Technical Data Sheet
StoPur EZ 502

PUR wearing course for tested and approved surface protection systems for traffic structures

Characteristics

Area of application

- interior
- exposed to the weather
- as a wearing course in the tested StoCretec OS 11 a.20 surface protection system

Properties

- mechanical resistance
- dynamic crack bridging
- can be filled with quartz sand on-site

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	
Shore hardness type D	EN ISO 868	73	
Density (mixture 23 °C)	EN ISO 2811	1.41 g/cm³	

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

General:
- Dry, load-bearing
- Free from separating, native, or foreign substances
- Remove weak layers.
- Remove any accumulation of fine concrete particles on the surface.

Dry substrate:
- Depends on the compressive strength class

	- Dry in accordance with the definition contained in the DAfStb (German Committee for Reinforced Concrete) Repair Guideline 2001-10 Moisture content: - Measure the moisture content of the concrete substrate with a calcium carbide meter. - Moisture content for concrete qualities up to C30/37: max. 4 CM per cent - Moisture content for concrete qualities up to C35/45: max. 3 CM per cent Substrate temperature: at least +10 °C, 3 K above the dew point Bond strength, average: 1.5 N/mm² Bond strength, lowest single value: 1.0 N/mm²
Preparations	1) Prepare all the above-mentioned substrates using a mechanical method, see “Substrate, requirements”. Example: - Shot-blasting - Milling followed by shot-blasting - Abrasive blasting

Application

Application temperature	substrate and air temperature minimum temperature: +10 °C Maximum temperature: +30 °C Application temperature: minimum temperature: +10 °C Maximum temperature: +30 °C Relative humidity: maximum: 80 %
Time for application	at +10 °C: approx. 40 minutes At +20 °C: approx. 30 minutes At +30 °C: approx. 15 minutes
Mixing ratio	component A : component B A : B 100.0 : 24.0 parts by weight
Material preparation	Notes: - Component A and Component B are supplied in the correct mixing ratio and should be mixed in accordance with the following instructions: - Observe the order of the “Preparing material” steps. - The material temperature is between +10 °C and +25 °C. - The temperature of all components is between +10 °C and +25 °C.

Mixing time:
- The length of the mixing time depends on the temperature of the material and the ambient temperature.
- Mix each container for the same length of time.

Possible consequences if mixing times are too long or too short:
- Mixing the product too long will shorten the time for application.

Preparing material:
1) Stir component A.
2) Add all of Component B.
3) Mix the components until the hardener is well distributed, the mixture is homogeneous, and a streak-free mass is produced.
Paddle mixer: slow running mixer, max. 300 rpm
Mixing time: at least 3 minutes
4) Ensure the the mixing equipment covers the floor areas and the edge zones of the mixing container. The hardener must be evenly distributed.
5) Transfer the mixture to a clean container. Mix the components again.

Consumption

Type of application	Approx. consumption	
as a wearing course	1.9	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

A: OS 11a.20 surface protection system
1) Prepare the substrate.
2) Priming: StoPox GH 531
3) Scatter: StoQuarz 0.3-0.8 mm
4) Apply a crack-bridging, elastic floating layer, main effective surface protection layer: StoPur EZ 500
5) Applying a wearing course: StoPur EZ 502
6) Scatter: StoQuarz 0.3-0.8 mm
7) Sealing coat: StoPox DV 502

Application

A: OS 11a.20 surface protection system

1) Prepare the substrate.

2) Priming:
- StoPox GH 531
- Flood apply the product without pores. Tools: rubber squeegee
- Rework the product and spread evenly with a roller. Tools: short-pile roller sleeve

- consumption: approx. 0.3-0.4 kg/m² depending on the absorption capacity of the substrate
- Note: Avoid the formation of puddles.

3) Scatter:
- StoQuarz 0.3-0.8 mm
- Do not scatter an excess of the fresh prime coating.
- consumption: approx. 0.5 kg/m²

4) Apply a crack-bridging, elastic floating layer, main effective surface protection layer:
- StoPur EZ 500
- Remove the unbound quartz sand.
- Apply the product unfilled without quartz sand. Tools: squeegee, e.g. Sto-Notched Blade, notching: 95
- Spread the product evenly and de-air. Tools: spiked roller
- consumption: approx. 2.1 kg/m² at a roughness depth of 0.5 mm
- consumption: approx. 2.6 kg/m² at a roughness depth of 1.0 mm
- Note: Use spiked soles with straight-edged nails during scattering or de-airing to prevent damage to the membrane.

