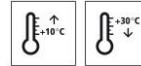


# Technical Data Sheet

## StoPur IB 510

PUR coating, viscoplastic, electrically conductive



### Characteristics

- Properties**
- electrically conductive (EN 1081, EN 61340-4-1)
  - durable
  - viscoplastic
  - as a surface that is suitable for both foot and vehicle traffic

- Appearance**
- gloss

- Information/notes**
- sensitive to humidity while curing
  - product is in accordance with EN 1504-2
  - product is in accordance with EN 13813

### Technical data

Criterion	Standard / test specification	Value/ Unit	Notes
Bond strength (28 days)	EN 1542	> 2.0 MPa	
Viscosity (at 23 °C)	EN ISO 3219	2,000 - 3,000 mPa.s	mixture
Shore hardness type D	DIN 53505-D/EN ISO 868	59 - 65	
Density (mixture 23 °C)	EN ISO 2811	1.43 - 1.52 g/cm <sup>3</sup>	
Abrasion resistance according to Taber device	EN ISO 5470-1	52 mg	CS 10/1000U/1000g, approx.

The characteristic values stated are average values or approximate values. Due to the natural raw materials in our products, the stated values can vary slightly in the same delivery batch; this does not affect the suitability of the product for its intended use.

### Substrate

- Requirements**
- Requirements on the concrete substrate:  
The substrate must be dry, load-bearing, and free from native and foreign release agents. Remove less strong layers and laitance.
- Dry in accordance with the definition of the DAfStb (German) Repair Guideline 2001-10, but depending on the compressive strength class. The moisture content may not exceed 4 CM per cent for concrete qualities up to C30/37 and max. 3 CM per cent for C35/45 concrete, measured with a calcium carbide meter.

# Technical Data Sheet

## StoPur IB 510

With mastic asphalt, 75 % of the aggregate must be exposed.

Substrate temperature higher than +10 °C and 3 K above dew point.

Average bond strength: 1.5 N/mm<sup>2</sup>

Bond strength, lowest single value: 1.0 N/mm<sup>2</sup>

### Preparations

Substrate preparation:

Prepare the substrate using a suitable mechanical process such as shot-blasting, milling and then shot-blasting, or abrasive blasting, or diamond-grinding.

### Application

#### Application conditions

Relative humidity must not exceed 70 % during the coating work and the curing phase.

#### Application temperature

lowest application temperature: +10 °C

Highest application temperature: +30 °C

#### Time for application

At +10 °C: approx. 70 minutes

at +20 °C: approx. 40 minutes

At +30 °C: approx. 25 minutes

Reworking time:

at +10 °C: approx. 24 h

at +20 °C: approx. 16 h

at +30 °C: approx. 12 h

#### Mixing ratio

Component A : component B = 100.0 : 23.0 parts by weight

#### Material preparation

Component A and Component B are supplied in the correct mixing ratio and should be mixed in accordance with the following instructions. Stir Component A, then add all of Component B.

Mix thoroughly with a slow-running paddle mixer (max. 300 rpm) until a homogeneous, streak-free compound develops. It is also vital to stir thoroughly at the sides and the bottom in order to evenly distribute the hardener.

Mixing time at least 3 minutes.

After mixing, transfer the material into a clean container and stir it thoroughly once again. Do not apply from the delivery container!

The temperature of the individual components must be min. +15 °C when mixing.

#### Consumption

Type of application

Approx. consumption

per mm layer thickness (unfilled)

1.4

kg/m<sup>2</sup>

Material consumption depends on the application, substrate, and consistency, among other factors. The stated consumption values are only to be used as a

# Technical Data Sheet

## StoPur IB 510

guide. If required, determine precise consumption values on the basis of the specific project.

### Coating build-up

electrically conductive coating for bituminous substrates  
Coating requirement for mastic asphalt screeds: (hardness class at least IC 40 in accordance with EN 13813)

- 1) Substrate preparation
- 2) Prime coating of StoPur IB 500, unfilled
- 3) Levelling filler coating (for roughness depths > 0.5 mm)
- 4) StoDivers LB 100 conductive strips (connection to ground)
- 5) StoPox WL 110 conductive layer
- 6) StoPur IB 510 top coat (unfilled)
- 7) Sealing coat of StoPur WV 210 or StoPur KV (optional)

electrically conductive coating for cementitious substrates

- 1) Substrate preparation
- 2) Prime coating of StoPox GH 205
- 3) Levelling filler coating (for roughness depths > 0.5 mm)
- 4) StoDivers LB 100 conductive strips (connection to ground)
- 5) StoPox WL 110 conductive layer
- 6) StoPur IB 510 top coat (unfilled)
- 7) Sealing coat of StoPur WV 210 or StoPur KV (optional)

