

- Industry classification "KB-Pur" registered at the German patent office, 395 06 701

Single component PU-injection foam for sealing water-bearing cracks and joints

Features

KÖSTER KB-Pur[®] IN 1 is a single component polyurethane prepolymer used with 10 % catalyst. The system reacts when it comes into contact with water and forms a waterproof polyurethane foam. KÖSTER KB-Pur[®] IN 1 is solvent and filler free, resistant to hydrolysis and tested for the use in drinking water environments, (KTW-testing). When coming into contact with water in a crack, KÖSTER KB-Pur[®] IN 1 forms a fine pored, closed-cell foam which stops and displaces the water.

Technical data

Mix viscosity at 25°C	approx. 300 mPa.s
Volume expansion	max. 1:30
Density of the mixture at 20 °C	approx. 1.1 kg / l
Density of the fully cured foam	approx. 0.1 g / cm ³
Starting time	approx. 30 seconds
Expansion time	approx. 60 seconds
Non-sticky after	approx. 2 minutes
Mixing ratio (by weight)	10 : 1 (resin / A : catalyst / B)
Mixing ratio (by volume)	12 : 1 (resin / A : catalyst / B)

Field of application

KÖSTER KB-Pur[®] IN 1 is intended for sealing water bearing cracks in concrete and masonry using pressurized injection equipment.

Mixing

The A and the B component are recommended to be mixed at 20°C in the given 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 and consistency.

Application

The ready mixed material must be used within the given pot life. The mixture can be applied using conventional single component injection pumps such as the electrical KÖSTER 1C Injection Pump. Prior to the injection, the cracks can be sealed using KÖSTER KB-Fix 5. Holes are drilled on alternating sides along the course of the crack at an interval of approx. 10 – 15 cm. Injection packers are inserted into the holes and (when possible) injected

from bottom to top. The diameter of the drill holes depends on the injection packers chosen. After the injection of KÖSTER KB-Pur[®] IN 1, the crack can be permanently sealed using KÖSTER KB-Pur[®] IN 2 or KÖSTER KB-Pur[®] IN 3. These subsequent injections are carried out between 5 and 15 minutes (depending on the surrounding temperature) after the initial injection.

Consumption

Approx. 0.1 kg / l void

Cleaning of tools

Clean tools immediately after use with KÖSTER KB-Pur[®] Cleaner.

Packaging

27.5 kg, 5.5 kg and 1.0 kg combi packages

Storage

Store the material at temperatures between + 10° and + 30 °C. In originally sealed packages, the material can be stored for 6 months.

Safety

Wear protective gloves and goggles when processing the material. When carrying out injection work, make sure to protect the surrounding work area from injection resin that may be discharged from the wall, packers, drill holes, etc. Do not stand directly behind the packers during injection.

Technical guidelines cited

KÖSTER KB-Fix 5	Art. No.	5.01
KÖSTER KB-Pur [®] IN 2	Art. No.	6.14
KÖSTER KB-Pur [®] IN 3	Art. No.	6.15
KÖSTER KB-Pur [®] Cleaner	Art. No.	9.10
KÖSTER 1C Injection Pump	Art. No.	12.072
KÖSTER Resin Stirrer	Art. No.	12.088

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.