Technical Data Sheet
StoPox DV 502

EP sealer for tested and approved surface protection systems for traffic structures

Characteristics

Area of application

- interior
- exposed to the weather
- on floors
- as an elastic sealing coat on scattered, self-levelling coatings
- in areas where skid resistance is required
- as a component of the tested StoCretec OS 8.17, OS 11a.20, OS 11b.20 surface protection systems

Properties

- mechanical resistance
- resistant to chemicals

Appearance

- gloss

Information/notes

- product is in accordance with EN 1504-2
- product is in accordance with EN 13813
- various test certificates

Technical data

Criterion	Standard / test specification	Value/ Unit	Notes
Bond strength	EN 1542	> 1,5 MPa	
Viscosity (at 23 °C)	EN ISO 3219	1.200 - 1.800 mPa.s	mixture
Shore hardness type D	DIN 53505-D/EN ISO 868	79	
Density (mixture 23 °C)	EN ISO 2811	1,44 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 the scatter sand which has not been integrated. - Remove any accumulation of fine concrete particles on the surface. Dry substrate: - Depends on the compressive strength class - Dry according to the definition contained in the DAfStb (German) Repair Guideline, issue 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: - Sweep - Suction clean 2) Check the coatings for resistance.

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: 85 %
Time for application	at +23 °C: approx. 20 minutes
Mixing ratio	component A : component B A : B 100.0 : 22.0 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 +15 °C and +25 °C.
- The temperature of all components is between +15 °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 the 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 that the mixing equipment covers the bottom and the rim areas 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 sealing coat, depending on the substrate	0,6 - 1,0	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: surface protection system OS 8
1) Prepare the substrate.
2) Apply the priming coat and self-levelling filler: StoPox GH 500
3) Scatter: StoQuarz 0.3-0.8 mm
4) Sealing: StoPox DV 502

B: StoCretec OS 11b.20 surface protection system
1) Prepare the substrate.
2) Priming: StoPox GH 500
3) Scatter: StoQuarz 0.3-0.8 mm
4) Apply an elastic floating layer and a wearing course: StoPur EZ 500
5) Scatter: StoQuarz 0.3-0.8 mm
6) Sealing: StoPox DV 502

C: OS 11a.20 surface protection system
1) Prepare the substrate.
2) Primer: 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: StoPox DV 502

Application

A: surface protection system OS 8

Notes:
- Application of the OS 8 surface protection systems: see the DIN V 18026 implementation instructions.
- coating build-up, layer thickness: 2.5 mm

1) Prepare the substrate.

2) Apply the priming coat and self-levelling filler:
- StoPox GH 500, filled with StoQuarz 0.1-0.5 mm
- mixing ratio: 1.0 parts by weight of StoPox GH 500, 1.0 parts by weight of StoQuarz 0.1-0.5 mm
- consumption of StoPox GH 500: approx. 0.8 kg/m²
- consumption of StoQuarz 0.1-0.5 mm: approx. 0.8 kg/m²

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

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

B: OS 11b surface protection system

Notes:
- Application of the OS 11 surface protection systems: see the DIN V 18026 implementation instructions.
- Material consumption increases at low material and on-site temperatures.

1) Prepare the substrate.

2) Priming:

- StoPox GH 500
- Flood apply the product without pores. Tools: rubber squeegee
- Rework the product with a roller and spread evenly. Tools: short-pile roller sleeve
- consumption: approx. 0.3-0.4 kg/m², depending on the roughness 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. 0.3-0.8 kg/m²

4) Apply an elastic floating layer and a wearing course:
- StoPur EZ 500, filled with StoQuarz 0.1-0.5 mm
- Waiting time: Apply the elastic floating layer and wearing course after 12-24 hours, and after removing the unbound quartz sand.
- mixing ratio for the self-levelling mortar: 1.0 parts by weight of StoPur EZ 500, 0.3 parts by weight of StoQuarz 0.1-0.5 mm
- Apply the self-levelling mortar in the required layer thickness.
- consumption of StoPur EZ 500: approx. 2.3 kg/m²
- consumption of StoQuarz 0.1-0.5 mm: approx. 0.75 kg/m²
- Note: The extender and filling degree can be adjusted for inclinations > 2 % or due to climate conditions.

