

## PRODUCT DATA SHEET

# Sikagard®-65 WN BH

### WATER-DISPERSED EPOXY COATING FOR CURING AND PROTECTION OF CONCRETE

#### DESCRIPTION

Sikagard®-65 WN BH is a solvent-free, water-dispersed, two part epoxy resin for curing and protection of precast concrete segments immediately after de-moulding.

It is designed and formulated to meet high durability demands in aggressive environments. Suitable for use in hot and tropical climatic conditions.

#### USES

Sikagard®-65 WN BH is used to cure and protect precast concrete segments, as an efficient alternative to conventional curing and protection procedures.

#### CHARACTERISTICS / ADVANTAGES

- Easy and fast to apply with a roller or spray equipment
- Water dispersed
- Solvent free
- Good hiding properties / cosmetic finish
- Fast curing at high temperature
- Pore sealer
- Increased chemical resistance
- Increased abrasion resistance
- Tools can be cleaned with water

#### PRODUCT INFORMATION

<b>Composition</b>	Water-dispersed epoxy resin
<b>Packaging</b>	20 kg sets (Part A + B)
<b>Appearance / Colour</b>	Grey
<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>	~1.35 kg/l (at +20°C, mixed A and B)
<b>Solid content by weight</b>	~56 %
<b>Solid content by volume</b>	~41 % (theoretical)
<b>Tensile Adhesion Strength</b>	≥ 1.5 N/mm <sup>2</sup> (failure in concrete) (BS 1881 - Part 207)
<b>Chemical Resistance</b>	Sikagard®-65 WN BH is designed to provide specific chemical resistance to concrete against chlorides and sulphates found in the ground in aggressive environments.

## APPLICATION INFORMATION

<b>Mixing Ratio</b>	(A : B) = (3 : 1) by weight		
<b>Consumption</b>	Single coat application on segments	1 x Sikagard®-65 WN BH	300 – 450 g/m <sup>2</sup>
	Double coat application on segments	1 x Sikagard®-65 WN BH 1 x Sikagard®-65 WN BH	150 – 250 g/m <sup>2</sup> 100 – 200 g/m <sup>2</sup>
<b>Relative Air Humidity</b>	<80 %		
<b>Dew Point</b>	Beware of condensation! The substrate must be at least 3 °C above dew point to reduce the risk of condensation or blooming on the surface of the applied product.		
<b>Substrate Temperature</b>	+10°C min. / +60°C max.		
<b>Substrate Moisture Content</b>	The substrate can be either dry or matt-damp green concrete and must be cleaned of loose cement particles and all contaminants such as oils, grease, coatings or surface treatments etc..		
<b>Pot Life</b>	~60 minutes at +20°C (Caution! End of pot life is not visually noticeable)		
<b>Curing Time</b>	Temperature	+20 °C	+30 °C
	Minimum curing time before transportation of segments	12 hours	4 hours
	Fully cured	10 days	7 days
Note: at below 80 % r.h.			
<b>Waiting Time / Overcoating</b>	Min. 2 hous (25°C) Max. 2 days (25°C) Note: Apply second coat only after the first coat is tack-free		

## APPLICATION INSTRUCTIONS

### SUBSTRATE PREPARATION

- The 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.
- Concrete substrates must be prepared mechanically 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.

### 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 an uniform mixed has been achieved. Use a low speed electrical stirrer (max. 600 rpm) to avoid air entrapment. To ensure proper mixing pour material into a clean container and stir again.

### APPLICATION

Sikagard®-65 WN BH may be applied either with a brush, roller or airless spray.

### CLEANING OF EQUIPMENT

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

## IMPORTANT CONSIDERATIONS

- When applying in 2 coats, second coat can only be applied after the first coat is tack-free.
- Maximum waiting time between 2 coats must not exceed 2 days.
- End of pot life cannot be visually or physically detected. Therefore, the specified pot life must be timed and observed strictly.
- Do not apply Sikagard®-65 WN BH on substrates with rising moisture.
- Freshly applied Sikagard®-65 WN BH should be protected from damp, condensation and water for at least 24 hours.
- Apply on a falling temperature. If applied during rising temperatures “pin holing” may occur from rising air.

## 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.

## 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 the exact product data and uses.

## 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.

## 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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