BUILDING TRUST

PRODUCT DATA SHEET

Sikagard® P 770

(formerly MSeal P 770)

2-Component Xolutec® Primer for resin-based Sikagard®- and Sikalastic®-coatings

DESCRIPTION

Sikagard® P 770 is a two-component primer based on Xolutec® - Technology, providing high substrate penetration and acting as bond promoter for the subsequent systems, e.g. Sikagard®-7000 CR.

Xolutec®
Durability by Design

Xolutec is an innovative and smart way of combining complementary chemistries. When the material is mixed on site a cross linked interpenetrating network (XPN) is formed enhancing the overall material properties. By controlling the cross-linking density, the properties of Xolutec can be adjusted depending on the product performance required, e.g. this allows the formulation of materials with varying degrees of toughness and flexibility. Xolutec is very low in volatile organic components (VOC), is quick and easy to apply with both spray and hand application depending on requirements. It cures rapidly even at low temperature, reducing application time thus enabling fast return to service and minimizing downtime. This technology is not sensitive to moisture and tolerates a wide variety of different site conditions, greatly expanding the application window and reducing the potential for delays and failures. Long maintenance cycles and lower life cycle costs significantly reduce total cost of ownership.

USES

Sikagard® P 770 is used as primer on mineral substrates for several approved Sikagard® and Sikalastic® systems. It will improve the adhesion and prevent the appearance of pinholes or bubbles in the subsequent hardened coating. Sikagard® P 770 is moisture tolerant and can be applied on substrates with high residual humidity.

FEATURES

- Low viscosity
- Easy to apply
- Excellent penetration
- Seals pores and capillaries
- Moisture tolerant: can be applied on substrates with high residual humidity.
- Certified radon tightness
- Excellent bond to substrate
- Does not contain solvents.

CERTIFICATES AND TEST REPORTS

- CE Certification as Primer for Sikagard M 790 in the system Sikagard-7000 CR according to EN 1504-2.
- Radon tightness certificate according ISO TS 11665-13.
- Test report Determination of water-vapour transmission properties acoording to EN ISO 7783:2012

PRODUCT INFORMATION

Packaging	Sikagard® P 770 is available in 5 kg Kits consisting of 2.2 kg Part A and 2.8 kg Part B as well as 9 kg Kits consisting of 4 kg Part A and 5 kg Part B. Please contact our customer service, for information of what packaging sizes are sold in Denmark.
Appearance and colour	Milky-ivory liquids
Shelf life	12 months in unopened pails if stored under below mentioned storage conditions.
Storage conditions	Sikagard® P 770 must be stored in unopened, original containers under dry conditions at temperatures between 10 - 25° C preferably. Protect from frost and no permanent storage over +30 °C.

Density

Part A	approx. 1.25 g/cm³	(EN ISO 2811-1)
Part B	approx. 1.17 g/cm³	
Mixed	approx. 1.2 g/cm³	

Viscosity

Part A	approx. 1140 mPas	(EN ISO 3219)
Part B	approx. 125 mPas	
Mixed	approx. 650 mPas	

TECHNICAL INFORMATION

Tensile adhesion strength

on concrete at +5°C	≥ 4.0 N/mm²
on concrete at +20°C	≥ 4.0 N/mm²
on concrete at +30°C	≥ 4.0 N/mm²

(EN 1542)
Primer application only, measured after 7 days curing.

on fully vitrified tiles	≥ 2.0 N/mm²
on vitrified tiles	≥ 5.0 N/mm²
on non-vitrified tiles (glazed tiles)	≥ 2.5 N/mm²

(EN 1542)
Primer application only, measured after 7 days curing at +20 °C.

Permeability to water vapour

Coverage 200 g/m²	Class III (S_D = 76 m)
Coverage 400 g/m²	Class III (S_D = 108 m)

(EN ISO 7783)
Primer application only, no addditional coating.