5) Scatter:
- StoQuarz 0.3-0.8 mm
- Scatter the surface full-faced in excess.
- Recommendation: Scatter heavily stressed surfaces according to the grain size, e.g. with DUROP or with granite chippings from Röhrig. see http://www.roehrig-granit.de
- consumption of StoQuarz 0.3-0.8 mm: approx. 4-6 kg/m²
- consumption of DUROP or granite chippings: approx. 5-8 kg/m²

6) Sealing:
- 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: approx. 0.6-1.0 kg/m², depending on the scattering

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C: OS 11a.20 surface protection system

Notes:
- Application of the OS 11 surface protection systems: see the DIN V 18026 implementation instructions.
- Material consumption increases at low material and on-site temperatures.

1) Prepare the substrate.

2) Priming:
- StoPox GH 531
- Flood apply the product without pores. Tools: rubber squeegee
- Rework the product with a roller and spread evenly. Tools: short-pile roller sleeve
- consumption: approx. 0.4 kg/m²

3) Scatter:
- StoQuarz 0.3-0.8 mm
- Do not scatter an excess of the fresh prime coating.
- consumption: approx. 0.5-1.0 kg/m²

4) Apply a crack-bridging, elastic floating layer, main effective surface protection layer:
- StoPur EZ 500
- Apply the product unfilled without quartz sand. layer thickness: at least 1.5 mm, tool: squeegee with triangular notching
- Rework the product in a criss-cross pattern for ventilation. tools spiked roller
- consumption: approx. 2.1 kg/m²
- Note: Use spiked soles with straight-edged nails during scattering or de-airing to prevent damage to the membrane.

5) Applying a wearing course:
- StoPur EZ 502, filled with StoQuarz 0.1–0.5 mm
- Waiting time: Apply the wearing course after 18-36 hours.
- mixing ratio for the self-levelling mortar: 1.0 parts by weight of StoPur EZ 502, 0.2 parts by weight of StoQuarz 0.1-0.5 mm
- Apply the self-levelling mortar in the required layer thickness.
- consumption of StoPur EZ 502: approx. 1.9 kg/m²
- consumption of StoQuarz 0.1-0.5 mm: approx. 0.4 kg/m²

6) Scatter:
- StoQuarz 0.3-0.8 mm
- Scatter the surface full-faced in excess.
- Recommendation: Scatter heavily stressed surfaces according to the grain size, e.g. with DUROP or with granite chippings from Röhrig. see http://www.roehrig-granit.de
- consumption of StoQuarz 0.3-0.8 mm: approx. 5-6 kg/m²
- consumption of DUROP or granite chippings: approx. 5-8 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: approx. 0.6-0.8 kg/m², depending on the scattering

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Note:

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. This is especially important to observe 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.

Sealing coat:
- layer thickness: < 0.5 mm
- Mechanical use reduces the layer thickness. This can shorten the service life.

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.

Curing:
- full chemical and mechanical resistance: after 7 days at +23 °C
- Low temperatures delay curing.
- During curing: water on the surface can cause carbamate formation and give the surface a whitish appearance. Moisture can cause a sticky surface.

Drying, curing, ready for next coat	suitable for foot traffic: after approx. 18 hours completely cured: after approx. 7 days All technical details are approximate values and were determined, unless otherwise stated, at a normal temperature of +23 °C, 50 % relative humidity, and using the standard colour shade RAL 7032.

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Cleaning the tools	Clean tools with StoDivers EV 100 or StoCryl VV.
Notes, recommendations, special information, miscellaneous	Frequent temperature and chemical exposure: visual changes may occur, e.g. discolouration. 1) Observe the general application instructions: - see www.stocretec.de, Products - see technical manual, notes 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	RAL colour fan, wide colour shade variety
Packaging	Pail

Article number	Name	Container
01775/005	StoPox DV 502 Set RAL7037	30 kg set
01775/004	StoPox DV 502 Set RAL7035	30 kg set
01775/003	StoPox DV 502 Set RAL7032	30 kg set
01775/002	StoPox DV 502 Set RAL7030	30 kg set
01775/001	StoPox DV 502 Set tinted	30 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	Sealing coat

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GISCODE	RE90

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.

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