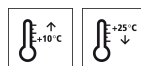


Technical data sheet

StoPox KU 180

EP sealer for vertical concrete areas



Characteristics

Areas of application

- interior and exposed to weathering
- coating material for concrete and reinforced concrete surfaces
- e.g. in communal wastewater treatment plants

Properties

- rapid curing at ambient room temperature
- resistance to biogenic sulphuric acid
- decontaminable
- application using a trowel and roller or spray equipment

Appearance

- gloss

Information/notes

- product is in accordance with EN 1504-2

Technical data

Criterion	Standard / test regulation	Value/ Unit	Notes
Tensile strength (28 days)	EN 1542	> 2.0 MPa	
Viscosity (at 23 °C)	EN ISO 3219	4,800 - 7,200 mPa.s	mixture
Shore hardness D	DIN 53505-D/EN ISO 868	76 - 82	
Density (mixture 23 °C)	EN ISO 2811	1.46 - 1.55 g/cm ³	

Technical data sheet

StoPox KU 180

The characteristic values stated are average values or approx. values. We use natural raw materials in our products, which means that 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

The substrate must be dry, load-bearing, and free from native and foreign substances that have a separating action.
Remove less solid layers and laitance.

Dry in accordance with the definition of the Restoration Guideline 2001-10, but depending on the concrete 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.

Substrate temperature greater than +8 °C and 3 K above dew point.
Average tensile bond strength 1.5 N/mm²
Tensile bond strength of the single smallest value 1.0 N/mm²

Preparations

Prepare the substrate using a suitable mechanical process such as shot-blasting, milling and then shot-blasting, or abrasive blasting.

Application

Application temperature

Lowest application temperature: +10 °C Maximum approved relative humidity 75 %
Highest application temperature: +25 °C Maximum approved relative humidity 85 %

Processing time

At +10 °C: approx. 45 minutes
At +20 °C: approx. 25 minutes
At +30 °C: approx. 10 minutes

Mixing ratio

Component A : component B = 81.0 : 19.0 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 stirrer (max. 300 rpm) until a homogeneous, streak-free compound develops. It is also vital to stir thoroughly at the sides and the bottom to ensure that the hardener spreads evenly. 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 at least +15 °C when

Technical data sheet

StoPox KU 180

mixing.

Consumption	Type of application	Approx. consumption
	as sealer per application cycle, depending on the substrate	0.6 - 0.8 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 procedure	1) Substrate preparation 2) Prime coating of StoPox 452 EP / StoPox GH 205 3) Trowelling pores and blow-holes using StoPox 452 EP / StoPox GH 205 4) Sealing coat of StoPox KU 180	
Application	1) Substrate preparation 2) Prime coating of StoPox 452 EP / StoPox GH 205 Apply the mixed material and then evenly spread it by rolling/brushing. Avoid forming puddles. Consumption: approx. 0.3 - 0.5 kg/m ² , depending on the roughness of the substrate. If necessary, scatter with StoQuarz 0.1 - 0.5 mm Consumption: approx. 0.5 - 1.0 kg/m ² 3) Trowelling pores and blow-holes Make StoPox 452 EP or StoPox GH 205 suitable for trowelling by adding StoQuarz 0.1 - 0.2 mm or StoQuarz 0.1 - 0.5 and StoDivers ST. Trowel on to the cured prime coating. Close pores and blow-holes completely. Consumption: approx. 0.5 - 1.0 kg/m ² (StoPox 452 EP / StoPox GH 205 depending on the substrate) Depending on the substrate roughness, several application cycles may be required. Alternatively, use StoPox SK 100. 4) Sealing coat of StoPox KU 180 Mix the material and use a trowel to spread it in delivery consistency onto the prepared substrate.	

Technical data sheet

StoPox KU 180

In one application cycle 0.6 - 0.8 kg/m² can be applied.

At least 2 application cycles are required.

Consumption: approx. 1.6 kg/m² (2 application cycles at +20 °C).