Softening point

Glass transition temperature after 28 days	109 °C	(EN 12614)

APPLICATION INFORMATION

Mixing ratio

Mixing ratio Part A : Part B (by weight)	approx. 1 : 1.26
Mixing ratio Part A : Part B (by volume)	approx. 1 : 1.35

Please note that Part B is the bigger part of the mix!

Consumption	The consumption of Sikagard® P 770 is approximately 0.25 – 0.4 kg/m². This consumption is theoretical and can vary according to the absorption and roughness of the substrate. It is essential to carry out representative trials on site to evaluate the exact consumption.
Ambient air temperature	+5 to 35 °C

Relative air humidity	Not restricted, but no condensation of water on the surface.	
Dew point	The temperature of the contact surfaces must be at least 3 °C above the ambient dew point temperature.	
Substrate temperature	+5 to +35 °C	
Substrate moisture content	Not restricted, but surface must be visibly dry.	
Pot Life	at +5 °C	approx. 30 min
	at +10 °C	approx. 25 min
	at +20 °C	approx. 20 min
	at +30 °C	approx. 10 min
Curing time	Fully cured at +10 °C after	approx. 7 days
	Fully cured at +20 °C after	approx. 5 days
	Fully cured at +30 °C after	approx. 2 days
Tack free time	After approx. 5 hours at +20 °C.	
Waiting time to overcoating	at +10 °C	approx. 11 hours
	at +20 °C	approx. 5 hours
	at +30 °C	approx. 2 hours

SYSTEM INFORMATION

Compatibility	Bond strength after 7 days curing at +20 °C on subsequent layers of	
	Sikagard M 790 (Xolutec)	≥ 2.5 N/mm²
	Sikagard M 391 (epoxy)	≥ 2.5 N/mm²
	Sikalastic M 689 (polyurea, hot-spray)	≥ 3.0 N/mm²
	Sikalastic M 808 (polyurethane)	≥ 2.5 N/mm²
	Sikalastic M 811 (polyurea-hybrid, hot-spray)	≥ 2.5 N/mm²
	(EN 1542) For other reactive resin coatings not mentioned here, we strongly recommend to conduct compatibility tests – please refer to the respective local technical department.	

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

- Do not apply at temperatures below +5 °C nor above + 35 °C
- Eventual separation of Part A can occur – this is no product failure and the material can be easily re-homogenized by mixing.
- Do not dilute Sikagard® P 770 with any solvents.
- **Attention:** unused remains of mixed material can lead to a strong heat development in the pail. Use up all material completely!

ECOLOGY, HEALTH AND SAFETY

This product is an article as defined in article 3 of regulation (EC) No 1907/2006 (REACH). It contains no substances which are intended to be released from the article under normal or reasonably foreseeable conditions of use. A safety data sheet following article 31 of the same regulation is not needed to bring the product to the market, to transport or to use it. For safe use follow the instructions given in this product data sheet.Based on our current knowledge, this product does not contain SVHC (substances of very high concern) as listed in Annex XIV of the REACH regulation or on the candidate list published by the European Chemicals Agency in concentrations above 0.1 % (w/w)

APPLICATION INSTRUCTIONS

SUBSTRATE PREPARATION

All substrates (new and old) must be structurally sound, dry, free of laitance and loose particles and clean of oil, grease, rubber skid marks, paint stains and other adhesion impairing contaminants.
Concrete surfaces should be prepared by shot blasting, high-pressure water jetting or other suitable mechanical method. After preparation, concrete and other cementitious substrates must have a minimum pull off strength of 1.5 N/mm² (lowest single value 1.0 N/mm²).
Very rough / irregular substrates on walls should be levelled before application with a suitable fairing coat, e.g. SikaEmaco® S 5800 DUO or Sika MonoTop®-3020.
On floors a suitable repair or levelling solution should be used. It is essential to have all pores closed in mineral substrates before priming.
Wall/Floor connections must be rounded by using suitable products like e.g. SikaTop®-590 Seal, SikaEmaco® S 5440 RS or Sika MonoTop®-3130 Ultra Rapid.
The substrate should be visibly dry - there is no limit to residual humidity. Substrate temperature must be minimum +5 °C and maximum +35 °C. The temperature of the contact surfaces must be at least 3 °C above the ambient dew point temperature.

