

# Disbocret® 510 Füllschicht



Plasto-elastic dispersion-based filler/surfacer (easy to spread) and undercoat in one product. Used for filling pores or shrink holes and as patch filler on concrete surfaces – also suitable for application on concrete with existing coatings.

## Product Description

### Field of Application

For filling pores or shrink holes and partial filling of surface defects and spallings up to 1 mm deep. Used for equalising unevenness and surface roughness during repairs. May be used as a modelling material for texturing repairs on fair-faced or textured concrete, to match the aspect of surrounding surfaces.

### Material Properties

- Ready for use.
- Easy to spread.
- Covers reticular surface cracks < 0.2 mm wide.
- Economic, easy to apply.
- Plasto-elastic.
- Alkali resistant.
- Water vapour permeable.
- Reduces the effects of CO<sub>2</sub> and SO<sub>2</sub> exposure.
- Spreads nearly to base level without lapping.
- Meets the requirements of EN 1504-2 and DIN V 18026: Surface protection systems for concrete

Tested in combination with Disbocret® 515 Betonfarbe as OS-C and with Disbocret® 518 Flex-Finish as OS D-II in accordance with TL/TP OS of ZTV-ING. German general site inspection test certificates are available.

### Material Base / Vehicle

Styrene acrylate dispersion with fillers.

### Packaging/Package Size

15 lit. plastic bucket

### Colours

White.  
Special tints are available on request.

### Gloss Level

Matt to DIN EN 1062.

### Storage

Cool, dry and frost-free.  
Tightly closed, original buckets have a shelf life of min. 1 year.

### Technical Data

- Density: approx. 1.6 g/cm<sup>3</sup>
- Solids content: approx. 74 % by weight
- Dry film thickness: approx. 65 µm/100 ml/m<sup>2</sup>
- Resistance-count for diffusion µ (H<sub>2</sub>O): 2,600
- Resistance-count for diffusion µ (CO<sub>2</sub>): 680,000
- Diffusion-equivalent air layer thickness s<sub>d</sub> H<sub>2</sub>O: approx. 1.80 m (bei 700 µm Trockenschichtdicke)
- Diffusion-equivalent air layer thickness s<sub>d</sub> CO<sub>2</sub>: approx. 480 m (bei 700 µm Trockenschichtdicke)

## Application

Suitable Substrates	Normal, heavy and lightweight concrete, Disbocret® fillers/surfacers, mineral renders/ plasters and existing coatings. The adhesive tensile strength of substrates must be 1.5 N/mm <sup>2</sup> on an average, with a minimum individual value of 0.5 N/mm <sup>2</sup> .
Substrate Preparation	<p><b>Mineral substrates</b> The substrate must be sound/solid, clean and free from loose material that may prevent good adhesion. Remove all adhesion diminishing substances, e.g. oils, fats/greases, by suitable methods. Clean soiled surfaces, e.g. infested with moss and algae, and remove vitreous, unsound cement laitance by suitable blasting medium and equipment. The substrate must be free from corrosive substances (e.g. chlorides). Substrates with normal absorbency must be moistened and should show a flat moist surface before applying the Filling Coat. Prime highly absorbent mineral substrates with CapaSol LF according to the factory specification.</p> <p><b>Coated substrates</b> Check existing coatings for sufficient adhesion to the substrate and remove non-adherent coatings. Clean sound, adherent, non-chalking existing coatings. Under normal conditions a priming coat is not required. As in practice various types of coatings may occur, the planned surface coating system must be tested in advance by a trial coating to verify its functionality.</p> <p><b>Spallings (defects), pores and shrink holes</b> To achieve a uniform, sufficiently thick protective coating, all spallings, cracks, high unevenness or surface roughness must be thoroughly repaired using adequate Disbocret® System materials according to the manufacturer's recommendations. Small pores and surface roughness can be filled and equalised with Disbocret® 510 Füllschicht · Filling Coat.</p>
Preparation of Material	Disbocret® 510 is ready for use, but should be stirred before application. The material can be thinned up to 5% with tap (potable) water, depending on application method, weather conditions or substrate requirements. Manual application: The drying time may be reduced by adding up to 20% of premixed CEM I (PZ 35). Spray application: Adjust to spraying consistency by adding max. 1–2% of tap (potable) water, if necessary.
Method of Application	<p>Apply with brush, roller or spraying equipment. The material is applied in one or two coats, depending on substrate requirements, by crosswise application, filling all shrink holes and pores. If the texture of substrates must be preserved, then the material has to be applied by rubber scraper (spread to base level). If applied with cement, the trowel marks can be removed by grinding after having allowed to dry for a sufficiently long period. During airless spray application, the filter should be removed if necessary, in order to avoid clogging. Nozzle size: 0.035 inch. In Germany: Follow VOB, part C (DIN 18 363, paragraph 3.1.3). 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.</p>
Layer Thickness	Spreading on the complete surface nearly to the base level without lapping, max. 1 mm. A higher layer thickness can be achieved by multi-layered application.
Surface Coating System	After a drying time of 24 hours, Disbocret® 510 Filling Coat can be coated with the following materials: Disbocret® 515 Betonfarbe · Concrete Paint Disbocret® 518 Flex-Finish A finishing coating can be omitted, provided that Disbocret® 510 is applied in two uniform coats onto the complete surface of normal or heavy concrete. However, efflorescence or other adverse effects may occur.
Consumption	Approx. 400–700 ml/m <sup>2</sup> per coat.
Application Conditions	Min. 5 °C and max. 40 °C <b>for material, substrate and ambient air.</b>
Drying/Drying Time	At 20 °C and 65 % relative humidity: dust-dry after approx. 1 hour, rainproof after approx. 2 hours and recoatable after approx. 24 hours.
Tool Cleaning	Clean tools immediately after use with water.

## Advice

### German Certificates

- 4-1086 Testing to ZTV-ING, TL/TP OS C, P 2134/00-76 Polymer-Institute, Flörsheim
- 4-1089 Testing to ZTV-ING, TL/TP OS D II, P 2134/00-77 Polymer-Institute, Flörsheim
- 4-1031 Evaluation of diffusion characteristics: Official Institute for Material Testing (Construction Engineering) Technical University Braunschweig

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

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 containers with residues of liquid material as remnants of water-based paints and dried material as hardened paints waste or via domestic waste.

### EU limit value for the VOC content

of this product (category A/c): max. 40 g/l (2010). This product contains max. 25 g/l of VOC.

### Product Code Paints and Enamels

M-DF 02

### Further Details

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

### 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 bodys.

### Customer Service Centre

Tel.: +49 6154 71-71710  
Fax: +49 6154 71-71711  
e-mail: kundenservicecenter@caparol.de

International Distribution: Please see [www.caparol.com](http://www.caparol.com)

## Technical Information No.510 · Issue: July 2017

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