BUILDING TRUST

PRODUCT DATA SHEET

Sikafloor®-169 PT

2-PART EPOXY BINDER FOR MORTAR, SCREEDS AND SEAL COATS

DESCRIPTION

Two part, very low yellowing, low viscous, transparent epoxy resin.

USES

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

- Transparent binder for coloured quartz mortars and screeds like Sikafloor® DecoDur ES-22 Granite, Sikafloor® DecoDur ES-26 Flake, Sikafloor® DecoDur EB-26 Quartz and Sikafloor® DecoDur EM-21 Compact
- Transparent sealer coat for broadcast colour quartz mortar screeds and smooth coatings fully broadcast to excess with coloured chips
- Suitable for normal up to medium heavy and heavy mechanical loading
- Particularly used in the food and pharmaceutical industries, for show rooms, workshops and production areas etc.

CHARACTERISTICS / ADVANTAGES

- Transparent
- Low VOC-content
- Low yellowing
- Good mechanical and abrasion resistance
- Low viscous
- Easy application
- Multi-purpose binder

APPROVALS / CERTIFICATES

Synthetic resin screed material according to EN 13813:2002 and EN 1504-2:2004, declaration of performance 02 08 01 02 009 0000001 1049, certified by notified factory production control certification body 0866 and provided with the CE marking.

PRODUCT INFORMATION

Composition	Epoxy	
Packaging	Part A:	6.66 kg
	Part B:	3.34 kg
	Part A + B:	10.0 kg ready mix units
	Kit Drums	
	Part A:	2 x 200 kg
	Part B:	1 x 200 kg
	Part A + B:	600 kg
	Please contact our customer service, for information of what packaging sizes are sold in Denmark.	
Appearance / Colour	Resin - part A:	coloured, liquid
	Hardener - part B	transparent, liquid
Shelf life	12 months from date of production	

Storage conditions	The product must be stored properly in original, unopened and undamaged sealed packaging, in dry conditions at temperatures between +5 °C and +30 °C. Protect from direct sunlight.

Density		
	Part A:	~ 1.13 kg/l (+23 °C)
	Part B:	~ 1.00 kg/l (+23 °C)
	Part A + B:	~ 1.10 kg/l (+23 °C)

TECHNICAL INFORMATION

Shore D Hardness	~ 83	(7 days, +23 °C)	(DIN 53505)
Abrasion Resistance	~ 30 mg (CS 10/1000/1000)	(8 days, +23 °C)	(DIN 53109)
Chemical Resistance	Resistant to many chemicals. Contact Sika technical service for specific information.		

Temperature Resistance

Exposure[1)]	Dry heat
Permanent	+40 °C
Short-term max. 7 days	+80 °C
Short-term max. 12 hours	+100 °C

[1)] No simultaneous chemical and mechanical exposure.

Short-term moist/wet heat[1)] up to +80 °C where exposure is only occasional (steam cleaning etc.).

SYSTEMS

Systems

Sikafloor® DecoDur ES-26 Flake

Coating System	Product	Consumption
Primer:	Sikafloor®-156[1)]	1 - 2 * 0.3 - 0.5 kg/m²
Wearing course:	Sikafloor®-263 SL or Sikafloor®-264 Filled according PDS of the wearing course	~ 1.7 kg/m²/mm
Broadcasting:	Sika®-PVA ColourFlakes 3 mm in excess	~ 1.0 kg/m²
1st seal coat:	Sikafloor®-169 PT	~ 0.5 kg/m²
2nd seal coat:	Sikafloor®-169 PT (after soft grinding between the layers)	~ 0.3 kg/m²

Sikafloor® DecoDur EB-26 Quartz

Coating System	Product	Consumption
Primer:	Sikafloor®-156[1)]	1 - 2 * 0.3 - 0.5 kg/m²
Wearing course:	Sikafloor®-263 SL[2)] or Sikafloor®-264[2)] Filled according PDS of the wearing course	~ 1.7 kg/m²/mm
Broadcasting:	PU coated coloured quartz sand (0.3-0.8 mm or 0.7-1.2 mm)	~ 4.0 - 7.0 kg/m²
Seal coat:	Sikafloor®-169 PT	~ 0.5 kg/m²
Matt seal coat (optional):	Sikafloor®-302 W+ transparent or Sikafloor®-304 W	~ 0.15 kg/m²

