

PRODUCT DATA SHEET

Sikafloor®-266 CR

2-part low-emission self-smoothing, textured and roller coating epoxy resin system

DESCRIPTION

Sikafloor-266 CR is a two part, low-emission, self-smoothing, textured and roller coating epoxy resin system designed for cleanrooms.

"Total solid epoxy composition acc. to the test method Deutsche Bauchemie e.V. (German Association for construction chemicals)"

USES

Sikafloor®-266 CR may only be used by experienced professionals.

- Especially designed for the use in cleanroom environment, where low VOC/AMC and particle emissions are mandatory.
- Also suitable as a hard wearing course for many industries, such as automotive, pharmaceutical, storage facilities and warehouses.

CHARACTERISTICS / ADVANTAGES

- Very low VOC / AMC emissions
- Very low particle emissions
- Organo phosphate and phthalate free
- Good chemical and mechanical resistance
- Easy to clean
- Economical
- Liquid proof
- Gloss finish
- Slip resistant surface possible

PRODUCT INFORMATION

Composition	Epoxy	
Packaging	Part A+B: 25 kg ready to mix units	Part A: 20 kg containers Part B: 5 kg containers

APPROVALS / CERTIFICATES

- Particle emission certificate Sikafloor-266 CR CSM Statement of Qualification - ISO 14644-1, class 3 - Report No. SI 0706-406.
- Outgassing emission certificate Sikafloor-266 CR: CSM Statement of Qualification - ISO 14644-8, class -7.8 - Report No. SI 0706-406.
- Particle and Outgassing Datasheet Sikafloor-266 CR (90°C) - M+W Zander Holding AG.
- Cetec Emission Study of Sikafloor-266 CR (Project CV060813) in accordance with United States Environmental Protection Agency (USEPA).
- Fire classification in accordance with EN 13501-1, Report-No. 2007-B-1784/1, MPA Dresden, Germany, May 2007.
- Eurofins Emission tested according to the AgBB-scheme and guidelines of the DiBt (AgBB – Committee for Health-related Evaluation of Building Products, DiBt – German Institute for Building Technology). Sampling, testing and evaluation were performed according to ISO-16000, Report No. 763695B.
- ISEGA Certificate of Conformity 27590 U 09 – Sikafloor-266 CR may be used safely as top layer or wearing surface on floors in the food sector. The short term contact of the coating with foodstuffs is safe as far as no hygiene regulations are violated.

USGBC LEED RATING

Sikafloor-266 CR conforms to the requirements of LEED EQ Credit 4.2: Low-Emitting Materials: Paints & Coatings SCAQMD Method 304-91 VOC Content < 100 g/l

Appearance / Colour	Part A	Resin	coloured, liquid
	Part B	Hardener	transparent, liquid
	Almost unlimited choice of colour shades. Under direct sun light and atmospheric influence 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 should be stored properly in original, unopened and undamaged sealed packaging, in dry conditions at temperatures between +5°C and +30°C.		
Density	Part A: ~ 1.60 kg/l Part B: ~ 1,02 kg/l Mixed resin: ~ 1.45 kg/l Filled resin 1 : 0.4 : ~ 1.66 kg/l All Density values at +23°C.		DIN EN ISO 2811-1
Solid content by weight	~ 100%		
Solid content by volume	~ 100%		

TECHNICAL INFORMATION

Shore D Hardness	84 (14 days / +23°C)		DIN 53 505
Abrasion Resistance	45 mg (CS 10/1000/1000)	(8 days / +23°C)	(DIN 53 109 (Taber Abraser Test))
Compressive Strength	Resin: ~ 80 N/mm ² (28 days / +23°C)		EN 13892-2
Tensile Strength in Flexure	Resin: ~ 39 N/mm ² (28 days / +23°C)		EN 13892-2
Tear Strength	> 1.5 N/mm ² (failure in concrete)		ISO 4624
Chemical Resistance	Resistant to many chemicals. Please ask for a detailed chemical resistance table.		
Temperature Resistance	Exposure*	Dry heat	
	Permanent	+50°C	
	Short term max. 7 d	+80°C	
	Short term max. 12 h	+100°C	
	Short-term moist/wet heat* up to +80°C where exposure is only occasional (i.e. during steam cleaning etc.). *No simultaneous chemical and mechanical exposure		

SYSTEM INFORMATION

System	<p><u>Roller coating:</u> Primer: 1 x Sikafloor-144 / -156 / -161 Coating: 2 x Sikafloor-266 CR Note: In cases of limited exposure and normal absorbent concrete substrates priming with Sikafloor-144 / -156 is not necessary.</p> <p><u>Textured coating:</u> Primer: 1 x Sikafloor-144 / -156 / -161 1st layer: 1 x Sikafloor-266 CR 2nd layer: 1 x Sikafloor-266 CR mixed with Extender T The 2nd layer of Sikafloor-266 CR can be mixed with additional aggregate in order to improve slip resistance, but particle emissions could increase. Note: In cases of limited exposure and normal absorbent concrete substrates priming with Sikafloor-144 / -156 / -161 is not necessary.</p> <p><u>Self-smoothing system:</u></p>
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Primer: 1 x Sikafloor-144 / -156 / -161

