BUILDING TRUST

PRODUCT DATA SHEET

# Sikagard® P 770 N

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

## DESCRIPTION

Sikagard® P 770 N is a two-component primer based on Xolutec® - Technology, providing long pot life, 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 N 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 N is moisture tolerant and can be applied on substrates with high residual humidity.

## CHARACTERISTICS / ADVANTAGES

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

## APPROVALS / STANDARDS

- Long-term resistance to biogenic sulfuric acid corrosion (Fraunhofer Institute).

## PRODUCT INFORMATION

| | | | |
|---|---|---|---|
| **Packaging** | Part A: 4.2 kg<br>Part B: 5.8 kg<br>10 kg/set | | |
| **Shelf life** | 12 months in unopened pails if stored under below mentioned storage conditions. | | |
| **Storage conditions** | Sikagard® P 770 N should be stored in original containers under dry conditions at temperatures between 10 - 25° C preferably. Protect from frost and no permanent storage over +35 °C. | | |
| **Appearance / Colour** | Milky-ivory liquids | | |
| **Density** | Mixed | approx. 1.23 g/cm³ | EN ISO 2811-1 |
| **Viscosity** | Mixed | approx. 650 cps | EN ISO 3219 |
| **Tensile Adhesion Strength** | Adhesion on dry concrete, 7 days curing | ≥ 1.5 MPa<br>or concrete failure | EN 1542 |

## APPLICATION INFORMATION

| | | |
|---|---|---|
| **Mixing ratio** | Part A : Part B (parts by weight) ~ 0.72 : 1 | |
| **Consumption** | ~0.25 - 0.4 kg/m²<br>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. | |
| **Product Temperature** | +5 to +35 °C | |
| **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. | |
| **Pot Life** | at +5 °C | ≥ 60 mins |
| | at +10 °C | ≥ 60 mins |
| | at +20 °C | ~ 55 mins |
| | at +30 °C | ~ 22 mins |
| **Curing time** | Fully curing at +10°C after | 7 days |
| | Fully curing at +20°C after | 5 days |
| | Fully curing at +30°C after | 2 days |
| **Waiting Time / Overcoating** | at +10 °C | Approx. 14 hours |
| | at +20 °C | Approx. 10 hours |
| | at +30 °C | Approx. 5 hours |

## 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 CONSIDERATION

- 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 N 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

Usual preventive measures for the handling of chemical products should be observed when using this product, for example do not eat, smoke or drink while working and wash hands when taking a break or when the job is completed.
Specific safety information referring the handling and transport of this product can be found in the Material Safety Data Sheet.
Disposal of product and its container should be carried out according to the local legislation in force. Responsibility for this lies with the final owner of the product.

## APPLICATION INSTRUCTIONS

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 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. Sikagard®-720 EpoCem or suitable products from Sika MonoTop® range. On floors a suitable repair or levelling solution should be used, e.g. Sikagard®-720 EpoCem. 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. Sikadur®-31 CF Normal, Sika-Floor®-161 HC mortar, Sika MonoTop® R.
The substrate should be visibly dry. 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

Primer:

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 N and briefly mix.

Then add 1% Sika Extender T by weight (of Sikagard® P 770 N+ sand) to this mixture to achieve a thixotropic consistency. Application thickness max. 2mm.

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

### APPLICATION

After mixing, Sikagard® P 770 N is applied to the prepared, smooth substrate by brush or roller. For spray application of Sikagard® P 770 N please refer to our application manual for Sikagard®-7000 CR.
Sikagard® P 770 N dries as an intense transparent film (within 10 hours at +20° C). In case there are holes not covered by the primer, please apply a second coat of primer. Wait for around 10 hours (at +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 maximum re-coating time. If this time is exceeded, please contact Sika's local Technical representative.

### CLEANING

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

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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