BUILDING TRUST

PRODUCT DATA SHEET

Sikagard® PW

Chemical Resistant Epoxy Coating

DESCRIPTION

Sikagard® PW is a two component, solvent free epoxy coating with outstanding mechanical and chemical properties.
Suitable for use in hot and tropical climatic conditions.

USES

Sikagard® PW may only be used by experienced professionals.

- Chemical resistant protective layer on concrete, structural cementitious mortars, epoxy cement, epoxy resin based products and steel
- Protection of concrete surfaces / foundations below ground level
- Lining in storage tanks, manholes, intakes and silos etc.
- Anti-corrosion coating on steel in food processing plants, sewage works, farms, agricultural enterprises, chemical and pharmaceutical facilities and beverage industry

CHARACTERISTICS / ADVANTAGES

- Suitable for direct contact with potable water
- Easy to clean, tough glossy finish
- Very good resistance to a wide range of chemicals and corrosive vapours
- Sewage resistant
- Good mechanical and chemical resistance
- High build
- Impervious to liquids

SUSTAINABILITY

Sikagard® PW is certified according "Low Emitting Materials as per Al Sa'fat - Dubai Green Building Evaluation System" by Dubai Central Laboratory (DCL) certificate No. CL17020432

PRODUCT INFORMATION

Composition	Epoxy resin	
Packaging	Part A Part B Part A + B	16 kg containers 4 kg containers 20 kg ready to mix units
Shelf life	12 months from date of production.	
Storage conditions	Store in unopened, undamaged and sealed original packaging in dry conditions at temperatures between +5 °C and +30 °C. Protect from direct sunlight, heat and moisture.	
Appearance / Colour	Grey and white (mixed A + B), further colours upon request	
Density	~1.48 kg/l (25 °C)	

TECHNICAL INFORMATION

Abrasion resistance	~50 mg (14 d / 23 °C)	(CS 10 / 1000 / 1000)	(ASTM D4060)
Tensile adhesion strength	> 1.5 N/mm² (or concrete failure)		(ASTM C1583)
Chemical resistance	Please contact Sika Technical Department for specific information.		

APPLICATION INFORMATION

Mixing ratio	(A : B) = (4 : 1) by weight
Consumption	~0.3 kg/m² for a layer-thickness of 200 microns. This figure is theoretical and does not include for any additional material required due to surface porosity, surface profile, variations in level and wastage etc..
Layer thickness	Minimum two coats, each minimum 200 microns thick.
Ambient air temperature	+5 °C min. / +40 °C max.
Relative air humidity	< 80 %
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. Note: Low temperatures and high humidity conditions increase the probability of blooming.
Substrate temperature	+5 °C min. / +40 °C max.
Substrate moisture content	< 4 % pbw moisture content. Test method: Sika®-Tramex meter, CM-measurement or Oven-dry-method. No rising moisture according to ASTM (Polyethylene-sheet).
Pot Life	~40 min. (20 °C)
Curing time	Fully cured — 7 d (25 °C)
Waiting time to overcoating	Min. 4 h (35 °C) Min. 5 h (25 °C) Max. 2 d (25 °C)

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.

FURTHER INFORMATION

Method Statement:
Sikagard® PW
Substrate quality & Preparation:
Please refer to Sika Method Statement: “EVALUATION AND PREPARATION OF SURFACES FOR FLOORING SYSTEMS”.
Application instructions:
Please refer to Sika Method Statement: “MIXING & APPLICATION OF FLOORING SYSTEMS”.

IMPORTANT CONSIDERATIONS

- Do not apply Sikagard® PW on substrates with rising moisture.
- Freshly applied Sikagard® PW should be protected from damp, condensation and water for at least 24 hours.
- Apply on falling temperatures. If applied during rising temperatures “pin holing” may occur from rising air.
- These pinholes can be closed by applying a scratch coat of Sikafloor®-161 mixed with approximately 3 % of Extender T, or by Sikafloor® PS epoxy putty.
- For potable water applications, local authorities / regulations need to be followed, especially the cleaning and disinfection procedures of the installed coating.

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.

APPLICATION INSTRUCTIONS

SUBSTRATE PREPARATION

- The substrate 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.
- 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 blow holes 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.
- All dust, loose and friable material must be completely removed from all surfaces before application of the product, preferably by brush or vacuum.
- Steel surfaces maybe primed using a suitable anti-corrosion primer.

APPLICATION

Prior to mixing stir part A mechanically. When all of part B has been added to part A mix continuously for 3 minutes until an uniform mixed has been achieved. Use a low speed electrical stirrer (300 - 400 rpm) to avoid air entrapment. To ensure proper mixing pour material into a clean container and stir again. Apply by brush, roller or airless spray.
Further coats and lamination may be applied to enhance the protective performance of the system.

CLEANING OF EQUIPMENT

Tools and equipment should be cleaned with Sika® Thinner immediately after use. Hardened material can only be removed mechanically.

LOCAL RESTRICTIONS

Please note that as a result of specific local regulations the declared data for this product may vary from country to country. Please consult the local Product Data Sheet for the exact product 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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