BUILDING TRUST

PRODUCT DATA SHEET

SikaFix®-101

Single component, solvent-free, low viscosity polyurethane resin for flexible crack sealing

DESCRIPTION

SikaFix®-101 is a single component TDI polyurethane based product that reacts in contact with water to form a flexible closed cell water resistant seal.

USES

- To seal leaking live crack movement joints, pipe intrusions, etc. suffering from infiltration in tunnels and galleries, basements, and concrete below water table
- To seal and fill defective concrete (honeycombs, voids, etc.)

CHARACTERISTICS / ADVANTAGES

- Totally water resistant
- Permanently flexible
- Solvent free
- Non-flammable
- No shrinkage
- Non-toxic in cured form
- Reacts with salt water
- Reacts rapidly
- Resistant to biological attack and to mild acids, alkalis, etc.

PRODUCT INFORMATION

Packaging	20 kg pail	
Colour	Yellow liquid	
Shelf Life	2 years from date of production	
Storage Conditions	Store properly in undamaged unopened, original sealed packaging, in dry conditions. Protect from direct sunlight and frost. Opened pails must be resealed immediately after use. Material exposed to atmospheric moisture will cure within 7–10 days. Shake the pails before use and once opened should be used as soon as possible.	
Viscosity	450–600 centipoise	(Brookfield Spindle)

TECHNICAL INFORMATION

Expansion

SikaFix®-101 is most readily used relying on the water in the crack or fissure to produce the reaction. The following figures give approximate results when mixed with water

Water : SikaFix®-101	Foaming time at +25 °C	Expansion ratio (to give resistant foam x original volume)
1:1	95 seconds	3 x
1:4	120 seconds	7 x

Note: Like all chemical reactions, the speed of the reaction is temperature dependant; lower temperatures will extend foaming time by approximately 10 % per +5 °C reduction in temperature.

APPLICATION INFORMATION

Curing Time 24 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.

LIMITATIONS

- Expanding SikaFix®-101 exerts a pressure of up to 3 bar. Consideration should be given to the effect of this on the structure.
- Use caution when cleaning the equipment with flammable agents.

ECOLOGY, HEALTH AND SAFETY

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 (MSDS) containing physical, ecological, toxicological and other safety-related data.

APPLICATION INSTRUCTIONS

APPLICATION METHOD / TOOLS

SikaFix®-101 is for injection directly in water bearing cracks and joints. On contact with water, it forms and expands to fill voids and prevent infiltration. Cures to form a flexible seal.

Sealing Cracks (minimum crack width is 0.2 mm)
Drill 15–22 mm holes along the side of the crack at a 45° angle. Drill the holes to intersect the crack midway. Install injection packers in the holes and tighten. If the crack to be injected is 10 mm wide or more at the surface, pack an open cell polyurethane foam saturated with SikaFix®-101 into the crack. Spray the saturated foam with a small amount of water to activate the grout and create a surface seal.
Pump SikaFix®-101 at > 20 bar into or behind fissures or into voids which are allowing water to infiltrate into unwanted areas. If voids in concrete being injected contain insufficient moisture to activate the grout, inject a small amount of water prior to injecting the grout. Pump SikaFix®-101 for approximately 45 seconds and then pause to allow the material to flow into all the cracks and crevices. Keep pumping, watch for material flow and water to appear at the surface of the next packer. When movement stops or SikaFix®-101 appears at the next packer move to the next packer and inject. When sealing vertical cracks start at the bottom and work upwards.
Refer to our Technical Service Department for advice on smaller cracks.

Application Tools

- By single action piston pump operating at high pressure
- By twin piston pump when mixed with water (1:1) to produce foams of different densities

CLEANING OF TOOLS

Completely flush the pump and hose with Sika® Colma-Cleaner or Thinner C. Use putty knife or trowel to remove excess material from walls, floors, etc. Wait for the material to cure before removing. May be sanded off.

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.

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. It may be necessary to adapt the above disclaimer to specific local laws and regulations. Any changes to this disclaimer may only be implemented with permission of Sika® Corporate Legal in Baar.

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