

SYSTEM DATA SHEET

Sikafloor® PurCem® PC

HIGH BUILD CEMENTITIOUS URETHANE COATING ENGINEERED WITH
SIKA FLOOR -31 NA PURCEM AT 15 -20 MILS (0.4 -0.5 MM) PER COAT

PRODUCT DESCRIPTION

Sikafloor® PurCem® PC is solvent free, pigmented, matte finished coating typically installed as a top coat for Sikafloor PurCem systems. It can be used as an economical standalone coating that provides excellent chemical resistance and very good durability against abrasion and mechanical wear. Application thickness 15 -20 mils (0.4 -0.5 mm) per coat.

USES

Sikafloor® PurCem® PC may only be used by experienced professionals.

- As a high build coating and top coat for PurCem topping products.
- 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

- Can be applied on green concrete, typically 7-10 days. Full 28 days cure time is not necessary.
- Can be applied over partially cured concrete substrates (> 4% mass (pbw –part by weight) as measured with Tramex® CME/CMExpert type concrete moisture meter surface moisture).
- Can be applied to concrete substrates where <100 % relative humidity is measured as per ASTM F2170.
- Substrate has tensile bond strength in excess of 218 psi (1.5 MPa). Substrate has tensile bond strength in excess of 218 psi (1.5 MPa).
- Resists a very wide range of organic and inorganic acids, alkalis, amines, salts and solvents. Consult Sika Technical Service for full details. Refer to the Sikafloor -31 NA Purcem (FS) Chemical Resistance Chart.
- Similar coefficient of thermal expansion to concrete allowing movement with the substrate through normal thermal cycling. It will perform and retain its physical characteristics through a wide temperature range from -40 °F (-40 °C) up to 248 °F (120 °C).
- Non-tainting, odorless.
- Good wear resistance from a two coat application, if used as a stand-alone coating.
- Behaves plastically under impact / deforms but will not crack or debond.
- High abrasion qualities result from its aggregate structure.
- Extra Expansion joints are not necessary; maintain and extend existing expansion joints up through the Sikafloor PurCem Flooring System.
- Minimal maintenance costs, superior life cycle cost advantage versus tile.
- Meets the requirements of USDA for use in food plants.

SYSTEM INFORMATION

System Structure

Sikafloor® PurCem® PC System 15 -20 mils (0.4 -0.5 mm) per coat

Description	Products	Thickness mils
Coating	Sikafloor®-31 NA PurCem*	224@15mils
Options		
Primers	Sikafloor®-2570	2,667@3mils
	Sikafloor®-31 NA PurCem*	224@15mils

* To reduce cure time use Sikafloor®- PurCem® Fast Set

Color	Available in standard PurCem colors.	
Nominal thickness	15 to 20 mils (0.4 -0.5 mm) per coat.	
Minimum thickness	15 mils (0.4 mm) per coat.	
Volatile organic compound (VOC) content	Please refer to the individual Product Data Sheets.	
Shore D Hardness	80	ASTM D2240 at 73°F (23°C) and 50% R.H
Abrasion Resistance	CS-17/1,000 cycles/1,000 g -0.10 g loss H-22/1,000 cycles/1,000 g -1.57 g loss	ASTM D4060 at 73°F (23°C) and 50% R.H
Impact Strength	1.67 ft-lb (2.27 joules)	ASTM D2794 at 73°F (23°C) and 50% R.H
Indentation	~ 0%	MIL -PRF -24613 at 73°F (23°C) and 50% R.H.
Compressive Strength	2,901 psi (20 MPa) 24 hrs	ASTM C579 at 73°F (23°C) and 50% R.H
Tensile Strength	1,552 psi (10.7 MPa)	ASTM C307 at 73°F (23°C) and 50% R.H
Flexural Strength	3,582 psi (24.7 MPa)	ASTM C580 at 73°F (23°C) and 50% R.H.
Microbiological Resistance	Resistance to Fungi Growth Rated 0 (no growth) Resistance to Mold Growth Rated 10 (highest resistance)	ASTM G21 at 73°F (23°C) and 50% R.H ASTM D3273 at 73°F (23°C) and 50% R.H
Thermal Conductivity	Pass	ASTM C884 at 73°F (23°C) and 50% R.H

