KÖSTER KB-Pox IN

Technical Data Sheet IN 231

Issued: 2018-08-06

- WZ "KB-POX" protected, German Patent Office, 395 06 702

Epoxy resin for crack injection and saturation for structural rebonding

CE 0761	**KÖSTER BAUCHEMIE AG Dieselstraße 1-10, 26607 Aurich 17 IN 231 EN 1504-5:2004 Concrete construction member injection material for structural filling of cracks, cavities, and defects in concrete U(F1)(W1)(1/2)(8/30)(1)**
Bond strength	> 2.0 MPa
Volumetric shrinkage	< 3%
Viscosity	175 mPa·s
Glass transition temperature	> + 40 °C
Injectibility into dry medium	Injectability class: 0.1
Injectability into non-dry medium	Injectability class: 0.1
Durability (Compatability with concrete)	Coshesive failure in concrete
Corrosion behavior	No corrosive effect
Release of dangerous substances	Compliance with 5.4, EN 1504-5

Features
KÖSTER KB Pox IN is a solvent free, 2 component low viscous epoxy injection resin for crack injection. KÖSTER KB-Pox IN does not contain any fillers or softeners and thereby sedimentation is avoided. Due to its high rate of penetration into porous substrates and it's excellent adhesion to concrete, stone, masonry and metal, KÖSTER KB-Pox IN permanently seals and bridges cracks and joints and restores structural integrity. KÖSTER KB-Pox IN can be used in water saturated cracks.

Technical Data

Mixing ratio	3.14 : 1
- by weight	2.8 : 1
- by volume	
Pot life (+ 20 °C, 100 g mixture) (DIN EN 16945)	approx. 80 min.
Application temperature	above + 5 °C
Ideal application temperature	+ 15 °C
Mixed viscosity (ISO 2555)	approx. 170 mPa.s
Density of mixture (DIN 53479)	1.0 kg / l
Compressive strength (7 days)	> 50 N / mm²
Adhesive tensile strength	
- dry standard concrete C 50/60	> 4 N / mm²
- damp standard concrete C 50/60	> 2 N / mm²
Color	transparent

Fields of Application
KÖSTER KB-Pox IN is used without pre-injection for filling and closing dry, damp, and wet cracks, joints, and voids. KÖSTER KB-Pox IN is used in cases where crack flanks or unequal structural members have to be structurally bonded together.

Substrate
The substrate can be dry, damp or wet and must be free of loose particles, oils, grease, and other contaminants. Liquid water in the crack has to be displaced with KÖSTER KB-Pox IN during injection when present.

Application
The A and the B component must be mixed intensively 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. Re-pot the material and mix again to avoid mixing failures.

The placement of the injection packers depends on the width and course of the crack. We recommend using KÖSTER Superpackers. The drill holes are placed on alternating sides of the crack at a maximum distance of 15 cm. Fine cracks may require reduced spacing. Drill at an angle of approx. 45° towards the crack. To stop material from exiting the crack, the crack is sealed with KÖSTER KB-Fix 5 prior to injection. The injection is carried out using an appropriate injection device such as the electrical KÖSTER 1C Injection Pump. After the material has cured, remove the injection packers and close the drill holes with KÖSTER KB-Fix 5. The material can also be installed by pouring, (saturation).

Consumption
Approx. 1 kg / l void

Cleaning
Clean tools immediately after use with KÖSTER Universal Cleaner.

Packaging

IN 231 001	1 kg combipackage
IN 231 006	6 kg combipackage

Storage
Store the material at temperatures between + 10 °C and + 30 °C; in originally sealed packages, the material can be stored for a minimum of 12 months.

Safety
Wear protective gloves and goggles. When carrying out injection work, make sure to protect the surroundings from injection resin that may be discharged from the wall, packers, drill holes, etc. Do not stand directly behind the packers during injection. Liquid polymers react to temperature fluctuations by changing their viscosity and/or curing behavior. The instructions given in the Technical Guidelines must be followed. Low temperatures will slow the reaction; high temperatures will increase the reaction rate. Mixing large volumes will also increase the reaction rate.

Related products

KÖSTER KB-FIX 5	Prod. code C 515 015

KÖSTER BAUCHEMIE AG • Dieselstraße 1-10 • D-26607 Aurich • Tel. 04941/9709-0 • Fax -40 • info@koester.eu • www.koester.eu

KÖSTER IN 1	Prod. code IN 110
KÖSTER IN 7	Prod. code IN 270
KÖSTER Superpacker 13 mm x 115 mm CH	Prod. code IN 915 001
KÖSTER One-Day-Site Packer 13 mm x 120 mm PH	Prod. code IN 922 001
KÖSTER 1C Injection Pump	Prod. code IN 929 001
KÖSTER Hand Pump without manometer	Prod. code IN 953 001
KÖSTER Hand Pump with manometer	Prod. code IN 953 002
KÖSTER Footpump	Prod. code IN 958 001
KÖSTER Universal Cleaner	Prod. code X 910 010

KÖSTER BAUCHEMIE AG • Dieselstraße 1-10 • D-26607 Aurich • Tel. 04941/9709-0 • Fax -40 • info@koester.eu • www.koester.eu