

# Sikagard® 705 L

## Silane based reactive water repellent penetrating sealer

<b>Description</b>	Sikagard® 705 L is a one part low viscosity, solvent free, reactive impregnation for concrete and cementitious substrates based on silane technology with 99% active ingredient. Sikagard®-705 L complies with the highest requirements of EN 1504-2 for hydrophobic Impregnation (penetration depth class II & resistance to freeze-thaw cycles and chloride ion penetration) and is tested in accordance with NCRHP 224 Series II & IV.
<b>Where to Use</b>	Sikagard® 705 L is used as water-repellent penetrating sealer (hydrophobic treatment) for absorbent substrates such as: <ul style="list-style-type: none"> <li>■ Parking decks</li> <li>■ Bridge decks</li> <li>■ Concrete highway surfaces</li> <li>■ Ramps and Barriers</li> <li>■ Cooling Towers</li> <li>■ Stadiums</li> <li>■ Natural stone substrates</li> <li>■ Many other traffic bearing/reinforced concrete substrates and structures</li> </ul>
<b>Advantages</b>	<ul style="list-style-type: none"> <li>■ Excellent penetration (~100% active content).</li> <li>■ Economical and easy to use.</li> <li>■ Reduces capillary water absorption, protection against driving rain and splashing on vertical areas.</li> <li>■ Reduction of absorption of aggressive or deleterious agents dissolved in water (i.e. de-icing salts or chloride from marine environment).</li> <li>■ Non vapor barrier.</li> <li>■ Long term efficiency, deep penetration.</li> <li>■ Increases the resistance of concrete to freeze and thaw cycles and de-icing salts.</li> <li>■ Low VOC content.</li> <li>■ Resistant to sea water.</li> <li>■ Ready and easy to use.</li> </ul>
<b>Coverage</b>	Dependent on absorbency of the substrate as well as the required penetration depth: 240-360 ft <sup>2</sup> / gal per coat.
<b>Cure Mechanism</b>	Sikagard® 705 L does not require any special curing but must be protected from rain for at least 3 hours at +68°F.
<b>Packaging</b>	5 gal. pail, 55 gal. drum.

### Typical Data (Material and curing conditions @ 73°F (23°C) and 50% R.H.)

RESULTS MAY DIFFER BASED UPON STATISTICAL VARIATIONS DEPENDING UPON MIXING METHODS AND EQUIPMENT, TEMPERATURE, APPLICATION METHODS, TEST METHODS, ACTUAL SITE CONDITIONS AND CURING CONDITIONS.

<b>Shelf Life</b>	2 years from production date.
<b>Storage Conditions</b>	Store in unopened, undamaged and original sealed packaging in dry and cool conditions. Protect from moisture.
<b>Product Conditioning</b>	Condition material between 40°F and 95°F.
<b>Sealer Type</b>	Alkylalkoxy Silane
<b>Active Ingredient Content</b>	~100%
<b>VOC</b>	327g/l
<b>Application Thickness</b>	7 mils
<b>Depth of Penetration - OHD L-34</b>	>10 mm
<b>Flash Point</b>	104°F (40°C)
<b>Alberta DOT Type 1c</b>	
<b>Water Repellance after Heavy Abrasion</b>	85.3%
<b>Alkali Resistance</b>	84.8%
<b>Vapor Transmission</b>	106.9%
<b>NCHRP 244: (125 ft<sup>2</sup>/gal)</b>	
<b>Series II - Absorbed Chloride</b>	88%
<b>Series IV - Absorbed Chloride</b>	98%
<b>Water Absorption - ASTM C642</b>	.06% (24 hrs)/.1% (48 hrs)
<b>Scaling Resistance - ASTM C672</b>	None
<b>90 Day Salt Ponding - AASHTO T 259</b>	82.6% (.5-1")



**PRIOR TO EACH USE OF ANY SIKA PRODUCT, THE USER MUST ALWAYS READ AND FOLLOW THE WARNINGS AND INSTRUCTIONS ON THE PRODUCT'S MOST CURRENT PRODUCT DATA SHEET, PRODUCT LABEL AND SAFETY DATA SHEET WHICH ARE AVAILABLE ONLINE AT [HTTP://USA.SIKA.COM/](http://USA.SIKA.COM/) OR BY CALLING SIKA'S TECHNICAL SERVICE DEPARTMENT AT 800.933.7452 NOTHING CONTAINED IN ANY SIKA MATERIALS RELIEVES THE USER OF THE OBLIGATION TO READ AND FOLLOW THE WARNINGS AND INSTRUCTIONS FOR EACH SIKA PRODUCT AS SET FORTH IN THE CURRENT PRODUCT DATA SHEET, PRODUCT LABEL AND SAFETY DATA SHEET PRIOR TO PRODUCT USE.**

