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# PRODUCT DATA SHEET Sikafloor®-21 PurCem® MY

# SELF-LEVELLING POLYURETHANE-CEMENT FLOOR TOPPING

## DESCRIPTION

Sikafloor<sup>®</sup>-21 PurCem<sup>®</sup> MY is a three part, water based, high strength, thermal shock, medium duty, coloured polyurethane self-smoothing topping suitable for floors subject to abrasion, chemical exposure and other physical aggression.

## USES

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

Sikafloor®-21 PurCem® MY is ideally suited for the following areas:

- Chemical processing
- Food processing and wet areas
- Brewing and dairy (clean areas)
- Engineering process areas
- Heavy duty traffic and plant areas
- Warehouse / logistics areas
- Pharmaceutical industrial
- Palm oil processing and packaging plants

# **PRODUCT INFORMATION**

# CHARACTERISTICS / ADVANTAGES

- Excellent resistance to organic and inorganic acids, alkalis, fuel and hydraulic oils, aromatic and aliphatic solvents
- Resists bacterial growth, fungi, mould, and mildew
- Durable and resistant to abrasion and impact
- Solvent free, odorless

Composition	Water based PU with selected aggregates		
Packaging	Part A	3 kg	
	Part B	3 kg	
	Part C	14 kg	
	Part A + B + C	20 kg	
Appearance / Colour	Standard Colours: Red, green, cream, yellow, grey, light grey. (The colour may change when exposed to UV light. However, the mechan- ical and physical properties of Sikafloor <sup>®</sup> -21 PurCem <sup>®</sup> MY remains the same)		
Shelf Life	9 months from the date of production		
Storage Conditions	Store properly in original, unopened and undamaged sealed packaging, in dry conditions at temperatures between +10 °C and +30 °C. Protect from direct sunlight, water/moisture and rain.		

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# **TECHNICAL INFORMATION**

Abrasion Resistance	~38 mg (Weight loss in mg/ 10 1 kg)	000 revolutions/	(ASTM D 4060–10, Taber Ab- raser)
Compressive Strength	~55 N/mm² (at 28 days)		(BS 6319: Part 2)
Tensile Adhesion Strength	> 1.5 N/mm <sup>2</sup> (failure in concrete) (ASTM C 15		(ASTM C 1583))
Chemical Resistance	Resistance to many chemicals. Please ask for detailed chemical resistance table.		
Temperature Resistance	Medium thermal shock resistance		
Service Temperature	For 6 mm thickness For 4 mm thickness		/ +100 °C max. / +80 °C max.

# **APPLICATION INFORMATION**

Consumption	Scratch coat Lightly broadcast with Quartz Sand 0.3–0.9 mm	1 x Sikafloor®-21 Pur- Cem® MY Sikadur®-501	~1.5–2.0 kg/m² ~2.0–2.5 kg/m²		
	Body coat	Sikafloor <sup>®</sup> -21 PurCem <sup>®</sup> MY	~1.9 kg/m²/mm		
	Consumptions are theoretical and do not include any wastage, additional material need due to porosity, substrate profile etc.				
Layer Thickness	4 mm min. / 6 mm max.				
Relative Air Humidity	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 blooming on the floor finish.				
Substrate Temperature	5 °C min. / 35 °C max.				
Substrate Moisture Content	Sikafloor <sup>®</sup> -21 PurCem <sup>®</sup> MY can be installed on substrates with moisture content of max. 4 % (checked by Tramex).				

# **APPLICATION INSTRUCTIONS**

#### SUBSTRATE QUALITY / PRE-TREATMENT

The concrete substrate must be sound and of sufficient compressive strength (minimum 25 N/mm<sup>2</sup>) with a minimum pull-off strength of 1.5 N/mm<sup>2</sup>. The substrate must be dry and free of all contaminants such as oil, grease, coatings and surface treatments, etc.

Concrete substrates should be prepared mechanically using abrasive blast cleaning or scarifying equipment to remove cement laitance and achieve a profiled open texture surface.

Weak concrete must be removed and surface defects such as blow holes and voids must be fully exposed. Repairs to substrate, filling of blow holes / voids and surface levelling must be carried out using appropriate products from the Sikafloor<sup>®</sup>, Sikadur<sup>®</sup> and Sikagard<sup>®</sup> Range of materials.

High spots can be removed by grinding.

Product Data Sheet Sikafloor®-21 PurCem® MY November 2019, Version 02.01 02081402002000027 All dust, loose and friable material must be completely removed from all surfaces before application of the product, preferably by brush and/or vacuum. If in doubt, apply a test area first.

#### MIXING

Prior to mixing, stir Part A (resin) well, then add all of Part B (hardener) and mix both liquid parts thoroughly with a low speed drill (500 rpm) and a helical mixer for a minimum of one minute until a uniform mix has been achieved.

Gradually add Part C (aggregate) to the mixed resin parts in the mixer for a further 3 minutes minimum, until a uniform moist mix is obtained.

#### APPLICATION

Prior to application, confirm substrate moisture content, r.h. and dew point.

Pour the mixed Sikafloor®-21 PurCem® MY onto the substrate and spread evenly with a trowel or rake to



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the required levels, achieving a flat surface. Light spike rolling should be carried out within 3 minutes of application in order to avoid interfering with the film gel time.

#### **CLEANING OF TOOLS**

Clean all tools and application equipment with water immediately after use. Hardened or cured material can only be mechanically removed.

# FURTHER DOCUMENTS

For more information on application, please refer to "Method Statement - Application of Sikafloor<sup>®</sup>-21 Pur-Cem<sup>®</sup> MY".

# IMPORTANT CONSIDERATIONS

- Freshly applied Sikafloor<sup>®</sup>-21 PurCem<sup>®</sup> MY should be protected from damp, condensation and water for at least 24 hours.
- To ensure the finished system remains fully bonded to the substrate, retaining slots of 5 mm deep by 5 mm wide must be cut into the substrate, running at 150 mm from and parallel to the walls and all edges.
- Retaining slots must also be provided at day joints.
- Always ensure good ventilation when using Sikafloor<sup>®</sup>-21 PurCem<sup>®</sup> MY in a confined space.

# **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.

# 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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