

Sika® Injection-101h

Flexible water reactive PUR-Injection foam for temporary water stopping

Product Description	Sika® Injection-101h is a low viscous, fast foaming and solvent-free water-reactive polyurethane injection foam resin, which cures to a dense flexible foam with a fine cellular structure.
Uses	<ul style="list-style-type: none">■ Sika® Injection-101 h is used for the temporary water stopping of high water intrusions in cracks, joints and cavities in concrete, brickwork and natural stonework.■ To achieve permanent watertight crack sealing, Sika® Injection-201 or Sika® Injection -203 should be injected subsequently.
Characteristics / Advantages	<ul style="list-style-type: none">■ No reaction takes place unless it is in direct contact with water.■ Sika® Injection-101h can be injected as a single component system.■ The free foaming expansion in contact with water is up to 40 times.■ The reaction speed (foam formation) is influenced by the temperatures of the mixed material, the structure and the contact water, plus the hydrodynamic conditions.■ In cold temperatures (< +10°C) Sika® Injection-101h can be accelerated using Sika® Injection-AC10.
Tests	
Product Data	
Form	
Colours	Pale yellow
Packaging	20 kg bucket
Storage	
Storage Conditions / Shelf-Life	6 months from date of production if stored in unopened, undamaged and original, sealed packaging, in dry conditions at temperatures between +5°C and +30°C.

Construction



Technical Data

Chemical Base	Solvent and CFC free, water reactive single part polyurethane resin
Density	1.06-1.1
Viscosity cps	500-1300 at 23°C
Odour	Faint characteristic

System Information

Application Conditions/ Limitations

Substrate Temperature	+5°C min. / +35°C max.
Ambient Temperature	+5°C min. / +35°C max.

Application Instructions

By single action piston pump operating at high pressure.
By twin piston pump when mixed with water (100:15) to produce foams of different densities.
Sealing cracks(minimum crack width 0.2mm,for smaller cracks consult Sika technical department)
Do not inject Sika® Injection-101h solution containing more than 50 % by weight of Sika® Injection-101h as localized high pressure may develop because of excessive foaming & swelling and may damage/ destroy the construction.
Drill 15-22 mm holes along the side of the crack at 45° angle. Drill the holes to intersect the crack midway. Install injection packers in the holes and tighten. If the cracks to be injected are 10mm wide or more at the surface, pack open cell polyurethane foam saturated with Sika® Injection-101h into the crack. Spray the saturated foam with a small amount of water to activate the grout and create a surface seal. Pump Sika® Injection-101h 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 Sika® Injection-101h for approximately 15 seconds and then pause to allow the material flow into all the cracks and crevices. Keep pumping, watch for material flow and water to appear at the surface or the next packer. When movement stops or Sika® Injection-101h appears at the next packer move to the next packer and inject. When sealing vertical cracks start at the bottom and work upward

Application Method / Tools	Use injection pumps suitable for single part products, such as Sika® Injection Pump EL-1, EL-2, Hand-1 or Hand-2.
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Cleaning of Tools	Clean all tools and application equipment with Sika® Colma Cleaner to remove any polyurethane residue immediately after use. Do not leave Sika® Colma Cleaner in the injection pump. Hardened/cured material can only be removed mechanically.
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Notes on Application / Limitations

The waterproofing process is divided into three phases:

Injection:

The time during which the injection material flows under pressure from the pump to the desired moisture/water containing areas.

Induction:

The time from initial mixing until the reaction starts.

Reaction:

The period during which the mix viscosity increases and foam expansion takes place.

Sika® Injection-101h is generally used for the temporary stopping of high water infiltration. To achieve permanent watertight crack sealing, the subsequent injection of Sika® Injection-201 CE is recommended.

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.

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.

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.



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