Note!
Overcoat the unscattered elastic floating layer:
- at +10 °C: within 72 h
- at +30 °C: within 18 h
- for details on the overcoating intervals: see the implementation instructions, Appendix A of the certificate of compliance DIN V 18026
- If the surface protection system OS 11 is applied to sloped surfaces: at an inclination of approx. 10 %, the elastic floating layer and wearing course must be applied in several application cycles to obtain the required layer thicknesses.

5) Applying a wearing course:
- StoPur EZ 502, filled with StoQuarz 0.1–0.5 mm
- mixing ratio: 1.0 parts by weight of StoPur EZ 502, 0.2 parts by weight of StoQuarz 0.1-0.5 mm
- Apply the product filled with quartz sand. Tools: squeegee, e.g. Sto-Notched Blade, notching: 48, 95
- Spread the product evenly and de-air. Tools: spiked roller
- consumption of StoPur EZ 502: approx. 1.9 kg/m²
- consumption of StoQuarz 0.1-0.5 mm: approx. 0.4 kg/m²
- Note: Use spiked soles with straight-edged nails during scattering or de-airing to prevent damage to the membrane.

6) Scatter:
- StoQuarz 0.3-0.8 mm
- Scatter the surface full-faced in excess.
- consumption: approx. 4-5 kg/m²

7) Sealing coat:
- StoPox DV 502
- Remove the unbound quartz sand.
- Apply the product evenly in a criss-cross pattern. Tools: rubber squeegee
- Rework the product and spread evenly in a criss-cross pattern with a roller. Tools: short-pile roller sleeve
- consumption StoPox DV 502: approx. 0.6-0.8 kg/m²

Notes:
Tested coating system:
- material consumption in accordance with the DAfStb (German Committee for Reinforced Concrete) directive, edition October 2001: see the instructions for implementation, Appendix A of the certificate of complianceDIN V 18026

UV stress, colour shade deviation:
- Any yellowing which occurs under UV stress does not impair the technical properties. It is especially important to observe this when using light colour shades.
- Exposure of the chemicals may cause discolourations, which do not, however, impair the technical function of the coating.
- Slight deviations in the colour shade are possible between different batches.

Substrate temperature, ambient temperature:
- In addition to the ambient temperature, the substrate temperature is vital for the application of reaction resins.
- Low temperatures delay the chemical reactions.
- This extends the time for application, overcoating, and walking on it.
- The consumption per surface unit may rise due to increasing viscosity.
- High temperatures accelerate chemical reactions, reducing the time for application, overcoating, and walking on it.

Consumption, application:
- The details on consumption and application relate to horizontal surfaces.
- On inclinations: test a sample surface area first. If required, work in multi-layers and add thixotropic additive or more quartz sand to the materials.

Drying, curing, ready for next coat	suitable for foot traffic: after approx. 12 hours subsequent coating: within 18-36 hours
Cleaning the tools	Clean tools with StoDivers EV 100 or StoCryl VV.
Notes, recommendations, special information, miscellaneous	1) Observe the general application instructions: - see www.stocretec.de, products - see the technical data sheets manual, annex 2) Observe the implementation instructions. Declaration of performance, CE marking:

- declaration of performance: see www.stocretec.de
- The abrasion resistance specified in the declaration of performance refers to the smooth, not scattered covering.

Delivery

Colour shade	grey, it is not possible to guarantee colour consistency
Packaging	pail

Article number	Name	Container
01773/001	StoPur EZ 500 Set	25 kg set

Storage

Storage conditions	Store in dry and frost-free conditions. Protect from direct sunlight.
Storage life	The product quality is best guaranteed in its unopened original container until its shelf life has expired. The first digit of the batch number is the final digit of the year. The second and third digits indicate the calendar week. Example: 1450013223 - shelf life until end of calendar week 45 in 2021. See product 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.

Technical Data Sheet

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