<b>How to Use</b>	
<b>Surface Preparation</b>	Best results are achieved when Sikagard® 705 L is applied on 28 days old concrete – however, due to its high alkali resistance, it is still possible to apply as early as 3 days. Testing should always be done to ensure proper penetration depth. Best results are achieved on a dry, very absorbent substrate. All surfaces to be sealed must be dry, clean, sound before application. Remove all grease, curing compounds, surface treatments, coatings, oils, etc. <b>Preparation Work:</b> Concrete, masonry and natural stone surfaces must be prepared using mechanical means (sandblast, shotblast, pressure wash, etc.). Cracks in concrete more than 12 mils must be repaired prior to application of the hydrophobic treatment. If using water to clean, substrate should be visibly dry (i.e. no damp/dark patches) before coating. Surface moisture as measured by Tramex® should read 6% or lower.
<b>Mixing</b>	Sikagard® 705 L is supplied ready to use and must not be diluted.
<b>Application</b>	Sikagard® 705 L is applied using a low-pressure spray, brush or roller, in a single pass from bottom up taking care not to let the product run. Apply subsequent coats wet on wet. Avoid ponding on the surface.
<b>Over Painting</b>	Can be over-coated with water and solvent based polymer paint - contact the proposed paint manufacturer for recommendations. Sikagard® 705 L can be used as a 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. Waiting time for Sikagard® over-coating: minimum 5 hours, maximum 1 week.
<b>Limitations</b>	<ul style="list-style-type: none"> <li>■ Best results are achieved when Sikagard® 705 L 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 as 3 days. Testing should always be done prior to application on early age concrete to ensure sufficient penetration depth.</li> <li>■ Areas such as window frames which still need to be painted must be securely covered to avoid contact with Sikagard® 705 L.</li> <li>■ Areas not to be impregnated such as window panes need to be protected from being accidentally contaminated with Sikagard® 705 L.</li> <li>■ Sikagard® 705 L can damage some coatings and bituminous products.</li> <li>■ Sikagard® 705 L can lead to darkening of concrete, apply sample areas first.</li> <li>■ Cannot be over-coated with limewash or cement paint.</li> <li>■ For use in the South Coast Air Quality Management District (SCAQMD): This product shall be used only for reinforced concrete bridge structures for transportation projects within 5 miles of the coast or above 4,000 feet elevation or for restoration and/or preservation projects on registered historical buildings that are under the purview of a restoration architect.</li> <li>■ Penetrates into concrete and masonry substrates and chemically react to form covalent bonds with naturally occurring minerals in the substrate.</li> <li>■ Lines the pores of concrete and masonry substrates with a hydrophobic coating, but does not form a surface film.</li> <li>■ Improves water repellency at least 80 percent after application on a concrete or masonry substrate. This performance has been verified on standardized test specimens, in accordance with one or more of the following standards: NCHRP 244 Series II &amp; IV.</li> <li>■ Provides a breathable waterproof barrier for concrete or masonry surfaces that does not prevent or substantially retard water vapor transmission. This performance has been verified on standardized test specimens in accordance with ASTM E96/E96M.</li> <li>■ Meets the performance criteria listed in the National Cooperative Highway Research Report 244 (1981), surface chloride screening applications, for products labeled and formulated for vehicular traffic.</li> </ul> <p><b>SCAQMD Rule 1113</b>            (A) Used only for reinforced concrete bridge structures for transportation projects within 5 miles of the coast or above 4,000 feet elevation; or for restoration and/or preservation projects on registered historical buildings that are under the purview of a restoration architect.            (B) Penetrates into concrete and masonry substrates and chemically react to form covalent bonds with naturally occurring minerals in the substrate.            (C) Lines the pores of concrete and masonry substrates with a hydrophobic coating, but do not form a surface film.            (D) Improves water repellency at least 80 percent after application on a concrete or masonry substrate. This performance must be verified on standardized test specimens, in accordance with one or more of the following standards: ASTM C67, or ASTM C97/97M, or ASTM C140.            (E) Provides a breathable waterproof barrier for concrete or masonry surfaces that does not prevent or substantially retard water vapor transmission. This performance must be verified on standardized test specimens, in accordance with ASTM E96/E96M or ASTM D6490.            (F) Meets the performance criteria listed in the National Cooperative Highway Research Report 244 (1981), surface chloride screening applications, for products labeled and formulated for vehicular traffic.</p>

