

Product Data Sheet
Edition 24/10/2007
Identification no:
02 07 05 01 000 0 000003
Sika® Injection-201

Sika® Injection-201

Flexible PUR-Injection resin for permanent watertight sealing

Product Description

Sika® Injection-201 is a very low viscous, flexible and solvent-free polyurethane injection resin. In contact with water, a uniform, closed and therefore watertight pore structure forms, which is elastic and flexible.

Uses

- Sika® Injection-201 is used for permanent watertight sealing with some flexibility to absorb limited movement, in dry, damp or water-bearing cracks and joints in concrete, brickwork and natural stone
- Sika® Injection-201 can be used for the injection of the Sika® Injectoflex-System (non re-injectable!)
- For use in water-bearing cracks under hydrostatic pressure, preliminary injection with shall be made with Sika® Injection-101

Characteristics / Advantages

- Permanently elastic, can absorb limited movements
- No shrinkage in subsequent dry conditions
- Due to its low viscosity it can penetrate into cracks >0.2 mm in width
- Cured Sika® Injection-201 is inert and chemically-resistant
- Solvent-free, environmentally friendly, usable in ground water protection zones
- In cold temperatures (< +10°C) Sika® Injection-201 can be accelerated using Sika® Injection-AC20
- Can be injected as a one component system (when no accelerator is used)

Tests

Approval / Standards German KTW drinking water certificate

Product Data

Form

Colours	Part A:	Colourless
	Part B:	Dark brown

Packaging	Part A:	10 and 20 kg
	Part B:	11.3 and 22.6 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 free, water reactive 2-part polyurethane resin		
Density	Part A:	~ 1.01 kg/l	(+20°C)
	Part B:	~ 1.14 kg/l	(+20°C)
Viscosity	Of mixture:	~ 95 mPa·s	(at +20°C)

System Information

Application Details

Substrate Preparation	Surfaces of cavities and cracks need to be clean, free of loose particles, dust, oil and any other bond-breaking substances. Any dirt must be blown out by compressed air.
------------------------------	--

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, 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 into 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-AC20 can be added to accelerate the reaction time.

Reaction time table Sika® Injection-201			Material temperature		
			+5°C	+10°C	+20°C
Dosage of Sika® Injection-AC20 in % by weight of Sika® Injection-201 Comp. A	0.0%	Reaction time	~ 180 min	~ 180 min	~ 135 min
	0.5%		~ 60 min	~ 55 min	~ 38 min
	1.0%		~ 29 min	~ 32 min	~ 24 min
	2.0%		~ 16 min	~ 17 min	~ 13 min
	3.0%		~ 13 min	~ 14 min	~ 10 min
	5.0%		~ 9 min	~ 7 min	~ 5 min

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.
--------------------------	--

Notes on Application / Limitations	<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 ingress/water containing areas.</p> <p><i>Induction:</i> The time from initial mixing until the reaction starts.</p> <p><i>Reaction in contact with water:</i> The period during which the mix viscosity increases and foam formation takes place.</p> <p>or</p> <p><i>Reaction in dry conditions:</i> The period during which the mix viscosity increases and the hardening process (without foam formation) takes place</p> <p>For water intrusions that can not be stopped with Sika® Injection-201, the fast foaming PUR injection resin Sika® Injection-101 can be injected until the water flow stops.</p>
Value Base	<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>
Local Restrictions	<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>
Health and Safety Information	<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>
Legal Notes	<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>
<p>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.</p>	



Sika Services AG
Tüffenwies 16
CH-8048 Zurich
Switzerland

Phone +41 44 436 40 40
Telefax +41 44 436 46 86
www.sika.com

