SikaFix® HH Hydrophilic

LOW VIScosity, EXPanding, POLYureTHANE CHEMICAL GROUT

**PRODUCT DESCRIPTION**

SikaFix® HH Hydrophilic is a nonflammable hydrophilic polyurethane resin designed to form a flexible gasket or plug joints and cracks in concrete from water infiltration. In its uncured form, SikaFix® HH Hydrophilic is a pale yellow liquid. When it comes in contact with water, the grout expands quickly and cures to a tough, flexible, adhesive, closed cell foam that is essentially unaffected by mildly corrosive environments.

**USES**

- Sealing leaks through concrete cracks and joints.
- Saturating backer rod to seal joints by the gasket method.

**CHARACTERISTICS / ADVANTAGES**

- Contains no volatile solvents.
- Non-flammable.
- Free Foam expands to 6 times its liquid volume.
- High elongation creates tight seal in moving cracks.
- Non-corrosive

**PRODUCT INFORMATION**

<table>
<thead>
<tr>
<th>Chemical Base</th>
<th>100% solids polyurethane chemical grout</th>
</tr>
</thead>
<tbody>
<tr>
<td>Packaging</td>
<td>5 gallon pail.</td>
</tr>
<tr>
<td>Color</td>
<td>Pale yellow</td>
</tr>
<tr>
<td>Shelf Life</td>
<td>1 year in original, unopened container.</td>
</tr>
<tr>
<td>Storage Conditions</td>
<td>Store in a dry area between 40–90 °F (4–32 °C) using original re-sealable containers. Low temperatures will affect viscosity. To minimize this effect, store the product at room temperature for a minimum period of 24 hours prior to use. Material must be preconditioned to between 60–90 °F (16–32 °C) before use. If site temperatures are extremely low, heat bands or heated water baths may be used on the pails, before and during use to maintain the products temperature. Immerse only the lower 2/3 of the pails. Avoid splashing water into open containers. Do not use if ambient temperature is below 40 °F (4 °C).</td>
</tr>
<tr>
<td>Property</td>
<td>Uncured (74 °F (23 °C))</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>-------------------------</td>
</tr>
<tr>
<td>Density</td>
<td>1.16 lbs/ft²</td>
</tr>
<tr>
<td>Flash Point</td>
<td>&gt; 200 °F</td>
</tr>
<tr>
<td>Viscosity</td>
<td>650 cps</td>
</tr>
</tbody>
</table>

**TECHNICAL INFORMATION**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tensile Strength</td>
<td>Cured 170 psi (ASTM D-638)</td>
</tr>
<tr>
<td>Elongation at Break</td>
<td>Cured 400 % (ASTM D-638)</td>
</tr>
<tr>
<td>Shrinkage</td>
<td>&lt; 1%</td>
</tr>
<tr>
<td>Chemical Resistance</td>
<td>Unaffected by mildly corrosive environments.</td>
</tr>
<tr>
<td>Reaction Time</td>
<td>Reaction Initiation Time 1:1 with water: 30 sed at 77F (25C)</td>
</tr>
</tbody>
</table>

**APPLICATION INSTRUCTIONS**

**SUBSTRATE PREPARATION**

When the crack is contaminated at the outside, it will be necessary to clean the crack surface so that the crack can be exactly located. If the crack is wide or high water flows are encountered, it will be necessary to seal the surface of the crack with a surface sealing material (SikaSet® Plug, Sikadur® 31 Hi Mod Gel, or open cell polyurethane foam saturated with SikaFix® HH Hydrophilic). The surface sealing can be done before or after drilling the injection holes, depending on the particular situation.

**MIXING**

Prior to installation the material should be agitated vigorously shaking the 5 gallon pail or by mixing with a jiffy mixer, bung mixer or by hand. During injection the grout will follow the path of least resistance. When the material has stopped migrating, it will continue to expand against the confines of the crack/joint and compress within itself, forming a very dense, closed cell material and stopping the leak.

**APPLICATION METHOD / TOOLS**

Begin by drilling 5/8” diameter holes along the side of the crack at a 45 degree angle. Drill the hole to intersect the crack midway through the substrate. Install injection packers in the holes and tighten. Spacing of the injection ports depends on crack width, but normal varies from 6” to 36”. It is always necessary to flush the drilled holes with water to remove debris and drill dust from the holes and crack. This will also ensure that the crack is wet enough to react with the grout when it is introduced to the crack. Begin the injection of the grout as the lowest packer installed on a vertical crack, or at the first packer flushed for a horizontal crack. During the injection, you will notice that the SikaFix® HH Hydrophilic displaces water from the crack. Continue injecting until the grout appears at the adjacent packer hole. Stop pumping and reinstall the packer in the adjacent hole. Tighten the packer and move the pump hose to the second packer and begin injection. Continue the process until 3–4 packers have been grouted. Disconnect and go back to the first packer and inject all the ports for the second time if necessary. Some ports may take additional grout, which will fill up and further densify the material in the crack. Continue process until the length of the prepared crack is injected.

**Tooling & Finishing**

When finished with the injection process, re-inject each installed packer with a small amount of water. This will react with the resin left behind in the drill hole. After the injection, the packers or injection ports can be cut flush with the concrete surface or can be removed from the injection holes. Let SikaFix® HH Hydrophilic completely cure before removing the packers. Packer holes can be filled with Sikadur® 31 or SikaSet® Plug and troweled smooth.

**Removal**

Residual resin that has foamed from the crack can be removed with a scraper as long as it is not cured to a solid on the surface. If the material has cured, remove with a wire brush or hand held grinders. SikaFix® HH Hydrophilic will aggressively bond to concrete surfaces.

**LIMITATIONS**

- Low temperatures will significantly affect viscosity and reaction time.
- Avoid splashing water into open containers, as material
is water activated.
• Water used to activate SikaFix® HH Hydrophilic must be in a range of pH 3–10 for optimum foam quality.
• Material must be stored between 40–90 °F (4–32 °C).
• Material must be preconditioned to between 60–90 °F (16–32 °C) before use.
• Ambient temperature must be between 40–90 °F (4–32 °C) for use.
• Use only in applications where exposure to moisture is constant.

BASIS OF PRODUCT DATA

Results may differ based upon statistical variations depending upon mixing methods and equipment, temperature, application methods, test methods, actual site conditions and curing conditions.

OTHER RESTRICTIONS

See Legal Disclaimer.

ENVIRONMENTAL, HEALTH AND SAFETY

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

LEGAL DISCLAIMER

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

Prior to each use of any product of Sika Corporation, its subsidiaries or affiliates (“SIKA”), the user must always read and follow the warnings and instructions on the product’s most current product label, Product Data Sheet and Safety Data Sheet which are available at usa.sika.com or by calling SIKA’s Technical Service Department at 1-800-933-7452. Nothing contained in any SIKA literature or 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 label, Product Data Sheet and Safety Data Sheet prior to use of the SIKA product.

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 the product’s shelf life. User determines suitability of product for intended use and assumes all risks. User’s and/or buyer’s sole remedy shall be limited to the purchase price or replacement of this product exclusive of any labor costs.

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 to the Terms and Conditions of Sale which are available at https://usa.sika.com/en/group/SikaCorp/termsandconditions.html or by calling 1-800-933-7452.