Technical Data Sheet
StoPur IB 500

PUR coating, viscoplastic

Characteristics

Area of application

- interior
- as a coloured coating for industrial flooring
- on cementitious substrates
- on hard mastic asphalt screeds

Properties

- durable
- structurally crack-bridging
- viscoplastic
- as surface 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	1,800 - 2,700 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/cm³	
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

Technical Data Sheet
StoPur IB 500

Requirements	Requirements on the concrete substrate: The substrate must be dry, load-bearing, and free from native and foreign release 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 +10 °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	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 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 min. +15 °C when mixing.

Technical Data Sheet
StoPur IB 500

Consumption

Type of application	Approx. consumption	
per mm layer thickness (unfilled)	1.4	kg/m²

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

Industrial floor coating on mastic asphalt, medium mechanical stress
1) Substrate preparation
2) Prime coating of StoPur IB 500, unfilled
3) Coating of StoPur IB 500
4) Sealing coat of StoPur WV 100 / 150 / 200 or StoPox MS 200 (optional)
5) Floor finish using StoDivers P 105/StoDivers P 120 (optional)

Industrial floor coating on cementitious substrates, medium mechanical stress
1) Substrate preparation
2) Prime coating of StoPox GH 205
3) Coating of StoPur IB 500
4) Sealing coat of StoPur WV 100 / 150 / 200 or StoPox MS 200 (optional)
5) Floor finish using StoDivers P 105/StoDivers P 120 (optional)

Application

Industrial floor coating on mastic asphalt, medium mechanical stress.
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/mm²

2) Prime coating of StoPur IB 500
Trowel off StoPur IB 500 (unfilled) sharply over the exposed aggregate grain. In the case of roughness depths > 0.5 mm, a levelling filler coating is recommended, if necessary, filled 1 : 0.3 with StoQuarz 0.1 - 0.5 mm.

If no further coating is applied within the interim period (max. 24 hours), scatter the prime coating with quartz sand 0.3 - 0.8 mm or quartz sand 0.1 - 0.5 mm.
Consumption of StoPur IB 500: approx. 0.5 - 1.0 kg/m², depending on the substrate roughness
Consumption of StoQuarz 0.3 - 0.8 mm or StoQuarz 0.1 - 0.5 mm: approx. 0.5 - 1.0 kg/m²

3) Top coat of StoPox IB 500
Apply StoPur IB 500 with a notched squeegee (notching 48 or 95, Sto-Tool Catalogue) and de-air it using a spiked roller in a criss-cross pattern.
For layer thicknesses > 1 mm StoPur IB 500 can be additionally filled with StoQuarz 0.1 - 0.5 mm (filling degree 1 : 0.3 wt%)
The minimum layer thickness depends on the substrate and the desired appearance.

On smooth substrates, layer thicknesses < 0.5 mm normally lead to surface defects.
Consumption of StoPur IB 500 (unfilled): approx. 1.8 - 2.2 kg/m²

4) Sealing coat of StoPur WV 100/150/200 coloured or StoPox MS 200 (optional)
Apply the respective sealer using a roller in a criss-cross pattern in order to obtain a glossy, silk matt, or matt, UV-resistant surface.

Consumption: approx. 0.15 - 0.2 kg/m²

5) Floor finish using StoDivers P 105/StoDivers P 120 (optional)
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.

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

Industrial floor coating on cementitious substrates, medium mechanical stress.
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 StoPur IB 500, scatter StoQuarz 0.1 - 0.5 mm over it (grain by grain).
Consumption of StoPox GH 205: approx. 0.3 - 0.5 kg/m², depending on the roughness of the substrate
Consumption of StoQuarz 0.1 - 0.5 mm: approx. 0.5 - 1.0 kg/m²

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/m² and mm of layer thickness
Consumption of Sto Zuschlag KS: approx. 1.2 kg/m² and mm of layer thickness
Layer thickness: sealed pores, at least 1.5 mm

3) Top coat of StoPox IB 500
Apply StoPur IB 500 with a notched squeegee (notching 48 or 95, Sto-Tool Catalogue) and de-air it using a spiked roller in a criss-cross pattern.
For layer thicknesses > 1 mm StoPur IB 500 can be additionally filled with StoQuarz 0.1 - 0.5 mm (filling degree 1 : 0.3 wt%)

The minimum layer thickness depends on the substrate and the desired appearance.
On smooth substrates, layer thicknesses < 0.5 mm normally lead to surface defects.
Consumption of StoPur IB 500 (unfilled): approx. 1.8 - 2.2 kg/m²

4) Sealing coat of StoPur WV 100/150/200 coloured or StoPox MS 200 (optional)
Apply the respective sealer using a roller in a criss-cross pattern in order to obtain a glossy, silk matt, or matt, UV-resistant surface.

Consumption: approx. 0.15 - 0.2 kg/m²

5) Care treatment using StoDivers P 105/120
When the industrial flooring is clean and has cured, evenly apply a thin layer of care treatment.
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.
Consumption: approx. 30 - 50 ml/m² per application cycle

Notes:
Avoid direct sunlight, high temperatures, and draughts during application.
The gloss level of matt sealing coats, such as StoPur WV 150, StoPur WV 200, and StoPox MS 200, is increased by applying the StoDivers P 105/120 floor finish.
StoPur IB 500 has a strong tendency to yellow under the influence of UV light. Lighter colour 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).

Cleaning the tools	Clean with StoDivers EV 100 immediately after use.
Notes, recommendations, special information, miscellaneous	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.

Delivery

Colour shade wide colour shade variety, RAL colour fan

Article number	Name	Container

Technical Data Sheet
StoPur IB 500

	09348/001	StoPur IB 500 Set tinted	30 kg set

Storage

Storage conditions	Store in dry and frost-free conditions; avoid direct sunlight.
Storage life	In the original container until ... (see packaging).

Identification

Product group	Coating

Safety

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 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