

PRODUCT DATA SHEET

Sikagard®-306

Two-component epoxy resin

PRODUCT DESCRIPTION

Sikagard®-306 is a two-component epoxy resin used as a topcoat in Sikagard® STEP waterproofing systems. It can be applied on to primed or hydraulic mortars and directly to steel.

USES

Topcoat for Sikagard® STEP laminated systems or as impervious coating, on concrete and steel in the following applications

Structures:

- Above-ground, semi-buried and buried tanks
- Sewage treatment plant tanks
- Raw water tanks

- Aqueducts
- Fountains
- Water covers
- Retention tanks

CHARACTERISTICS / ADVANTAGES

- Excellent resistance to petroleum products, chemicals and most of the effluents found in wastewater treatment plants
- Easy to apply
- Can be applied by spraying

APPROVALS / STANDARDS

CE marked in accordance with EN 1504-2:2004. Product for concrete surface protection product - Coating (C) in accordance with EN 1504-9 (1.3) against penetration (5.1) increase of physical resistance (PR) and physical resistance (PR) and (6.1) chemical resistance (CR). Coating with Sikagard®-106 Primer.

PRODUCT INFORMATION

Chemical Base	Epoxy resin
Packaging	25 kg kit (A+B) <ul style="list-style-type: none"> ▪ Component A: 18.5 kg metal bucket ▪ Component B: 6.5 kg metal bucket
Appearance / Colour	Grey, glossy
Shelf Life	12 months from date of manufacture, in original, unopened packaging.
Storage Conditions	Store in original, unopened packaging, away from moisture and frost, at temperatures between +5°C and +35°C.
Density	~ 1.4 (mixture) <ul style="list-style-type: none"> ▪ Component A: 1.51 ▪ Component B: 1.08
Solid Content	100 %

Viscosity		Sikagard®-306 Component A	Sikagard®-306 Component B	(EN ISO 3219)
	+10°C	10.3 Pa.s	3.16 Pa.s	
	+20°C	3.96 Pa.s	1.35 Pa.s	
	+35°C	1.43 Pa.s	0.595 Pa.s	

TECHNICAL INFORMATION

Shore D Hardness		at 2 days	at 7 days	(EN 868)
	+10°C	50	77	
	+20°C	72	79	
	+40°C	78.5	79	
Abrasion Resistance	Taber test	1787 mg		(EN ISO 5470-1)
Resistance to Dynamic Puncture	Class III ≥ 20 Nm			(EN ISO 6272-1)
Elongation at Break	Free film at +20°C	≥ 7%		(ISO 1184)
Tensile adhesion strength	On concrete with Sik-agard®-106 Primer	≥ 2 MPa		(EN 1542)
Thermal Resistance	+50°C max.			
Permeability to Water Vapour	~0.8 mm (1 kg/m ²)	0.37 g/(m ² .d)		(EN ISO 7783)
Diffusion Resistance to Water Vapour	~0.8 mm (1 kg/m ²)	S _D = 56.1 m		(EN ISO 7783)
Permeability to Liquid Water	W < 0.1 kg/m ² .h ^{0.5}			(EN 1062-3)
Permeability to CO2	~ 0.8 mm (1 kg/m ²)	S _D = 738 m		(EN 1062-6)

APPLICATION INFORMATION

Mixing Ratio		Volume	Weight
	Sikagard®-306 (A)	67%	74%
	Sikagard®-306 (B)	33%	26%
Consumption	0.7 kg/m ² to 1.0 kg/m ² depending on the system		
Product Temperature	+ 10°C min. / + 35°C max. Ideally, the temperature of components A and B should be between +20°C and +30°C. The use of a heating braid may be necessary.		
Ambient Air Temperature	+10°C min. / +35°C max.		
Relative Air Humidity	5% h.r. min. / 80% h.r. max.		
Dew Point	Beware of condensation. To reduce the risk of condensation, the substrate must be at a temperature of + 3 °C above the dew point.		
Substrate Temperature	+10°C min / +40°C max.		
Substrate Moisture Content	≤ 4 % by weight (measured using a carbide meter or a moisture meter, non-destructive mass moisture meter, CM scale). There must be no rising damp in accordance with ASTM D 4263 (polyane test).		
Pot Life	~ 30 minutes at + 20°C ~ 15 minutes at + 30°C		

Waiting Time / Overcoating

	+10°C	+20°C	+40°C
Dust dry	10 hours	4 hours	1,5 hours
Touch dry	48 hours	8 hours	4 hours
Fully dry	10 days	7 days	5 days

These data are only indicative as curing times vary according to conditions (temperature and relative humidity in particular).

