

KÖSTER KB-Pur® IN 3 HT

Technical guideline / Article number 6.151
Issued: January 10, 2010

- Industry classification "KB-Pur" registered at the German patent office, 395 06 701.4
- Official test certificate, Fachhochschule Ostfriesland (Technical College) – Properties of the resin

2 component polyurethane injection resin for bridging cracks where structural strength is required in high temperature climates

Features

KÖSTER KB-Pur® IN 3 HT is a solvent-free, 2 component polyurethane injection resin for crack injection. Due to its high compressive and adhesive tensile strength, KÖSTER KB-Pur® IN 3 HT permanently seals and bridges cracks and joints where structural strength is required. The pot life of this injection resin has been adjusted so that it is suited for use in high temperature climatic conditions.

Technical data

Mixing ratio	by volume	Component A : B	2 : 1
	by weight	Component A : B	5 : 3
Application temperature			above + 5 °C
Viscosity (A + B component)			approx. 200 mPa.s
Density (of the mixture)			1.1 kg / l
Compressive strength			> 80 N / mm ²
Adhesive tensile strength (Concrete)			> 14 N / mm ²
Flexural tensile strength (after 7 d / 23 °C / 65 % rel. hum.)			approx. 12 N / mm ²

Temperature [°C]	20	25	30	40
Pot life [minutes]	< 120	< 90	< 80	< 60

Field of application

The material can be used in combination with KÖSTER KB-Pur® IN 1 for the permanent, force-transmitting sealing of water bearing cracks and joints in concrete, screeds, masonry etc. as well as for solidifying granular soils. It can be used without pre-injections of KÖSTER KB-Pur® IN 1 for closing dry cracks, joints and voids. KÖSTER KB-Pur® IN 3 HT is used in cases where cracks have to be bridged where structural strength is required between the flanks of a crack or between different structural members. KÖSTER KB-Pur® IN 3 HT is suited for use in high temperature climatic conditions.

Mixing

The A and the B component are recommended to be mixed at 20°C in the above stated mixing ratio using a slowly rotating electrical mixer preferably equipped with a KÖSTER Resin Stirrer. The material must be mixed until it is streak free and homogeneous in appearance.

Application

Water bearing cracks, joints and voids are dried up through preceding injections of KÖSTER KB-Pur® IN 1. The placement of the injection packers depends on the course of the crack. The boreholes are best placed on alternating sides of the crack at a distance of approx. 10 to 20 cm of each other at an angle of 45 ° to the surface of the structural member. The diameter of the boreholes depends on the injection packers chosen. Prior to the injection, the crack is closed with KÖSTER KB-Fix 5. The injection is carried out using customary injection devices, e. g. the KÖSTER 1C Injection Pump, from bottom to top. After the removal of the injection packers, the boreholes can be closed with KÖSTER KB-Fix 5.

Consumption

Approx. 1.1 kg / l void

Cleaning of tools

Immediately after use with KÖSTER KB-Pur® Cleaner. Reacted material can be treated with KÖSTER KB-Pur® Remover.

Packaging

8 kg and 1 kg combi packages

Storage

Store the material at temperatures between 10 and 30 °C; in originally sealed packages, it can be stored for approx. 12 month.

Safety

Wear protective gloves and goggles. When carrying out injection works, make sure to protect the surroundings from injection resin that may be discharged from the wall, packers, boreholes etc. due to the pressurized mode of injection or accidentally. Do not stand directly behind the packers during injection.

Technical guidelines cited

KÖSTER KB-Fix 5	Art. No.	5.015
KÖSTER KB-Pur® IN 1	Art. No.	6.13
KÖSTER KB-Pur® Cleaner	Art. No.	9.10
KÖSTER KB-Pur® Remover	Art. No.	9.11

The information contained in this technical data sheet is based on the results of our research and on our practical experience in the field. All given test data are average values which have been obtained under defined conditions. The proper and thereby effective and successful application of our products is not subject to our control. The installer is responsible for the correct application under consideration of the specific conditions of the construction site and for the final results of the construction process. This may require adjustments to the recommendations given here for standard cases. Specifications made by our employees or representatives which exceed the specifications contained in this technical guideline require written confirmation. The valid standards for testing and installation, technical guidelines, and acknowledged rules of technology have to be adhered to at all times. The warranty can and is therefore only applied to the quality of our products within the scope of our terms and conditions, not however, for their effective and successful application. This guideline has been technically revised; all previous versions are invalid.