Construction

Sikafloor®-326

2-part PUR tough-elastic, low-VOC, self smoothing floor

Product Description

Sikafloor®-326 is a two part solvent free coloured self-smoothing PUR resin with tough-elastic properties.

Uses

- Smooth wearing course with crack-bridging properties for industrial floors in production and storage facilities, work shops etc.
- Broadcast wearing course with crack-bridging properties for wet working areas (food and beverage industry etc.), car park decks and loading ramps etc.
- Can be subjected to normal to medium heavy mechanical and chemical stress

Characteristics / Advantages

- Flexible and tough-elastic
- Crack-bridging
- Good chemical and mechanical resistance
- Low VOC emitting
- Solvent-free
- Possible slip resistant surface
- Liquid proof
- Easy to apply
- Easy to clean
- Economical

Tests

Approval / Standards

Coating for concrete protection according to the requirements of EN 1504-2:2004 and EN 13813:2002, DoP 020801040060000007 1008 certified by Factory Production Control Body, 0921 and provided with the CE-mark.

Fire classification in the radiant panel apparatus and smoke rating:
Reports No. 2011-1895 and 2011-1896 Exova Brandhaus Germany

Emission test according to the German **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. G10003B, Eurofins Product Testing A/S, Denmark.

Emission test according to the French **AFSSET**-scheme and guidelines. Sampling, testing and evaluation were performed according to ISO-16000, Report No. G10003C, Eurofins Product Testing A/S, Denmark.

ISEGA - EN1186, EN 13130, and prCEN/TS 14234 standards, and the Decree on Consumer Goods for contact with food stuffs, according to test report by ISEGA, Registered Nº 33045 U 12, dated 31. January 2012

Particle (vs.PA6) emission certificate: Cleanroom Suitable Materials CSM Statement of Qualification, class ISO 4. Tested by IPA report No. SI 1108-568.

Particle (vs.PA6) emission certificate: Cleanroom Suitable Materials CSM Statement of Qualification, GMP A. Tested by IPA report No. SI 1108-568.

Outgassing VOC emission certificate: Cleanroom Suitable Materials CSM

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	Statement of Qualification, ISO-AMCm class -7.3. Tested by IPA report No. SI 1108-568. **Biological Resistance Class "Very Good** "–Cleanroom Suitable Materials Evaluation of the biological resistance in accordance with ISO 846. Tested by IPA report No. SI 1108-568.

Product Data

Form

Appearance / Colours	Resin - part A: coloured, liquid Hardener - part B: brownish, liquid Standard colour on stock RAL 7032 Extended Colour Range on request: Under direct sun radiation there will be discolouration and colour deviation; this has no influence to the function and performance of the coating. Application steps and the use of different batch numbers during one project might lead to a colour variation. For areas with aesthetical requirements, the use of Sikafloor®-357 N or Sikafloor®-305W as seal coat is recommended.
Packaging	Part A: 16,05kg containers Part B: 5,95 kg containers Part A+B: 22 kg ready to mix units

Storage

Storage Conditions / Shelf-Life	12 months from date of production if stored properly in original, unopened and undamaged sealed packaging, in dry conditions at temperatures between +5°C and +30°C.

Technical Data

Chemical Base	Polyurethane (PUR)
Density	Part A: 1.3 kg/l Part B: 1.2 kg/l (DIN EN ISO 2811-1) Mixed Resin (unfilled): 1.25 kg/l Mixed Resin (filled 1:0,7) 1.6 kg/l Filling 1:0.7 with quartz sand F34 0.1 – 0.3 mm All Density values at +23°C
Solid Content	~ 100% (by volume) / ~ 100% (by weight)

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Mechanical / Physical Properties

Compressive Strength	Resin filled (1 : 0.7) ~ 53 N/mm^2 (after 28 days at +23 °C)	(EN 196-1)
Flexural Strength	Resin filled (1 : 0.7) ~ 22 N/mm^2 (after 28 days at +23 °C)	(EN 196-1)
Tensile Strength	Resin: ~ 15 N/mm² (after 28 days, at +23 °C)	(ISO 527-2)
	Resin filled (1 : 0.7) ~9 N/mm² (after 28 days, at +23 °C)	(ISO 527-2)
Bond Strength	> 1.5 N/mm^2 (failure in concrete)	(EN 1542)
Tear Strength	Resin: ~ 74 N/mm (after 28 days, at +23 °C)	(ISO 34-1)
	Resin filled (1 : 0.7): ~ 32 N/mm² (after 28days, at +23 °C)	
Shore D Hardness	Resin: 78 (28 days / +23 °C / 50% r.h)	(ISO 868)
Elongation at Break	Resin: ~ 90% (28 days / +23 °C / 50% r.h)	(ISO 527-2)
	Resin filled (1 : 0.7): ~22% (28 days / +23 °C / 50% r.h)	(ISO 527-2)
Abrasion Resistance	Resin: ~70 mg (CS 10/1000/1000)	(ISO 5470-1)
	Resin filled (1 : 0.7) ~ 59 mg (CS 10/1000/1000)	(ISO 5470-1)

Resistance

Chemical Resistance

Resistant to many chemicals. Please ask for a detailed chemical resistance table.

