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# SYSTEM DATA SHEET Sikafloor<sup>®</sup> PurCem<sup>®</sup> HS-21

# SELF-SMOOTHING, MEDIUM TO HEAVY DUTY, MATT FINISH POLYURETHANE CEMENT HYBRID FLOORING SYSTEM

#### DESCRIPTION

Sikafloor<sup>®</sup> PurCem<sup>®</sup> HS-21 system is made with polyurethane cement technology and is part of the Sikafloor<sup>®</sup> PurCem<sup>®</sup> flooring range. The Sikafloor<sup>®</sup> Pur-Cem<sup>®</sup> HS-21 system is especially designed to withstand chemical attack, high impact and can be used in wet and dry processing plants.

The system is composed of an 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

Sikafloor<sup>®</sup> PurCem<sup>®</sup> HS-21 may only be used by experienced professionals.

- Food processing plants, in wet or dry process areas, freezers and coolers, thermal shock areas
- Chemical plants
- Laboratories
- Workshops

# **CHARACTERISTICS / ADVANTAGES**

- High chemical resistance. Resists a wide range of organic and inorganic acids, alkalis, amines, salts and solvents
- Good temperature resistance
- 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 cycle cost performance

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## **PRODUCT INFORMATION**

Packaging	Please refer to the individual Product Data Sheet
Shelf Life	Please refer to the individual Product Data Sheet
Storage Conditions	Please refer to the individual Product Data Sheet

## SYSTEM INFORMATION

System	Structure
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Sikafloor<sup>®</sup> PurCem<sup>®</sup> HS-21



	Layer	Product	
	1. Scratch coat +	Sikafloor <sup>®</sup> -21 PurCem <sup>®</sup> LP	
	Lightly broadcast with Quartz Sand (0.3–0.9 mm)	Sikadur <sup>®</sup> -501	
	2. Body coat	Sikafloor <sup>®</sup> -21 PurCem <sup>®</sup> LP	
Composition	Water-based polyurethane cement hybrid		
Appearance	Smooth surface, matt finish		
Colour	Red, Green, Cream, Yellow, Grey, and Light Grey		
Nominal Thickness	~ 4-6 mm		

### **TECHNICAL INFORMATION**

Compressive Strength	~50 N/mm² after 28 days at +23°C / 50% r.h.	(BS EN 13892-2)	
Tensile Adhesion Strength > 1.5 N/mm <sup>2</sup> (failure in concrete)		(EN1542)	
Chemical Resistance	Please refer to Sikafloor <sup>®</sup> PurCem <sup>®</sup> chemical resistance guide. Contact Sika technical service for specific information.		
Temperature Resistance	-5 °C up to +65 °C The product is not designed to withstand thermal shock. Hot steam clean- ing is not recommended. Use Sikafloor®-20 PurCem® LP at 9 mm thickness. The product is resistant to short term contact with temperatures of < 70 °C at 6 mm thickness, mainly dur- ing the cleaning regimes.		

# **APPLICATION INFORMATION**

Consumption	Layer	Product	Consumption
	1. Scratch coat Sikafloor®-21 PurCem Lightly broadcast with Sikadur®-501 Quartz Sand 0.3–0.9 mm		~1.5–2.0 kg/m <sup>2</sup> ~2.0–2.5 kg/m <sup>2</sup>
	2. Body coat	Sikafloor <sup>®</sup> -21 PurCem <sup>®</sup>	~1.9 kg/m²/mm
	Consumptions are theoretical and do not include any wastage, additional material need due to porosity, substrate profile etc.		

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Product Temperature	Please refer to t	Please refer to the individual Product Data Sheet			
Ambient Air Temperature	+10 °C min / +3	+10 °C min / +30 °C max			
Relative Air Humidity	85 % max	85 % 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 other disturbance of the surface on the floor finish.				
Substrate Temperature	+10 °C min / +30	+10 °C min / +30 °C max			
Substrate Moisture Content	Sikafloor <sup>®</sup> PurCem <sup>®</sup> HS-21 can be installed on substrates with higher mois- ture 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 mois- ture.				
Applied Product Ready for Use	Temperature	Foot traffic	Light traffic	Full cure	
	+10 °C	~24 hours	~48 hours	~7 days	
	+20 °C	~18 hours	~24 hours	~4 days	
	+30 °C	~12 hours	~18 hours	~3–4 days	
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#### MAINTENANCE

#### CLEANING

Please refer to Sikafloor®- Cleaning Regime.

#### FURTHER DOCUMENTS

Please refer to:

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

## IMPORTANT CONSIDERATIONS

- Always ensure good ventilation when using Sikafloor<sup>®</sup> PurCem<sup>®</sup> products in a confined space, to prevent excessive ambient humidity.
- Freshly applied Sikafloor<sup>®</sup> PurCem<sup>®</sup> 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<sup>®</sup> PurCem<sup>®</sup> product range are subject to discolouration when exposed to UV radiation. Extent depends on colour. There are no measurable losses of any properties when discolouration 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.
- Please refer to the latest Product Data Sheet of Sikafloor®-21 PurCem<sup>®</sup> LP for more information on the

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product and its limitations.

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.



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# 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.

Sika Kimia Sdn. Bhd. Lot 689, Nilai Industrial Estate, 71800 Nilai Negeri Sembilan D.K., Malaysia Phone: +606-7991762 Fax: +606-7991980 e-mail: info@my.sika.com Website: www.sika.com.mv





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