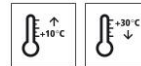


Technical Data Sheet

StoPox KU 613

Epoxy resin coating, electrically conductive



Characteristics

- Area of application**
- interior
 - as a coloured, electrically conductive coating for industrial flooring with increased requirements for protection from electrostatic discharge

Properties

- low consumption
- high wear resistance
- excellent flow properties
- volume-conductive
- fulfills requirements in accordance with EN 61340-5-1
- fulfills requirements in accordance with DIN VDE 0100-410 (in combination with StoPox WL 118)

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	
Viscosity (at 23 °C)	EN ISO 3219	1,000 - 1,500 mPa.s	Mixture
Shore hardness type D	DIN 53505-D/EN ISO 868	67 - 73	
Density (mixture 23 °C)	EN ISO 2811	1.26 - 1.34 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

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Requirements

The substrate must be dry, load-bearing, and free from native and foreign release 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 qualities 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: +30 °C
Maximum approved relative humidity 85 %

Time for application

At +10 °C: approx. 40 minutes
At +23 °C: approx. 30 minutes
At +30 °C: approx. 15 minutes

Mixing ratio

component A : component B = 100.0 : 29.0 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 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

1.0 - 1.2

kg/m²

Material consumption depends on the application, substrate, and consistency, among other factors. The stated consumption values are only to be used as a

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guide. If required, determine precise consumption values on the basis of the specific project.

Coating build-up

ESD coating

- 1) Substrate preparation
- 2) Prime coating of StoPox GH 205
- 3) Levelling filler using StoPox GH 205
- 4) Self-adhesive conductive strips StoDivers LB 100
- 5) Conductive layer of StoPox WL 110 (StoPox WL 118 for requirements in accordance with DIN VDE 0100-410)
- 6) Top coat of StoPox KU 613, electrically conductive

Application

ESD coating with increased requirements:

- 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 or brushing. Avoid the formation of 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 filler

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.

Note:

It is important that the filling is done very smoothly and it is free from contaminations embedded in the surface (such as roller lint, sand grains, dirt particles, insects etc.)

It is therefore recommended to sand the filler and levelling coat once it has cured, and to suction up all the resulting sanding dust.

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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 (StoPox WL 118 for requirements in accordance with DIN VDE 0100-410) with up to approx. 10 % water and apply with a short-pile roller (Sto-Lasurwalze Mikrofaser, 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 subsequent top coat.

The resistance to ground must not exceed 50 kiloohm when using StoPox WL 110. If StoPox WL 118 is used, the resistance to ground may not exceed 1 megaohm.

6. Covering layer, electrically conductive

Apply the mixed material with a squeegee (95, S2, or S3 notching, Sto tool catalogue), evenly spread it, and de-air it using a spiked roller in a criss-cross pattern.

Consumption: approx. 1.0 - 1.2 kg/m²

Note:

For personal protection requirements in accordance with VDE 0100-410, instead of a conductive layer of StoPox WL 110, a conductive layer of StoPox WL 118 must be used.

Fully cured (earliest contact with water): at +23 °C - after 7 days. Over-coatable at +23 °C: after 15 - 48 hours

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

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

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

Cleaning the tools

StoCryl VV or StoDivers EV 100

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Notes, recommendations, special information, miscellaneous

The Declaration(s) of Conformity can be obtained from the StoCretec Technisches InfoCenter.

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.

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

Delivery

Colour shade RAL colour fan, limited colour choice

Packaging pail and tin

Article number	Name	Container
04924/005	StoPox KU 613 Set getönt	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.

Observe the Safety Data Sheet!

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](http://www.bgbau.de/gisbau/fachthemen/epoxi)

Published by:

Berufsgenossenschaft der Bauwirtschaft

Hildegardstrasse 28-30, 10715 DE-Berlin

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

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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.

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