

EP coating, electrically conductive

CE





Characteristics	
Area of application	<ul> <li>interior</li> <li>as a coloured, electrically conductive coating for industrial flooring with increased requirements for protection from electrostatic discharge</li> </ul>
Properties	<ul> <li>high wear resistance</li> <li>very good flow properties</li> <li>volume-conductive</li> <li>fulfils requirements in accordance with EN 61340-5-1</li> <li>meets requirements in accordance with DIN VDE 0100-410 in combination with StoPox WL 118</li> </ul>
Appearance	• gloss
Information/notes	<ul> <li>product is in accordance with EN 1504-2</li> <li>product is in accordance with EN 13813</li> </ul>

#### **Technical data**

Criterion	Standard / test specification	Value/ Unit	Notes
Bond strength	EN 1542	> 2,0 MPa	
Viscosity (at 23 °C)	EN ISO 3219	1.100 - 1.600 mPa.s	mixture
Shore hardness type D	DIN 53505-D/EN ISO 868		Intended for approx. RAL 7032
Density (mixture 23 °C)	EN ISO 2811	1,37 - 1,45 g/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

Requirements

Requirements on the substrate:

- 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	<ol> <li>Prepare all the above-mentioned substrates using a mechanical method, see "Substrate, requirements".</li> <li>Example:         <ul> <li>Shot-blasting</li> <li>Milling followed by shot-blasting</li> <li>Abrasive blasting</li> </ul> </li> </ol>
Application	
Application temperature	Application temperature: minimum temperature: +10 °C maximum temperature: +30 °C
	Relative humidity: maximum: 75 % at +12 °C maximum: 85 % at +30 °C
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 A : B 100.0 : 30.0 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.



	<ul> <li>Observe the order of the "Preparing material" steps.</li> <li>The material temperature is between +15 °C and +25</li> <li>The temperature of all components is between +15 °C</li> </ul>	5 °C. C and +25 °C.	
	Mixing time: - The length of the mixing time depends on the temper ambient temperature. - Mix each container for the same length of time.	ature of the mate	rial and the
	Possible consequences if mixing times are too long or - Mixing the product too long will shorten the time for a	too short: pplication.	
	<ul> <li>Preparing the material:</li> <li>1) Stir component A.</li> <li>2) Add all of component B.</li> <li>3) Mix the components until the hardener is well distribution homogeneous, and a streak-free mass is produced.</li> <li>Paddle mixer: slow running mixer, max. 300 rpm</li> <li>Mixing time: at least 3 minutes</li> <li>4) Ensure that the mixing equipment covers the bottom mixing container. The hardener must be evenly distributes</li> <li>5) Transfer the mixture to a clean container. Mix the component of the mixture to a clean container.</li> </ul>	outed, the mixture n and the rim area uted. omponents again	e is as of the
Consumption	Type of application	Approx. consumption	
	as a coating	1,8 - 2,2	kg/m²
	Material consumption depends on the application, sub- among other factors. The stated consumption values a guide. If required, determine precise consumption value specific project.	strate, and consis ire only to be use es on the basis c	stency, d as a of the
Coating build-up	<ol> <li>Prepare the substrate.</li> <li>Primer: StoPox GH 205</li> <li>Levelling coat: StoPox GH 205</li> <li>Self-adhesive conductive strip: StoDivers LB 100</li> <li>Apply a conductive layer: StoPox WL 110, for requirements in accordance with DIN VDE 0100-410: StoPox WL 118</li> <li>Apply the electrical conductive covering layer: StoPox KU 614</li> </ol>		
	<ol> <li>2) Primer: StoPox GH 205</li> <li>3) Levelling coat: StoPox GH 205</li> <li>4) Self-adhesive conductive strip: StoDivers LB 100</li> <li>5) Apply a conductive layer: StoPox WL 110, for requir DIN VDE 0100-410: StoPox WL 118</li> <li>6) Apply the electrical conductive covering layer: StoPot</li> </ol>	ements in accord	lance with
Application	<ul> <li>2) Primer: StoPox GH 205</li> <li>3) Levelling coat: StoPox GH 205</li> <li>4) Self-adhesive conductive strip: StoDivers LB 100</li> <li>5) Apply a conductive layer: StoPox WL 110, for requir</li> <li>DIN VDE 0100-410: StoPox WL 118</li> <li>6) Apply the electrical conductive covering layer: StoPox</li> <li>ESD coating with increased requirements:</li> </ul>	ements in accord	lance with
Application	<ul> <li>2) Primer: StoPox GH 205</li> <li>3) Levelling coat: StoPox GH 205</li> <li>4) Self-adhesive conductive strip: StoDivers LB 100</li> <li>5) Apply a conductive layer: StoPox WL 110, for require DIN VDE 0100-410: StoPox WL 118</li> <li>6) Apply the electrical conductive covering layer: StoPox</li> <li>ESD coating with increased requirements:</li> <li>1) Prepare the substrate.</li> </ul>	ements in accord	dance with



