

# **BUILDING TRUST**

# PRODUCT DATA SHEET

# Sikafloor®-169

Low VOC epoxy resin binder for decorative mortar screeds, terrazzo floorsystems and seal coats



# **DESCRIPTION**

Sikafloor®-169 is a 2-part epoxy resin binder for mortars, screeds, terrazzo floor systems and seal coats. It is used in the aesthetic Sikafloor® Terrazzo and DecoDur range in areas where normal to high mechanical loading and wear is expected.

# **USES**

Sikafloor®-169 may only be used by experienced professionals.

The Product can be used as a:

- Binder for coloured quartz mortars and screeds
- Transparent sealer coat for broadcast coloured quartz mortar screeds and Sikafloor® DecoDur systems

# **CHARACTERISTICS / ADVANTAGES**

- Very versatile can be used as coloured or transparent binder or sealer
- Helps to achieve good indoor air quality due to low VOC emissions
- Good aesthetics over the product's lifetime due to good yellowing resistance
- Low VOC content
- Good mechanical resistance
- Good chemical resistance
- Resistant to staining
- Low viscosity

# **SUSTAINABILITY**

- 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
- GISCODE RE30 (RE1)

# **APPROVALS / CERTIFICATES**

- CE Marking and Declaration of Performance to EN 13813:2002 — Screed material and floor screeds — 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
- Sliding test DIN 51130, Sikafloor®-169, Certificate No. 020109-15-11
- Sliding test DIN 51131, Sikafloor®-169, Roxeler, Certificates No. 020108-13-30a, 020108-13-31a, 020109-15-10a, 020109-15-13a, 020109-15-4a, 020171-14-1a, 020197-15-1a, 020197-15-5a
- Coating compatibility test PV 3.10.7, Sikafloor®-169, HQM, Report No. 14-04-14201871-7
- Biological Stress ISO 846, Sikafloor®-169, CSM Fraunhofer, Certificate No. SI/1008-533

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# **PRODUCT INFORMATION**

Composition	Solvent free epoxy				
Packaging	Transparent version				
	Part A container	7,50 kg conta	iners		
	Part B container		2,50 kg containers		
	Part A + Part B	10 kg unipack	10 kg unipacks		
Appearance / Colour	Part A, transparent	cloudy liquid			
	Part B yellowish, liquid		uid		
	Final floor appearance	Gloss finish			
	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	24 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.				
Density	Part A	~1,2 kg/l	(EN ISO 2811-1		
	Part B	~1,0 kg/l	~1,0 kg/l		
	Mixed product	~1,1 kg/l			
TECHNICAL INFORMATION	I				
Shore D Hardness	~80 (7 days / +23 °C)		(DIN 53 505		
Abrasion resistance	47 mg		(EN ISO 5470-1		
Chemical resistance	Resistant to many chemicals. Contact Sika Technical Services for additional information.				
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.				

Part A : Part B	75 : 25 (by weight)
Applied as a seal coat on Sikafloor®smooth substrates	~0,15 kg/m²
Applied as a seal coat on Sikafloor®broadcast substrates	~0,6–0,9 kg/m²
	Applied as a seal coat on Sikafloor®smooth substrates Applied as a seal coat on

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.

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	If more than 0,6-0,7kg/m2 is applied as clear topcoat on existing surface (none absorbent), it will become whitish after curing.					
Product temperature	Minimum			+10 °C		
	Maximum			+30 °C		
Ambient air temperature	Minimum		+10 °C	+10 °C		
	Maximum		+30 °C	+30 °C		
Relative air humidity	80 % r.h. max					
Dew point	Beware of condensation. The substrate and uncured applied floor materia 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	Minimum		+10 °C	+10 °C		
	Maximum	Maximum		+30 °C		
Substrate moisture content	< 4 % part by we	eight				
Pot Life	+10 °C		~60 minutes	~60 minutes		
	+20 °C		~30 minutes	~30 minutes		
	+30 °C		~20 minutes	~20 minutes		
Waiting time to overcoating	Before overcoating the product, allow:					
	Substrate tempe	erature Minimun	n	Maximum		
	+10 °C	~45 hour		~4 days		
	+20 °C	~36 hour	`S	~3 days		
	+30 °C	~24 hour	'S	~18 hours		
	Note: Times are approximate and will be affected by changing ambient conditions, particularly temperature and relative humidity.					
Applied product ready for use	Temperature	Foot traffic	Light traffic	Full cure		
	+10 °C	~3 days	~5 days	~10 days		
	+20 °C	~48 hours	~3 days	~7 days		
	+30 °C	~24 hours	~48 hours	~5 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
- Sikafloor® cleaning concept

