BUILDING TRUST

PRODUCT DATA SHEET

Sikafloor®-425

1-part elastic smooth polyurethane floor coating

PRODUCT DESCRIPTION

Sikafloor®-425 is a 1-part coloured, UV resistant polyurethane resin floor coating. It provides a seamless, waterproof and slip resistant smooth matt finish. It is part of the Sikafloor® Monoflex flooring range for decorative or engineered applications

USES

Sikafloor®-425 may only be used by experienced professionals.

The Product can be used as a:
- Waterproof coating on concrete and underneath tiles

Please note:
- The Product may only be used by experienced professionals.

CHARACTERISTICS / ADVANTAGES

- iCure® based technology
- Moisture-activated curing
- Good crack-bridging ability
- Fast curing
- Abrasion resistant
- Good adhesion to substrate
- Slip resistant
- Waterproof
- Water vapour permeable
- Resistant to weathering
- High yellowing resistance

APPROVALS / STANDARDS

- CE Marking and Declaration of Performance to European Technical Assessment ETA 18/0485, based on ETAG 005 Part 1 and Part 6 — Liquid applied roof waterproofing kits. Part 1: General. Part 6: Specific stipulations for Kits based on Polyurethane
- CE Marking and Declaration of Performance to EN 14891:2012/AC:2012 — Liquid-applied water impermeable products for use beneath ceramic tiling bonded with adhesives
- Fire testing DD CEN/TS 1187, Sikafloor®-425, Exova,Test Report No. 378184
- Reaction to fire classification EN 13501-1, Exova Warringtonfire, Report No. WF 379356

PRODUCT INFORMATION

Chemical Base	Elastomeric aliphatic polyurethane
Packaging	6.5 kg (5 L) container 19.5 kg (15.1 L) container Refer to current price list for packaging variations.
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. Al-

	ways refer to packaging. Refer to current Safety Data Sheet for information on safe handling and storage.		
Appearance / Colour	Final floor finish colour	RAL 7015 (slate grey), RAL 85 00 (light grey), RAL 9016 (traffic white)	
	Applied colours selected from colour charts will be approximate. For colour matching: Apply colour sample and confirm selected colour under real lighting conditions.		
Density	Mixed Product	~1.29 kg/l	(EN ISO 2811-1)
Solid content by mass	84,6 %		
Solid content by volume	79,3 %		

TECHNICAL INFORMATION

Abrasion Resistance	AR0.5 (special) - Accelerated Resistance		(BS 8204-2)
Tensile Strength	Unreinforced	~7.5 MPa	(EN ISO 527-3)
	Reinforced	~17 MPa	
Elongation at Break	Reinforced	~30 %	(EN ISO 527-3)
	Unreinforced	~500 %	
Chemical Resistance	Resistant to many chemicals. Contact Sika Technical Services for additional information. Note: Wine, coffee, certain leaves, flower petals and similar organic materials may cause surface discolouration. This will have no effect on the product performance and durability. Use a suitable top coat, such as Sikafloor®-418, for improved cleanability and resistance to contamination		

APPLICATION INFORMATION

Consumption	~0.9–1.4 kg/m² per layer depending on the application 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.	
Layer Thickness	Refer to the relevant System Data Sheet	
Product Temperature	Minimum	+2 °C
	Maximum	+30 °C
Ambient Air Temperature	Minimum	+2 °C
	Maximum	+30 °C
Relative Air Humidity	Maximum	80 %
	Minimum	35 %
Dew Point	Beware of condensation. The substrate and uncured applied floor material 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	+2 °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.
Pot Life	As soon as the container is opened, surface film formation will happen within 1–2 hours. High temperatures and high air humidity will accelerate curing significantly.
Waiting Time / Overcoating	Note: Times are given at 50 % r.h.. Times in brackets are with the use of Sika® PU Accelerator.

Substrate temperature	Minimum	Maximum
+10 °C	~24 hours (6 hours)	~14 days (14 days)
+20 °C	~16 hours (4 hours)	~14 days (7 days)
+30 °C	~12 hours (2 hours)	~7 days (7 days)

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

Applied Product Ready for Use

Note: Times are given at 50 % r.h.. Times in brackets are with the use of Sika® PU Accelerator.

Temperature	Rain resistant	Foot traffic	Full cure
+10 °C	~15 hours (2 hours)	~24–48 hours (4 hours)	~7–14 days (36 hours)
+20 °C	~5 hours (1 hour)	~24 hours (3 hours)	~5–9 days (24 hours)
+30 °C	~3 hours (30 min)	~18 hours (2 hours)	~3–5 days (16 hours)

Note: Times are approximate and will be affected by changing ambient conditions, particularly temperature and relative humidity. Times are also dependant on layer thickness.

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.

FURTHER DOCUMENTS

- Sika® Information Manual: Evaluation and preparation of surfaces for flooring systems
- Sika® Information Manual: Mixing and application of flooring systems
- Sikafloor® cleaning concept

LIMITATIONS

IMPORTANT
Indentations
Under certain conditions, underfloor heating or high ambient temperatures combined with high point loading may lead to indentations in the resin.
IMPORTANT
Incompatibility
Do not overcoat the product with Sikafloor®-410 or Sikafloor®-416.

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.

Regulation (EC) No 1907/2006 (REACH) - Mandatory training
As from 24 August 2023 adequate training is required before industrial or professional use of this product. For more information and a link to the training visit www.sika.com/pu-training.

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

According to the EU-Directive 2004/42, the maximum allowed content of VOC (Product category IIA / i type sb) is 500 g/l (Limits 2010) for the ready to use product. The maximum content of Sikafloor®-425 is < 500 g/l VOC for the ready to use product.

APPLICATION INSTRUCTIONS

EQUIPMENT

Mixing equipment
- Electric single paddle mixer (300 to 400 rpm)

Application equipment
- Brush
- Short pile roller

- Squeegee

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 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.
No rising moisture must be present in the substrate, according to ASTM (Polyethylene-sheet).
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

Avoid over-mixing to minimise air entrainment.
1. Before application, mix for at least 2 minutes

APPLICATION

IMPORTANT
Protect from moisture
After application, protect the Product from damp, condensation and direct water contact for at least 24 hours.
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
Application during falling temperatures
Always apply during falling temperatures. If applied during rising temperatures, pin holes may occur from rising air.
IMPORTANT
Film formation
Start the application procedure immediately once the container has been opened. When exposed to air, film formation will happen within 1–2 hours. High temperatures and high air humidity will reduce pot life significantly.
IMPORTANT
Ensuring consistent colour matching
For consistent colour matching, make sure the Product in each area is applied from the same control batch numbers.
Smooth coating
1. Pour the Product onto the surface.
2. Apply the Product in two directions at right angles with a short-pile roller, brush, or squeegee.

Note: A seamless finish can be achieved if a "wet" edge is maintained during application.
Note: After thorough cleaning, the product can be overcoated with itself.

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.

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