

**Product Data Sheet**  
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Sika® Injection-101

# Sika® Injection-101

## Flexible PUR-Injection foam for temporary waterstopping

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**Product Description** Sika® Injection-101 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.

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**Uses**

- Sika® Injection-101 is used for the temporary waterstopping 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.

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**Characteristics / Advantages**

- No reaction takes place unless product is in direct contact with water.
- Sika® Injection-101 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-101 can be accelerated using Sika® Injection-AC10.

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### Tests

**Approval / Standards** Tested and approved according to ZTV-ING (RISS)  
German KTW drinking water certificate

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### Product Data

#### Form

**Colours** Part A: Colourless  
Part B: Brown

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**Packaging** Part A: 10.0 or 21.0 kg  
Part B: 12.0 or 25.0 kg

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#### Storage

**Storage Conditions / Shelf-Life** 36 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.

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Construction



## Technical Data

<b>Chemical Base</b>	Solvent and CFC free, water reactive 2-part polyurethane resin		
<b>Density</b>	Part A:	~ 1.03 kg/l	(+20°C)
	Part B:	~ 1.23 kg/l	(+20°C)
<b>Viscosity</b>	Of mixture:		
	Part A:	~ 125 mPa·s	(at+20°C)
	Part B:	~ 150 mPa·s	(at+20°C)
<b>Expansion</b>	Expansion start:	Approx. 16 seconds after contact with water (+20°C)	
		Sika® Injection-AC10 can be used to speed up the start of expansion (see table in Mixing section).	

## System Information

### Application Conditions/ Limitations

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

### Application Instructions

<b>Application Method / Tools</b>	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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<b>Mixing Ratio</b>	1 : 1 parts by volume
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- Mixing**
- Measure out into separate vessels equal quantities of Part A and Part B. (Sika® Injection-101 are supplied in packs of the correct mixing ratio 1:1 by volume).
  - Pour the measured out material into a mixing vessel and mix slowly (max 250 rpm) for a minimum of 2 minutes until homogeneous.
  - When mixed, pour the material into the pump feed container.
  - Use within the pot life. Approximately 6 hours at 20°C. Remove any skin that has formed on the surface if left standing prior to use.
  - In low substrate and/or low ambient temperatures (<10°C) Sika® Injection-AC10 can be added to the Sika® Injection-101 to speed up the start of expansion. See table below.

If the substrate and/or ambient temperatures are < +10°C, Sika® Injection-AC10 can be added to Sika® Injection-101 to accelerate the start of expansion.

Reaction time table Sika® Injection-101			Material temperature		
			+5°C	+10°C	+20°C
Dosage of Sika® Injection-AC10 in % by weight of Sika® Injection-101 (component A+B)	0%	Expansion start	~ 24 sec	~ 20 sec	~ 16 sec
		Expansion end	~ 82 sec	~ 72 sec	~ 63 sec
	5%	Expansion start	~ 11 sec	~ 10 sec	~ 9 sec
		Expansion end	~ 38 sec	~ 36 sec	~ 32 sec
	10%	Expansion start	~ 8 sec	~ 6 sec	~ 5 sec
		Expansion end	~ 26 sec	~ 24 sec	~ 22 sec

The given data are laboratory parameters and may deviate depending on the object and conditions on site.

<b>Cleaning of Tools</b>	Clean all tools and application equipment with Thinner C to remove any polyurethane residue immediately after use. Do not leave Thinner C in the injection pump. Hardened/cured material can only be removed mechanically.
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<b>Potlife</b>	Approx. 6 hours (at +20°C); remove skin from the surface (do not mix in!)
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<b>Notes on Application / Limitations</b>	<p>The waterproofing process is divided into three phases:</p> <p><i>Injection:</i> The time during which the injection material flows under pressure from the pump to the desired moisture/water containing areas.</p> <p><i>Induction:</i> The time from initial mixing until the reaction starts.</p> <p><i>Reaction:</i> The period during which the mix viscosity increases and foam expansion takes place.</p> <p>Sika® Injection-101 is generally used for the temporary stopping of high water infiltration. To achieve permanent watertight crack sealing, the subsequent injection of Sika® Injection-201 is recommended.</p>
<b>Value Base</b>	<p>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.</p>
<b>Local Restrictions</b>	<p>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.</p>
<b>Health and Safety Information</b>	<p>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.</p>
<b>Legal Notes</b>	<p>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.</p>



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