

PRODUCT DATA SHEET

Sikagard®-340 WCT IN

2-part coloured waterborne epoxy coating for tunnels

DESCRIPTION

Sikagard®-340 WCT IN is a 2-part coloured, chemically resistant epoxy coating for internal application to concrete tunnels. It provides a hard wearing, seamless, low maintenance, easily cleanable, gloss finish.

USES

The Product is used as a coating for tunnel walls made of concrete or lined with cementitious mortar.

Please note:

- The Product may only be used by experienced professionals.

FEATURES

- Good resistance to specific chemicals
- Good mechanical resistance
- Very good abrasion resistance
- Water vapour permeable
- Very low odour
- Easy to apply
- Easy to clean and maintain

PRODUCT INFORMATION

Composition	Water based epoxy	
Packaging	Part A+B pre-batched	20 kg
	Part A	14.60 kg container
	Part B	5.40 kg container
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. Refer to the current Safety Data Sheet for information on safe handling and storage.	
Appearance and colour	Cured colour	White, Black, Green, Orange, Magnolia
	IMPORTANT: For colour matching, apply colour sample and confirm selected colour under real lighting conditions. IMPORTANT: Colour uniformity cannot be completely guaranteed from batch to batch. Do not mix batch numbers in a single area. IMPORTANT: Colour on smooth substrates may appear different than on mortar substrates due to substrate finish and absorbency of substrate.	

Density	Part A+B mixed	~1.35 kg/L
	Part A	~1.52 kg/L
	Part B	~1.05 kg/L
Values measured at +27 °C		

TECHNICAL INFORMATION

Tensile adhesion strength	≥ 1.5 N/mm ²	(EN 1542)
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SYSTEM INFORMATION

System structure	ON CONCRETE	
	Layer	Product
	Primer	1–2 × Sikagard®-340 WCT IN diluted 5 % with water
	Wearing layer	1–2 × Sikagard®-340 WCT IN
	OS 2 (OS-B)	
	Layer	Product
	Hydrophobic coating	1–2 × Sikagard®-705 L / Sikagard®-706 Thixo / Sikagard®-740 W
	Wearing layer	2 × Sikagard®-340 WCT IN First layer diluted 5 % with water
	OS 4 (OS-C)	
	Layer	Product
	Levelling filler (pore closure and levelling)	1 × Sika MonoTop®-2500 Fair Finish
	Wearing layer	2 × Sikagard®-340 WCT IN First layer diluted 5 % with water

APPLICATION INFORMATION

Mixing ratio	Part A : Part B (by weight)	73 : 27
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Consumption	ON CONCRETE		
	Layer	Product	Consumption
	Primer	Sikagard®-340 WCT IN diluted 5 % with water	1–2 × 0.15–0.20 kg/m ² per layer
	Wearing layer	Sikagard®-340 WCT IN	1–2 × 0.15–0.25 kg/m ² per layer
	OS 2 (OS-B)		
	Layer	Product	Consumption
	Hydrophobic coating	Sikagard®-705 L / Sikagard®-706 Thixo / Sikagard®-740 W	1–2 × 0.15–0.30 kg/m ² per layer
	Wearing layer	Sikagard®-340 WCT IN First layer diluted 5 % with water	2 × 0.20 kg/m ² per layer
	OS 4 (OS-C)		
	Layer	Product	Consumption
	Levelling filler (pore closure and levelling)	Sika MonoTop®-2500 Fair Finish	1 × 1.30 kg/m ² /mm
	Wearing layer	Sikagard®-340 WCT IN First layer diluted 5 % with water	2 × 0.20 kg/m ² per layer

Note: Consumption data is theoretical and does not allow for any additional material due to surface porosity, surface profile, variations in level, wastage or any other variations. Apply product to a test area to calculate the exact consumption for the specific substrate conditions and proposed application equipment.

Material temperature	Maximum	+30 °C		
	Minimum	+10 °C		
Ambient air temperature	Maximum	+30 °C		
	Minimum	+10 °C		
Relative air humidity	Maximum	75 %		
Dew point	Beware of condensation. The substrate and uncured applied product must be at least +3 °C above dew point to reduce the risk of condensation on the surface of the applied product.			
Substrate temperature	Maximum	+30 °C		
	Minimum	+10 °C		
Substrate moisture content	Substrate	Test method	Moisture content	
	Cementitious substrate	Calcium carbide method (CM-method)	≤ 4%	
	No rising moisture (ASTM D4263, polyethylene sheet)			
Pot Life	~40 minutes at +30 °C			
Waiting time to overcoating	Before applying Sikagard®-340 WCT IN on Sikagard®-340 WCT IN, allow:			
	Temperature	Minimum	Maximum	
	+10 °C	180 minutes	7 days	
	+20 °C	180 minutes	7 days	
	+30 °C	180 minutes	7 days	
	Before applying Sikagard®-340 WCT IN on Sika MonoTop®-2500 Fair Finish, allow:			
	Temperature	Minimum	Maximum	
	+10 °C	24 hours	3 days	
	+20 °C	24 hours	3 days	
	+30 °C	24 hours	3 days	
	Before applying Sikagard®-340 WCT IN on Sikagard®-705 L / Sikagard®-706 Thixo / Sikagard®-740 W, allow:			
	Temperature	Minimum	Maximum	
	+10 °C	8 hours	7 days	
	+20 °C	5 hours	7 days	
	+30 °C	4 hours	7 days	
		Note: Times are approximate and will be affected by changing ambient conditions, particularly temperature and relative humidity.		
Drying time	Temperature	Tack free	Light traffic	Full cure
	+10 °C	24 hours	5 days	10 days
	+20 °C	6 hours	3 days	7 days
	+30 °C	3 hours	2 days	5 days
		Note: Times are approximate and will be affected by changing ambient conditions, particularly temperature and relative humidity.		

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.

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

IMPORTANT

Strictly follow installation procedures

Strictly follow installation procedures as defined in Method Statements, application manuals and working instructions which must always be adjusted to the actual site conditions.

SUBSTRATE QUALITY

Cementitious substrates must be structurally sound and of sufficient compressive strength (minimum 25 N/mm²) with a minimum tensile strength of 1.5 N/mm².

Substrates must be clean, dry and free of all contaminants such as dirt, oil, grease, coatings, laitance, surface treatments and loose friable material.

MIXING

1. Mix Part A (resin) for ~30 seconds.
2. Add Part B (hardener) to Part A.
3. **IMPORTANT** Do not mix excessively. Mix Part A + B continuously for ~3 minutes until a uniform mix is achieved.
4. To ensure thorough mixing, pour materials into another container and mix again to achieve a smooth and uniform mix.
5. During the final mixing stage, scrape down the sides and bottom of the mixing container with a flat or straight edge trowel at least once to ensure complete mixing.

APPLICATION

IMPORTANT

Protect from moisture

After application, protect the Product from damp, condensation and direct water contact for at least 24 hours.

IMPORTANT

Ventilation in confined spaces

Always ensure good ventilation when applying the Product in a confined space.

IMPORTANT

UV exposure

The Product is not resistant for permanent direct exposure to UV light.

1. Where exposed cover the Product with a suitable coating to resist UV.

APPLICATION PROCEDURE

1. Apply the Product evenly over the surface with a brush or fleece roller
2. Alternatively, apply the Product using airless spray equipment.
3. Ensure a continuous, pore free coat covers the substrate. If necessary, apply two priming coats.

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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Product Data Sheet

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