

## StoPox KU 611

EP coating, highly resistant to chemicals and mechanical stress, electrically conductive







Characteristics	
Area of application	• interior
	<ul> <li>as a coloured, electrically conductive coating for industrial flooring</li> </ul>
	<ul> <li>for surfaces with high mechanical and chemical stress, e.g. HBV systems and</li> </ul>
	ESD protection zones
	• as a component of StoFloor Cleanroom system 3
Properties	electrically conductive in accordance with EN 1081, EN 61340-4-1
	<ul> <li>high chemical resistance according to the chemical resistance list</li> </ul>
	high mechanical resistance
	<ul> <li>very good flow properties</li> </ul>
	very good de-airing properties
	high wear resistance
	<ul> <li>free from additives that can damage paint</li> </ul>
	• clean with water for a short period: +80 °C, if permanently wet: maximum +50 °C
Appearance	• gloss
Information/notes	• product is in accordance with EN 1504-2
	<ul> <li>product is in accordance with EN 13813</li> </ul>
	various test certificates

#### Technical data

Criterion	Standard / test specification	Value/ Unit	Notes
Bond strength (28 days)	EN 1542	> 2,0 MPa	
Flexural strength	EN ISO 178	> 50 MPa	
Shore hardness type D	DIN 53505-D/EN ISO 868	76 - 82	Intended for approx. RAL 7032
Density (mixture 23 °C)	EN ISO 2811	1,47 - 1,57 a/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



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#### 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 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 per cent
   Moisture content for concrete qualities up to C35/45: max. 3 weight per cent

Substrate temperature: at least +10 °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 -

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#### Application temperature

Application temperature:

minimum temperature: +10 °C Maximum temperature: +25 °C

Relative humidity:

maximum 75 % at +10 °C maximum: 85 % at +25°C

#### Time for application

at +10 °C: approx. 40 minutes At +23°C: approx. 25 minutes

#### Mixing ratio

component A: component B

A:B

100.0: 21.1 parts by weight



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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.
- The material temperature is between +15 °C and +25 °C.

#### 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.

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Type of application	Approx. consumption		
as a coating	2,0 - 2,5	kg/m	

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

- 1) Prepare the substrate.
- 2) Priming: StoPox GH 205
- 3) Optionally, apply the levelling coat: StoPox GH 205
- 4) Self-adhesive conductive strip: StoDivers LB 100
- 5) Apply a conductive layer: StoPox WL 110
- 6) Apply the electrical conductive covering layer: StoPox KU 611

#### **Application**

1) Prepare the substrate.

#### 2) Priming:

- StoPox GH 205
- 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. 0.2-0.3 kg/m², depending on the roughness of the substrate

#### Note:

- Avoid the formation of puddles.
- Do not scatter the prime coating.
- waiting time until the subsequent coating: maximum 48 hours
- 3) Optionally, apply the levelling coat:
- StoPox GH 205

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- filling the product: 1 : 1 to 1 : 3 parts by weight, StoPox GH 205: Sto-Aggregate KS or StoQuarz0.1-0.5 mm, StoQuarz 0.01 mm
- consumption StoPox GH 205 per mm layer thickness: approx. 0.4-0.5 kg/m²
- consumption of Sto-Aggregate KS, StoQuarz per mm of layer thickness: approx. 0.4-1.5  $\mbox{kg/m}^{2}$

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

- Do not scatter the surface.
- waiting time until the subsequent coating: maximum 48 hours
- Apply a levelling coat for roughness depths > 0.5 mm.

#### 4) Self-adhesive conductive strip:

- StoDivers LB 100
- Affix the product to the prepared substrate.
- Pull the free ends vertically up the wall surface and connect to ground.
- Overlap the joints of the conductive strip by 5 cm.
- Optional: Connection to ground is also possible using the conducting set. product: StoDivers LS

#### Note:

- A connection to ground is required for every 100 m² of surface.
- The number and location of the groundable points must be determined by an electrician.
- Only an electrician is permitted to ground connections of the conductive strips or conducting set.

#### 5) Apply a conductive layer:

- StoPox WL 110
- Dilute with approx. 10 % water.
- Apply the product evenly. Tools: short-pile roller sleeve
- consumption: approx. 0.12-0.15 kg/m<sup>2</sup>

#### Note:

- Check the resistance to ground before applying the top coat. This ensures the functionality of the conductive layer.
- Resistance to ground: StoPox WL 110 maximum 50 kiloohm

#### 6) Apply the electrical conductive covering layer:

- StoPox KU 611
- Apply and spread the product. Tools: squeegee notching: 48 or 95
- Roll the product evenly in a criss-cross pattern. Tools: spiked roller sleeve
- Consumption: approx. 2.0–2.5 kg/m², depending on the desired texture Note:
- Do not exceed an application rate of 2.5 kg/m², as this can affect electrical conductivity.
- to increase slip resistance, the surface can additionally be scattered with silicon carbide grain size F54, F20

#### Application:

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



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UV stress, colour shade deviation:

- Any yellowing which occurs under UV stress does not impair the technical properties.
- The fibres visible have been inserted to guarantee electrical conductivity; they are not a visual defect.
- Exposure of the chemicals may cause discolouration, which does not, however, impair the technical function of the coating.

Personal protection requirements:

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

Drying,	curing,	read	ly 1	for	next
coat					

fully cured, earliest contact with water:

at +23 °C: after 7 days

Reworking time:

at +10 °C: approx. 16 hours at +23 °C: approx. 8 hours

#### 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.

Observe the general application instructions:

- see www.stocretec.de, Products
- see technical manual, notes

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			
Packaging	pail			
	Article number	Name	Container	
	01462/013	StoPox KU 611 Set tinted	30 kg set	
Storage				
Storage conditions	Store in dry and frost	Store in dry and frost-free conditions. Protect from direct sunlight.		



## StoPox KU 611

Storage life

The product quality is best guaranteed in its unopened original container until its shelf life has expired. This information is included in the batch number on the

container. Explanation of batch nos.:

digit 1 = last digit of the year, digits 2 + 3 = calendar week, example: 2450013223 -

storage life ends at week 45 in 2022

See product packaging

Identification Product group	Coating
GISCODE	RE55
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.  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/gefahrstoffe/umgangmit-epoxidharzen/
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## StoPox KU 611

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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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