# **IMPORTANT CONSIDERATIONS**

# Indentations

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

# **ECOLOGY, HEALTH AND SAFETY**

For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Safety Data Sheet (SDS) containing physical, ecological, toxicological and other safety-related data.

# DIRECTIVE 2004/42/CE LIMITATION OF EMISSIONS OF VOC

According to the EU Directive 2004/42/CE, the maximum allowed content of VOC (product category IIA / x type xx) is 500 g/l (Limits 2010) for the ready to use product.

The maximum content of Sikafloor®-169 is  $\leq 500 \text{ g/l}$  VOC for the ready to use product.



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# APPLICATION INSTRUCTIONS

#### **EQUIPMENT**

#### MIXING EQUIPMENT

- Electric single paddle mixer (300 to 400 rpm)
- Electric double paddle mixer (> 700 W, 300 to 400 rpm)
- Forced action mixer

#### SUBSTRATE QUALITY / PRE-TREATMENT

#### 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.

#### SUBSTRATE MOISTURE CONTENT

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

#### 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.

#### MIXING

#### MIXING PROCEDURE

- 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 (300–400rpm, > 700 W).
- 4. While mixing Parts A + B, gradually add the required filler or aggregates.
- 5. Mix for a further 2 minutes until a uniform mix is achieved
- To ensure thorough mixing, pour materials into another container and mix again to achieve a smooth and uniform mix.
- 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**

# **Protect from moisture**

After application, protect the Product from damp, condensation and direct water contact for at least 24 hours.

#### Sika Danmark A/S

Hirsemarken 5 3520 Farum Tlf. +45 48 18 85 85 www.sika.dk







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#### **IMPORTANT**

### Temporary heating

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

#### **BINDER**

- 1. Pour the Product onto the surface.
- 2. Apply the Product evenly over the surface with atrowel.

#### **SEAL COAT**

- 1. Pour the mixed Product onto the surface. Note: The consumption is specified in Application Information.
- 2. Apply the Product evenly over the surface with a squeegee.
- Back roll the surface in two directions at right angles with a short pile roller. Note: A seamless finish can be achieved if a "wet"edge is maintained during application.

#### **CLEANING OF EQUIPMENT**

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 declared data for this product may vary from country to country. Please consult the local Product Data Sheet for the exact product data.

### **LEGAL NOTES**

Any information or suggestions for use concerning Sika's products, which we either in writing or orally have given buyers or end-users of the product, have been given in good faith based on our own experiences and based on approved praxis and the technological and scientific knowledge on the time of giving such suggestions and information, which are given without any type of guarantees, and which do not lead to any further responsibility from Sika Danmark A/S, besides what is stated in the sales agreement in question. The buyer or end-user should themselves investigate or otherwise make sure, that our products are suitable for the use in question and further make sure that the products are kept and used correct and in agreement with the published rules and considering the actual conditions in order to avoid damages or less satisfactory results. Any order is accepted and any deliverance is affected according to the general terms of sales and delivery from Sika Danmark A/S, which are considered known and accepted, and which could be handed out when asked for. Our catalogues are not up-dated automatically. The present product data sheet is only for use in Denmark. Values stated in the present product data sheet should be seen as recommended, unless stated otherwise.

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