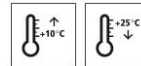


Technical Data Sheet

StoPox KU 611

Epoxy resin coating, highly resistant to chemicals and mechanical stress, electrically conductive



Characteristics

- Area of application**
- interior
 - as a coloured, electrically conductive coating for industrial flooring
 - (HBV surfaces, ESD surfaces) with high mechanical and chemical stress

Properties

- excellent flow and de-airing properties
- electrically conductive (EN 1081, EN 61340-4-1)
- high chemical resistance according to the chemical resistance list
- high mechanical resistance
- excellent flow and de-airing properties
- high wear resistance
- free from additives which damage the lacquer

Appearance

- gloss

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	
Flexural strength (28 days)	EN ISO 178	> 50 MPa	
Shore hardness type D	DIN 53505-D/EN ISO 868	76 - 82	
Density (mixture 23 °C)	EN ISO 2811	1.47 - 1.57 g/cm ³	

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

The substrate must be dry, load-bearing, and free from native and foreign release

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agents.
Remove weak layers and laitance.

Dry in accordance with the definition of the DAfStb (German) Repair Guideline 2001-10, but depending on the compressive 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 higher than +10 °C and 3 K above dew point.
Average bond strength 1.5 N/mm²
Lowest single bond strength 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 %

Time for application At +10 °C: approx. 40 minutes
At +23°C: approx. 25 minutes

Mixing ratio Component A : component B = 100.0 : 21.1 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 paddle mixer (max. 300 rpm) until a homogeneous, streak-free compound develops. It is also vital to stir thoroughly at the sides and the bottom in order to evenly distribute the hardener. 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 mixing.

Consumption	Type of application	Approx. consumption	
	as coating	2.0 - 2.5	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 electrically conductive industrial flooring/HBV surfaces/ESD surfaces (ECF)

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- 1) Substrate preparation
- 2) Prime coating of StoPox GH 205
- 3) Levelling coat of StoPox GH 205 (optional)
- 4) Self-adhesive conductive strips StoDivers LB 100
- 5) Conductive layer of StoPox WL 110
- 6) Top coat of StoPox KU 611, electrically conductive

Application

electrically conductive industrial flooring/HBV surfaces/ESD surfaces (ECF)

1) Substrate preparation

2) Prime coating of StoPox GH 205 Apply StoPox GH 205 with a rubber squeegee, flooding until the substrate is totally free of pores, and then evenly spread the material by rolling/brushing. Avoid forming puddles. Consumption: approx. 0.2 - 0.3 kg/m², depending on the roughness of the substrate.

Do not scatter anything onto the prime coating.
Waiting time until the next coating: maximum 48 hours.

3) Levelling coat (optional, for roughness depths > 0.5 mm)

Fill StoPox GH 205 either 1 : 1 to 1 : 3 parts by weight with Sto Zuschlag KS or with a mixture of StoQuarz 0.1 - 0.5 mm and StoQuarz 0.01 mm (50 : 50 parts by weight).

Consumption: StoPox GH 205 approx. 0.4 - 0.5 kg/m² and mm of layer thickness

Consumption: Sto Zuschlag KS (StoQuarz) approx. 0.4 - 1.5 kg/m² and mm of layer thickness

Consumption: approx. 1.8 kg/m² per mm of layer thickness (filled)

Do not scatter anything onto the prime coating. Waiting time until the next coating: maximum 48 hours.

4) Self-adhesive conductive strips

Affix the self-adhesive conductive strips to the prepared substrate. A connection to ground is required for every 100 m² of surface. Overlap the joints of the conductive strips by 5 cm.

Pull the free ends of the StoDivers LB 100 conductive strips vertically up to the wall surface areas and connect them to the grounding system.

Alternatively, connect them to ground using the StoDivers LS conducting set.

An electrician must determine the number and location of the connections to ground. Only an electrician is permitted to ground the conductive strips/conducting set.

5) Conductive layer

Dilute StoPox WL 110 with up to 10 % water and apply with a short-pile roller (Sto-

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Glaze Roller Micro-Fibre, Sto-Tool Catalogue).

Consumption: approx. 0.15 - 0.2 kg/m²

Check the functionality of the applied conductive layer by measuring the resistance to ground before applying the following top coat.
The resistance to ground may not exceed 50 kilohms.

6) Top coat, electrically conductive, ECF

In order to avoid partial fibre concentration, apply StoPox KU 611 using a squeegee (or a toothed trowel) with coarse tothing (e.g. tothing: 48 or 95, Sto-Tool Catalogue), spread evenly and immediately trowel off in criss-cross pattern.

Consumption: approx. 2.0 - 2.5 kg/m²

Material consumption of 2.5 kg/m² must not be exceeded, because the electrically conductive properties would be negatively affected.

Note:

For requirements regarding protection of persons in accordance with VDE 0100-410, see the coating systems in the current StoCretec brochure on conductive floor coating systems.

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

Avoid direct sunlight, high temperatures, and draughts during application.

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

The fibres visible have been inserted to guarantee conductivity; they are not a visual defect.

In order to increase the slip resistance, the surface can additionally be scattered with silicon carbide (grain size e.g. F54, F20 or others).

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

Drying, curing, ready for next coat

Reworking time:
At +10°C: approx. 16 h
At +23°C: approx. 8 h

Cleaning the tools

StoCryl VV / StoDivers EV 100

Notes, recommendations, special information, miscellaneous

The Declaration(s) of Conformity can be obtained from the StoCretec Technisches InfoCenter
For general application instructions, see www.stocretec.de (Products) and in the latest issue of the "Technical Data Sheets" manual, in the appendix.

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The abrasion resistance class specified in the CE marking refers to the smooth, not scattered covering.

Delivery

Colour shade RAL colour fan

Packaging Pail

Article number	Name	Container
01462/013	StoPox KU 611 Set tinted	30 kg set

Storage

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

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

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 epoxy resin coatings: "Handschuhe für lösemittelfreie Epoxidharz-Systeme" and "Schutzhandschuhe: Richtig anwenden"

www.bgbau.de/gisbau/fachthemen/epoxi

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

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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.

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