

PRODUCT DATA SHEET

Sikafloor®-31 PurCem® TH

HIGH-BUILD POLYURETHANE COATING

DESCRIPTION

Sikafloor®-31 PurCem® TH is a three-component, solvent-free, high build, coloured, matt finish coating based on the unique Sikafloor® PurCem (TH) water dispersed polyurethane / cement and aggregate technology. Typically installed as stand alone coating for concrete substrates or used as a top coat for Sikafloor® PurCem (TH) broadcast textured finishes. It provides an economical solution that has excellent chemical resistance properties and very good durability against abrasion and mechanical damage. Installed thickness 0.2-0.25mm per coat.

USES

- In combination with Sikafloor® -20/ 21 PurCem (TH)
- As a high build coating
- As a chemical resistant concrete coating
- Typically used in food processing plants, chemical storage areas, warehouses, washrooms, laboratories, food preparation areas and chemical process plants

CHARACTERISTICS / ADVANTAGES

- Resists a very wide range of organic and inorganic acids, alkalis, amines, salts and solvents. Consult Sika Technical Sales for full details. Refer to the Sikafloor® PurCem (TH) Chemical Resistance Chart.
- Non-taint, odourless
- Excellent long term wear resistance from a two coat application
- Economical and easy to apply

PRODUCT INFORMATION

Packaging	4.7 kg/set Comp.A: 1.5 kg/pail Comp.B: 1.4 kg/pail Comp.C: 1.8 kg/pack
Appearance / Colour	Seven standard colours are available (all are approximate): Beige: ~ RAL 1001 May Green ~ RAL 6017 Oxide Red: ~ RAL 3009 Grass Green: ~ RAL 6010 Maygreen:~ RAL 6017 Slate Grey: ~ RAL 7015 Stone Grey: ~ RAL 7037 Custom colours subject to minimum orders.
Shelf life	Component A and B : 12 months from the date of production. If store in original unopened packaging. Component C : 6 months from the date of production. If store in original unopened packaging.

Storage conditions	Store in dry between 10°C - 25°C. Protect from freezing.	
Density	1.40 kg/L	(ASTM C 905)

TECHNICAL INFORMATION

Shore D Hardness	80	(ASTM D 2240)
Indentation	~ 0%	(MIL-PRF-24613)
Resistance to Impact	2.27 joules at 1 mm of thickness	ASTM D 2794)
Abrasion Resistance	-1.57 g	(ASTM D 4060)
Compressive Strength	N/A	(ASTM C579)
Tensile Strength in Flexure	24.7 MPa	(ASTM C 580)
Tensile Strength	10.7 MPa	(ASTM C 307)
Tensile Adhesion Strength	> 1.75 MPa (substrate failure)	(ASTM D 4541)
Coefficient of Thermal Expansion	N/A	(ASTM D 696)
Water Absorption	0.07%	(ASTM C 413)
Softening Point	130°C	

APPLICATION INFORMATION

Mixing Ratio	Components A:B:C = Mix full units only.	
Ambient Air Temperature	10°C min. / 30°C max.	
Curing Time	Usable pot life	20-25 min.
	Initial join up time	25-30 min.
	Waiting Time Between Coats	16 hours min. / 48 hours max.
	Cure to foot traffic	14-16 hours
	Cure to light traffic	36-48 hours
	Full cure	5 days
*at temperature 20°C		

APPLICATION INSTRUCTIONS

SUBSTRATE QUALITY / PRE-TREATMENT

Concrete surfaces must be clean and sound. Remove all dust, dirt, existing paint films, efflorescence, exudates, laitance, form oils, hydraulic or fuel oils, brake fluid, grease, fungus, mildew, biological residues or any other contaminants which may prohibit good bond. Prepare the surface by appropriate mechanical means, i.e., steel shot blasting or any other method approved by Sika to achieve (CSP 3). The compressive strength of the concrete substrate should be at least 25 MPa at 28 days and a minimum of 1.5 MPa in tension at the time of application. Repairs to cementitious substrates, filling of blowholes, leveling of irregularities, etc. should be carried out using an appropriate Sika profiling mortar.

MIXING

- Mixing will be affected by temperature; condition materials for use to 18°C to 25°C
- Stir Component A first for approx. 15 seconds
- Add component B, and mix for approx. 30 seconds with low speed mixer
- While mixing, add Component C (pigment pack) within 15 seconds
- Further mix for 2 minutes until the mixture is homogeneous and the pigment is uniformly dispersed
- Mix full units only

APPLICATION

Apply by short or medium nap roller directly from a paint tray. Push the resin well into the surface, making sure the floor is fully wetted and then pull back lightly with roller to the required thickness.

A slip resistant texture can be attained by seeding the Sikafloor®-31 PurCem® TH with selected mineral aggregates then sealed with a second coat of Sikafloor®-31 PurCem® TH.

CLEANING OF EQUIPMENT

Clean all tools and equipment with Sika® Equipment Cleaner/Epoxy Thinner. Wash soiled hands and skin thoroughly in hot soapy water or use Sika® Hand Cleaner. Once hardened, product can only be removed mechanically.

IMPORTANT CONSIDERATIONS

- Steam cleaning may lead to delamination due to thermal shock (if use over Sikafloor®-19 PurCem (TH) or Sikafloor®-20 PurCem (TH)).
- Do not apply below 10°C or above 30°C / maximum relative humidity 85%.
- Do not apply to un-reinforced sand cement screeds, asphaltic or bitumen substrate, glazed tile or non-porous brick, tile and magnesite, copper, aluminium, soft wood, or urethane composition, elastomeric membranes, fibre reinforced polyester (FRP) composites.
- Do not apply to wet or green concrete or polymer modified patches if the moisture content > 10%.
- Do not apply to concrete if air or substrate temperature is within 3°C of dew point.
- Protect substrate during application from condensation from pipes or any overhead leaks.
- Do not mix Sikafloor® PurCem (TH) materials by hand, mechanical mix only.
- Do not apply to cracked or unsound substrates.
- Avoid puddles during application.
- Do not apply to surfaces where moisture vapour can condense and freeze.
- Colour uniformity cannot be completely guaranteed from batch to batch (numbered). Take care when using Sikafloor® PurCem (TH) products to draw from inventory in batch number sequence, do not mix batch numbers in a single floor area.
- 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® (TH) product range are subject to yellowing when exposed to UV radiation. There are no measurable losses of other properties when this occurs and it is a purely aesthetic matter. Products can be used outside provided the change in appearance is acceptable by the customer.

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 Material Safety Data Sheet 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 (Thailand) Limited

700/37 Moo 5 Amata City Chonburi
Industrial Estate, T. Klong Tamhru
A. Muang, Chonburi 20000, Thailand
Tel : +66 3810 9500
E-mail : sikathai@th.sika.com
Website: tha.sika.com



Product Data Sheet

Sikafloor®-31 PurCem® TH
January 2020, Version 01.02
020814020030000007

Sikafloor-31PurCemTH-en-TH-(01-2020)-1-2.pdf