

PRODUCT DATA SHEET

Sikafloor®-2350 ESD

Electrostatic dissipative epoxy floor coating

DESCRIPTION

Sikafloor®-2350 ESD is a 2-part self smoothing coloured electrostatic dissipative epoxy resin floor coating.

USES

Sikafloor®-2350 ESD may only be used by experienced professionals.

The Product can be used as a:
Smooth electrostatically conductive floor covering
Please note:

- The Product may only be used for interior applications.
- The Product may only be used by experienced professionals.

CHARACTERISTICS / ADVANTAGES

- Reliable long term conductivity
- Meets ESD requirements
- Low VOC emissions
- Abrasion resistant
- Low odour during application
- High mechanical resistance

ENVIRONMENTAL INFORMATION

- Conformity with LEED v4 MRc 2 (Option 1): Building Product Disclosure and Optimization — Environmental Product Declarations
- Conformity with LEED v4 MRc 4 (Option 2): Building Product Disclosure and Optimization — Material Ingredients
- Conformity with LEED v4 EQc 2: Low-Emitting Materials
- IBU Environmental Product Declaration (EPD) available
- VOC emission certificate according to AgBB und DIBT approval requirements
- Class A+ according to French Regulation on VOC emissions

APPROVALS / STANDARDS

- CE Marking and Declaration of Performance to EN 13813:2002 — Screed material and floor screeds — Synthetic resin screed material
- CE Marking and Declaration of Performance to EN 1504-2:2004 — Products and systems for the repair and protection of concrete structures — Part 2: Surface protection systems for concrete — Coating
- Fire classification report, EN 13238, Ghent University, Report No. 20-1069-02
- Slip resistance DIN 51130, Sikafloor®-2350 ESD, Roxeler, Certificate No. 020243-20-3; 020243-20-3a
- Slip resistance DIN 51130, Sikafloor®-2350 ESD, Roxeler, Certificate No. 020243-20-2; 020243-20-2a

PRODUCT INFORMATION

Composition	Epoxy		
Packaging	Container Part A	24.6 kg	
	Container Part B	5.4 kg	
	Container Part A + Part B	30 kg	
Appearance / Colour	Part A	coloured liquid	
	Part B	transparent liquid	
	Cured product colour	Available in the approximate colours RAL 1014, RAL 3012, RAL 5024, RAL 6010, RAL 6020, RAL 6021, RAL 6027, RAL 6033, RAL 6034, RAL 7005, RAL 7015, RAL 7016, RAL 7030, RAL 7032, RAL 7035, RAL 7040, RAL 7047	
Please contact Sika customer service for information on availability. Note: When the product is exposed to direct sunlight, there may be some discolouration and colour variation. This has no influence on the function and performance of the coating.			
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 current Safety Data Sheet for information on safe handling and storage.		
Density	Part A	~1.70 kg/l	(EN ISO 2811-1)
	Part B	~1.00 kg/l	
	Mixed Product	~1.5 kg/l	
Solid content by weight	100 %		
Solid content by volume	100 %		

TECHNICAL INFORMATION

Shore D Hardness	~80 (after 7 days at +23 °C)	(EN ISO 868)
Abrasion Resistance	~1.29 g, resin filled 20% with QS (H22/1000/1000) (after 20 days at +23°C)	(EN ISO 5470-1)
Compressive Strength	Cured 28 days at +23 °C ~120 MPa	(EN ISO 604)
Tensile Strength in Flexure	Cured 28 days at +23 °C ~30 MPa	(EN ISO 178)
Tensile Adhesion Strength	> 1.5 N/mm ² (failure in concrete)	(EN 1542)
Temperature Resistance	Short-term, maximum 7 days +60 °C	
IMPORTANT: No simultaneous mechanical and chemical strain While the product is exposed to temperatures up to +60 °C, do not also subject it to chemical and/or mechanical strain, as it may cause damage to the product.		

Electrostatic Behaviour

Resistance to ground	$R_G < 10^9 \Omega$ This product fulfils the requirements of ATEX 137	(IEC 61340-4-1)
Typical average resistance to ground	$R_G \leq 10^5 \Omega$ to $10^6 \Omega$	(EN 1081)
Body voltage generation	$< 100 V$	(IEC 61340-4-5)
System Resistance (Person/Floor/footwear)	$< 10^9 \Omega$	

Note: Measurement results can be affected by ESD clothing, ambient conditions, measurement equipment, cleanliness of the floor and the test personnel.

