

# Disbocret® 519 PCC-Flex-Schlämme



Low-temperature elastic, crack-bridging, versatile applicable, extremely resistant, waterproof PCC slurry, in particular suitable for concrete – may also be applied on existing coating.

## Product Description

Field of Application	<p>Polymer modified / dispersion-based cement slurry (grout), used for covering net-like shrinking racks (alligator cracking) and separating cracks. Suitable for protection against penetration of pollutants and water into new, existing and repaired concrete surfaces.</p> <p>Alternatively used as a sealer against non-pressurised water (DIN 18 195 T 5).</p>
Product Properties	<ul style="list-style-type: none"> <li>■ Bridges alligator cracking and separating cracks <math>\leq 0.3</math> mm</li> <li>■ Equalises dynamic cracks <math>\leq 0.1</math> mm</li> <li>■ Crack-bridging class I<sub>r</sub> successfully tested at -20 °C and under dynamic stress</li> <li>■ Good working properties</li> <li>■ Weatherproof</li> <li>■ Alkali resistant</li> <li>■ Water vapour permeable</li> <li>■ Decelerates corrosive gas (CO<sub>2</sub> and SO<sub>2</sub>)</li> <li>■ May be applied by machines</li> <li>■ Meets the requirements of EN 1504-2 and of DIN V 18026: Surface protection systems for concrete</li> </ul> <p>Tested without additional operations and materials as OS-D I and combined with Disbocret® 518 Flex-Finish as OS-D II in accordance with TL/TP of ZTV-ING.</p>
Product Base / Vehicle	2-component, polymer modified cement slurry
Packaging/Package Size	<ul style="list-style-type: none"> <li>■ <b>Dry Mortar Premix</b> 20 kg bag</li> <li>■ <b>Mixing Liquid</b> 9 litres plastic can</li> </ul>
Colours	Grey, Greyish-white.
Storage	<ul style="list-style-type: none"> <li>■ <b>Liquid Component (mixing liquid):</b> Keep in a cool, dry, frost free place. Shelf life of tightly closed original packaging: min. 6 months.</li> <li>■ <b>Powdery component (dry mortar premix):</b> Keep in a cool, dry, frost free place. Shelf life: min. 6 months from date of manufacture; low chromate content: 6 months.</li> </ul>



## Technical Data

■ Density:	approx. 1.7 g/cm <sup>3</sup>
■ Dry film thickness:	approx. 590 µm/1.0 kg/m <sup>2</sup>
■ Resistance-count for diffusion µ (H <sub>2</sub> O):	1,600
■ Resistance-count for diffusion µ (CO <sub>2</sub> ):	110,000
■ Diffusion-equivalent air layer thickness s <sub>d</sub> H <sub>2</sub> O:	approx. 3.20 m
■ Diffusion-equivalent air layer thickness s <sub>d</sub> CO <sub>2</sub> :	approx. 230 m
■ Water permeability (w-value):	< 0.01 kg/ (m <sup>2</sup> • h <sup>0.5</sup> ), w <sub>3</sub> class, DIN EN 1062

## Application

### Suitable Substrates

Lightweight, normal and heavy concrete, surfaces reprofiled with Disbocret® surfacers and fillers, mineral renders/ plasters and existing coatings. Cementitious self-levelling fluid mortars, ameliorated with synthetic resin, must be checked for suitability by a trial application, if necessary. The adhesive tensile (pull-off) strength of substrates must be greater or equal than 1.0 N/mm<sup>2</sup> on an average, with a minimum individual value of 0.5 N/mm<sup>2</sup>.

### Substrate Preparation

#### 1. Mineral substrates

The substrate must be sound, clean and free from loose material that may prevent good adhesion. Separating substances (e.g. oils, fats/greases) and impurities must be removed by suitable treatment. Badly soiled substrates e.g. moss, algae attack and vitreous, unsound cement laitance must be removed by suitable solid blasting medium and equipment. The substrate must be free from corrosive substances (e.g. chlorides). Substrates must be pre-wetted. Care must however be taken that most of the moisture has been absorbed before the PCC slurry is applied (matt surface aspect).

#### 2. Coated substrates

Check existing paint coatings for sufficient adhesion to the substrate. Remove non-adherent existing paint coatings using suitable blasting medium. Clean sound/stable, adherent, non-chalking existing paint coatings, e.g. with water jet or steam blasting. As in practice various types of coatings may occur, the planned surface coating system has to be tested in advance by a trial application, verifying the efficiency of the coating system.

#### 3. Spallings (defects), pores and shrink holes

To achieve a uniform, sufficiently thick protective coating, spallings, cracks, high unevenness or surface roughness are to be thoroughly repaired with adequate materials out of the Disbocret® System according to the manufacturer's recommendations. Small pores and surface roughness can be filled and levelled with flexible PCC slurry Disbocret® 519.

#### 4. Cracks

Treat and prepare cracks ≥ 0.3 mm as joints in accordance with DIN 18 540.

### Preparation of Material

Pour the mixing liquid into a vessel/container. While mixing with a suitable low speed electric paddle (agitator, max. 400 rpm), pour the complete contents of a bag gradually into the vessel and keep on stirring until a homogenous slurry is achieved. The material can be diluted up to max. 2% with (potable) water, depending on application method, substrate requirements and weather conditions. Adjust to spraying consistency by adding max. 1-2% of tap water, if necessary.

