

Sikagard®-706 Thixo

Silane based water repellent impregnation cream

Product Description	Sikagard®-706 Thixo is a one part reactive silane based impregnation cream. It is a solvent free product with ~ 80% content of active substance. Sikagard®-706 Thixo complies with the highest requirements of EN 1504-2 for hydrophobic Impregnation (penetration depth class II & resistance to freeze and thaw salt stresses).
Uses	<p>Sikagard®-706 Thixo is used as water-repellent impregnation (hydrophobic treatment) for absorbent substrates such as concrete in civil engineering or building concrete structures subjected to heavy stress due to freeze and thaw cycles and de-icing salts, chloride attack in marine environment, etc...</p> <ul style="list-style-type: none">√ 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	<ul style="list-style-type: none">■ Non-sag (thixotropic) consistency, allowing wastage-free application of sufficient quantities and assuring deep penetration■ Reduction of water absorption■ Reduction of absorption of aggressive or deleterious agents dissolved in water (i.e. de-icing salts or chloride from marine environment)■ No noticeable change of water vapour permeability■ Not film forming■ Ready for use■ Long term efficiency, deep penetration■ Increases the resistance of concrete to freeze and thaw cycles and de-icing salts■ Resistant to sea water■ Low VOC content
Tests	
Approvals / Standards	<p>Conforms to the requirements of LPM-qualification test to SIA 162/5, Report A-20 450-1 of 19.04.1999. (Water absorption, penetration depth, alkali resistance, water vapour diffusion, resistance to freeze thaw cycles and de-icing salts).</p> <p>Conforms to the requirement of the "Bro 2002" Swedish National Road Administration (SNRA) publication No. VV2002:47 –report reference F507580 Arev</p> <p>Conforms to the requirements of the EN 1504-2 class II – Polymer Institute report P 5672-E dated 9th August 2007.</p>



Product Data

Form

Appearance / Colour White paste / cream (transparent after application and drying)

Packaging 18 kg and 180 kg containers

Storage

Storage Conditions / Shelf Life 12 months from date of production if stored in undamaged and unopened original sealed packaging in dry and cool conditions.

Technical Data

Chemical Base Silane (~ 80% active ingredient)

Density ~ 0.900 kg/l (at +20 °C)

pH Value ~ 8

VOC ~ 77 g/lit (~ 0.77% w/w)

Resistance to Freeze-Thaw-Salts Stress Comply (EN 13581)

Depth of Penetration Class II: ≥ 10 mm Test performed on concrete with a W/C = 0.70

Water Absorption <7.5% (EN 13580)

Drying Rate Coefficient Class I: > 30% (EN 13579)

Resistance

Alkali Resistance < 10% (EN 13580)

System Information

System Structure 1 - 2 coats of Sikagard®-706 Thixo

Application Details

Consumption Dependent on substrate profile and porosity as well as the required penetration depth: ~ 200 to 300 g/m² per coat.

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

Substrate Preparation Cleaning is best done with suitable detergents or by light blastcleaning, 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. / +35 °C max.

Ambient Temperature +5 °C min. / +40 °C max.

Application Instructions

Mixing Sikagard®-706 Thixo is supplied ready for use and should not be thinned or diluted.

Application Method / Tools	Sikagard®-706 Thixo is applied using airless spray, brush or roller, from top to bottom in a single pass.
Cleaning of Tools	Clean all tools and application equipment with Colma Cleaner immediately after use. Hardened / cured material can only be mechanically removed.
Waiting Time / Overcoating	<p>Can be overcoated with water and solvent based polymer paint - contact the proposed paint manufacturer for recommendations.</p> <p>Sikagard®-706 Thixo can be used as water repellent primer under many Sikagard® protective coatings. Penetration of water is thus prevented at possible weak spots or in the event of damage to the top coat and the risk of consequential damages such as paint flaking can be reduced.</p> <p>Waiting time: minimum 5 hours, maximum 1 week.</p>
Notes on Application / Limitations	<p>Best results are achieved when Sikagard®-706 Thixo is applied on 28 days old concrete – however, due to its high alkali resistance, it is still possible to apply it at a very early age.</p> <p>Areas such as window frames which still need to be painted must be securely covered to avoid contact with Sikagard®-706 Thixo.</p> <p>Areas not to be impregnated such as window panes need to be protected from being accidentally contaminated with Sikagard®-706 Thixo.</p> <p>Sikagard®-706 Thixo can damage some coatings and bituminous products.</p> <p>Sikagard®-706 Thixo can lead to darkening of concrete, apply sample areas first.</p> <p>Cannot be overcoated with limewash or cement paint.</p> <p>Apply Sikagard®-706 Thixo onto a sample area to confirm consumption rates.</p> <p>Refer to the latest Method Statement for detailed information regarding surface preparation, application method, etc.</p>
Curing Details	
Curing Treatment	Sikagard®-706 Thixo does not require any special curing but must be protected from rain for at least 3 hours at +20 °C.
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.
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.
Health and Safety Information	For information and advice on the safe handling, storage and disposal of chemical products, users should refer to the most recent Material Safety Data Sheet containing physical, ecological, toxicological and other safety-related 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.

Construction



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