

## SYSTEM DATA SHEET

# Sikafloor® PurCem® HS-21 Gloss

### GLOSS AND SMOOTH FINISH, POLYURETHANE CEMENT HYBRID FLOORING SYSTEM

#### PRODUCT DESCRIPTION

Sikafloor® PurCem® HS-21 Gloss is an industrial flooring system based on polyurethane cement hybrid technology and is part of the Sikafloor® PurCem® Gloss system range.

The system is composed of a scratch primer coat layer and an highly durable, glossy, scratch resistant and seamless polyurethane hybrid wearing course. It withstands chemical attack, abrasion and impacts. Due its gloss, scratch resistant and impervious surface the floor is hygienic, easy to clean and maintain.

#### USES

Sikafloor® PurCem® HS-21 Gloss may only be used by experienced professionals.

- Food and beverage industry
- Processing and chemical industry
- Workshops
- Ramps
- Basements
- Laboratories
- Back of house areas

#### CHARACTERISTICS / ADVANTAGES

- Good chemical resistance
- Dense and scratch resistant surface
- High mechanical resistance
- Low dirt pick up
- Easy to clean and maintain
- Low VOC and environmental friendly
- Non tainting
- Odourless during application
- Can be applied on substrates with high moisture tolerance
- Seamless
- Very good life cycle cost performance

#### ENVIRONMENTAL INFORMATION

- Conforms to AgBB (2012) for use in indoor environment. Test report No. 392-2014-00295701E. Eurofins Product Testing.

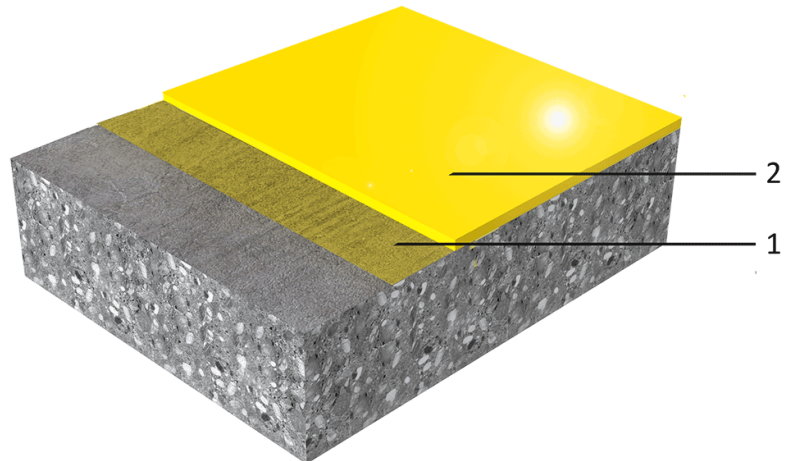
#### APPROVALS / STANDARDS

- Sikafloor® PurCem® HS-21 Gloss consist of synthetic screed material according to EN 13813:2002, provided with the CE mark
- Food Industry Approval. Certificate of Compliance to be used safely as a floor coating in food sector. Short term contact of the coating with the foodstuffs is safe as long as any hygienic regulations are not violated. Report No. 38653U14. ISEGA Forschungs- und Untersuchungs-Gesellschaft mbH.
- Taint potential. Report No. S/REP/134217/1 Campden BRI (Chipping Campden) Ltd.
- Cleanability. Clean Room Suitable Material (Riboflavin test) test report SI 1501-752, Sikafloor® -210 PurCem®. Fraunhofer Institute for Manufacturing and Engineering and Automation IPA.
- Biological resistance. Clean Room Suitable Material Test report SI 1412-740, Sikafloor® -210 PurCem®.

# SYSTEM INFORMATION

## System Structure

## Sikafloor® PurCem® HS-21 Gloss



Layer	Product
1. Scratch coat	Sikafloor®-21/-210/-260 PurCem®
2. Wear coat	Sikafloor®-210 PurCem®

As an optional build up the primers Sikafloor®-155 W/-156/-161 + quartz sand 0.3–0.8 mm fully blinded broadcast, followed by the Sikafloor®-210 PurCem® (scratch coat) can be used. Please refer to the individual Product Data Sheet.