- Rework the product with a roller or rebrush and spread evenly.
- consumption: approx. 0.2-0.3  $\mbox{kg/m^2},$  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) Levelling coat:
- StoPox GH 205

- filling the product: 1:1 to 1:3 parts by weight, StoPox GH 205: Sto-Aggregate KS, or StoQuarz 0.1-0.5 mm, StoQuarz 0.01 mm

- consumption StoPox GH 205 per mm layer thickness: approx. 0.4-0.5 kg/m<sup>2</sup>

- 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/m<sup>2</sup> per mm layer thickness (filled)

4) Self-adhesive conductive strip:

- StoDivers LB

- Affix the product to the prepared substrate.

- Pull the free ends vertically up the wall surface and connect to ground.

- Optional: can also be connected to ground using the conducting set. product: StoDivers LS

- A connection to ground is required for every 100 m<sup>2</sup> 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, StoPox WL 118 for requirements in accordance with DIN VDE 0100-410

- Dilute with approx. 10 % water.

- Apply the product evenly in a criss-cross pattern. Tools: nylon roller, pile height: 13-14 mm

- 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, StoPox WL 118 maximum 1 megaohm

6) Apply the electrical conductive covering layer:

- StoPox KU 614

- Apply the product. Tools: Sto-Upright Squeegee, notching (depending on coverage): 25, 95, or 67

- Roll the product evenly in a criss-cross pattern. Tools: spiked roller sleeve

- consumption: approx. 1.8-2.2 kg/m<sup>2</sup>
- Minimum consumption: 1.5 kg/m<sup>2</sup>



Notes: Fully cured (earliest contact with water): at +23 °C - after 7 days. Over-coatable at +23 °C: after 15-48 hours. Application: - Avoid direct sunlight, high temperatures, and draughts during application. UV stress, colour shade deviation: - Any yellowing which occurs under UV stress does not impair the technical properties. - Exposure of the chemicals may cause discolouration, which does not, however, impair the technical function of the coating. Personal protection requirements: - For personal protection requirements in accordance with VDE 0100-410, use the StoPox WL 118 conductive layer. Drying, curing, ready for next Reworking time: at +23 °C: 15-48 h coat fully cured, earliest contact with water: after 7 days, at +23 °C Cleaning the tools Clean tools with StoDivers EV 100 or StoCryl VV. Notes, recommendations, Observe the general application instructions: special information, - see www.stocretec.de, Products miscellaneous - 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, limited colour choice Packaging pail and tin Article number Name Container StoPox KU 614 Set tinted 04103/001 30 kg set



Storage	
Storage conditions	Store in dry and frost-free conditions. Protect from direct sunlight. Avoid temperatures above +25 °C.
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	RE30
Safety	This product is subject to compulsory labelling in accordance with the current EU regulation. Observe the Safety Data Sheet!

**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.

StoCretec GmbH Gutenbergstr. 6 D-65830 Kriftel

Tel.: +49 6192 401-104 Fax: +49 6192 401-105 stocretec@sto.com www.stocretec.de