Sikafloor® DecoDur ES-22 Granite

Coating System	Product	Consumption
Primer:	Sikafloor®-156[1)]	1 - 2 * 0.3 - 0.5 kg/m²
Scratch coat:	1 part Sikafloor®-264[2)] + 1 part quartz sand 0.1-0.3 mm + 1 - 2 % Extender T	~ 1. 4 - 1.7 kg/m²/mm
Wearing course:	Sikafloor®-169 PT filled 1:1.5 with Sika® DecoFiller	~ 3.5 kg/m² ~ 1.4 kg/m² binder + ~ 2.1 kg/m² filler
Matt seal coat:	Sikafloor®-302 W+ transparent or Sikafloor®-304 W	~ 0.15 kg/m²

Sikafloor® DecoDur EM-21 Compact

Coating System	Product	Consumption
Primer:	Sikafloor®-156[1)] Slightly broadcasted with Sika-PU Quartz CF 0.3-1.2	1 - 2 * 0.3 - 0.5 kg/m²
Wearing course:	1 part Sikafloor®-169 PT + 1 part Sikafloor® Compact Filler	See system datasheet
Broadcasting:	To saturation with Sika-PU Quartz CF 0.3-1.2 Power floating	See system datasheet
Seal coat:	Sikafloor®-169 PT	According system datasheet
Matt seal coat:	Sikafloor®-304 W	~ 0.15 kg/m²

[1)] Also possible: Sikafloor®-701, Sikafloor®-160 and Sikafloor®-161.

[2)] Pigmented in approx. the same colour like the following quartz sand/flakes/Sika® DecoFiller.

These figures are theoretical and do not allow for any additional material due to surface porosity, surface profile, variations in level or wastage etc.

APPLICATION INFORMATION

Mixing Ratio	Part A : part B =	67 : 33 (by weight)
Consumption	Applied as a top coat:	~ 0.5 - 0.7 kg/m²
	Applied as a wearing course:	~ 0.7 - 2.0 kg/m²
	These figures are theoretical and do not allow for any additional material due to surface porosity, surface profile, variations in level or wastage etc. For detailed info, please refer to the System data sheet Sikafloor® DecoDur ES-26 Flake, Sikafloor® DecoDur EB-26, Sikafloor® DecoDur ES-22 Granite and Sikafloor® DecoDur EM-21 Compact.	
Ambient Air Temperature	Min. +10 °C, max. +30 °C	
Relative Air Humidity	Max. 80 % r.h.	
Dew Point	Beware of condensation! The substrate and uncured floor must be at least 3 °C above dew point to reduce the risk of condensation or blooming on the floor finish. Note: Low temperatures and high humidity conditions increase the probability of blooming.	
Substrate Temperature	Min. +10 °C, max. +30 °C	
Substrate Moisture Content	< 4 % pbw moisture content Test method: Sika® Tramex meter, CM-measurement or Oven-dry-method. No rising moisture according to ASTM (Polyethylene-sheet).	

Pot Life

Temperature	Time
+10 °C	~ 45 minutes
+20 °C	~ 25 minutes
+30 °C	~ 15 minutes

Curing Time

Before applying Sikafloor®-169 PT on Sikafloor®-169 PT, Sikafloor®-264 Sikafloor®-156 or other primer allow:

Substrate temperature	Minimum	Maximum
+10 °C	24 hours	4 days
+20 °C	12 hours	2 days
+30 °C	6 hours	1 day

Before applying Sikafloor®-304 W on Sikafloor®-169 PT allow:

Substrate temperature	Minimum	Maximum
+10 °C	48 hours	4 days
+20 °C	24 hours	3 days
+30 °C	12 hours	2 days

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	~ 36 hours	~ 5 days	~ 10 days
+20 °C	~ 12 hours	~ 3 days	~ 7 days
+30 °C	~ 8 hours	~ 2 days	~ 5 days

Note: Times are approximate and will be affected by changing ambient conditions.