Thermal Resistance

Exposure*	Dry heat
Permanent	+50 °C
Short-term max. 7d	+80 °C
Short-term max. 8h	+100 °C

*No simultaneous chemical and mechanical exposure.

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

USGBC LEED Rating

Sikafloor®-326 conforms to the requirements of LEED
EQ Credit 4.2: Low-Emitting Materials: Paints & Coatings
SCAQMD Method 304-91 VOC Content < 100 g/l

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System Information

System Structure

Self-smoothing system 1.5 - 2.0 mm:

Primer:	1-2 x Sikafloor®-156/-161
Coating:	1 x Sikafloor®-326 + quartz sand (*F34 0.1 – 0.3 mm*)
Top Coat (optional):	1-2x Sikafloor® 357 N or Sikafloor® 305W

Broadcast system approx. 3 mm (single layer system):

Primer:	1-2 x Sikafloor®-156/-161
Base coat:	1 x Sikafloor®-326 + quartz sand (*F34 0.1 – 0.3 mm*)
Broadcasting:	quartz sand (0.4 - 0.7 mm) broadcast to excess
Seal coat:	1-2x Sikafloor® 357 N or 1-2 x Sikafloor®-359 N*

Broadcast system approx. 4 mm (2 layers system with improved crack bridging properties):

Primer:	1-2 x Sikafloor®-156/-161
Membrane:	1 x Sikafloor®-326 + quartz sand (*F34 0.1 – 0.3 mm*)
Base coat:	1 x Sikafloor®-326
Broadcasting:	quartz sand (0.4 - 0.7 mm) broadcast to excess
Seal coat:	1-2x Sikafloor® 357 N or 1-2 x Sikafloor®-359 N*

*For Outdoor UV-exposed areas the use of Sikafloor®-359 N as a seal coat is mandatory.

For application on inclined surfaces:
Same systems as described above with the addition of Extender T to the Sikafloor®-326.

Application Details

Consumption / Dosage

Coating System	Product	Consumption
Primer	1-2 x Sikafloor®-156/-161	1-2 x ~0.3 - 0.5 kg/m²
Levelling (optional)	Sikafloor®-156/-161 levelling mortar	Refer to PDS of Sikafloor®-156/-161
Self-smoothing system 1.5 - 2.0 mm Topcoat	1 pbw Sikafloor®-326 0.7 pbw quartz sand (F34 0.1 – 0.3 mm) 1-2 x Seal coat Sikafloor®-357N or Sikafloor®- 305W	~1.60 kg/m² mixture (0.94 kg/m² binder + 0.66 kg/m² quartz sand) per mm layer thickness ~0,14 kg/m²,
Broadcast system approx. 3 mm (single layer system): Basecoat Topcoat	 1 pbw Sikafloor®-326 0.7 pbw quartz sand (F34 0.1 – 0.3 mm) + broadcast quartz sand 0.4 - 0.7 mm 1-2x Sikafloor® 357 N or 1-2 x Seal coat Sikafloor®-359 N*	 ~1.60 kg/m² mixture (0.94 kg/m² binder + 0.66 kg/m² quartz) per mm layer thickness ~ 4.0 kg/m² ~ 0.7 kg/m²

	Broadcast system approx. 4 mm (2- layers system with improved crack bridging properties)		
	Membrane	1 pbw Sikafloor®-326 + 0.7 pbw quartz sand (F34 0.1 – 0.3 mm)	~2.50 kg/m² mixture (1.47 kg/m² binder + 1.03 kg/m² quartz
	Basecoat	Sikafloor®-326 + broadcast quartz sand 0.4 - 0.7 mm	1.20 kg/m² ~ 4.0 kg/m²
	Topcoat	1-2x Sikafloor® 357 N or 1-2 x Seal coat Sikafloor®-359 N*	~ 0.7 kg/m²
	For application on inclined surfaces	Inclination (%)	Extender T (wt.-%, related to Sikafloor®-326 at t +20°C)
		0 - 2.5	-
		2.5 - 5.0	1
		5.0 - 10.0	2
		10 - 15	2.5
		15 - 20	3

The 0.7 parts per weights quartz sand filling, is a maximum not a must. Due to local conditions in weather or application method less filling might be necessary to have good workability.

* For outdoor UV-exposed areas the use of Sikafloor®-359 N as a seal coat is mandatory.

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

Substrate Quality

Concrete substrates must be sound and of sufficient compressive strength (minimum 25 N/mm^2) with a minimum pull off strength of 1.5 N/mm^2.

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 leveling 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 leveled 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.

Application Conditions / Limitations

Substrate Temperature

+10°C min. / +25°C max.

