

**BUILDING TRUST** 

# PRODUCT DATA SHEET

# Sikalnject<sup>®</sup>-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

Sikalnject<sup>®</sup>-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.

# **FEATURES**

- 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 SikaInject®-315 PS
- optional retarder Sikalnject<sup>®</sup>-311 SL for extreme long potlife

### **CERTIFICATES AND TEST REPORTS**

- CE-Marked acc.to EN 1504-5 (S, swelling-fitted filling of cracks, alone and combined with the polymericstrengthening (PS) compound SikaInject<sup>o</sup>-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 Data Sheet Sikalnject®-311 January 2025, Version 01.01 020707020030000023

#### **PRODUCT INFORMATION**

Packaging	part A1: 10 kg or 20 kg or 1000 kg part A2: 0.5 kg or 1 kg or 25 kg part B: 0.15 kg or 15 kg optional PS compound SikaInject*-315 PS: 20 kg
Colour	part A1: transparent, liquid part A2: colorless, liquid part B2: white, solid
Shelf life	12 months from date of production in original packaging
Storage conditions	dry, between 15 °C - 25 °C, protected from heat, frost and direct sunlight
Density	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)
Water absorption	~20% (DIN EN ISO 62)
Elongation at break	~ 290 % (DIN EN ISO 527)
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 DOCUMENTATION

For use in combination with the optional compounds SikaInject®-315 PS or SikaInject®-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,

**Product Data Sheet** Sikalniect®-311 January 2025, Version 01.01 020707020030000023

free of loose particles, dust, oil and any other bondbreaking substances.

Any dirt must be blown out with compressed air.

#### MIXING

1. 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 readyfor-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)
- Sikalnject<sup>®</sup>-315 PS is used instead of water in Component B
- Make sure that component BII (hardener salt) is completely dissolved in SikaInject<sup>®</sup>-315 PS

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Therefore: half-fill container of part B2 with tap-wa-



ter and shake until part B2 salt is completely dissolved

- Fill this salt-solution into container of Sikalnject<sup>®</sup>-315 PS and mix for 3 minutes (part B2 + water + PS = Component B)
- Components A and B prepared in this way are readyfor-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 declared data for this product may vary from country to country. Please consult the local Product Data Sheet for the exact product 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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Product Data Sheet Sikalnject®-311 January 2025, Version 01.01 020707020030000023 SikaInject-311-en-AU-(01-2025)-1-1.pdf

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