MIXING

Sikagard® P 770 is supplied in working kits which are pre-packaged in the exact mixing ratio.
Open the two Parts of the product and briefly mix the single components with a mechanical drill and paddle at low speed (max. 400 rpm) in order to obtain a uniform consistency.
Then pour the entire content of Part A into the container of Part B and mix with a mechanical drill and paddle at low speed (max. 400 rpm) for 90 seconds. Scrape the sides and the bottom of the container several times to ensure complete mixing. Keep the mixer blades submerged in the coating to avoid introducing air bubbles.
Do not mix part packs and do not mix by hand!
Attention: unused remains of mixed material can lead to a strong heat development in the pail. Always use up all mixed material completely.
Scratch Coat Mix:
Add oven dry, fine quartz sand (0.1-0.3 mm) in 1:1 ratio by weight to the mixed Sikagard® P 770 and briefly mix. Then add 1% Sika Extender T by weight (of Sikagard® P 770 + sand) to this mixture to achieve a thixotropic consistency.

Example: 5 kg sand + 5 kg Sikagard® P 770 (A+B mixed) + 100 g of Sika Extender T.

APPLICATION

After mixing, Sikagard® P 770 is applied to the prepared, smooth substrate by brush or roller. For spray application of Sikagard® P 770 please refer to our application manual for Sikagard®-7000 CR.

Sikagard® P 770 dries as an intense transparent film (within 5 hours @ 20° C). In case there are holes not covered by the primer, please apply a second coat of primer. Wait for at least 5 hours (@ 20° C) before applying further coatings like e.g. Sikagard® M 790.
In case the substrate is rough and/or filling of pinholes is required, please apply the scratch coat mixed as described in the mixing instructions. This mix can be easily applied on concrete surfaces by using a steel trowel.
The curing time of the material is influenced by the ambient, material and substrate temperatures. At low temperatures, the chemical reactions are slowed down; this lengthens the pot life, open time and curing times. High temperatures speed up the chemical reactions thus the pot life, open time and curing times are shortened accordingly. To fully cure, the material, substrate and application temperature should not fall below the minimum. The temperature of the contact surfaces must be at least 3 °C above the ambient dew point temperature.
We recommend overcoating the primer within the next 48 hours of its application. If this time is exceeded, please contact Sika's local Technical representative.

CLEANING OF EQUIPMENT

Tools can be cleaned with solvent-based cleaner while still wet. Once cured, the material can only be removed mechanically.

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.

LEGAL NOTES

Any information or suggestions for use concerning Sika's products, which we either in writing or orally have given buyers or end-users of the product, have been given in good faith based on our own experiences and based on approved praxis and the technological and scientific knowledge on the time of giving such suggestions and information, which are given without any type of guarantees, and which do not lead to any further responsibility from Sika Danmark A/S, besides what is stated in the sales agreement in question. The buyer or end-user should themselves investigate or otherwise make sure, that our products are suitable for the use in question and further make sure that the products are kept and used correct and in agreement with the published rules and considering the actual conditions in order to avoid damages or less satisfactory results. Any order is accepted and any deliverance is affected according to the general terms of sales and delivery from Sika Danmark A/S, which are considered known and accepted, and which could be handed out when asked for. Our catalogues are not up-dated automatically. The present product data sheet is only for use in Denmark. Values stated in the present product data sheet should be seen as recommended, unless stated otherwise.

Sika Danmark A/S
Hirsemarken 5
3520 Farum
Tlf. +45 48 18 85 85
www.sika.dk