### Mixing Ratio

Dry Mortar Premix	Mixing Liquid
1 part by weight	0.45 part by weight

The delivered packaging sizes of dry mortar premix and mixing liquid are matched.

### Method of Application

Apply the slurry with suitable tools like e.g. trowel, smoothing-trowel or brush. Pre-fill porous substrates with little material in counter move technique. After a waiting period of approx. 5 hours, a second coat can be applied.

If manually applied, the surface of the applied material (by smoothing-trowel) should subsequently be blended with a soft brush; this further treatment leads to a slightly broom-textured surface. The material may be applied by wet spraying technique using a spiral pump (e.g. PFT N2V). Follow VOB, part C (DIN 18 363, paragraph 3.1.3). Therefore the material should not be applied e.g. in direct sunlight or on sun heated substrates, during strong wind, fog or rain, high relative humidity or imminent rain or frost, etc. Protective tarpaulins should be used, if necessary.

### Layer Thickness

For an effective surface protection minimum 2000 µm dry-film thickness is necessary.

### Surface Coating System

If flexible PCC slurry Disbocret® 519 is not subjected to water loads, then the material may be coated with Disbocret® 518 Flex-Finish to achieve a coloured surface. However this will correspond to the Surface Protection System OS-D II of ZTV-ING.

### Consumption

Ready mixed slurry: approx. 1.7 kg /mm/m<sup>2</sup>

### Workability

Approx. 3 hours at 20 °C.

### Application Conditions

**Material, Atmospheric, and Substrate Temperature:**  
Min. 5 °C, max. 30 °C

Drying/Drying Time	At 20 °C and 65% relative humidity, dust-dry after approx. 12 hours, rainproof after approx. 5 hours and recoatable after approx. 48 hours.
Tool Cleaning	immediately after use with water.

## Advice

### German Certificates

- 4-1077: Testing to ZTV-ING, TL/TP, OS DI, P 1862/99-33 Polymer Institute, Flörsheim
- 4-1091: Testing to ZTV-ING, TL/TP, OS DII, P 2134/01-111 Polymer Institute, Flörsheim
- 4-1065: Testing of water permeability to DIN 18195, T5 Polymer Institute, Flörsheim
- 4-1066: Testing of bond strength if wet spray applied Polymer Institute, Flörsheim
- 4-1073: Testing as per IBH Data Sheet "Sealing of buildings with cement-based rigid and flexible slurry type seal coatings" Polymer Institute, Flörsheim
- 4-1090: Testing of water vapour permeability and adhesive (bond) strength Polymer Institute, Flörsheim

Only to be used by trained operatives.

### Special Risks (Hazard Note) / Safety Advice (Status as at Date of Publication)

#### **Powder component:**

Irritating to skin. Risk of serious damage to eyes. Keep out of reach of children. Do not breathe dust. Avoid contact with eyes and skin. In case of contact with eyes rinse immediately with plenty of water and seek medical advice. Wear suitable gloves and eye/face protection. If swallowed, seek medical advice immediately and show the packaging or label.

### Please Note (Status as at Date of Publication)

#### **Liquid Component:**

Keep out of reach of children. In case of contact with eyes, rinse immediately with plenty of water. In case of spray application: Do not breathe spray dust. Do not empty into drains, water courses or onto the ground.

### Disposal

Materials and all related packaging must be disposed of in a safe way in accordance with the full requirements of the local authorities. Particular attention should be made to removing wastage from site in compliance with standard construction site procedures. In Germany: Only completely emptied packaging should be given for recycling. Dispose of hardened material as of mixed construction and demolition-site waste.

### EU limit value for the VOC content

of this product (category A/c): max. 40 g/l (2010). This product contains < 1 g/l of VOC.

### Giscode


ZP 1 (powder component)

### Product Code Paints and Enamels

M-GF 01 (liquid component)

### Further Details

See Material Safety Data Sheets (MSDS). Follow the application references while applying our materials.

 <span style="font-size: 1.2em; vertical-align: middle;">1119</span>
Caparol Farben Lacke Bautenschutz GmbH Roßdörfer Straße 50, D-64372 Ober-Ramstadt
<b>09</b>  ETAG 0004 : 2000
06 <sup>1)</sup>
EN 1504-2
Products for surface protection coating
CO <sub>2</sub> permeability sd-value > 50 m Water vapour permeability Class I, < 5 m Capillary water absorption w < 0.1 kg/(m <sup>2</sup> · h <sup>0.5</sup> ) Pull-off test, ≥ 0.8 N/mm <sup>2</sup> without travelling loads Temperature cycling compatibility ≥ 0.8 N/mm <sup>2</sup> Crack bridging capability A2 (-20 °C) Fire behaviour B2 Artificial weathering No visible defects

CE Labelling

**EN 1504-2**

“Products and systems for protection and repair of concrete load-bearing structures-Part 2: Protective coating systems for concrete”, defining the requirements for the surface protection proceeding. Products matching the above mentioned standards are to be labelled with the CE mark. Additional engineer standards are effective for the use in Germany in structural safety relevant areas. Conformity is documented by the Ü sign (Überwachung = supervision) on the container. Established by documented evidence of conformity 2+ with controls and tests on the part of the manufacturer and notified bodies.

Technical Assistance

As it is impossible to list herein the wide variety of substrates and their specific problems, please request our technical assistance in case of queries.

Customer Service Centre

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