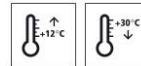


# Technical Data Sheet

## StoPox TEP MultiTop

EP-PU hybrid coating for increased requirements, tested 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 the main effective surface protection layer, element in the tested surface protection systems for multi-storey car parks: StoCretec OS 11a.5 and OS 11b.5-1
- as a wearing course in the surface protection system: StoCretec OS 10.2

#### Properties

- resistant to oils
- resistant to fuels
- high wear resistance
- dynamic crack bridging

#### Information/notes

- 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	4,000 - 6,000 mPa.s	mixture
Density (mixture 23 °C)	EN ISO 2811	1.16 - 1.23 g/cm <sup>3</sup>	

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:

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- 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 weight percent
- Moisture content for concrete qualities up to C35/45: max. 3 weight percent

Substrate temperature: at least +12 °C, 3 K above the dew point Bond strength, average: 1.5 N/mm<sup>2</sup>

Bond strength, lowest single value: 1.0 N/mm<sup>2</sup>

#### 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: +12 °C  
Maximum temperature: +30 °C

Application temperature:  
minimum temperature: +12 °C  
Maximum temperature: +30 °C

Relative humidity:  
maximum: 85 %

##### Time for application

at +12 °C: approx. 75 minutes  
at +23 °C: approx. 45 minutes  
At +30 °C: approx. 25 minutes

##### Mixing ratio

component A : component B  
A : B  
100 : 22.2 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.

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- 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 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 floating layer	2.3 - 2.5	kg/m <sup>2</sup>
	as a wearing course	1.9	kg/m <sup>2</sup>

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 with two layers, surface protection system: OS 11a.5

- 1) Prepare the substrate.
- 2) priming coat: StoPox GH 530
- 3) Scatter: StoQuarz 0.3-0.8 mm
- 4) Apply a crack-bridging, elastic floating layer: StoPox TEP MultiTop
- 5) Applying a wearing course: StoPox TEP MultiTop
- 6) Scatter: StoQuarz 0.6-1.2 mm
- 7) Sealing: StoPox DV 100

-----B:  
crack-bridging build-up with one layer, surface protection system: OS 11b.5-1

- 1) Prepare the substrate.
- 2) priming coat: StoPox GH 530
- 3) Scatter: StoQuarz 0.3-0.8 mm
- 4) Apply an elastic floating layer and a wearing course in one application cycle: StoPox TEP MultiTop
- 5) Scatter: StoQuarz 0.3-0.8 mm

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6) Sealing: StoPox DV 100

### Application

A: crack-bridging build-up with two layers, surface protection system: OS 11a.5

1) Prepare the substrate.

2) Priming:

- StoPox GH 530
- Apply the product evenly. tools rubber squeegee
- Rework the product with a roller and spread evenly.
- consumption: approx. 0.3-0.4 kg/m<sup>2</sup>, 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 prime coating grain by grain and without excess.
- consumption: approx. 0.5 - 1.0 kg/m<sup>2</sup>
- Note: Remove the unbound quartz sand after 24 h.

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

- StoPox TEP MultiTop
- 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. 2.3 kg/m<sup>2</sup>
- Note: Use spiked soles with blunt nails during scattering or de-airing to prevent damage to the membrane.

5) Applying a wearing course:

- StoPox TEP MultiTop, filled with StoQuarz 0.1–0.5 mm
- Waiting time: Apply the wearing course after 12-24 hours.
- mixing ratio for the self-levelling mortar: 1.0 parts by weight of StoPox TEP MultiTop, 0.2 parts by weight of StoQuarz 0.1-0.5 mm
- Apply the self-levelling mortar in the required layer thickness.
- consumption of StoPox TEP MultiTop: approx. 1.9 kg/m<sup>2</sup>
- consumption of StoQuarz 0.1-0.5 mm: approx. 0.4 kg/m<sup>2</sup>

6) Scatter:

- StoQuarz 0.6-1.2 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 0.6-1.2 mm: approx. 4-6 kg/m<sup>2</sup>