**PRIOR TO EACH USE OF ANY SIKA PRODUCT, THE USER MUST ALWAYS READ AND FOLLOW THE WARNINGS AND INSTRUCTIONS ON THE PRODUCT'S MOST CURRENT PRODUCT DATA SHEET, PRODUCT LABEL AND SAFETY DATA SHEET WHICH ARE AVAILABLE ONLINE AT [HTTP://USA.SIKA.COM/](http://usa.sika.com/) OR BY CALLING SIKA'S TECHNICAL SERVICE DEPARTMENT AT 800.933.7452 NOTHING CONTAINED IN ANY SIKA MATERIALS RELIEVES THE USER OF THE OBLIGATION TO READ AND FOLLOW THE WARNINGS AND INSTRUCTIONS FOR EACH SIKA PRODUCT AS SET FORTH IN THE CURRENT PRODUCT DATA SHEET, PRODUCT LABEL AND SAFETY DATA SHEET PRIOR TO PRODUCT USE.**

KEEP CONTAINER TIGHTLY CLOSED. KEEP OUT OF REACH OF CHILDREN. NOT FOR INTERNAL CONSUMPTION. FOR INDUSTRIAL USE ONLY. FOR PROFESSIONAL USE ONLY.

For further information and advice regarding transportation, handling, storage and disposal of chemical products, users should refer to the actual Safety Data Sheets containing physical, ecological, toxicological and other safety related data. Read the current actual Safety Data Sheet before using the product. In case of emergency, call CHEMTREC at 1-800-424-9300, International 703-527-3887.

Prior to each use of any Sika product, the user must always read and follow the warnings and instructions on the product's most current Product Data Sheet, product label and Safety Data Sheet which are available online at <http://usa.sika.com/> or by calling Sika's Technical Service Department at 800-933-7452. Nothing contained in any Sika materials relieves the user of the obligation to read and follow the warnings and instruction for each Sika product as set forth in the current Product Data Sheet, product label and Safety Data Sheet prior to product use.

SIKA warrants this product for one year from date of installation to be free from manufacturing defects and to meet the technical properties on the current Product Data Sheet if used as directed within shelf life. User determines suitability of product for intended use and assumes all risks. Buyer's sole remedy shall be limited to the purchase price or replacement of product exclusive of labor or cost of labor. NO OTHER WARRANTIES EXPRESS OR IMPLIED SHALL APPLY INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. SIKA SHALL NOT BE LIABLE UNDER ANY LEGAL THEORY FOR SPECIAL OR CONSEQUENTIAL DAMAGES. SIKA SHALL NOT BE RESPONSIBLE FOR THE USE OF THIS PRODUCT IN A MANNER TO INFRINGE ON ANY PATENT OR ANY OTHER INTELLECTUAL PROPERTY RIGHTS HELD BY OTHERS. SALE OF SIKA PRODUCTS ARE SUBJECT SIKA'S TERMS AND CONDITIONS OF SALE AVAILABLE AT [HTTP://USA.SIKA.COM/](http://usa.sika.com/) OR BY CALLING 201-933-8800.

Visit our website at [usa.sika.com](http://usa.sika.com)

1-800-933-SIKA NATIONWIDE

**Regional Information and Sales Centers.** For the location of your nearest Sika sales office, contact your regional center.

**Sika Corporation**  
 201 Polito Avenue  
 Lyndhurst, NJ 07071  
 Phone: 800-933-7452  
 Fax: 201-933-6225

**Sika Canada Inc.**  
 601 Delmar Avenue  
 Pointe Claire  
 Quebec H9R 4A9  
 Phone: 514-697-2610  
 Fax: 514-694-2792

**Sika Mexicana S.A. de C.V.**  
 Carretera Libre Celaya Km. 8.5  
 Fracc. Industrial Balvanera  
 Corregidora, Queretaro  
 C.P. 76920  
 Phone: 52 442 2385800  
 Fax: 52 442 2250537