Wearing course: 1 x Sikafloor-266 CR, filled with quartz sand 0.1 - 0.3 mm

APPLICATION INFORMATION

Mixing Ratio	Part A : part B = 80 : 20 (by weight)	
Consumption	1 Primer	
	Product	Consumption
	Sikafloor-144 / -156/ -161	0.3 - 0.5 kg/m ²
	2 Levelling (optional)	
	Product	Consumption
	Sikafloor-144 / -156/ -161 mortar	Refer to PDS of Sikafloor-144 /-156/-161
	3 Roller coating	
	Product	Consumption
	2 x Sikafloor-266 CR	0.4 - 0.6 kg/m ² for each layer
	4 Textured coating	
	Product	Consumption
	1st layer Sikafloor-266 CR	0.4 - 0.6 kg/m ²
	2nd layer Sikafloor-266 CR	0.7 - 0.8 kg/m ²
	+ Extender T	1.5 - 2% (by weight)
	5 Self-smoothing wearing course (Film thickness ~ 1.5)	
	Product	Consumption
	Sikafloor-266 CR	Maximum 2.5 kg/m ²
	filled with quartz sand 0.1 - 0.3 mm	Binder + quartz sand
		15 - 20°C: 1 : 0.3 pbw (1.9 + 0.6 kg/m ²)
		20 - 30°C: 1 : 0.4 pbw (1.8 + 0.7 kg/m ²)
	These figures are theoretical and do not allow for any additional material due to surface porosity, surface profile, variations in level or wastage etc.	
Ambient Air Temperature	+15°C min. / +30°C max.	
Relative Air Humidity	70 % r.h. max.	
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.	
Substrate Temperature	+15°C min. / +30°C max.	
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	~ 30 minutes
	+30°C	~ 15 minutes

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

Curing Time

Before applying Sikafloor-266 CR on Sikafloor-144 allow:

Substrate temperature	Minimum	Maximum
+10°C	26 hours	4 days
+20°C	24 hours	2 days
+30°C	12 hours	1 day

Before applying Sikafloor-266 CR on Sikafloor-156 allow:

Substrate temperature	Minimum	Maximum
+10°C	24 hours	4 days
+20°C	8 hours	2 days
+30°C	5 hours	1 day

Before applying Sikafloor-266 CR on Sikafloor-161 allow:

Substrate temperature	Minimum	Maximum
+10°C	24 hours	3 days
+20°C	12 hours	2 days
+30°C	8 hours	1 day

Before applying Sikafloor-266 CR on Sikafloor-266 CR allow:

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

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	48 hours	~ 6 days	~ 10 days
+20°C	36 hours	~ 4 days	~ 7 days
+30°C	24 hours	~ 2 days	~ 5 days

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

APPLICATION INSTRUCTIONS

SUBSTRATE QUALITY / PRE-TREATMENT

SUBSTRATE QUALITY

Concrete substrates 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.

If in doubt, apply a test area first.

SUBSTRATE PREPARATION

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 blowholes 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.

The concrete or screed substrate has to be primed or levelled in order to achieve an even surface.

High spots must be removed by e.g. grinding. All dust, loose and friable material must be completely removed from all surfaces before application of the product, preferably by brush and/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.

When parts A and B have been mixed, add the quartz sand 0.1 - 0.3 mm and mix for a further 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 entrapment.

Sikafloor-266 CR must be thoroughly mixed using a low speed stirrer (300 - 400 rpm) or other suitable equipment.

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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.

Levelling:

Rough surfaces need to be levelled first. Therefore use Sikafloor-144 / -156 / -161 levelling mortar (see PDS).

Roller coating:

Sikafloor-266 CR as coating can be applied by short-piled roller (crosswise).

Textured coating:

Sikafloor-266 CR is applied with a serrated trowel and then back-rolled (crosswise) with a textured roller.

Wearing course smooth:

Sikafloor-266 CR is poured, spread evenly by means of a serrated trowel.

After spreading the material evenly, turn the serrated trowel and smooth the surface in order to achieve an aesthetically higher grade of finish.

Roll immediately (within max. 10 minutes of application) in two directions with a spiked roller to ensure even thickness and to remove entrapped air. To obtain the highest level of aesthetic finish, spike roll in two directions at a 90 degree angle, passing only once in each direction.

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-266 CR 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.

IMPORTANT CONSIDERATIONS

This product may only be used by experienced professionals.

Do not apply Sikafloor-266 CR on substrates with rising moisture

Do not blind the primer.

Freshly applied Sikafloor-266 CR must be protected from damp, condensation and water for at least 24 hours.

Avoid puddles on the surface with the primer.

Tools

Recommended Supplier of Tools:

PPW-Polyplan-Werkzeuge GmbH, Phone: +49 40/5597260,

www.polyplan.com.

Serrated trowel for smooth wearing layer:

e.g. Large-Surface Scrapper No. 565, Toothed blades No. 25

Serrated trowel for textured wearing layer:

e.g. Trowel No. 999 or Adhesive Spreader No.777, Toothed blades No. 23

For exact colour matching, ensure the Sikafloor-266 CR in each area is applied from the same control batch numbers.

BASIS OF PRODUCT DATA

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

LOCAL RESTRICTIONS

Note that as a result of specific local regulations the declared data and recommended uses for this product may vary from country to country. Consult the local Product Data Sheet for the exact product data and uses.

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ECOLOGY, HEALTH AND SAFETY

CE MARK

Please refer to Declaration of performance.

HEALTH AND SAFETY INFORMATION

For information and advice on the safe handling, storage and disposal of chemical products, users should refer to the most recent Material Safety Data Sheet 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, the maximum allowed content of VOC (Productcategory IIA / j type **sb**) is 500 g/l (Limit 2010) for the ready to use product. The maximum content of Sikafloor-266 CR is < 500 g/l VOC for the ready to use product.

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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