

# PRODUCT DATA SHEET

## Sikagard®-63

### 2-PART EPOXY PROTECTIVE COATING

#### DESCRIPTION

Sikagard®-63 is a solvent free, high build thixotropic epoxy resin based protective coating with high chemical resistance.

#### USES

- Abrasion resistant universal coating material designed for normal to highly aggressive chemical environments
- For use on concrete, cementitious mortars and rendering, epoxy mortars (including Sika® EpoCem®) and steel
- For protective lining of storage tanks, silos and bund areas
- As an anti-corrosion coating in food and beverage processing plants, sewage works, agricultural, chemical and pharmaceutical plants, bottling plants etc.
- Also used as part of glass fibre reinforced self supporting linings with crack bridging properties for bund areas and storage tanks

#### CHARACTERISTICS / ADVANTAGES

- Very good chemical and mechanical resistance
- Liquid proof (according to the products chemical resistance table)
- Easy application
- Solvent free

#### PRODUCT INFORMATION

<b>Chemical Base</b>	Epoxy
<b>Packaging</b>	Part A: 3 kg containers Part B: 1 kg containers Part A+B: 4 kg ready to mix units

**Appearance / Colour**

Resin - Part A: coloured, liquid  
 Hardener - Part B: brownish, liquid

Available in ~RAL 7003 (Moss grey), 7043 (Traffic grey B).

Under direct sun radiation there may be some discolouration and colour deviation; this has no influence to the function and performance of the coating.

<b>Shelf Life</b>	12 months from date of production if stored properly in original, unopened and undamaged sealed packaging.
<b>Storage Conditions</b>	Store in dry conditions at temperatures between +5 °C and +35 °C.
<b>Density</b>	Part A : 1.6 kg/l Part B : 1.11 kg/l Mixed resin: ~ 1.5 kg/l All density values at +27°C.
<b>Solid Content</b>	~ 100% (by weight)

**TECHNICAL INFORMATION**

<b>Tensile Adhesion Strength</b>	Substrate:	
	Concrete:> 1.5 N/mm <sup>2</sup> (failure in concrete)	(DIN EN 13892-8)
	Steel (SA 2.5):~ 24 N/mm <sup>2</sup>	(DIN EN 24624)

<b>Chemical Resistance</b>	<b>Title 1</b>	<b>Title 2</b>				
	<b>Test medium</b>	<b>Temp.</b>	<b>24 h</b>	<b>7 d</b>	<b>42 d</b>	<b>6 m</b>
Acetone	30°C	A	A	A	A	
Ethanol 96%	30°C	A	A	A	A	
Formic acid 10%	30°C	A	A	A	A	
Acetic acid 20%	30°C	A	A	D	D	
Water	30°C	A	A	A	A	
NaOH 50%	30°C	A	A	A	A	
Nitric acid 20%	30°C	D	C			
Hydro-chloric acid 37%	30°C	D	D	D	D	
Sulphuric acid 50%	30°C	A	D	D	D	

<b>Thermal Resistance</b>	Exposure*	Dry heat
	Permanent	+60°C

\*No simultaneous chemical and mechanical exposure.

**SYSTEM INFORMATION**

**Systems****Roller coating (concrete surface):**

Primer*:	1 x Sikagard®-67/ Sikafloor®-93 EC Primer / Sikafloor®-161 HC
Coating:	2 - 3 x Sikagard®-63

**Lamination (1.5 - 2.0 mm):**

Primer*:	1 x Sikafloor®-93 EC Primer / Sikafloor®-161 HC
1st lamination layer:	1 x Sikagard®-63 + glass fibre fabric
2nd lamination layer:	1 x Sikagard®-63 + glass fibre fabric
Seal coat:	1 x Sikagard®-63

\*optional, only recommended for use on strongly absorbent surfaces.

**APPLICATION INFORMATION**

<b>Mixing Ratio</b>	Part A : Part B = 3: 1 (by weight)		
<b>Consumption</b>	Coating System	Product	Consumption
	Scratch coat (optional)	Sikadur®-31 / Sikadur®-41 Sikafloor®-161 HC + Silica flour / quartz sand	Refer to PDS
	Primer	Sikagard®-67 / Sikafloor®-161 HC	0.2 - 0.4 kg/m <sup>2</sup>
	Roller coating	Sikagard®-63	0.3-0.5 kg/m <sup>2</sup> per coat, dependent on substrate condition and required coating thickness
	Lamination	Sikagard®-63 + Glass fiber fabric	1st layer: 0.7 kg/m <sup>2</sup> 2nd layer: 0.6 kg/m <sup>2</sup> Seal coat: 0.4 kg/m <sup>2</sup> ~0.3 kg/m <sup>2</sup> per layer

Notes: For a theoretical dry film thickness of 100 microns (0.1 mm) approx. 0.15 kg/m<sup>2</sup> must be applied.  
These figures are theoretical and do not allow for any additional material due to surface porosity, surface profile, variations in level and wastage etc.

