

# PRODUCT DATA SHEET

## Sikagard® PW SG

### Chemical Resistant Epoxy Coating

#### DESCRIPTION

Sikagard® PW SG 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 SG 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

- 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

#### PRODUCT INFORMATION

<b>Composition</b>	Epoxy resin
<b>Packaging</b>	25 kg units (21 kg Part A + 4 kg Part B)
<b>Appearance / Colour</b>	White or Grey colour (mixed A + B)
<b>Shelf life</b>	12 months from date of production.
<b>Storage conditions</b>	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.
<b>Density</b>	~1.62 kg/l (23 °C)
<b>Solid content</b>	~100 %
<b>Tensile adhesion strength</b>	≥1.5 N/mm <sup>2</sup> (or concrete failure) (ASTM C1583)
<b>Chemical resistance</b>	Please contact Sika Technical Department for specific information.

<b>Mixing ratio</b>	(A : B) = (5.25 : 1) by weight
<b>Consumption</b>	~0.34 kg/m <sup>2</sup> for a layer-thickness of 200 micron. 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..
<b>Layer thickness</b>	Minimum two coats, each minimum 200 microns thick.
<b>Ambient air temperature</b>	+5 °C min. / +40 °C max.
<b>Relative air humidity</b>	< 80 %
<b>Dew point</b>	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.
<b>Substrate temperature</b>	+5 °C min. / +40 °C max.
<b>Substrate moisture content</b>	< 4 % pbw moisture content. Test method: Sika®-Tramex meter, CM-measurement or Oven-dry-method. No rising moisture according to ASTM (Polyethylene-sheet).
<b>Pot Life</b>	~40 min. (20 °C)
<b>Curing time</b>	Fully cured: ~7 days (25 °C)
<b>Waiting time to overcoating</b>	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 Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

## FURTHER INFORMATION

### Method Statement:

Sikagard® PW SG

### 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 Sikadur® PF 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

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

### SUBSTRATE QUALITY

- 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 clean, dry and free of all contaminants such as dirt, oil, grease, coatings and surface treatments, etc.

### SUBSTRATE PREPARATION

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 should be primed using a suitable anti-corrosion primer.

## MIXING

Prior to mixing, stir part A mechanically. When all of part B has been added to part A, mix continuously for 3 minutes until a uniform mix has been achieved. When parts A and B have been mixed. To ensure thorough mixing pour materials into another container and mix again to achieve a consistent mix. Over mixing must be avoided to minimise air entrainment.

### Mixing Tools

Sikagard® PW SG must be thoroughly mixed using a low speed electric stirrer (300 - 400 rpm) or other suitable equipment. For the preparation of mortars use a forced action mixer of rotating pan, paddle or trough type. Free fall mixers should not be used.

## APPLICATION

Prior to application, confirm substrate moisture content, relative humidity and dew point. If more than 4 % pbw moisture content, Sikafloor® EpoCem® may be applied as a T.M.B. (temporary moisture barrier) system. Make sure that a continuous, pore free coat covers the substrate. Apply Sikagard® PW SG by brush or roller.

## CLEANING OF EQUIPMENT

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

## LOCAL RESTRICTIONS

Note that as a result of specific local regulations the declared data and recommended uses for this product may vary from country to country. Consult the local Product Data Sheet for exact product data and uses.

## 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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All products are supplied under a management system certified to conform to the requirements of the quality, environmental and occupational health & safety standards ISO 9001, ISO 14001 and OHSAS 18001.

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