BUILDING TRUST

PRODUCT DATA SHEET

SikaInject®-453

Formerly TPH.® Hydropox EP1 / 2-component epoxy-based injection resin

DESCRIPTION

2-Component, low viscosity, epoxy-based injection resin for force transmitting filling of cracks, voids and interstices in concrete according to EN 1504-5.

USES

SikaInject®-453 may only be used by experienced professionals.

Force transmitting filling of cracks joints and honeycombs in concrete and masonry.
Suitable for the following actions: XALL, XF1-XF4, XSTAT, XBW1, XCR DY, XCR DP, XDYN according to ZTV.ING 2017 or BAW planner recommendation.
Can also be used as a primer resin for concrete restoration.

FEATURES

- extreme low viscosity
- penetration into finest hairline cracks
- chemically resistant to seawater according to XA2
- application even on slightly moist surface possible (see bond strength)

CERTIFICATES AND TEST REPORTS

DOP, CE-Mark acc. to EN 1504-5, MPFA Leipzig
DIBt expertise for crack filler F(P), DIBt Berlin
Test of the effect on elastomers in concrete acc. to DIN EN 12637-3, MFPA Leipzig

PRODUCT INFORMATION

Packaging	part A: 20 kg / 10 kg part B: 8.8 kg / 4.4 kg combiset AB: 1.44 kg Refer to current price list for packaging variations.
Shelf life	12 months from date of production

Storage conditions	The product must be stored in original, unopened and undamaged sealed packaging in dry conditions at temperature between +15 °C and +25 °C.
Colour	part A: light yellowish, liquid part B: light yellowish, liquid
Density	part A: ~ 1.13 kg/l (DIN EN ISO 2811-1) part B: ~ 0.99 kg/l (DIN EN ISO 2811-1)
Viscosity	part A: ~ 700 - 950 mPas (DIN EN ISO 2555) part B: ~ 20 - 40 mPas (DIN EN ISO 2555) mix AB: ~200 mPas (DIN EN ISO 2555)

TECHNICAL INFORMATION

Compressive strength	~ 85 N/mm2 (DIN EN 12190)
Tensile strength	~ 23 N/mm2 (DIN EN ISO 527)
Modulus of elasticity in tension	~ 2170 MPa (DIN EN ISO 527)
Elongation at maximum tensile stress	~ 1% (DIN EN ISO 527)
Mixing ratio	2 : 1 (parts by volume) 2.27 : 1 (parts by weight)
Substrate temperature	10 °C - 30 °C
Pot Life	~ 30 min (DIN EN 14022)
Curing time	7 d

BASIS OF PRODUCT DATA

All technical data stated in this Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

FURTHER DOCUMENTATION

Bond strength at concrete:
~ 3.1 N/mm2 (dry, DIN EN 1542)
~ 2.8 N/mm2 (slightly moist, DIN EN 1542)
~ 1.9 N/mm2 (wet, DIN EN 1542)
Bending tensile strength:
~ 29 N/mm2 (DIN EN 12390-5)

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

Mix part A and part B in the correct mixing ratio in a dry and clean container.
Mix until homogeneous (no streaks) - then mix is ready to be pumped by 1-component pump.

CLEANING OF EQUIPMENT

Use SikaInject® Cleaner C1 or SikaInject® CL2 for pump-cleaning (non-cured resin). Cured material can only be removed mechanically.

LOCAL RESTRICTIONS

Note that as a result of specific local regulations the declared data and recommended uses for this product may vary from country to country. Consult the local Product Data Sheet for exact product data and uses.

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.

Sika Gulf B.S.C. (c)
Tel: +973 177 38188
Email: info@bh.sika.com
Sika Kuwait Cons. Mat. & Paints Co WLL
Tel: +965 22 282 296
Email: sika.kuwait@kw.sika.com
Web: gcc.sika.com

Sika UAE LLC
Sika MB Construction Chemicals LLC
Sika International Chemicals LLC
Tel: +971 4 439 8200
Email: info@ae.sika.com
Web: gcc.sika.com

Sika Saudi Arabia Limited
Sika Construction Chemicals for Manufacturing LLC
Riyadh / Jeddah / Dammam / Rabigh
Tel: +966 12 692 7079
Email: info@sa.sika.com
Web: gcc.sika.com

Sika LLC - Oman
Master Builders Solutions LLC
(part of Sika)
Tel. +968 22 826 500
Email: info@om.sika.com
Web: gcc.sika.com