

PRODUCT DATA SHEET

Sikafloor®-31 PurCem® CN

Solvent-Free, High-Build Polyurethane Coating

DESCRIPTION

Sikafloor®-31 PurCem® CN is a three-component, solvent-free, high-build, coloured, matt finish coating based on the unique Sikafloor® PurCem (CN) 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 (CN) 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

Sikafloor®-31 PurCem® CN may only be used by experienced professionals.

- In combination with Sikafloor® -20 / 24 PurCem CN
- 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.

PRODUCT INFORMATION

Chemical Base	Waterborne polyurethane composite mortar	
Packaging	Part A	1.5 kg/pail
	Part B	1.4 kg/pail
	Part D	1.8 kg/bag
	Part A+B+D	4.7 kg
Shelf Life	Part A	12 months
	Part B & D	6 months
Storage Conditions	The product must be stored in original, unopened and undamaged sealed packaging in dry conditions at temperatures between +10 °C and +25 °C. Always refer to packaging.	

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 (CN) Chemical Resistance Chart.
- Non-taint, odourless.
- Excellent long term wear resistance from a two coat application.
- Economical and easy to apply.
- USDA acceptance for use in food plants in the U.S.A.
- Canadian Food Inspection Agency acceptance for use in food plants in Canada.
- British Standard Specifications (BSS) acceptance for use in the U.K.

APPROVALS / STANDARDS

- JC/T 2327-2015

Appearance / Colour

Available in 7 colour shades:
 Beige, Maize Yellow, Oxide Red, Grass Green, Slate Grey, Dusty Grey,
 Traffic Grey.
 Applied colours selected from colour charts will be approximate.
 Custom colors subject to minimum orders.

Density	Mixing Units	~ 1.40 kg/L	GB/T 6750
----------------	---------------------	--------------------	------------------

Volatile Organic Compound (VOC) Content	< 30 g/L
--	--------------------

TECHNICAL INFORMATION

Shore D Hardness	~68; Pencil hardness: 5H
Abrasion Resistance	< 0.02 g
Resistance to Impact	Heavy duty (1000g)
Compressive Strength	≥40 MPa
Tensile Strength in Flexure	≥ 10 MPa
Tensile Adhesion Strength	≥ 2.0 MPa
Skid / Slip Resistance	≥ 0.6
Chemical Resistance	Resistant to many chemicals. Please ask for a detailed chemical resistance table.

SYSTEM INFORMATION

Systems	Coating System	Product
	Intermediate coat	Sikafloor®-20 / 24 PurCem® CN
	Textured coat	Sikafloor®-31 PurCem® CN

APPLICATION INFORMATION

Mixing Ratio	Parts A:B:D= Mix full units only.		
Consumption	Coating System	Product	Consumption
	Intermediate coat	Sikafloor®-20 / 24 Pur-Cem® CN	Refer to the PDS
	Textured coat	Sikafloor®-31 PurCem® CN	~0.35 kg/m ²
These figures are theoretical and do not allow for any additional material due to surface porosity, surface profile, variations in level and wastage etc.			
Layer Thickness	0.20-0.25 mm		
Ambient Air Temperature	+10°C min. / +30°C max.		
Relative Air Humidity	80% r.h. max.		
Dew Point	Beware of condensation! The substrate and uncured floor must be at least 3°C above the dew point to reduce the risk of condensation or blooming on the floor finish.		
Substrate Temperature	+10°C min. / +30°C max.		
Substrate Moisture Content	< 4% pbw moisture content. Test method: Sika®-Tramex meter or CM - measurement. No rising moisture according to ASTM (Polyethylene-sheet).		
Pot Life	Temperature	Time	
	+20 °C	20~25 minutes	



Curing Time

Temperature	Foot traffic	Light traffic	Full cure
+20°C	14~16 hours	36~48 hours	5 days

Note: At low temperature the curing need longer time.

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.

LIMITATIONS

- 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.
- Protect substrate during application from condensation from pipes or any overhead leaks.
- Do not apply to vertical or overhead surfaces / for vertical surfaces refer to Sikafloor®-29 PurCem.
- Do not mix Sikafloor® PurCem materials by hand / mechanical mix only.
- Steam cleaning may lead to delamination due to thermal shock (Use Sikafloor®-20 PurCem CN).
- Colour uniformity cannot be completely guaranteed from batch to batch (numbered). Take care when using Sikafloor® PurCem 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® (CN) 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 aesthetical matter. Products can be used outside provided the change in appearance is acceptable by the customer.

ECOLOGY, HEALTH AND SAFETY

User must read the most recent corresponding Safety Data Sheets (SDS) before using any products. The SDS provides information and advice on the safe handling, storage and disposal of chemical products and contains physical, ecological, toxicological and other safety-related data.

APPLICATION INSTRUCTIONS

EQUIPMENT

Sikafloor®-31 PurCem® CN must be thoroughly mixed using a low speed electric stirrer (300 -400rpm) or other suitable equipment.

SUBSTRATE QUALITY / PRE-TREATMENT

- Concrete substrates must be sound and of sufficient compressive strength (minimum 25 N/mm²) with a minimum pull off strength of 1.5 N/mm².

- The substrate must be clean, dry and free of all contaminants such as dirt, oil, grease, coatings and surface treatments, etc.
- If in doubt, apply a test area first.
- Concrete substrates must be prepared mechanically using abrasive blast cleaning or scarifying equipment to remove cement laitance and achieve an open textured surface.
- Weak concrete must be removed and surface defects such as blowholes and voids must be fully exposed.
- Repairs to the substrate, filling of blowholes/voids and surface levelling must be carried out using appropriate products from the Sikafloor®, SikaDur® and SikaGard® range of materials.
- The concrete or screed substrate has to be primed or levelled in order to achieve an even surface.
- High spots must be removed by e.g. grinding.
- All dust, loose and friable material must be completely removed from all surfaces before application of the product, preferably by brush and/or vacuum.

MIXING

- Mixing will be affected by temperature; condition materials for use to 18°C to 25°C.
- Stir part A first for approx. 15 seconds. Add part B, and mix for approx. 30 seconds with low speed mixer. While mixing, add part D (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® CN with selected mineral aggregates then sealed with a second coat of Sikafloor®-31 PurCem® CN.

CLEANING OF TOOLS

Clean all tools and application equipment with Thinner C immediately after use. Hardened / cured material can only be mechanically removed.

MAINTENANCE

CLEANING

Sikafloor® PurCem (CN) floors are easily cleaned using a stiff brushing action and or high-pressure water, preferably hot, and even live steam. Degreasing agents and detergents will assist, but do not use any compounds containing Phenol as the floor colour may be damaged. Consult the cleaning compound manufacturer's printing directions before use.

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.

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. It may be necessary to adapt the above disclaimer to specific local laws and regulations. Any changes to this disclaimer may only be implemented with permission of Sika® Corporate Legal in Baar.

SIKA HONGKONG LTD.

Rm.1507-12, Blk A, New Trade Plaza,
6 On Ping Street, Shatin, N.T., H.K.
Phone: +852 26868108
Fax: +852 26453671
Mail: marketing@hk.sika.com
Website: www.sika.com.hk



Product Data Sheet

Sikafloor®-31 PurCem® CN
February 2024, Version 01.01
020814020030000018

Sikafloor-31PurCemCN-en-HK-(02-2024)-1-1.pdf