

## PRODUCT DATA SHEET

# SikalInject®-311

Formerly TPH. ® RUBBERTITE / 3-part rubberlike, flexible acrylate resin

### DESCRIPTION

3-part, acrylate-/methacrylate-based water-expanding hydrogel that hardens to a rubber-like, flexible product.

### USES

SikalInject®-311 may only be used by experienced professionals.

Waterproofing of cracks, joints & honeycombs. Injection into masonry, concrete structures, civil engineering construction and tunneling.

Sealing of annular gaps in tunnels and shaft applications. Repair of failed warterbars/expansion joints in combination with a polymeric strengthening (PS) compound. Curtain injection into ground and sand.

### CHARACTERISTICS / ADVANTAGES

- extreme low viscosity
- very good penetration into finest aggregates
- rubberlike flexible product
- good chemical resistance (many acids, alkalis, hydrocarbons)
- suitable also for damp proof courses in brickwork
- optional polymeric strengthening with SikalInject®-315 PS
- optional retarder SikalInject®-311 SL for extreme long potlife

### APPROVALS / STANDARDS

- CE-Marked acc.to EN 1504-5 (S, swelling-fitted filling of cracks, alone and combined with the polymeric-strengthening (PS) compound SikalInject®-315 PS)
- German General Building Inspectorate Approval as an injection product for curtain grouting
- DIBt-certificate for use as a crack filler acc. to German Reinforced Concrete Committee (DAfStb) in combination PS.

### PRODUCT INFORMATION

<b>Packaging</b>	part A1: 20 kg part A2: 1 kg part B2: 0.3 kg optional PS compound SikalInject®-315 PS: 20 kg
<b>Shelf Life</b>	12 months from date of production in original packaging
<b>Storage Conditions</b>	dry, between 15 °C - 25 °C, protected from heat, frost and direct sunlight
<b>Colour</b>	part A1: transparent, liquid part A2: colorless, liquid part B2: white, solid
<b>Density</b>	part A1: ~ 1.06 kg/l (DIN EN ISO 3675) part A2: ~ 0.93 kg/l (DIN EN ISO 3675) part B2: ~ 2.59 kg/l

**Viscosity** part A1: ~ 15 mPas (DIN EN ISO 2555)  
part A2: ~ 8 mPas (DIN EN ISO 2555)  
mix AB: ~ 3 mPas (DIN EN ISO 2555)

**Consistency** rubberlike

## TECHNICAL INFORMATION

**Modulus of Elasticity in Flexure** ~ 0.13 MPa (DIN EN ISO 527)

**Tensile Strength** ~ 0.08 MPa (DIN EN ISO 527)

**Elongation at break** ~ 290 % (DIN EN ISO 527)

**Water Absorption** ~20% (DIN EN ISO 62)

**Substrate Temperature** 5 °C - 40 °C

**Pot Life** ~5 min (DIN EN 14022)

**Curing Time** ~10 min

## 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.

## FURTHER DOCUMENTS

For use in combination with the optional compounds SikalInject®-315 PS or SikalInject®-311 SL please see also respective PDS.

## 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 Safety Data Sheets (SDS) containing physical, ecological, toxicological and other safety-related data.

## APPLICATION INSTRUCTIONS

### SUBSTRATE PREPARATION

Surfaces of cracks, joints and voids need to be clean, free of loose particles, dust, oil and any other bond-breaking substances.

Any dirt must be blown out with compressed air.

### MIXING

- For curtain injection, brickwork, horizontal barrier (dpc) and ground stabilisation:
  - Empty part A2 completely into the part A1 container and mix for 3 minutes (part A1 + part A2 = Component A)
  - Fill part B2 into an equivalent 20 L container and fill with 20 L of tap water - mix for 3 minutes (part B2 + water = Component B)
  - Components A and B prepared in this way are ready-for-use, pump with a 2-C pump in a ratio 1:1 parts by volume directly from containers
- For crack injection and injection hoses
  - Empty part A2 completely into the part A1 container

and mix for 3 minutes (part A1 + part A2 = Component A)

- SikalInject®-315 PS is used instead of water in Component B
- Make sure that component BII (hardener salt) is completely dissolved in SikalInject®-315 PS
- Therefore: half-fill container of part B2 with tap-water and shake until part B2 salt is completely dissolved
- Fill this salt-solution into container of SikalInject®-315 PS and mix for 3 minutes (part B2 + water + PS = Component B)
- Components A and B prepared in this way are ready-for-use, pump with a 2-C pump in a ratio 1:1 parts by volume directly from containers.

Activated components A and B remain stable for approx. 5 hours (depending on temperature).

## 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.

### SIKA HONGKONG LTD.

Rm.1507-12, Blk A, New Trade Plaza,  
6 On Ping Street, Shatin, N.T., H.K.  
Phone: +852 26868108  
Fax: +852 26453671  
Mail: [marketing@hk.sika.com](mailto:marketing@hk.sika.com)  
Website: [www.sika.com.hk](http://www.sika.com.hk)



### Product Data Sheet

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