

Technical Data Sheet

StoPur AC 500 S

PUR coating for increased requirements, tested and approved surface protection systems for traffic structures



Characteristics

Area of application	- interior - exposed to the weather - as a coating for floor areas subject to vehicle traffic in multi-storey car parks and underground car parks - as asphalt overlay in the surface protection systems: OS 10.5 and OS 10.21 from StoCretec
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Properties	viscoplastic
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Information/notes	- product is in accordance with EN 1504-2 - product is in accordance with EN 13813
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Technical data

Criterion	Standard / test specification	Value/ Unit	Notes
Viscosity (at 23 °C)	EN ISO 3219	1.800 - 2.200 mPa.s	mixture
Shore hardness type D	EN ISO 868	65	(28 days)
Density (mixture 23 °C)	EN ISO 2811	1,1 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 in EN 1504-10
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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 +5 °C, 3 K above the dew point Bond strength, average: 1.5 N/mm²

Bond strength, lowest single value: 1.0 N/mm²

Preparations

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: +5 °C
Maximum temperature: +25 °C

Application temperature:
minimum temperature: +5 °C
Maximum temperature: +25 °C

Relative humidity:
minimum: 30 %
maximum: 80 %

Time for application

At +23 °C: approx. 15 minutes

Mixing ratio

component A : component B
A : B
100.0 : 47.0 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.

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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.

Mixing paddle: slow running mixer, maximum 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 wearing course	1,2 - 1,3	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

A: crack-bridging build-up, surface protection system OS 10.21

- 1) Prepare the substrate.
- 2) Priming: StoPox GH 500
- 3) Scatter: StoQuarz 0.3-0.8 mm
- 4) Apply a crack-bridging, sealing layer: StoPur SC 300
- 5) Applying a wearing course: StoPur AC 500 S
- 6) Scatter: StoQuarz 0.6-1.2 mm
- 7) Sealing: StoPox DV 502

B: crack-bridging build-up, surface protection system OS 10.5

- 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: StoPur PM MultiBase
- 5) Applying a wearing course: StoPur AC 500 or StoPur AC 500 S
- 6) Scatter: StoQuarz 0.3-0.8 mm or StoQuarz 0.6-1.2 mm

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7) Sealing: StoPox DV 502

Application

1) Prepare the substrate.

A: crack-bridging build-up, surface protection system OS 10.21

2) Priming:

- StoPox GH 500
- Apply the product evenly. Tools: rubber squeegee
- Rework the product with a roller and spread evenly.
- consumption: approx. 0.3-0.4 kg/m², depending on the roughness of the substrate
- Note: Avoid the formation of puddles.
- Recommendation: Apply a scratch coat for roughness depths > 0.5 mm.

3) Scatter:

- StoQuarz 0.3-0.8 mm
- Scatter the fresh priming coat grain by grain without any surplus.
- consumption: approx. 0.5 - 1.0 kg/m²
- Note: Remove the unbound quartz sand after 24 h.

4) Apply a crack-bridging, elastic floating layer, main effective surface protection layer:

- StoPur SC 300
- Apply the product unfilled without quartz sand. layer thickness: at least 2.0 mm,
- The product can only be applied using two-component spray equipment.
- consumption: approx. 2.3 kg/m²

5) Applying a wearing course:

- StoPur AC 500 S
- Waiting time: Apply the wearing course after 1-24 hours.
- Apply the product evenly. Tools: squeegee
- StoPur AC 500 S coverage: approx. 1.2–1.3 kg/m²
- Note: Use spiked soles with straight-edged nails during scattering or de-airing to prevent damage to the membrane.

6) Scatter:

- StoQuarz 0.6-1.2 mm
- Scatter the surface full-faced in excess.
- consumption of StoQuarz 0.6-1.2 mm: approx. 5-6 kg/m²

7) Sealing:

- StoPox DV 502
- Remove the unbound quartz sand.

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- 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. 0.8-1.0 kg/m², depending on the scattering

Apply the StoCretec surface protection system OS 10.21 :

- Coverage and details: implementation instructions, attachment 1 of the general building inspection test certificate.

B: crack-bridging build-up, surface protection system OS 10.5

1) Prepare the substrate.

2) Priming:

- StoPox GH 531
- Apply the product evenly. Tools: rubber squeegee
- Rework the product with a roller and spread evenly.
- consumption: approx. 0.3-0.4 kg/m², depending on the roughness of the substrate
- Note: Avoid the formation of puddles.
- Recommendation: Apply a scratch coat for roughness depths > 0.5 mm.

3) Scatter:

- StoQuarz 0.3-0.8 mm
- Scatter the fresh priming coat grain by grain without any surplus.
- consumption: approx. 0.5-1.0 kg/m²
- Note: Remove the unbound quartz sand after 24 h.

4) Apply a crack-bridging, elastic floating layer, main effective surface protection layer:

- StoPur PM MultiBase
- Apply the product unfilled without quartz sand. layer thickness: at least 2.0 mm
- Tools: squeegee with V-notch
- Rework the product in a criss-cross pattern for ventilation. Tools: spiked roller
- coverage: approx. 3.0 kg/m²

5) Applying a wearing course:

- StoPur AC 500 S
- Waiting time: Apply the wearing course after 8–24 hours.
- Apply the product evenly. Tools: squeegee
- StoPur AC 500 S coverage: approx. 1.2–1.3 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 or StoQuarz 0.6–1.2 mm

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- Scatter the surface full-faced in excess.
- coverage StoQuarz 0.3–0.8 mm or StoQuarz 0.6–1.2 mm: approx. 1–2 kg/m²

7) 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
- coverage: approx. 0.6-1.0 kg/m², depending on the broadcasting

Apply the StoCretec surface protection system OS 10.5:

- Coverage and details: implementation instructions, attachment 1 of the general building inspection test certificate.

Notes:

- Damp and not fully cured substrates lead to damage.
- Substrate temperature, ambient temperature:
- In addition to the ambient temperature, the substrate temperature is vital for the application of reaction resins.
- Low temperatures generally 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.

Colour shade deviation:

- 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.

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.
- Recommendation: Take the relevant measures to prevent such disruptions.

Drying, curing, ready for next coat

- Time until the area is suitable for foot traffic:
- After approx. 3 hours
- Reworking time:
- at +23 °C: within 18 hours

Cleaning the tools

Clean tools with StoDivers EV 100 or StoCryl VV.

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Notes, recommendations, special information, miscellaneous

- 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.

- With OS 10 system build-ups, surface cracks cannot be excluded.

Delivery

Colour shade grey

Packaging Pail

Article number	Name	Container
09736/001	StoPur AC 500 S Set	25 kg set

Identification

GISCODE PU40

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

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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StoPur AC 500 S

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