<b>Chemical base</b>	Water-based polyurethane cement hybrid
<b>Appearance</b>	Smooth, gloss finish
<b>Colour</b>	Beige, Dusty Grey, Grass Green, Maize Yellow, Night Blue, Oxide Red, Pebble Grey, Tele Grey 2
<b>Nominal Thickness</b>	~ 3-6 mm
<b>Volatile organic compound (VOC) content</b>	Very low content of Volatile Organic Compounds. It fulfils the stringent demands for indoor air quality and low VOC emitting products AFFSET, M1 Gold, AgBB, EMICODE and A+.

## TECHNICAL INFORMATION

<b>Water Absorption</b>	0 %	(CP BM2/67/2)
<b>Shore D Hardness</b>	~80	(ASTM D 2240)
<b>Abrasion Resistance</b>	<1500 mg (CS 22/1000/1000) (7 days / +23°C)	(DIN 53 109)
<b>Resistance to Impact</b>	Class II (>10 N/mm <sup>2</sup> )	(ISO 6272)
<b>Compressive Strength</b>	>50 N/mm <sup>2</sup> after 28 days at +23°C / 50% r.h.	(BS EN 13892-2)
<b>Tensile Strength</b>	≥ 15 N/mm <sup>2</sup> after 28 days at +23 °C / 50% r.h.	(BS EN 13892-2)
<b>Tensile Adhesion Strength</b>	> 2.0 N/mm <sup>2</sup>	(EN 1542)
<b>Reaction to Fire</b>	Bfl-s1	(EN 13501-1)
<b>Chemical Resistance</b>	Please refer to Sikafloor® PurCem® Gloss chemical resistance guide. Contact Sika technical service for specific information.	
<b>Thermal Resistance</b>	<b>3 mm</b> -10 °C to +60 °C	<b>6 mm</b> -20 °C to +70 °C
<b>Permeability to Water Vapour</b>	Class II (24 m)	(EN 1504-2)
<b>Capillary Absorption</b>	< 0.01 kg/(m <sup>2</sup> h <sup>0,5</sup> )	(EN 1062-3)

## APPLICATION INFORMATION

Consumption	Layer	Product	Consumption
	1. Scratch coat	Sikafloor®-21/-210/-260 PurCem®	~1.0–3.0 kg/m <sup>2</sup>
	2. Wear coat	Sikafloor®-210 Pur-Cem®	~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>Product Temperature</b>	Please refer to the individual Product Data Sheets		
<b>Ambient Air Temperature</b>	+10 °C min / +35 °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 / +35 °C max		
<b>Substrate Moisture Content</b>	Sikafloor® PurCem® HS-21 Gloss 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	~ 40 hours	~ 48 hours
	+20 °C	~ 22 hours	~ 26 hours
	+30 °C	~ 18 hours	~ 22 hours
	Full cure		
			~ 7 days
			~ 3 days
			~ 2 days
Note: Times are approximate and will be affected by changing ambient and substrate conditions			

## PRODUCT INFORMATION

<b>Packaging</b>	Please refer to the individual Product Data Sheets
<b>Shelf Life</b>	Please refer to the individual Product Data Sheets
<b>Storage Conditions</b>	Please refer to the individual Product Data Sheets

## MAINTENANCE

### CLEANING

Please refer to the Sikafloor® Cleaning Regime.

### FURTHER DOCUMENTS

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

### LIMITATIONS

- Freshly applied Sikafloor® PurCem® products, must be protected from damp, condensation and direct water contact (rain) for at least 24 hours.

- 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® range are subject to discolouration when exposed to UV radiation. There are no measurable losses of any properties when discolouration occurs, and it is a purely aesthetic 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.

### 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.

## 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

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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