The viscosity of StoPox KU 180 strongly depends on the temperature, as is the case with all known fluid epoxy resins. At high temperatures, it is possible to add StoDivers ST (up to approx. 2 wt%) to improve non-sag properties.

At low temperatures, add up to 2 % StoDivers EV 100 to the material in order to adjust viscosity.

That means that the consumption and application information may vary depending on the temperature (see also the application instructions in the appendix).

Fully cured (earliest contact with water): at +23 °C - after 7 days.

Over-coatable: at +23 °C - after 8 h (application cycle 1)

The finished surface features a light texture depending on the application equipment.

It is not possible to avoid some pockets of entrapped air due to the product's non-sag properties, but if there are at least 2 application cycles they do not affect the impermeability of the whole system.

For floor areas, use StoPox KU 601 instead. It results in surfaces that have a similar resistance and are visually more appealing.

In wastewater treatment plants, use StoPox KU 180 also on horizontal areas for system reasons.

Note:

Depending on exposure to chemicals, discolourations can occur. These do not, however, impair the technical function of the coating.

Any yellowing which occurs under UV stress does not impair the technical properties.

At low material and object temperatures, material consumption per m² increases due to the rise in viscosity.

Cleaning the tools

Clean with StoCryl VV.

Indications, recommendations, special

The Declaration(s) of Conformity can be obtained from the StoCretec Technical Information Centre
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.

Technical data sheet

StoPox KU 180

information, miscellaneous

Delivery

Colour shade pebble-grey, approx. RAL 7032

Packaging pail and tin

Article number	Designation	Container
01617/007	StoPox KU 180 Combi	15 kg combi

Storage

Storage conditions Store in dry and frost-free conditions; avoid direct solar radiation.

Storage life In the original container until ... (see packaging).

Certificates/approvals

P 4255 Test report sulphuric acid

Identification

Product group Sealer

Safety

This product is subject to compulsory designation in accordance with the current EU directive.

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.

Practical guide for dealing with epoxy resins: "Sicherer Umgang mit Epoxidharzen in der Bauwirtschaft".

And

Test report on the protective action of chemical protective gloves against EP coatings: "Handschuhe für lösemittelfreie Epoxidharz-Systeme"

Technical data sheet

StoPox KU 180

and "Schutzhandschuhe: Richtig anwenden"
[Www.gisbau.de/service/epoxi/Bericht.pdf](http://www.gisbau.de/service/epoxi/Bericht.pdf)

Published by:
 Berufsgenossenschaft der Bauwirtschaft
 Hildegardstrasse 28-30, 10715 DE-Berlin
 Tel. (+49) 30 85781-0, fax. (+49) 30 85781-500, www.gisbau.de/service

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

Published by:
 Geschäftsstelle der Initiative Neue Qualität der Arbeit (INQA)
 Friedrich-Henkel-Weg 1-25, 44149 DE-Dortmund
 Tel. (+49) 231 9071-2171, fax. (+49) 231 9071-2170
Www.inqa.de/ under Themen/Bauwirtschaft/Wissen and www.inqa-bauen.de

Special notes

The information or data 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. Nevertheless, users are responsible for establishing the suitability of the product for its intended use.

Applications other than those explicitly mentioned in this technical data sheet are only permissible after prior consultation. Where no approval is given, such applications are at the risk of the user. This applies particularly to combinations 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.

Sto SEA Pte Ltd
 159 Sin Ming Road
 #06-02 Amtech Building
 Singapore 575625
 Phone : +65 6453 3080
 Fax : +65 6453 3543
Info.sg@sto.com
www.sto-sea.com

Sto SEA Sdn Bhd
 No. 15 Jalan Teknologi PJU 3/3A
 Surian Industrial Park Kota Damansara
 47810 Petaling Jaya, Selangor Malaysia
 Phone : +60 03 6156 6133
 Fax : +60 03 6156 7133
Info.sg@sto.com
www.sto-sea.com

StoCretec GmbH
 Gutenbergstraße 6
 D-65830 Kriftel
 Germany
 Phone : +49 6192 401 104
 Fax : +49 6192 401 105
Info.sg@sto.com
www.stocretec.de