APPLICATION INFORMATION

Mixing Ratio	Part A : Part B (by weight)	82 : 18
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Consumption	Coating system	Product	Consumption
	Wearing layer	Sikafloor®-2350 ESD	2.5 kg/m ² filled with 20 % quartz sand 0.1–0.3 mm
	Textured layer	Sikafloor®-2350 ESD with ~1.5 % (by weight) Sika® Extender T	0.7 kg/m ² to 0.8 kg/m ²

Note: These figures are theoretical and do 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	Minimum	+15 °C
	Maximum	+30 °C

Ambient Air Temperature	Minimum	+15 °C
	Maximum	+30 °C

Relative Air Humidity	80 % r.h. max.
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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.
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Substrate Temperature	Minimum	+15 °C
	Maximum	+30 °C

Substrate Moisture Content	< 4 % parts by weight (Sika® Tramex moisture meter) No rising moisture (ASTM D4263, polyethylene sheet) The substrate must be visibly dry with no standing water.
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Pot Life	+10 °C	40 minutes
	+20 °C	25 minutes
	+30 °C	15 minutes

Applied Product Ready for Use	Temperature	Foot traffic	Light traffic	Full cure
	+15 °C	~48 hours	~3 days	~7 days
	+20 °C	~24 hours	~48 hours	~4 days
	+30 °C	~16 hours	~36 hours	~3 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

- Sika® Method Statement: Evaluation and preparation of surfaces for flooring systems
- Sika® Method Statement: Mixing and application of flooring systems

IMPORTANT CONSIDERATIONS

IMPORTANT:

Indentations

Under certain conditions, underfloor heating or high ambient temperatures combined with high point loading may lead to indentations in the resin.

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

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.

EQUIPMENT

APPLICATION EQUIPMENT

Refer to individual application text.

MIXING EQUIPMENT

Electric double paddle mixer (> 700 W, 300 to 400 rpm)

SUBSTRATE QUALITY / PRE-TREATMENT

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 MOISTURE CONTENT

The following test methods can be used to determine the substrate moisture content:

- Sika®-Tramex meter
- CM-measurement
- Oven-dry-method

The Product can be applied on substrates with a moisture content of < 4 %. The substrate must be visibly dry with no standing water.

SUBSTRATE CONDITION

Cementitious substrates (concrete / screed) 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 free of all contaminants such as dirt, oil, grease, coatings, laitance, surface treatments and loose friable material.

MIXING

For self-smoothing wearing layer

1. Mix Part A (resin) for ~10 seconds with a single paddle mixer (300–400 rpm).
2. Add Part B (hardener) to Part A.
3. Switch to an electric double paddle mixer (300–400 rpm, > 700 W).
4. While mixing Parts A + B, gradually add the required filler or aggregates.
5. **(Optional)** If necessary, gradually add the required amount of Sika® Extender T (refer to Consumption).
6. Mix for a further 2 minutes until a uniform mix is achieved.
7. To ensure thorough mixing, pour materials into another container and mix again to achieve a smooth and uniform mix.
8. During the final mixing stage, scrape down the sides and bottom of the mix-ing container with a flat or straight edge trowel at least once to ensure complete mixing.

APPLICATION

IMPORTANT:

Temporary heating

If temporary heating is required, do not use gas, oil, paraffin or other fossil fuel heaters. These produce large quantities of both carbon dioxide and water vapour, which may adversely affect the finish. For heating, use only electric powered warm air blower systems.

IMPORTANT:

Performing pre-trials

Pre-trials/mock-up applications must be performed and procedures agreed with all parties before full project application.

IMPORTANT:

Temporary moisture barrier

Before application, confirm substrate moisture content, relative air humidity, dew point, substrate, air and product temperatures. If moisture content is > 4 % parts by weight, Sika®floor® EpoCem® may be applied as a Temporary Moisture Barrier (T.M.B.) system.

SMOOTH WEARING LAYER

Suitable application equipment

Large-Surface Scraper No. 656, Toothed blades No. 25 (www.polyplan.com)

Procedure

1. Pour the mixed Product onto the substrate.
Note:The consumption is specified in Application Information.
2. Apply the Product evenly over the surface with a serrated trowel.
3. To achieve a smooth finish, smooth the surface with the flat side of a trowel.
4. Back roll the surface in two directions at right angles with a steel spike roller.

TEXTURED WEARING LAYER

Suitable application equipment

- Trowel No. 999 (www.polyplan.com)
- Adhesive Spreader No. 777, Toothed blades No. 23 = A3 (www.polyplan.com)

Procedure

1. Pour the mixed Product onto the substrate.
Note:The consumption is specified in Application Information.
2. Apply the Product evenly over the surface with a serrated trowel.
3. Back roll the surface in two directions at right angles with a textured roller.

CLEANING OF TOOLS

Clean all tools and application equipment with Sika® Thinner C 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.

Sika Kimia Sdn. Bhd.

Lot 689, Nilai Industrial Estate,
71800 Nilai, Negeri Sembilan D.K.
Malaysia
Phone: +606-7991762
e-mail: info@my.sika.com
Website: www.sika.com.my



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