BUILDING TRUST

PRODUCT DATA SHEET

Sikagard®-65 WN

2-part water-based epoxy curing compound and protective coating

DESCRIPTION

Sikagard®-65 WN is a 2-part, epoxy resin, water based, grey coating for the efficient curing of precast concrete elements and as a concrete protective coating.

USES

Sikagard®-65 WN may only be used by experienced professionals.

- Curing compound for precast concrete elements
- Protective coating for concrete
- Sealing surface micro-cracks

CHARACTERISTICS / ADVANTAGES

- Good adhesion to damp and green concrete
- Application immediately after de-moulding
- Good pore sealing properties
- Good opacity
- Easy application by roller
- Fast curing at elevated temperatures
- Almost odourless

APPROVALS / CERTIFICATES

- Water permeability DIN 1048, SikaGard®-65 WN, Admaterials Technologies, Report No. ADM/15/4183
- Water test SikaGard®-65 WN, Admaterials Technologies, Report No. ADM/14/6443, No. ADM/14/4901

PRODUCT INFORMATION

Composition	Water based epoxy resin	
Packaging	Part A	22,5 kg, drum
	Part B	7,5 kg, drum
Appearance / Colour	Resin - part A	Thick coloured paste
	Hardener - part B	Light yellow translucent emulsion
	Available in number of colours shades	
Shelf life	12 months from date of production	
Storage conditions	The product must be stored in original, unopened and undamaged sealed packaging in dry conditions at temperatures between +5 °C and +30 °C. Always refer to packaging.	
Density	Part A	~1,6 kg/l
	Part B	~1,1 kg/l
	Mixed resin	~1,4 kg/l
Solid content by mass	~70 %	
Solid content by volume	~56 %	

TECHNICAL INFORMATION

Abrasion resistance	<3000 mg (H22/1000/1000)		EN ISO 5470-1
Tensile adhesion strength	>1.5 N/mm² (failure in concrete)		(EN 13892-8) at +23 °C / 50 % r.h.
Permeability to water vapour	Water vapour transmission rate	~27 g·m^{-2}·d^{-1}	(EN ISO 7783:2012)
	Water vapour permeance	~4.5×10^{-6} g·m^{-2}·d^{-1}·Pa^{-1}	
	Diffusion equivalent air layer thickness s_d	0.77 m	
Permeability to carbon dioxide	Carbon dioxide permeability	~2.6 g·m^{-2}·d^{-1}	(EN 1062-6:2003)
	Diffusion equivalent air layer thickness S_d	~100 m	
	Diffusion resistance factor µ	~470 000	

APPLICATION INFORMATION

Mixing ratio	Part A : Part B = 100 : 33 (by weight)
Consumption	~300g/m² per layer These figures are theoretical and do not allow for any additional material due to surface porosity, surface profile, variations in level or wastage etc.
Layer thickness	~120 µm
Ambient air temperature	+10 °C min. / +40 °C max.
Relative air humidity	85 % maximum
Substrate temperature	+10 °C min. / +40 °C max.
Substrate moisture content	Can be applied on green or damp concrete ensuring no standing water is present
Pot Life	**Material temperature** / **Time** +10 °C / ~40 minutes +20 °C / ~20 minutes +30 °C / ~10 minutes
Waiting time to overcoating	If a second coat is required, it must be applied when the first coat is tack free

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.

IMPORTANT CONSIDERATIONS

- Apply Sikagard®-65 WN only on freshly demoulded concrete elements.
- Concrete temperature must be below +40 °C
- Protect freshly applied product from rain/ water for a minimum of 6 hours.
- Continuously monitor the pot life of the mixed material as the end of pot life is not visibly noticeable.
- Ensure good ventilation when Sikagard®-65 WN is applied in confined spaces.
- Do not apply by airless spray.

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

Mixing
- Double paddle electric stirrer (300–400 rpm)
- Scraper
- Clean mixing containers

Application
- Brush
- Trowel
- Fleece roller

SUBSTRATE QUALITY

Curing Membrane
Substrate must be clean, dry or slightly damp and free of all contaminants such as dirt, oil, grease, surface treatments and loose friable material.

SUBSTRATE PREPARATION

Curing Membrane
No substrate preparation after demoulding

MIXING

Prior to mixing all parts, mix part A (resin) using an electric stirrer to mix liquid and all the coloured pigment until a uniform colour has been achieved. Add part B (hardener) to part A and mix part A + B continuously for 3,0 minutes until a uniformly coloured mix has been achieved. To ensure thorough mixing pour materials into a clean container and mix again for at least 1,0 minute to achieve a smooth consistent mix. Excessive mixing must be avoided to minimise air entrainment. During the final mixing stage, scrape down the sides and bottom of the mixing container with a straight edge trowel or spatula at least once to ensure complete mixing. Mix full units only. Mixing time for A+B = ~4,0 minutes

APPLICATION

Reference must be made to further documentation where applicable, such as relevant method statement, application manual and installation or working instructions.
Prior to application, relative air humidity, dew point, substrate, air and product temperatures.
Apply Sikagard®-65 WN onto the prepared substrate evenly using a roller, brush or trowel at the required consumption rate. When applied by trowel, while coating is wet, use a roller to achieve an even coating thickness.

CLEANING OF EQUIPMENT

Clean all tools and application equipment with water 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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