Ambient Temperature

+10°C min. / +25°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).

Relative Air Humidity

70% r.h. max.

Dew Point

Beware of condensation!

The substrate and uncured floor must be at least 3ºC above the dew point to reduce the risk of condensation or blooming on the floor finish.

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Application Instructions

Mixing	Part A : part B = 73 : 27 (by weight)
Mixing Time	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 F34 0.1 – 0.3 mm and mix for a further 2 minutes until a uniform mix has been achieved. To ensure thorough mixing pour the materials into another pail and mix again to achieve a consistent mix. After mixing leave the mixture for 3 minutes to react before applying. This so called induction time minimizes the appearing of colour shade differences. When the Sikafloor-326 is finished using a pigmented topcoat, this procedure is not necessary. Over mixing must be avoided to minimize air entrainment. The product has been designed to be filled and mixed in one pail, without the need to split the mixture over two pails. When splitting the product over 2 pails, make sure to split the A-component and the B-component before mixing, and do not split the mixture. When splitting the mixture, differences in reaction-time can lead to colour differences on the floor.
Mixing Tools	Sikafloor®-326 must be thoroughly mixed using a low speed electric stirrer (300 - 400 rpm) or other suitable equipment.
Application Method / Tools	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 Sikafloor®-161 by brush, roller or squeegee. Preferred application is by using a squeegee and then back rolling crosswise. *Levelling:* Rough surfaces need to be levelled first. Therefore use e.g. Sikafloor®-156 levelling mortar (see PDS). *Self smoothing system:* Sikafloor®-326 is poured, spread evenly by means of a serrated trowel or pin rake. Roll immediately in two directions with spiked roller to ensure even thickness and to remove entrapped air. *Broadcast system:* Sikafloor®-326 is poured, spread evenly by means of a serrated trowel or pin rake. Then, level and remove entrapped air with a spiked roller and after about 10 minutes (at +20°C) but before 20 minutes (at +20°C), broadcast with quartz sand, at first lightly and then to excess. *Seal coat Broadcasted system:* *1-2* Sealer coats can be applied by squeegee and then back-rolled (crosswise) with a short-piled roller. A seamless finish can be achieved if a “wet” edge is maintained during application.
Cleaning of Tools	Clean all tools and application equipment with Thinner C immediately after use. Hardened and/or cured material can only be removed mechanically.

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Potlife

Temperature	Time
+10℃	~ 40 minutes
+20℃	~ 20 minutes
+30℃	~ 10 minutes

Waiting Time / Over coating

Before applying Sikafloor®-326 on Sikafloor®-*156/-161* allow:

Substrate temperature	Minimum	Maximum
+10℃	24 hours	3 days
+20℃	12 hours	2 days
+30℃	6 hours	1 day

If maximum waiting time is exceeded, a new primer layer have to be applied.

Before applying Sikafloor®-326 or Sikafloor®-coatings on Sikafloor®-326 allow:

Substrate temperature	Minimum	Maximum
+10℃	30 hours	4 days
+20℃	24 hours	2 days
+30℃	16 hours	1 day

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

If maximum waiting time is exceeded, the Sikafloor®-326 surface have to be grinded to get mechanical bonding between the Sikafloor® layers.

Notes on Application / Limitations

Do not apply Sikafloor®-326 on substrates with rising moisture.

Freshly applied Sikafloor®-326 must be protected from damp, condensation and water for at least 24 hours.

Uncured material reacts in contact with water (foaming). During application care must be taken that no 'sweat' drops into fresh Sikafloor®-326 (wear head and wrist bands).

*Tool*s
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

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

In smooth applications with sun light exposure use Sikafloor®-357 N or Sikafloor®-305W as seal coat.

For colour matching, ensure Sikafloor®-326 Comp. A and B is applied from the same control batch numbers. Be aware that Sikafloor®-326 will have colour variation.

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

If during application temporary 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.

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Curing Details

Applied Product ready for use

Temperature	Foot traffic	Light traffic	Full cure
+10℃	48 hours	5 days	14 days
+20℃	24 hours	3 days	7 days
+30℃	16 hours	2 days	5 days

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

Cleaning / Maintenance

Methods

To maintain the appearance of the floor after application, Sikafloor®-326 must have all spillages removed immediately and be regularly cleaned using rotary brush, mechanical scrubbers, scrubber dryer, high pressure washer, wash and vacuum techniques etc., using suitable detergents and waxes.

Note

The following chapter is only mandatory for European countries.

EU Regulation 2004/42

VOC - Decopaint Directive

According to the EU-Directive 2004/42, the maximum allowed content of VOC (Product category IIA / **j** type **sb**) is 550 / 500 g/l (Limits 2007 / 2010) for the ready to use product.

The maximum content of **Sikafloor®-326** is < 500 g/l VOC for the ready to use product.

Value Base

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 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.

Health and Safety Information

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

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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