

Technical Data Sheet

StoPur BB 100

PUR coating, high-quality visual characteristics,
low-emission



Characteristics

Area of application

- interior
- as coloured floor coating with a decorative style
- on cementitious substrates
- on hard mastic asphalt screeds

Properties

- visually appealing finish
- low VOC emissions
- viscoplastic
- structurally crack-bridging
- damps sound of impacts

Appearance

- gloss, silk matt, or matt, depending on the sealant used

Information/notes

- product is in accordance with EN 1504-2
- product is in accordance with EN 13813
- sensitive to humidity while curing

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	2,800 - 4,200 mPa.s	Mixture
Shore hardness type D	DIN 53505-D/EN ISO 868	34 - 40	
Density (mixture 23 °C)	EN ISO 2811	1.42 - 1.50 g/cm ³	

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

Technical Data Sheet

StoPur BB 100

agents. Remove weak layers and laitance.

Dry in accordance with the definition of the DAfStb (German) Repair Guideline 2001-10, but depending on the compressive strength class. Residual moisture may amount to max. 4 wt% for concrete in strength classes up to C30/37 and max. 3 wt% for C35/45 concrete, measured with a calcium carbide meter.

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

Substrate temperature higher than +12 °C and 3 K above dew point.

Average bond strength 1.5 N/mm²

Lowest single bond strength value 1.0 N/mm²

Preparations

Substrate preparation:

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

Application

Application conditions

The relative air humidity may not exceed 75 % during coating work.

Application temperature

Lowest application temperature: +12 °C

Highest application temperature: +30 °C

Maximum approved relative humidity 75 %

Time for application

At +12 °C: approx. 45 minutes

At +20 °C: approx. 30 minutes

At +30 °C: approx. 15 minutes

Reworking time:

at +10 °C: approx. 32 h

at +20 °C: approx. 18 h

at +30 °C: approx. 14 h

Mixing ratio

Component A : component B = 100.0 : 30.0 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 is at least 3 minutes.

After mixing, pour the compound into a clean container and mix again.

Do not apply from the delivery container!

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

Technical Data Sheet

StoPur BB 100

Consumption

Type of application	Approx. consumption
per mm layer thickness (unfilled)	1.4 kg/m ²

Material consumption depends on the application, substrate, and consistency, among other factors. The stated consumption values are only to be used as a guide. If required, determine precise consumption values on the basis of the specific project.

Coating build-up

Visually high-quality coating on mastic asphalt.

- 1) Substrate preparation
- 2) Prime coating of StoPox 452 EP
- 3) Scratch coat of StoPox 452 EP
- 4) Covering layer of StoPur BB 100
- 5) Chips scattering (optional) of StoChips 1 mm / StoChips 3 mm (loose scattering)
- 6) Sealing coat of StoPur WV 100 transparent (gloss) or StoPur WV 150 transparent (silk matt), or StoPur WV 205 transparent (matt)
- 7) Floor finish using StoDivers P 105 / StoDivers P 120

Visually high-quality coating on cementitious substrates

- 1) Substrate preparation
- 2) Prime coating of StoPox GH 205
- 3) Scratch coat of StoPox GH 205
- 4) Covering layer of StoPur BB 100
- 5) Chips scattering (optional) of StoChips 1 mm / StoChips 3 mm (loose scattering)
- 6) Sealing coat of StoPur WV 100 transparent (gloss) or StoPur WV 150 transparent (silk matt), or StoPur WV 205 transparent (matt)
- 7) Floor finish using StoDivers P 105 / StoDivers P 120

Application

Visually high-quality coating on mastic asphalt.

coating requirement for mastic asphalt screeds: (quality class min. IC 40 in accordance with EN 13813)

- 1) Substrate preparation

75 % of the aggregate must be exposed, bond strength 1.5 N/mm²

- 2) Prime coating of StoPox 452 EP

Flood-apply StoPox 452 EP 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.

Consumption: approx. 0.3 - 0.6 kg/m², depending on the roughness of the substrate

The StoPur BB 100 coating must be applied within 72 hours. Do not scatter the filler and levelling coat.

- 3) Scratch coat of StoPox 452 EP

Fill StoPox 452 EP approx. 1:1.5 parts by weight with a mixture of 50 % StoQuarz 0.01 mm and 50 % StoQuarz 0.1 - 0.5 mm and apply it using a smoothing trowel or

Technical Data Sheet

StoPur BB 100

squeegee with triangular notching. Then de-air the coating using a spiked roller.
Consumption of StoPox 452 EP: approx. 0.7 - 0.8 kg/m² and mm of layer thickness

The StoPur BB 100 coating must be applied within 72 hours. Do not scatter the filler and levelling coat.

4) Covering layer of StoPur BB 100

Apply StoPur BB 100 with a notched squeegee (notching 48 or 95, Sto tool catalogue).

Consumption of StoPur BB 100 (unfilled): approx. 2.5 kg/m²

5) Chips scattering (optional) of StoChips 1 mm/StoChips 3 mm (loose scattering)
StoChips 1 mm/StoChips 3 mm can be added to StoPur BB 100 to provide it with a visually high-quality design. Scatter the StoChips into the fresh coating.

