

Sikagard®-700 S

Siloxane based water repellent impregnation

Construction

Product Description

Sikagard®-700 S is a one part water repellent impregnation for absorbent cementitious substrates. It penetrates well into the open pores of the substrate, providing durable water repellency, while still allowing water vapour diffusion in both directions.

Sikagard®-700 S complies with the requirements of EN 1504-2 for hydrophobic Impregnation (penetration depth class I)

Uses

Sikagard®-700 S is used as water repellent and colourless protective surface treatment absorbent exposed materials such as concrete, cementitious rendering, concrete tiles, fibre cement, brickwork (clay and lime sand, non-vitrified), natural stone etc.

Sikagard®-700 S can also be used as hydrophobic primer under solvent based or emulsion protective coating

Sikagard®-700 S is used as water-repellent impregnation (hydrophobic treatment) for absorbent substrates such as concrete in civil engineering or building concrete structures

- Suitable for protection against ingress (Principle 1, method 1.1 of EN 1504-9),
- Suitable for moisture control (Principle 2, method 2.1 of EN 1504-9)
- Suitable for increasing the resistivity (Principle 8, method 8.1 of EN 1504-9)

Characteristics / Advantages

- Reduction of capillary water absorption.
- Reduces efflorescence.
- Reduces dirt penetration into the pores.
- Improves thermal insulation.
- Can be overcoated with solvent based and dispersion coating.
- Higher durability and resistance than conventional silicone based treatments.
- Does usually not change the appearance of the substrate.
- Reduces chloride ion ingress and movement.
- Does not act as a vapour barrier.

Tests

Approvals / Standards

Tested by LPM -qualification test to SIA 162/5, Report A-13719-2 dated April 1993 – Water absorption, penetration depth, alkali resistance, water vapour diffusion.

Conformity to the requirements of the EN 1504-2 class I – MPL, Sika Tüffenwies dated September 2008



Product Data

Form

Appearance / Colour Colourless liquid.

Packaging 5 and 25 l pails.

Storage

Storage Conditions / Shelf Life 12 months from date of production if stored in undamaged and unopened, original sealed packaging, in cool and dry conditions at temperatures at maximum +20°C. Protect from direct sunlight.

Technical Data

Chemical Base Silanes/Siloxanes blend in organic solvent.

Density ~ 0.800 kg/l (at +20°C)

Flash Point ~ 36 - 40°C

System Information

System Structure 1 - 2 x Sikagard®-700 S.

Application Details

Consumption ~ 0.300 - 0.500 kg/m² (0.375 - 0.625 l/m²) per coat for normally absorbent substrate.
In order to ensure durability, a minimum of 2 coats must be applied.

Substrate Quality Free of dust, oil, efflorescence and existing paint coatings.
Cracks in concrete of more than 200 microns must be repaired prior to application of the hydrophobic treatment.

Substrate Preparation Cleaning is best achieved by brushing with suitable detergents or by light blastcleaning or steam cleaning etc.
Best results are obtained on dry, very absorbent substrates. The substrate must look dry with no damp patches.

Application Conditions / Limitations

Substrate Temperature +5°C min. / +30°C max.

Ambient Temperature +5°C min. / +30°C max.

Substrate Moisture Content 5% max.

Application Instructions

Mixing Sikagard®-700 S is supplied ready for use and should not be thinned.

Application Method / Tools Sikagard®-700 S is applied using low pressure spray, brush or roller, working from bottom up taking care not to let the product run. Apply subsequent coats "wet on wet".

Cleaning of Tools Clean all tools and application equipment with whit spirit immediately after use. Hardened / cured material can only be mechanically removed.

Waiting Time / Overcoating Can be overcoated with water/solvent based polymer paints - contact the paint manufacturer for details.
When overcoating with Sikagard® or SikaColor® Emulsion or solvent based coating, wait at least 5 hours after the hydrophobic impregnation.

Notes on Application / Limitations	<p>Minimum age of concrete or mortar: at least 4 weeks.</p> <p>Cannot be overcoated with limewash or cement paint.</p> <p>If there are strict aesthetic requirements (often when used on natural stone), it is recommended to make preliminary tests as on some stones a slight darkening of the surfaces may result.</p> <p>Sikagard®-700 S is not intended for waterproofing under hydrostatic pressure, in permanent contact with water, or for below grade waterproofing.</p> <p>Sikagard®-700 S is not intended to seal visible cracks from moisture ingress.</p> <p>Building components not to be coated (e.g. aluminium frames, windows etc.) need to be protected from contact with Sikagard®-700 S. In case of splashes, clean immediately using an additional solvent if necessary.</p>
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Curing Details

Curing Treatment	Sikagard®-700 S does not require any special curing but must be protected from rain for at least 3 hours at +20°C.
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Value Base

Value Base	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.
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Local Restrictions

Local Restrictions	Please note that as a result of specific local regulations the performance of this product may vary from country to country. Please consult the local Product Data Sheet for the exact description of the application fields.
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Health and Safety Information

Health and Safety Information	For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Material Safety Data Sheet containing physical, ecological, toxicological and other safety-related data.
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Legal Notes

Legal Notes	<p>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.</p>
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