APPLICATION INSTRUCTIONS

SUBSTRATE QUALITY / PRE-TREATMENT

The concrete substrate must be sound and of sufficient compressive strength (minimum 25 N/mm²) with a minimum pull off strength of 1.5 N/mm².

The substrate must be clean, dry and free of all contaminants such as dirt, oil, grease, coatings and surface treatments, etc.

Concrete substrates must be prepared mechanically using abrasive blast cleaning or scarifying equipment to remove cement laitance and achieve an open textured surface.

Weak concrete must be removed and surface defects such as blow holes and voids must be fully exposed.

Repairs to the substrate, filling of blowholes/voids and surface levelling must be carried out using appropriate products from the Sikafloor®, Sikadur® and Sikagard® range of materials.

All dust, loose and friable material must be completely removed from all surfaces before application of the product, preferably by brush or vacuum.

MIXING

Prior to mixing, stir part A mechanically. When all of part B has been added to part A, mix continuously for 2 minutes until a uniform mix has been achieved. To ensure thorough mixing pour materials into another container and mix again to achieve a consistent mix. Over mixing must be avoided to minimise air entrainment.

When using an additional C component like the Sikafloor® CompactFiller or the Sikafloor® DecoFiller, please add the C component after Parts A and B have been mixed, in the correct mixing ratio (Slurry Sika® CompactFloor; 1 part resin: 1 part Sikafloor® CompactFiller; Wearing course Sika® DecoFloor; 1 part resin: 1.5 part Sikafloor® DecoFiller) and mix for a further 2 minutes until a uniform mix has been achieved.

For mortars add the premixed Sikafloor®-169 PT to the aggregates and mix until a uniform mix has been achieved.

Mixing Tools
Sikafloor®-169 PT must be thoroughly mixed using a low speed electric stirrer (300 - 400 rpm) or other suitable equipment. For the preparation of mortars use a forced action mixer of rotating pan, paddle or trough type. Free fall mixers should not be used.

APPLICATION

Prior to application, confirm substrate moisture content, r.h. and dew point. If > 4 % pbw moisture content, Sikafloor® EpoCem® may be applied as a T.M.B. (temporary moisture barrier) system.

Primer:
Make sure that a continuous, pore free coat covers the substrate. If necessary, apply two priming coats. Apply the primer or Sikafloor®-169 PT by brush, roller or squeegee. Preferred application is by using a squeegee and then back rolling crosswise.

Seal coat:
Apply Sikafloor®-169 PT by brush, roller or squeegee. Preferred application is by using a squeegee and then back rolling crosswise.

General:
Please refer to the System data sheet Sikafloor® Decodur ES-22 granite, Sikafloor® Decodur ES-26 flake, Sikafloor® Decodur EB-26 Quartz and Sikafloor® Decodur EM-21 Compact.

CLEANING OF EQUIPMENT

Clean all tools and application equipment with Sika® Thinner C immediately after use. Hardened and/or cured material can only be removed mechanically.

MAINTENANCE

To maintain the appearance of the floor after application, Sikafloor®-169 PT must have all spillages removed immediately and must be regularly cleaned using rotary brush, mechanical scrubbers, scrubber dryer, high pressure washer, wash and vacuum techniques etc. using suitable detergents and waxes.

CLEANING

Please refer to “Sikafloor® CLEANING REGIME”.

IMPORTANT CONSIDERATIONS

Do not apply Sikafloor®-169 PT on substrates with rising moisture.

Freshly applied Sikafloor®-169 PT must be protected from damp, condensation and water for at least 24 hours.

Trials should be carried out on mortar mixes to confirm and evaluate suitable aggregate colour blends and size distribution (granulometry).

The incorrect assessment and treatment of cracks may lead to a reduced service life and reflective cracking.

Under certain conditions, underfloor heating combined with high point loading, may lead to imprints in the resin.
Under UV-exposure some discolouration (yellowing) will occur, however this has no influence on the function and performance of the coating.

If heating is required do not use gas, oil, paraffin or other fossil fuel heaters, these produce large quantities of both CO_2 and H_2O water vapour, which may adversely affect the finish. For heating use only electric powered warm air blower systems.

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.

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.

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.

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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