APPLICATION INFORMATION

Coverage	Description	Products	Approximates Sq.Ft./kit
	Coating	Sikafloor®-31 NA PurCem*	224@15mils
	Options		
	Primers	Sikafloor®-2570 Sikafloor®-31 NA PurCem*	2,667@3mils 224@15mils
Sikafloor®- PurCem Fast Set Sq.Ft coverage per kit is equivalent to standard Sikafloor®- PurCem			
Ambient Air Temperature	Minimum/Maximum 40°/85°F (4°/30°C).		
Substrate Temperature	Minimum/Maximum 40°/85°F (4°/30°C).		
Pot Life	Please refer to the individual Product Data Sheets.		
Waiting / Recoat Times	Please refer to the individual Product Data Sheets.		

PRODUCT INFORMATION

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

APPLICATION INSTRUCTIONS

SUBSTRATE PREPARATION

Surface should be clean and sound. Remove all dust, dirt, existing paint films, efflorescence, exudates, laitance, forms 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 any appropriate mechanical means, in order to achieve a profile equivalent to ICRI-CSP 3-6. The compressive strength of the concrete substrate should be at least 3,625 psi (25 MPa) and a minimum of 218 psi (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. Contact Sika Technical Service for a recommendation.

Edge Terminations

All free edges of a Sikafloor PurCem floor, whether at the perimeter, along gutters or at drains require extra anchorage to distribute mechanical and thermal stresses. This is best achieved by forming or cutting grooves in the concrete. Grooves should have a depth and width of 2 times the thickness of the Sikafloor PurCem floor. Contact Sikafloor Technical Service for more information and construction details. If necessary, protect all free edges with mechanically attached metal strips. Do not feather edge, always turn into an anchor groove.

Expansion Joints

Expansion joints should be provided in the substrates at the intersection of dissimilar materials. Isolate areas subject to thermal stresses, vibration movements or around load-bearing columns and at vessel sealing rings. Refer to details provided at <https://usa.sika.com/flooring>.

Priming

Please refer to the individual Product Data Sheet for each component.

MIXING

Please refer to the individual Product Data Sheet for each component.

APPLICATION

Please refer to the individual Product Data Sheet for each component.

LIMITATIONS

Please refer to the individual Product Data Sheet for limitations.

BASIS OF PRODUCT DATA

Results may differ based upon statistical variations depending upon mixing methods and equipment, temperature, application methods, test methods, actual site conditions and curing conditions.

OTHER RESTRICTIONS

See Legal Disclaimer.

ENVIRONMENTAL, HEALTH AND SAFETY

Please refer to the individual Product Data Sheet

LEGAL DISCLAIMER

- KEEP CONTAINER TIGHTLY CLOSED
- KEEP OUT OF REACH OF CHILDREN
- NOT FOR INTERNAL CONSUMPTION
- FOR INDUSTRIAL USE ONLY
- FOR PROFESSIONAL USE ONLY

Prior to each use of any product of Sika Corporation, its subsidiaries or affiliates ("SIKA"), the user must always read and follow the warnings and instructions on the product's most current product label, Product Data Sheet and Safety Data Sheet which are available at usa.sika.com or by calling SIKA's Technical Service Department at 1-800-933-7452. Nothing contained in any SIKA literature or materials relieves the user of the obligation to read and follow the warnings and instructions for each SIKA product as set forth in the current product label, Product Data Sheet and Safety Data Sheet prior to use of the SIKA product.

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Sika Corporation

201 Polito Avenue
Lyndhurst, NJ 07071
Phone: +1-800-933-7452
Fax: +1-201-933-6225
usa.sika.com

Sika Mexicana S.A. de C.V.

Carretera Libre Celaya Km. 8.5
Fracc. Industrial Balvanera
Corregidora, Queretaro
C.P. 76920
Phone: 52 442 2385800
Fax: 52 442 2250537



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