

## PRODUCT DATA SHEET

# Sikagard<sup>®</sup>-300

(formerly MProtect 300)

HIGH BUILD, CRACK-BRIDGING, ELASTOMERIC, PROTECTIVE, AND WATERPROOF COATING FOR CONCRETE & MASONRY

### DESCRIPTION

Sikagard<sup>®</sup>-300 is a single component, high performance, acrylic resin based coating for long term protection of concrete & masonry from aggressive atmospheric gases such as, carbon dioxide, sulphur dioxide and chloride ions. It is available in standard colours. It can be made available in custom colours subject to prior agreement.

### USES

Sikagard<sup>®</sup>-300 is recommended for external protection of concrete to prevent ingress of atmospheric corrosive gases, wind driven rain, and water borne chlorides. Applications include protection of :

- Bridges, Flyovers, Aqueducts, viaducts
- Residential & Commercial Buildings
- Multi storey car parks & podiums
- Chimneys, cooling towers and silos.
- Jetties and berths.
- Overhead water tanks.
- Industrial buildings and power plants.

### CHARACTERISTICS / ADVANTAGES

- Anti-carbonation and sulphate resistant coating - High resistance to CO<sub>2</sub> & SO<sub>2</sub> diffusion.
- Resistant to diffusion of chloride ions – suitable for marine applications.
- UV resistant – suitable for exposure.
- Resists water ingress and permeable to water vapour – suitable for exposure to splashes or wind driven rain
- Resists dirt pick up, and growth of fungus – suitable for use in the tropics
- Sikagard<sup>®</sup>-300 – copes with thermal movements of buildings.
- Washable - coating with excellent durability

### PRODUCT INFORMATION

<b>Packaging</b>	20 kg container
<b>Shelf life</b>	12 months from date of production
<b>Storage conditions</b>	Store under cover, out of direct sunlight and protect from extremes of temperature. In tropical climates the product must be stored in an air conditioned environment.
<b>Density</b>	1.20 ±0.10gm/cc at 25°C
<b>Solid content by volume</b>	40%
<b>Consistency</b>	Thick Paste

## TECHNICAL INFORMATION

Tensile strength	> 1.0 MPa @300 micron	(ASTM D 2370)	
Elongation at break	>300% @ 300μ thickness	(ASTM D 2370)	
Tensile adhesion strength	>1.5 MPa (Concrete Failure)	(ASTM D 7234)	
Cross cut	Adhesion 4/5 (excellent)	(AS 1580 408.2)	
Service temperature	5°C to 40°C		
Water vapour transmission	> 70 @300 micron (gm/m <sup>2</sup> /24hr)	(ASTM E 96)	
Diffusion resistance to carbon dioxide	> 50m		
Chloride ion diffusion resistance	Negligible chloride ion penetrability	(ASTM C1202)	
Behaviour after artificial weathering	No color change or chalking (Appearance after 1000 hr. accelerated weathering)		
System structure	<b>Layer</b>	<b>Product</b>	<b>No. of Coats</b>
	Primer	Sikagard®-399	1
	Protective Coating	Sikagard®-300	2
Dry film thickness	DFT = 300μ @ 0.9 Kg/m <sup>2</sup> (in 2 coats)		

## APPLICATION INFORMATION

Consumption	<b>Product</b>	<b>Consumption</b>
	Sikagard®-399	0.10 ~ 0.15 kg/m <sup>2</sup>
	Sikagard®-300	0.45 Kg/m <sup>2</sup> /coat
Each pack of 20 kg is sufficient for an area of 22 m <sup>2</sup> to achieve the recommended final dry film thickness of 300μ in 2 coats. The coverage rate is strongly influenced by the roughness and porosity of the substrate.		
Curing time	Full cure : 7 Days	
Drying time	Touch dry : 1 Hour at 25°C Re-coatable: 4 Hours at 25°C	

### 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.

### IMPORTANT CONSIDERATIONS

Sikagard®-300 is not recommended for application in areas likely to be submerged in water and on floors subjected to traffic

### 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.

### SUBSTRATE QUALITY

New masonry and concrete should be at least 14 days old before treatment and with moisture level in substrate below 7% by volume.

### SUBSTRATE PREPARATION

Correct substrate preparation is critical for optimum performance. The surface to be treated must be thoroughly cleaned. Remove all traces of formwork, release agent, grease, efflorescence, laitance, algae, or other contaminant that may prevent proper adhesion. Remove organic materials by scraping, brushing or high pressure water cleaning. Spores must be treated with a suitable fungicide sterilizing agent and carefully rinsed.

On non-decorated concrete surface containing blow holes and/or minor irregularities, and on some rough rendered or dashed surface, it is advantageous to use SikaEmaco® N 303 to close the surface, thus preventing the possibility of pinholes occurring. Cracks wider than hairline should be patched with Sikadur®-31 IN or sealed using epoxy putty before treatment.

## SUBSTRATE QUALITY / PRE-TREATMENT

### Priming

Prime the surface using Sikagard®-399 or Sikagard®-551 S Elastic Primer.

Allow the primer to dry for 2-3 hr (at temp. >25°C) before applying Sikagard®-300. At lower temperatures, allow a longer time to dry.

### MIXING

Stir (do not dilute) to obtain a uniform mixture before use.

### APPLICATION

Apply Sikagard®-300 in one coat using airless spray to achieve a wet film thickness of 650µ or in two coats each of 325µ WFT using roller or brush, with the second coat applied 2 – 4hrs after the first and at right angle to it. The prepared substrate must be air-dry when the first coat is applied. Where a textured finish is required use a medium nap roller to apply the product and over roll with a textured roller to give the desired finish in one direction only.

Only apply Sikagard®-300 when the ambient temperature and substrate temperature are at least 5°C and will not fall below 5°C with-in 24 hours. To avoid condensation which influences the adhesion negatively, surface temperature during application should be at least 3°C higher than the dew point.

## 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.

#### Sika India Pvt. Ltd.

620, Diamond Harbour Road  
Commercial Complex II  
Kolkata - 700 034  
West Bengal, India

#### Contact:

Phone: +91 33 2447 2448  
Fax: +91 33 2397 8688  
info.india@in.sika.com  
www.sika.in



#### Product Data Sheet

Sikagard®-300

September 2024, Version 02.01  
02030300000002062

Sikagard-300-en-IN-(09-2024)-2-1.pdf