### Application

electrically conductive coating for bituminous substrates  
Coating requirement for mastic asphalt screeds: (hardness class at least IC 40 in accordance with EN 13813)

- 1) Substrate preparation  
75 % of the aggregate must be exposed, bond strength 1.5 N/mm<sup>2</sup>

- 2) Prime coating of StoPur IB 500  
Trowel off StoPur IB 500 (unfilled) sharply over the exposed aggregate grain.  
Consumption of StoPur IB 500: approx. 0.5 - 1.0 kg/m<sup>2</sup>, depending on substrate roughness

- 3) Levelling filler coating (for roughness depths > 0.5 mm)  
StoPur IB 500, if necessary filled 1 : 0.3 parts by weight with StoQuarz 0.1 - 0.5 mm  
Consumption of StoPur IB 500 filled with StoQuarz 0.1 - 0.5 mm, depending on the substrate roughness: approx. 0.8 - 1.5 kg/m<sup>2</sup>

- 4) StoDivers LB conductive strips (connection to ground)  
Fix the self-adhesive conductive strips to the prepared substrate. A connection to ground is required for every 100 m<sup>2</sup> of surface. Overlap the joints of the conductive strips by 5 cm.

Pull the free ends of the StoDivers LB 100 conductive strips vertically up to the wall

# Technical Data Sheet

---

## StoPur IB 510

surface areas, then connect them to the grounding system.  
Alternatively, connect them to ground using the StoDivers LS conducting set.  
An electrician must determine the number and location of the earthing points. Only an electrician is permitted to ground the conductive strips/conducting set.

### 5) StoPox WL 110 conductive layer

Apply StoPox WL 110, approx. 10 % diluted with water, using a nylon roller (pile length 13 - 14 mm, e.g. Sto-Varnish Roller Nylon RS 13).  
consumption: approx. 0.12-0.15 kg/m<sup>2</sup>

Check the functionality of the applied conductive layer by measuring the discharge resistance before applying the subsequent top coat.

The resistance to ground may not exceed 50 kilohms.

Waiting time until the subsequent PUR coating: min. 24 hours

### 6) StoPur IB 510 top coat, electrically conductive (unfilled)

Carefully mix the StoPur IB 510 material and transfer to another container. Apply with a squeegee (48 or 95 notching, Sto-Tool Catalogue), and de-air using a spiked roller.

Consumption: approx. 2.0 kg/m<sup>2</sup>

### 7) Sealing coat of StoPur WV 210 or StoPur KV (optional)

Apply the material evenly with the Sto-Glaze Roller Micro-Fibre in a criss-cross pattern.

Consumption: approx. 0.15 - 0.2 kg/m<sup>2</sup>, depending on substrate and colour shade

Avoid direct sunlight, high temperatures, and draughts during application.

electrically conductive coating for cementitious substrates

#### 1) Substrate preparation

#### 2) Prime coating of StoPox GH 205

Apply StoPox GH 205 with a rubber squeegee, flooding until the substrate is totally free of pores, and then evenly spread the material by rolling/brushing.

Avoid the formation of puddles.

If not reworking the fresh prime coating within 48 hours using StoPox GH 205, scatter StoQuarz 0.1 - 0.5 mm over it (grain by grain). Consumption of StoPox GH 205: approx. 0.3 - 0.5 kg/m<sup>2</sup>, depending on the roughness of the substrate

Consumption of StoQuarz 0.1 - 0.5 mm: approx. 0.5 - 1.0 kg/m<sup>2</sup>

If there is a risk of rising damp, apply a self-levelling mortar within 24 hours, consisting of StoPox GH 205 and Sto Zuschlag KS (filling degree 1 : 2 wt%)

Consumption of StoPox GH 205: approx. 0.6 kg/m<sup>2</sup> and mm of layer thickness

Consumption of Sto Zuschlag KS: approx. 1.2 kg/m<sup>2</sup> and mm of layer thickness

Layer thickness: sealed pores, at least 1.5 mm

## Technical Data Sheet

---

### StoPur IB 510

3) Levelling filler coating (for roughness depths > 0.5 mm) of StoPox WG 205  
Apply a levelling filler coating consisting of StoPox GH 205 and StoQuarz 0.1 - 0.5 mm or StoQuarz 0.01 mm (filling degree 1 : 1.5 wt%). Consumption of StoPox GH 205: approx. 0.7 kg/m<sup>2</sup> and mm layer thickness  
consumption of StoQuarz 0.1 - 0.5 mm: approx. 0.5 kg/m<sup>2</sup> and mm layer thickness  
consumption of StoQuarz 0.01 mm: approx. 0.5 kg/m<sup>2</sup> and mm layer thickness

