

Product Data Sheet
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Sika® Injection-101

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Tough-elastic PUR-Injection foam for temporary waterstopping

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 tough-elastic foam with a fine cellular structure.

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.

Characteristics / Advantages

- No reaction takes place unless it 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.

Tests

Approval / Standards

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

Product Data

Form

Colours

Part A: Colourless
Part B: Brown

Packaging

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

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.



Technical Data

Chemical Base Solvent and CFC free, water reactive 2-part polyurethane resin

Density
Part A: ~ 1.03 kg/l (+20°C)
Part B: ~ 1.23 kg/l (+20°C)

Viscosity
Of mixture:
Part A: ~ 125 mPa·s (at+20°C)
Part B: ~ 150 mPa·s (at+20°C)

Expansion Expansion start: Approx. 16 seconds after contact with water (+20°C)

System Information

Application Conditions/ Limitations

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

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

Application Instructions

Mixing Ratio 1 : 1 parts by volume

Mixing

- Empty parts A and B into a mixing vessel and mix slowly and thoroughly for at least 2 min (max. 250 rpm) until homogeneous, thereby observing the safety precautions. The containers are supplied according to the required mixing ratio of 1 : 1 parts by volume.
- Partial quantities can be measured out in separate vessels. After mixing, pour the material into the pump's feed container, stir briefly and apply within the pot life.
- After mixing, pour the material into the pump's feed container, stir briefly and use within the pot life.

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.

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.

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.

Potlife

Approx. 6 hours (at +20°C); remove skin from the surface (do not mix in!)

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-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/-203 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.

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.

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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