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- consumption of DUROP or granite chippings: approx. 5-8 kg/m<sup>2</sup>

### 7) Sealing:

- StoPox DV 100
- 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/m<sup>2</sup>, depending on the scattering

Apply the StoCretec OS 11a.5 and StoCretec OS 11b.5-1 surface protection systems:

- consumption and details: see the instructions for implementation, Appendix A of the DIN V 18026 certificate of compliance

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B: crack-bridging build-up with one layer, surface protection system: OS 11b.5-1

### 1) Prepare the substrate.

### 2) Priming:

- StoPox GH 530
- Apply the product evenly. Tools: rubber squeegee
- Rework the product with a roller and spread evenly.
- consumption: approx. 0.4 kg/m<sup>2</sup>, 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 prime coating grain by grain and without excess.
- consumption: approx. 0.5-1.0 kg/m<sup>2</sup>
- Note: Remove the unbound quartz sand after 24 h.

### 4) Apply an elastic floating layer and a wearing course:

- StoPox TEP MultiTop, filled with StoQuarz 0.1–0.5 mm or StoQuarz 0.3–0.8 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 StoPox TEP MultiTop, 0.4 parts by weight of StoQuarz 0.1-0.5 mm, or StoQuarz 0.3-0.8 mm

Apply the self-levelling mortar in the required layer thickness.

- consumption of StoPox TEP MultiTop: approx. 2.5 kg/m<sup>2</sup>
- Consumption of StoQuarz 0.1 - 0.5 mm: approx. 0.5 - 1.0 kg/m<sup>2</sup>
- consumption of StoQuarz 0.3-0.8 mm: approx. 1.0 kg/m<sup>2</sup>
- Note: The extender and filling degree can be adjusted for inclinations > 2 % or due to climate conditions.

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### 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/m<sup>2</sup>
- consumption of DUROP or granite chippings: approx. 5-8 kg/m<sup>2</sup>

### 6) Sealing:

- StoPox DV 100
- 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/m<sup>2</sup>, depending on the scattering

Apply the StoCretec OS 11a.5 and StoCretec OS 11b.5-1 surface protection systems:

- consumption and details: see the instructions for implementation, Appendix A of the DIN V 18026 certificate of compliance

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### Notes

Damp and not fully cured substrates lead to damage.

- If there is a danger of rising damp, the StoPox GH 502 prime coating, which has been tested according to RILI SIB DAfStb (German Committee for Reinforced Concrete), can be used in the OS 11 systems as an alternative.

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.

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.

Consumption, application:

- The details on consumption and application relate to horizontal surfaces.

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- 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

Reworking time:  
At +12°C: approx. 24 h  
At +23°C: approx. 14 h  
At +25°C: approx. 12 h

### 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](http://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](http://www.stocretec.de)  
- The abrasion resistance specified in the declaration of performance refers to the smooth, not scattered covering.

### Delivery

Colour shade                      grey

Packaging                         pail

	Article number	Name	Container
	14087/008	StoPox TEP MultiTop Set	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**                              Coating

### Safety

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

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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.

Handling epoxy resins: "Praxisleitfaden für den Umgang mit Epoxidharzen", (Practical guide for handling epoxy resins) and

test report: "Prüfbericht zur Schutzwirkung von acht

Chemikalienschutzhandschuhen gegenüber EP-Beschichtungen" (Test report on the protective effect of eight chemical protective gloves against EP coatings),

Gloves: "Handschuhe für den Umgang mit lösemittelfreien Epoxidharzen" (Gloves for handling solvent-free epoxy resins), and

Protective gloves: "Die richtige Anwendung von Schutzhandschuhen" (The correct use of protective gloves)

<https://www.bgbau.de/themen/sicherheit-und-gesundheit/gefährstoffe/umgang-mit-epoxidharzen/>

Published by:

BG BAU - Berufsgenossenschaft der Bauwirtschaft

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Guidelines for the planning of building site facilities: "Wirtschaftliche and sichere Baustelleneinrichtung"

Published by:

Bundesanstalt für Arbeitsschutz und Arbeitsmedizin (BAuA)

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### 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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