

## SYSTEM DATA SHEET

# Sikafloor® PurCem® HS-24

Self-smoothing, medium duty, matt polyurethane cement hybrid flooring system

### DESCRIPTION

Sikafloor® PurCem® HS-24 system is made with polyurethane cement technology and is part of the Sikafloor® PurCem® flooring range. The Sikafloor® PurCem® HS-24 system is especially designed to withstand chemical attacks, high impacts and can be used in wet and dry processing plants. The system consists of a highly durable polyurethane cement body coat, it has an aesthetic, easy to clean and smooth surface, providing medium slip resistance. Is typically installed at 4 to 6 mm thick.

### USES

- Food processing plants
- Chemical plants
- Laboratories
- Workshops
- Bakeries
- Dry food production areas

### CHARACTERISTICS / ADVANTAGES

- High chemical resistance. Resists a wide range of organic and inorganic acids, alkalis, amines, salts and solvents
- Good resistance to fire
- High mechanical and abrasion resistance
- Easy application
- Easy to clean and maintain
- Seamless, non-taint, odourless
- Smooth, matt surface
- Tolerant to moisture in the substrate
- Very good life cyclecost performance
- P3 Slip Rating (AS 4586-13)

### SUSTAINABILITY

Conformity with LEED v2009 IEQc 4.2: Low-Emitting Materials - Paints and Coatings

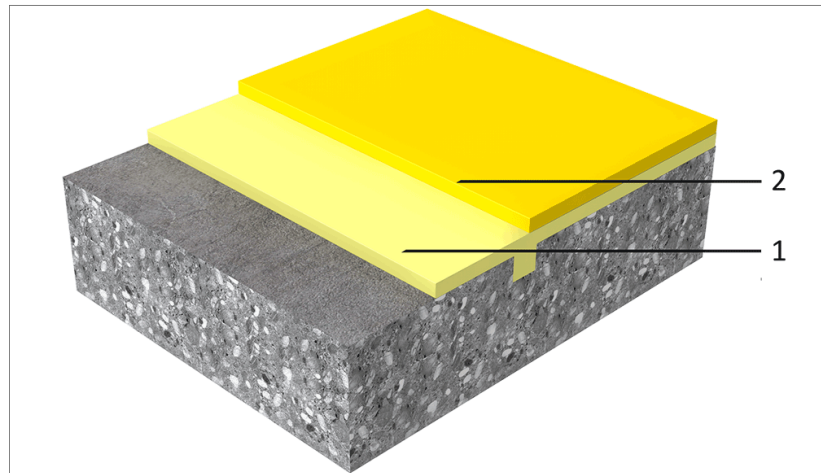
### APPROVALS / CERTIFICATES

- Screed material for floor screeds according to EN 13813:2002, Declaration of Performance 02 08 02 02 001 0 000017 1088, certified by notified factory production control body 0086, certificate of conformity of factory production control 541325, and provided with the CE-mark.
- Surface protection coating for concrete according to EN 1504-2:2004, Declaration of Performance 02 08 02 02 001 0 000017 1088, certified by notified factory production control body 0086, certificate of conformity of factory production control 541325, and provided with the CE-mark.
- Slip resistance properties according to DIN 51130 tested at MPI (Materialprüfung und Entwicklung), test reports refs. N° 12-6638-S/12, dated August 7th, 2012.

# SYSTEM INFORMATION

## System structure

## Sikafloor® PurCem® HS-24



Layer	Product
1. Scratch coat	Sikafloor®-24 PurCem®
2. Body coat	Sikafloor®-24 PurCem®

As optional primers Sikafloor®-156/-161 + quartz sand 0.4–0.8 mm broadcast to excess can be used. Please refer to the individual Product Data Sheet.

<b>Composition</b>	Water-based polyurethane cement hybrid
<b>Appearance</b>	Smooth surface, matt finish
<b>Colour</b>	Available RAL colours: Dusty Grey - Traffic Grey - Curtain Call - Beige - Maize Yellow - Oxide Red - Sky Blue - Grass Green Other RAL colours MTO as per Sikafloor PurCem colour chart
<b>Nominal thickness</b>	~ 3-5 mm
<b>Volatile organic compound (VOC) content</b>	Very low VOC content, in line with the EU-Directive 2004/42

