Technical Data Sheet
StoPox WL 113

EP water-based coating material, electrically conductive, low-emission

Characteristics

Area of application

- interior
- on floors
- for mineral substrates such as concrete and cementitious screed
- on magnesite and calcium sulphate screeds
- on old and new conductive epoxy resin coatings
- as an electrically conductive sealing coat subject to medium stress
- as a component of StoFloor Cleanroom system 7

Properties

- very good adhesion to the substrate
- electrically conductive (EN 61340-4-1, EN 61340-4-5, EN 61340-5-1)
- conductivity largely does not depend on relative humidity
- low in VOC emissions
- lightly textured surface

Appearance

- gloss

Information/notes

- product is in accordance with EN 1504-2

Technical data

Criterion	Standard / test specification	Value/ Unit	Notes
Bond strength	EN 1542	> 2,0 MPa	
Viscosity (at 23 °C)	EN ISO 3219	3.000 - 4.600 mPa.s	Mixture undiluted
Density (mixture 23 °C)	EN ISO 2811	1,34 - 1,43 g/cm³	
Abrasion resistance according to Taber device	EN ISO 5470-1	< 70 mg	CS 10/1000U/1000g
Water vapour permeability class	EN ISO 7783	Class II (medium)	Classification in accordance with DIN EN 1504-2

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

Technical Data Sheet
StoPox WL 113

Requirements	Requirements on the concrete substrate: The substrate must be dry, load-bearing, and free from native and foreign release agents. Remove less strong layers and laitance. Dry in accordance with the definition of the DAfStb (German) Repair Guideline 2001-10, but depending on the compressive strength class. The moisture content may not exceed 4 CM per cent for concrete qualities up to C30/37 and max. 3 CM per cent 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 Bond strength, lowest single value: 1.0 N/mm²
Preparations	Substrate preparation: Prepare the substrate using a suitable mechanical process such as shot-blasting, milling and then shot-blasting, or abrasive blasting, or diamond-grinding.
Application	
Application temperature	lowest application temperature: +10 °C Highest application temperature: +30 °C max. approved relative humidity: 85 %
Time for application	At +10 °C: approx. 180 minutes At +20 °C: approx. 90 minutes at +30 °C: approx. 60 minutes
Mixing ratio	Component A : component B = 100.0 : 20.0 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 at least 3 minutes. After mixing, transfer into a clean container and stir again thoroughly. Do not apply from the delivery container! The temperature of the individual components must be min. +15 °C when mixing.

Technical Data Sheet
StoPox WL 113

Consumption

Type of application	Approx. consumption	
as sealer	0,2 - 0,3	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 guide. If required, determine precise consumption values on the basis of the specific project.

Coating build-up

Sealing mineral substrates
1) Substrate preparation
2) Prime coating of StoPox WL 113
3) StoDivers LS
4) Sealing coat of StoPox WL 113 (1 – 2 application cycles)

sealing coat for electrically conductive epoxy resin coatings
1) Substrate preparation
2) Sealing coat of StoPox WL 113 (1 – 2 application cycles)

Application

Sealing mineral substrates
1) Substrate preparation

2) Prime coating of StoPox WL 113
StoPox WL 113 can be diluted with up to 20 % water depending on the substrate and application conditions.

Consumption: approx. 0.15 - 0.25 kg/m² (undiluted)

3) StoDivers LS in accordance with installation instructions

4) Sealing

Manual application:
StoPox WL 113 can be diluted with up to 15 % water. Distribute the material using a rubber squeegee and then roll it with a nylon roller (Sto-Lackierwalze Nylon RS 13 or Sto Großflächenwalze Nylon RS 13 Sto tool catalogue).

Apply the material evenly. Using a paint roller grid in the application container is recommended.
Consumption: approx. 0.2 - 0.3 kg/m² (undiluted)

If using airless equipment, material consumption increases by approx. 10 to 20 %.

Airless application:
The following requirements must be fulfilled if the material is sprayed using airless equipment:

Machine pressure: at least 150 bar

Nozzle size: 0.023" to 0.043" (0.584 mm to 1.092 mm), e.g. nozzle 52300, 61700, or 62500 from Graco
Conveying output: min.3.8 l/min
Sprayer: e.g. Graco TexSpray Mark V

Note: Depending on the colour shade and substrate, 1 - 2 application cycles may be required to achieve a homogeneous appearance.

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

sealing coat for electrically conductive epoxy resin coatings
1) Substrate preparation

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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. If using office chairs on the floor, these must be equipped with type "W" castors in accordance with DIN EN 12529. Avoid direct sunlight, high temperatures, and draughts during application.
The fillers used to guarantee conductivity may cause roller marks to remain visible despite working in a criss-cross pattern.
We therefore recommend using airless equipment in order to achieve visually

homogenous surfaces.

Observe the required occupational safety measures.

The layer thickness for sealing coats is normally < 0.5 mm and decreases as a result of mechanical use. This should be taken into account with regard to the required service life.

Ensure sufficient ventilation when applying water-based coating systems. However, avoid draughts. Different layer thicknesses, too high humidity, and too low temperatures (< +10 °C) can lead to visual defects, e.g. differences in the gloss levels.

Roller marks cannot be completely avoided due to manual application of the sealer.

Drying, curing, ready for next coat	at +10 °C: approx. 24 h at +20 °C: approx. 16 h at +30 °C: approx. 12 h
Cleaning the tools	Clean with water immediately after use. Hardened material can only be removed mechanically.
Notes, recommendations, special information, miscellaneous	General application instructions are available at www.stocretec.de and in the notes of the latest Technical Manual.

Delivery

Colour shade	limited colour choice, RAL colour fan, and StoColor System, approx. RAL 7001, 7004, 7023, 7030, 7032, 7035, 7036, 7037, 7038, 7040, 7042, 7045, 7046 and ca. RAL 1019, 1020, 3003, 4007, 4009, 5007, 5009, 5014, 5024, 6011, 6028, 6033, 6034, 7005, 7010, 7015, 7016, 7024, 7026, 7031, 7039, 8002, 8017, 9005
Packaging	pail and tin

Article number	Name	Container
04910/003	StoPox WL 113 Set tinted	12 kg set

Storage

Storage conditions	Store in dry and frost-free conditions. Avoid direct sunlight.
Storage life	In the original container until ... (see packaging).

Technical Data Sheet
StoPox WL 113

Identification

Product group	Sealing coat
GISCODE	RE20
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/umgang-mit-epoxidharzen/ Published by: BG BAU - Berufsgenossenschaft der Bauwirtschaft Hildegardstraße 29/30, 10715 DE-Berlin Tel. (+49) 30 85781-0, Fax. (+49) 800 6686688-37400, www.bgbau.de Guidelines for the planning of building site facilities: "Wirtschaftliche and sichere Baustelleneinrichtung" Published by: Bundesanstalt für Arbeitsschutz und Arbeitsmedizin (BAuA) Friedrich-Henkel-Weg 1-25, 44149 DE-Dortmund Tel. (+49) 231 9071-0, Fax. (+49) 231 9071-2454, E-mail: poststelle@baua.bund.de, homepage: www.baua.de

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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