4) StoDivers LB 100 conductive strips (connection to ground)  
Affix the self-adhesive conductive strips to the prepared substrate. A connection to ground is required for every 100 m<sup>2</sup> of surface. Overlap the joints of the conductive strips by 5 cm.  
Pull the free ends of the StoDivers LB 100 conductive strips vertically up to the wall surface areas and connect them to the grounding system.  
Alternatively, connect them to ground using the StoDivers LS conducting set.  
An electrician must determine the number and location of the connections to ground. Only an electrician is permitted to ground the conductive strips/conducting set.

5) StoPox WL 110 conductive layer  
Apply StoPox WL 110, approx. 10 % diluted with water, using a nylon roller (pile length 13 - 14 mm, e.g. Sto-Varnish Roller Nylon RS 13).  
consumption: approx. 0.12-0.15 kg/m<sup>2</sup>

Check the functionality of the applied conductive layer by measuring the discharge resistance before applying the subsequent top coat.  
The resistance to ground may not exceed 50 kilohms.  
Waiting time until the subsequent PUR coating: min. 24 hours

6) StoPur IB 510 top coat, electrically conductive (unfilled)  
Carefully mix the StoPur IB 510 material and transfer to another container. Apply with a squeegee (48 or 95 notching, Sto-Tool Catalogue), and de-air using a spiked roller.  
Consumption: approx. 2.0 kg/m<sup>2</sup>

7) Sealing coat of StoPur WV 210 or StoPur KV (optional)  
Apply the material evenly with the Sto-Glaze Roller Micro-Fibre in a criss-cross pattern.  
Consumption: approx. 0.15 - 0.2 kg/m<sup>2</sup>, depending on substrate and colour shade

#### Notes:

Avoid direct sunlight, high temperatures, and draughts during application.  
Do not exceed the material consumption of 2.5 kg/m<sup>2</sup> of StoPur IB 510, as otherwise the required electrostatic conductivity can no longer be guaranteed.  
To avoid accumulating fibres in just certain areas, apply the material using a squeegee with coarse notching (notching 48 or 95) and immediately re-spike.  
The fibres visible have been inserted to guarantee conductivity; they are not a visual defect.  
StoPur IB 510 has a strong tendency to yellow under UV radiation. Lighter colour

# Technical Data Sheet

## StoPur IB 510

shades are particularly affected. Repairs and connections made to existing surfaces are therefore visible.  
Applying a suitable sealant can improve UV resistance.  
When working with polyurethanes, ensure that the material does not come into contact with water during application and curing, as this leads to reaction bubbles (foam formation).

<b>Cleaning the tools</b>	Clean with StoDivers EV 100 immediately after use.
---------------------------	--

<b>Notes, recommendations, special information, miscellaneous</b>	The abrasion resistance class specified in the CE marking refers to the smooth, not scattered covering. General application instructions are available at <a href="http://www.stocretec.de">www.stocretec.de</a> and in the notes of the latest Technical Manual.
---	--

### Delivery

<b>Colour shade</b>	wide colour shade variety, RAL colour fan
---------------------	---

Article number	Name	Container
09349/002	StoPur IB 510 Set tinted	30 kg set

### Storage

<b>Storage conditions</b>	Store in dry and frost-free conditions. Avoid direct sunlight.
---------------------------	--

<b>Storage life</b>	In the original container until ... (see packaging).
---------------------	--

### Identification

<b>Product group</b>	Coating
----------------------	---------

<b>Safety</b>	This product is subject to compulsory labelling in accordance with the current EU regulation.
---------------	---

You will receive an EU Safety Data Sheet with your first order.

Please observe the information regarding the handling of the product, its storage, and disposal.

### Special notes

The information in this Technical Data Sheet serves to ensure the product's intended use, or its suitability for use, and is based on our findings and experience. Users are nevertheless

# Technical Data Sheet

---

## StoPur IB 510

responsible for establishing the product's suitability and use.

Applications not specifically mentioned in this Technical Data Sheet are permissible only after prior consultation. Where no approval is given, such applications are at the user's own risk. This applies in particular when the product is used in combination with other products.

When a new Technical Data Sheet is published, all previous Technical Data Sheets are no longer valid. The latest version is available on the Internet.

StoCretec GmbH  
Gutenbergstr. 6  
D-65830 Kriftel

Tel.: +49 6192 401-104  
Fax: +49 6192 401-105  
stocretec@sto.com  
www.stocretec.de