<tr>
<td>H302: Harmful if swallowed.</td>
<td>Aquatic Chronic: Hazardous to the aquatic environment</td>
</tr>
<tr>
<td>H317: May cause an allergic skin reaction.</td>
<td>Acute Tox.: Acute toxicity</td>
</tr>
<tr>
<td>H319: Causes serious eye irritation.</td>
<td>STOT RE: Specific target organ toxicity – repeated exposure</td>
</tr>
<tr>
<td>H373: May cause damage to organs through prolonged or repeated exposure.</td>
<td>Org. Perox.: Organic peroxide</td>
</tr>
<tr>
<td>H400: Very toxic to aquatic life.</td>
<td>Eye Irrit.: Serious eye irritation</td>
</tr>
<tr>
<td>H411: Toxic to aquatic life with long lasting effects.</td>
<td></td>
</tr>
</tbody>
</table>
Aquatic Acute: Hazardous to the aquatic environment

<table>
<thead>
<tr>
<th>Classification</th>
<th>Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin Sens. 1; H317</td>
<td>Calculated</td>
</tr>
<tr>
<td>Aquatic Chronic 2; H411</td>
<td>Data obtained by expert judgement.</td>
</tr>
</tbody>
</table>

Recommended restrictions: None under normal processing. Observe technical data sheet.

Modifications of the previous version are denoted with an asterisk (*).

This information is provided in accordance with the current status of our knowledge and experience. The Safety Data Sheet describes products with a view to relevant safety requirements. This information does not constitute a warranty of properties, features or qualities.