## TECHNICAL INFORMATION

<b>Shore D Hardness</b>	~80	(ASTM D 2240)
<b>Abrasion resistance</b>	Class "Special" Severe abrasion resistance	(BS 8204 Part 2)
	AR 0.5	(EN 13892-4)
	Class A6	(EN 13892-3)
	≤ 3000 mg (H-22/1000/1000)	(ASTM D 4060-01)
<b>Compressive strength</b>	≥ 50 N/mm <sup>2</sup> after 28 days at +23 °C / 50% r.h.	(BS EN 13892-2)
	≥ 44 MPa after 28 days at +23 °C / 50% r.h.	(ASTM C 579)
<b>Tensile adhesion strength</b>	≥ 1.5 N/mm <sup>2</sup>	(EN1542)
<b>Reaction to fire</b>	B <sub>fi</sub> -s1	(EN 13501-1)
<b>Chemical resistance</b>	Please refer to Sikafloor® PurCem® chemical resistance guide. Contact Sika technical service for specific information.	
<b>Temperature resistance</b>	<b>3 mm</b> -5 °C to +50 °C	<b>4–5 mm</b> -10 °C to +70 °C
<b>USGBC LEED Rating</b>	Conforms Section EQ (Indoor Environmental Quality), Credit 4.2 Low-Emit-	

<b>Skid / slip resistance</b>	R 10	(DIN 51130)
	P3	(AS 4586-13)
	<b>SRV Dry</b>	<b>SRV Wet</b>
	70	60
		(EN 13036- 4)

## APPLICATION INFORMATION

<b>Consumption</b>	<b>Layer</b>	<b>Product</b>	<b>Consumption</b>
	1. Scratch coat	Sikafloor® -24 PurCem®	~ 2.0 kg/m <sup>2</sup>
	2. Body coat	Sikafloor® -24 PurCem®	~ 1.9 kg/m <sup>2</sup> /mm
Consumptions are theoretical and do not include any wastage, additional material need due to porosity, substrate profile etc.			
<b>Material temperature</b>	Please refer to the individual Product Data Sheet		
<b>Ambient air temperature</b>	+10 °C min / +40 °C max		
<b>Relative air humidity</b>	80 % max		
<b>Dew point</b>	Beware of condensation! The substrate and uncured floor must be at least 3 °C above dew point to reduce the risk of condensation or other disturbance of the surface on the floor finish.		
<b>Substrate temperature</b>	+10 °C min / +40 °C max		
<b>Substrate moisture content</b>	Sikafloor® PurCem® HS-24 can be installed on substrates with higher moisture content. The substrate needs to be visibly dry and have an adequate pull-off strength min 1.5 N/mm <sup>2</sup> . No ponding water. Check for rising moisture.		
<b>Applied product ready for use</b>	<b>Temperature</b>	<b>Foot traffic</b>	<b>Light traffic</b>
	+10 °C	~ 20 hours	~ 34 hours
	+20 °C	~ 12 hours	~ 16 hours
	+30 °C	~ 8 hours	~ 14 hours
			<b>Full cure</b>
			~ 7 days
			~ 4 days
			~ 3–4 days

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

## 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

Please refer to:

- Sikafloor® PurCem® Method Statement
- Sika® Method Statement Mixing and Application of Flooring Systems
- Sika® Method Statement Surface Evaluation & Preparation
- Sikafloor® PurCem® Product Data Sheets

## IMPORTANT CONSIDERATIONS

- Do not apply to PCC (polymer modified cement mortars) that may expand due to moisture when sealed with an impervious resin.
- Always ensure good ventilation when using Sikafloor® PurCem® products in a confined space, to prevent excessive ambient humidity.

- Freshly applied Sikafloor® PurCem® products, must be protected from damp, condensation and direct water contact (rain) for at least 24 hours.
- Protect the substrate during application from condensation from pipes or any overhead leaks.
- Do not apply to cracked or unsound substrates.
- Always allow a minimum of 48 hours after product application prior to placing into service in proximity with food stuffs.
- Products of the Sikafloor® PurCem® product range are subject to discolouration when exposed to UV radiation.
- Extent depends on colour. There are no measurable losses of any properties when this occurs and it is a purely aesthetical matter.
- Products can be used outside provided the change in appearance is acceptable by the customer. In some slow curing conditions, soiling of the surface may occur when opened to foot traffic, even though mechanical properties have been achieved. It is advised to remove dirt using a dry mop or cloth. Avoid scrubbing with water for the first three days.

## 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.

## MAINTENANCE

### CLEANING

Please refer to Sikafloor®- Cleaning Regime.

### 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

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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