Consumption of StoChips 1 mm or StoChips 3 mm (loose scattering): approx. 0.05 kg/m²

6) Gloss sealing coat of StoPur WV 100 transparent, silk matt sealing coat of StoPur WV 150 transparent, or matt sealing coat of StoPur WV 205 transparent
Apply StoPur WV 100 transparent / StoPur WV 150 transparent / StoPur WV 205 transparent using a short-pile lacquer roller and working in a criss-cross pattern.
Consumption: approx. 0.1 - 0.2 kg/m²

7) Floor finish using StoDivers P 105 / StoDivers P 120

When the industrial flooring is clean and has cured, evenly apply a thin layer of floor finish. Apply the material using a pre-dampened, lint-free mop. Leave the floor to dry sufficiently, approx. 20 - 30 min.

Carry out the second application cycle at right angles (perpendicular) to the previous application. It is very important to observe the specified drying times between application cycles. Depending on the expected stress, several application cycles may be necessary.

Apply the StoDivers P 105 floor finish at the earliest 2 days after applying StoPur WV 150 or StoPur WV 100.

Consumption: approx. 30 - 50 ml/m² per application cycle

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

The gloss levels of the silk matt StoPur WV 150 transparent sealing coat and the matt StoPur WV 205 transparent sealing coat are increased by the StoDivers P 120 or the StoDivers P 105 floor finish.

Visually high-quality coating on cementitious substrates.

1) Substrate preparation

2) Prime coating of StoPox GH 205

Flood-apply StoPox GH 205 with a rubber squeegee and evenly spread it by subsequent rolling/brushing.

Avoid the formation of puddles.

Technical Data Sheet

StoPur BB 100

The StoPur BB 100 coating must be applied within 48 hours. Scattering should be avoided.

Consumption of StoPox GH 205: approx. 0.3 - 0.5 kg/m², depending on the roughness of the substrate

3) Scratch coat of StoPox GH 205

Fill StoPox GH 205 approx. 1:1.5 parts by weight with a mixture of 50 % StoQuarz 0.01 mm and 50 % StoQuarz 0.1 - 0.5 mm and apply it using a smoothing trowel or squeegee with triangular notching. Then de-air the coating using a spiked roller.

Consumption of StoPox GH 205: approx. 0.7 - 0.8 kg/m²/mm of layer thickness

The StoPur BB 100 coating must be applied within 48 hours. Do not scatter the filler and levelling coat.

4) Covering layer of StoPur BB 100

Apply StoPur BB 100 with a notched squeegee (notching 48 or 95, Sto tool catalogue).

Consumption of StoPur BB 100 (unfilled): approx. 2.5 kg/m²

5) Chips scattering (optional) of StoChips 1 mm/StoChips 3 mm (loose scattering)

StoChips 1 mm / StoChips 3 mm can be added to StoPur BB 100 to provide it with a visually high-quality design. Scatter the StoChips into the fresh coating.

Consumption of StoChips 1 mm or StoChips 3 mm (loose scattering): approx. 0.05 kg/m²

6) Gloss sealing coat of StoPur WV 100 transparent, silk matt sealing coat of StoPur WV 150 transparent, or matt sealing coat of StoPur WV 205 transparent
Apply StoPur WV 100 transparent / StoPur WV 150 transparent / StoPur WV 205 transparent using a short-pile lacquer roller and working in a criss-cross pattern.
Consumption: approx. 0.1 - 0.2 kg/m²

7) Floor finish using StoDivers P 105 / StoDivers P 120

When the industrial flooring is clean and has cured, evenly apply a thin layer of floor finish. Apply the material using a pre-dampened mop. Leave the floor to dry sufficiently, approx. 20 - 30 min.

Carry out the second application cycle at right angles (perpendicular) to the previous application. It is very important to observe the specified drying times between application cycles. Depending on the expected stress, several application cycles may be necessary.

Consumption: approx. 30 - 50 ml/m² per application cycle

Avoid direct sunlight, high temperatures, and draughts during application.
Please observe: the StoDivers P 120 or StoDivers P 105 floor finish increases the gloss level of silk matt coatings such as StoPur WV 150.

Note:

Depending on exposure to chemicals, discolourations can occur. These do not,

Technical Data Sheet

StoPur BB 100

however, impair the technical function of the coating.

When working with polyurethane, make sure that the material does not come into contact with water during curing, as this can lead to reaction bubbles (foam formation).

If StoPur BB 100 is matted with StoPur WV 150 transparent or StoPur WV 205 transparent, the underlying colour shade will become lighter.

This should be particularly observed when matting dark and bright colour shades.

Roller marks might be visible, due to applying the sealer manually.

The natural raw materials contained in the product can lead to a minor change in colour shade over time.

This particularly affects white and very light colour shades.

If using office chairs on the floor, these must be equipped with type "W" castors in accordance with DIN EN 12529.

Further useful information about the application can be found in the StoPur BB 100 guidelines.

Cleaning the tools

Clean with StoDivers EV 100 immediately after use.

Notes, recommendations, special information, miscellaneous

The abrasion resistance class specified in the CE marking refers to the smooth, not scattered covering.
General application instructions can be found at www.stocretec.de (Products) and in the latest issue of the "Technical Data Sheets" manual, in the appendix.
The Declaration(s) of Conformity can be obtained from the StoCretec Technisches InfoCenter

Delivery

Colour shade

wide colour shade variety, RAL colour fan, limited tintability in accordance with the StoColor System

Article number	Name	Container
03778/005	StoPur BB 100 Set tinted	25 kg set
03778/003	StoPur BB 100 Combi tinted	10 kg combi

Storage

Storage conditions

Store in dry and frost-free conditions; avoid direct sunlight.

Storage life

In the original container until ... (see packaging).

Technical Data Sheet

StoPur BB 100

Identification

Product group Coating

Safety

This product is subject to compulsory labelling in accordance with the current EU regulation.
Observe the Safety Data Sheet!

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 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