BUILDING TRUST

PRODUCT DATA SHEET

Sikafloor®-220 W Conductive

Electrostatic conductive epoxy primer

DESCRIPTION

Sikafloor®-220 W Conductive is a 2-part, water-dispersed epoxy resin with high electrostatic conductivity. It is part of selected Sikafloor® ECF and ECD flooring systems.

USES

The Product is used as a:
- Conductive primer below Sikafloor® electrostatic conductive floor coatings

Please note:
- The Product may only be used by experienced professionals.

CHARACTERISTICS / ADVANTAGES

- Electrostatically conductive
- Easy to apply

APPROVALS / STANDARDS

- CE marking and declaration of performance based on EN 13813:2002 Screed material and floor screeds — Screed material — Properties and requirements — Synthetic resin screed material
- CE marking and declaration of performance based on EN 1504-2:2004 Products and systems for the protection and repair of concrete structures — Surface protection systems for concrete — Coating
- Fire classification report, EN 13501-1, Ghent University, Report No. 20-1069-03

PRODUCT INFORMATION

Composition	Water-based epoxy		
Packaging	Container Part A	4.98 kg	
	Container Part B	1.02 kg	
	Container Part A + Part B	6 kg	
	Refer to the current price list for available packaging variations.		
Shelf Life	12 months from date of production		
Storage Conditions	The Product must be stored in original, unopened and undamaged sealed packaging in dry conditions at temperatures between +5 °C and +30 °C. Always refer to packaging. Refer to the current Safety Data Sheet for information on safe handling and storage.		
Appearance / Colour	Part A	black, liquid	
	Part B	white, liquid	
Density	Part A	1.17 kg/l	(EN ISO 2811-1)
	Part B	1.09 kg/l	
	Mixed Product	1.16 kg/l	

Solid content by weight	44 %
Solid content by volume	34 %

TECHNICAL INFORMATION

Electrostatic Behaviour	Typical average resistance to ground:	Rg ≤ 10^4 Ω	(EN 1081)

Readings may vary, depending on ambient conditions (i.e. temperature, humidity) and measurement equipment.

APPLICATION INFORMATION

Mixing Ratio	Part A : Part B (by weight)	83 : 17
Consumption	Roller coat	~0.08–0.1 kg/m²

Note: Consumption data is theoretical and does not allow for any additional material due to surface porosity, surface profile, variations in level, wastage or any other variations. Apply product to a test area to calculate the exact consumption for the specific substrate conditions and proposed application equipment.

Product Temperature	Maximum	+30 °C
	Minimum	+10 °C
Ambient Air Temperature	Maximum	+30 °C
	Minimum	+10 °C
Relative Air Humidity	Maximum	75 % r.h.

Dew Point

Beware of condensation. The substrate and uncured applied product must be at least +3 °C above dew point to reduce the risk of condensation or blooming on the surface of the applied product. Low temperatures and high humidity conditions increase the probability of blooming.

Substrate Temperature	Maximum	+30 °C
	Minimum	+10 °C

Substrate Moisture Content

Refer to the individual primer Product Data Sheet

Pot Life	+10 °C	~120 minutes
	+20 °C	~90 minutes
	+30 °C	~30 minutes

Waiting Time / Overcoating

Before overcoating the Product, allow:

Substrate temperature	Minimum	Maximum
+10 °C	~26 hours	~7 days
+20 °C	~17 hours	~5 days
+30 °C	~12 hours	~4 days

Note: Times are approximate and will be affected by changing ambient conditions, particularly temperature and relative humidity.

BASIS OF PRODUCT DATA

All technical data stated in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

FURTHER INFORMATION

Refer to the following method statements:

- METHOD STATEMENT EVALUATION AND PREPARATION OF SURFACES FOR FLOORING SYSTEMS
- Sika Method Statement — Sikafloor® mixing and application

ECOLOGY, HEALTH AND SAFETY

User must read the most recent corresponding Safety Data Sheets (SDS) before using any products. The SDS provides information and advice on the safe handling, storage and disposal of chemical products and contains physical, ecological, toxicological and other safety-related data.

APPLICATION INSTRUCTIONS

EQUIPMENT

MIXING
- Electric single paddle mixer (300 to 400 rpm)

APPLICATION
- Short-pile nylon roller

SUBSTRATE QUALITY

Cementitious substrates must be structurally sound and of sufficient compressive strength (minimum 25 N/mm²) with a minimum tensile strength of 1.5 N/mm².
Substrates must be clean, dry and free of contaminants such as dirt, oil, grease, coatings, laitance, surface treatments and loose friable material.
Use industrial vacuuming equipment to remove all dust, loose and friable material from the application surface before applying the Product.
TREATMENT OF JOINTS AND CRACKS
Construction joints and existing static surface cracks in substrate require pre-treating before full layer application. Use Sikadur® or Sikafloor® resins.

