BUILDING TRUST

PRODUCT DATA SHEET

Sikagard®-65 WN Primer

TWO-PART WATER DISPERSED EPOXY RESIN PRIMER

DESCRIPTION

Sikagard®-65 WN Primer is a solvent-free, water dispersed primer based on epoxy resin.

USES

As a primer and adhesion promoter on properly prepared:
- Hardened concrete
- Cementitious screeds
- EpoCem levelling layers

As a primer for:
- Sikagard®-65 WN

CHARACTERISTICS / ADVANTAGES

- Easy and fast to apply
- Especially suitable for highly absorbent substrates
- Water dispersed and odourless
- Can be applied in unventilated areas
- Very good bond strength over its whole application temperature range

PRODUCT INFORMATION

Chemical Base	Water dispersed epoxy		
Packaging	Part A Part B Part A+B	22.5 kg containers 7.5 kg containers 30 kg ready to mix units	
Appearance / Colour	Resin - part A Hardener - part B Mixed Resin	Thick coloured paste Light yellow translucent emulsion Oxide red (~ RAL 3009)	
Shelf Life	12 months from date of production		
Storage Conditions	The product must be stored properly in original, unopened and undamaged sealed packaging, in dry conditions at temperatures between +5 °C and +30 °C.		
Density	Part A Part B Mixed resin All density values at +23 °C.	~1.6 kg/L ~1.1 kg/L ~1.4 kg/L	(DIN EN ISO 2811-1)
Solid content by weight	~70 %		
Solid content by volume	~56 %		

Viscosity	4 900 mPa·s (+20 °C)		Contraves (RM 180 Rheomat)
Tensile Adhesion Strength	28 days	~1.5 N/mm² (failure in concrete)	(EN 13892-8) at +23 °C / 50 % r.h.

SYSTEM INFORMATION

Systems	1 - 2 coats of Sikagard®-65 WN Primer (dependent on substrate porosity)

APPLICATION INFORMATION

Mixing Ratio	Part A : B = 3 : 1 by weight
Consumption	0.3 - 0.5 kg/m²/coat (2.0 - 3.3 m² / kg / coat) Sikagard®-65 WN Primer, diluted with water 10 % by weight for the first coat. Undiluted for the second coat. This figure is theoretical and does not include for any additional material required due to surface porosity, surface profile, variation in level or wastage, etc.
Layer Thickness	~110 - 180 µm per coat (dry film thickness)
Ambient Air Temperature	+10 °C min. / +35 °C max.
Relative Air Humidity	85 % r.h. max.
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 surface of the applied product.
Substrate Temperature	+10 °C min. / +35 °C max.
Substrate Moisture Content	Test method: Sika®-Tramex meter, CM - measurement or Oven-dry-method. Always confirm substrate moisture content prior to the application of the primer: ▪ < 4 % for impervious resin finishes. No rising moisture according to ASTM D 4263 test (Polyethylene sheet). ▪ Can be applied on matt damp green concrete when overcoating with the Sikafloor® EpoCem® range without standing water on the substrate.

Pot Life

Temperature	Time
+10 °C	~180 min
+20 °C	~90 min
+30 °C	~45 min

All above values at 75 % relative air humidity.
Caution: Expiry of pot life without visible change.

Curing Time

Substrate temperature	Foot traffic
+10 °C	~12 h
+20 °C	~6 h
+30 °C	~4 h

Waiting Time / Overcoating

Before applying Sikagard®-65 WN onto Sikagard®-65 WN Primer allow:

Substrate temperature	Min. waiting time	Max. waiting time
+10 °C	12 h	72 h
+20 °C	6 h	48 h
+30 °C	4 h	24 h

At low temperatures and / or high humidity curing time will increase.
Apply subsequent coats only to tack free primer.

APPLICATION INSTRUCTIONS

SUBSTRATE QUALITY

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

SUBSTRATE PREPARATION

- 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.

MIXING

Prior to mixing, thoroughly stir part A (resin), then add all of part B (hardener) and mix both liquid parts thoroughly for one minute until a uniform mix has been achieved.
When parts A and B have been mixed for one minute for the first coat, slowly add 10 % of clean water while mixing continues for a further two minutes, until a fully homogenous mix has been achieved.
For the second coat, do not add additional water, but continue the mixing for a total of 3 minutes until a fully homogenous mix has been achieved.
To ensure thorough mixing of both coats, after the minimum 3 minutes mixing, pour the mixed material into another container carefully scraping the sides and mixing paddle with a spatula and then mix again briefly to ensure complete and thorough mixing.
Excessive mixing must also be avoided to minimise air entrainment.
Mixing Tools
Low speed electric stirrer (~ 300 - 400 rpm)

APPLICATION

Apply Sikagard®-65 WN Primer by suitable brush, roller or trowel and overwork with a roller.
Caution
The end of the product's pot life is not noticeable! Respect the limitations mentioned. Discard material not used within indicated pot life.

CLEANING OF TOOLS

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

LIMITATIONS

- At low temperatures and/or high humidity, the curing time will increase
- Protect application from rain / water while reaction and curing takes place
- Dilution of the first coat with 10 % of water by weight helps improve bond on dense and only slightly absorbent substrates, as well as reducing the consumption of material on excessively porous substrates. When applying a second coat, always use it undiluted.
- Make sure to monitor and control the pot life of the mix as the end of pot life is not visibly noticeable. Discard any material at the pot life limits indicated for the existing application conditions!

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.

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.

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.

Sika (Singapore) Pte Ltd
66A Sungei Kadut Street 1
Singapore 729368
Phone: +65 6368 0883
Fax: +65 6368 6636
Email: sikasing@sg.sika.com
www.sika.com.sg