Waiting time 24 hours min. / 15 days max (at + 20°C)

SYSTEM INFORMATION

Systems Refer to the Sikagard® STEP System Sheets

VALUE BASE

All technical data stated in this Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

USES

- When the substrate temperature is between +10°C and + 15°C, setting time may be longer.
- When the maximum covering time (15 days at +20°C) is exceeded, it is necessary to provide a light sanding of the surface and careful removal of dust before applying a second coat of Sikagard®-306.
- Do not add solvent.
- Substrates must be free of under-pressure or condensation during application and curing of Sikagard®-306.
- Protect Sikagard®-306 from contact with moisture condensation and water for a period of 24 hours.
- Beware of gas exchanges that may be provoked caused by heating the substrate before polymerisation, which may lead to pinholes. It is recommended to apply by decreasing temperature.
- Temperature and hygrometry must be kept during application to avoid condensation.
- Avoid using heating systems that use fossil fuels which produce large quantities of water vapour and CO₂, which can affect the proper polymerization and adhesion of the resin.
- The following minimum time limits must be observed 7 days at +20°C.
- For tank filling, follow the instructions from "Fascicule 74" (french regulation).

ECOLOGY, HEALTH AND SAFETY

REGULATION (EC) NO 1907/2006 - REACH

Local safety regulations must be observed and it advisable to wear PPI when working with this product with particular attention paid to cutting and handling. Transportation Class: The product is not classified as hazardous good for transport. Disposal: The material is recyclable. Disposal must be according to local regulations. Please contact your local Sika sales organisation for more information.

APPLICATION INSTRUCTIONS

EQUIPMENT

Manual application

- Brush.
- Roller: 10 to 12 mm.

Spray application

- Airless spray gun:
- Pump ratio 60/1 min.
- Nozzle 24 to 27/1000"
- Air pressure 5 to 6 kg/cm².

SUBSTRATE QUALITY

Concrete substrates must be primed with Sikagard®-106 Primer. For CAD systems, the primer, impregnating and saturating coats must be cured and the reinforcement properly embedded.

Check for pinholes with a dielectric broom before applying the Sikagard®-306.

Steel substrates must have a surface finish of Sa 2 ^{1/2}.

SUBSTRATE PREPARATION

Concrete and hydraulic mortar substrates

- primed with Sikagard®-106 Primer for Sikagard® STEP SIL system
- Primer, impregnation + reinforcement, saturation layer, cured, for Sikagard® STEP CAD systems.

Steel supports

- Steel supports must comply with the constructive provisions in accordance with ISO 12944-3.
- Preparation by abrasive blasting to obtain a minimum degree Sa 2 ^{1/2}, in accordance with ISO 8501-1.
- Roughness > 80 microns or Medium (G), in accordance with standard ISO 8501-1.

MIXING

Sikagard®-306 is packed in pre-dosed packages. In case of splitting, the mixing ratio A/B must be observed.

- Carefully re-mix component A, if necessary, with a mechanical mixer.
- Add component B to component A
- Mix the A + B mixture with a mechanical agitator for 3 minutes

To reduce air entrainment as much as possible during mixing, it is advisable to carry out this operation at low speed (approx. 400 rpm), taking care keep the agitator at the bottom of the bucket during rotation.

APPLICATION

Check the humidity of the substrate, relative humidity, the ambient temperatures of the products and the dew point.

- Apply Sikagard®-306 by roller or spray.
- Check that there are no pinholes in the coating after curing by sweeping the entire surface with a dielectric broom.

CLEANING OF TOOLS

Clean tools with water immediately after use. Once hardened, the product 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 the 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 IRELAND LIMITED

Ballymun Industrial Estate
Ballymun
Dublin 11, Ireland
Tel: +353 1 862 0709
Web: www.sika.ie
Twitter: @Sikalreland



Product Data Sheet

Sikagard®-306
February 2025, Version 02.01
020303120020000039

Sikagard-306-en-IE-(02-2025)-2-1.pdf