SUBSTRATE PREPARATION

MECHANICAL SUBSTRATE PREPARATION
IMPORTANT
Surface defects due to voids in the substrate
Voids and blow holes in the substrate will weaken the surface and damage the covering Product if not repaired during the preparation process.
1. Fully expose blow holes and voids during surface preparation to identify the required repairs.
1. Remove weak cementitious substrates.
2. Prepare cementitious substrates mechanically using abrasive blast cleaning, abrasive planing or scarifying equipment to remove cement laitance.
3. Before applying thin layer resins, remove high spots by grinding.
4. Use industrial vacuuming equipment to remove all dust, loose and friable material from the application surface before applying the Product.
5. Use products from the Sikafloor®, Sikadur® and Sikagard® range of materials to level the surface or fill cracks, blow holes and voids.

Contact Sika® Technical Services for additional information on products for levelling and repairing defects.
SUBSTRATE PREPARATION OF NON-CEMENTITIOUS SUBSTRATES
For information on substrate preparation of non-cementitious substrates, contact Sika® Technical Services.

MIXING

1. Mix Part A (resin) until the coloured pigment is dispersed and a uniform colour is achieved.
2. Add Part B (hardener) to Part A.
3. IMPORTANT Do not mix excessively. Mix Part A + B continuously for ~2 minutes until a uniformly coloured mix is achieved.
4. To ensure thorough mixing, pour materials into another container and mix again to achieve a smooth and uniform mix.
5. During the final mixing stage, scrape down the sides and bottom of the mixing container with a flat or straight edge trowel at least once to ensure complete mixing.

APPLICATION

IMPORTANT
Strictly follow installation procedures
Strictly follow installation procedures as defined in Method Statements, application manuals and working instructions which must always be adjusted to the actual site conditions.
IMPORTANT
Damaged finish due to heating with fossil fuel heaters
Fossil fuel heaters powered by gas, oil or paraffin produce large quantities of both carbon dioxide and water vapour, which may adversely affect the finish.
1. For temporary heating, use only electrically powered warm air blower systems. Do not use gas, oil, paraffin or other fossil fuel heaters.

IMPORTANT
Ventilation in confined spaces
Always ensure good ventilation when applying the Product in a confined space.
IMPORTANT
Protecting the material after application
After application, protect the System from damp, condensation and direct water contact for at least 24 hours.
IMPORTANT
Earthing connections
Self-adhesive copper tapes can lead to high conductivity of the floor and non-compliance with the requirements of VDE100-610. There is no protective effect at the earthing point and ~10 cm around the earthing point.
1. Do not use self-adhesive copper tapes to form conductive grids across the floor.
2. Only use the earthing points contained in the Sikafloor® Conductive Set.
3. Earthing points must be marked and covered using a rubber mat with a resistance of > 1 MΩ.
4. Do not apply the Product on substrates with rising moisture.

Preconditions
Apply only on primed or levelled concrete and screed surfaces. IMPORTANT Do not blind the primer and only start application of the Sikafloor® conductive primer after all the primer has dried tack-free.
1. Pour the mixed Product onto the surface. For consumption, refer to Application Information.
2. Apply the Product evenly over the surface with a short-piled roller.
3. Back-roll the surface in two directions at right angles.

Note Ensure that a continuous, pore free-coat covers the substrate.

4. Confirm that waiting time or overcoating time has been achieved before applying subsequent products.

Conductivity testing

Note: After curing of the Sikafloor® conductive primer and before application of the subsequent conductive wearing layers, conductivity testing of the conductive primer must be carried out.

All readings must be below 10^4 Ohm.

Resistance to ground: insulation tester Metriso 3000 from Warmbier or comparable

Surface resistance probe: carbon rubber electrode

Weight: 2.5 kg (± 0.25 kg); diameter: 65 mm (± 5 mm); rubber pad hardness: Shore A 60 (± 10)

CLEANING OF TOOLS

Clean all tools and application equipment with water immediately after use. Hardened material can only be removed mechanically.

LOCAL RESTRICTIONS

Please note that as a result of specific local regulations the performance of this product may vary from country to country. Please consult the local Product Data Sheet for the exact description of the application fields.

LEGAL NOTES

The information, and, in particular, the recommendations relating to the application and end-use of Sika products, are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Sika's recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The user of the product must test the product's suitability for the intended application and purpose. Sika reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.

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