<b>Ambient Air Temperature</b>	+8°C min. / +35 °C max.	
<b>Relative Air Humidity</b>	80% r.h. max.	
<b>Dew Point</b>	Beware of condensation!	
	The substrate and uncured coating must be at least 3°C above dew point to reduce the risk of condensation or blooming on the coating surface.	
<b>Substrate Temperature</b>	+8°C min. / +35 °C max.	
<b>Substrate Moisture Content</b>	< 4% 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>	4 kg mass	
	Temperatures	Time
	+10°C	~ 90 minutes
	+20°C	~ 45 minutes
	+30°C	~ 35 minutes

## Curing Time

Temperature	Foot Traffic	Full cure
+10°C	~ 24 hours	~ 15 days
+20°C	~ 18 hours	~ 9 days
+30°C	~ 12 hours	~ 7 days

Note: Times are approximate and will be affected by changing ambient conditions.

## Waiting Time / Overcoating

Before applying Sikagard®-63 on Sikafloor®-161 HC:

Substrate Temperature	Minimum	Maximum
+10°C	24 hours	4 days
+20°C	12 hours	2 days
+30°C	6 hours	1 day

Before applying Sikagard®-63 on Sikagard®-63

Substrate Temperature	Minimum	Maximum
+10°C	9 hours	3 days
+20°C	5 hours	2 days
+30°C	4 hours	1 day

Note: Times are approximate and will be affected by changing ambient conditions particularly temperature and relative humidity.

## APPLICATION INSTRUCTIONS

### EQUIPMENT

Sikagard®-63 must be thoroughly mixed using a low speed electric stirrer (300 - 400 rpm) or other suitable equipment.

### SUBSTRATE QUALITY

The concrete substrate must be sound and of sufficient compressive strength (minimum 20 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.

If in doubt apply a test area first.

### SUBSTRATE PREPARATION

Concrete substrates must be prepared mechanically using abrasive blast cleaning, scarifying or grinding equipment to remove cement laitance and achieve an open textured surface.

Weak concrete must be removed and surface defects such as blowholes 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.

The concrete or screed substrate has to be primed or levelled in order to achieve an even surface.

High spots must be removed by e.g. grinding.

All dust, loose and friable material must be completely removed from all surfaces before application of the product, preferably by brush and/or vacuum.

### MIXING

Prior to mixing, stir Part A mechanically. When all of Part B has been added to Part A, mix continuously for 2 minutes until a uniform mix has been achieved.

To ensure thorough mixing pour the material into another container and mix again to achieve a consistent mix.

Over mixing must be avoided to minimise air entrapment.

After mixing allow the material to stand for 3 minutes.

### APPLICATION

Prior to application, confirm substrate moisture content, r.h. and dew point.

If > 4% moisture content, Sikafloor® EpoCem® Mortars or Sikagard®-720 EpoCem should be applied as a Temporary Moisture Barrier (TMB) system.

Coating: Sikagard®-63, can be applied with a stiff brush or a short piled, solvent resistant roller.

Lamination: The fabric should be embedded in the 'wet' Sikagard®-63 using a special profiled roller.

### CLEANING OF TOOLS

Clean all tools and application equipment with Sika® Colma Cleaner or any suitable thinner immediately after use. Hardened and/or cured material can only be removed mechanically.

## 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 declared data for this product may vary from country to country. Please consult the local Product Data Sheet for the exact product data.

## ECOLOGY, HEALTH AND SAFETY

### 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 India Pvt. Ltd.

620, Diamond Harbour Road  
Commercial Complex II  
Kolkata - 700 034  
Tel : +91 33 24472448  
Fax : +91 33 23978688  
Mail : info.india@in.sika.com



Product Data Sheet  
Sikagard®-63  
July 2019, Version 01.02  
020606010020000003

Sikagard-63-en-IN-(07-2019)-1-2.pdf