




KÖSTER IN 2

Technical Data Sheet IN 220

Issued: 2021-12-21

- Test certificate K-25017-15-Ko according to the Guideline for Hygienic Assessment of Organic Coatings in Contact with Drinking Water, Hygiene-Institut des Ruhrgebiets

Elastic 2 component polyurethane injection resin

	KÖSTER BAUCHEMIE AG Dieselstraße 1-10, 26607 Aurich 15 IN 220 EN 1504-5:2005 Concrete Injection for the elastic filling of cracks, voids, and defects U(D1)-W(3)-(1/3/5)-(1/2/3)-(8/30)
Adhesion capacity Elongation capacity Water tightness Glass transition temperature Injectability into dry medium Injectability into non-dry medium Injectability into wet medium Durability (Compatibility with concrete) Corrosion behaviour Dangerous substances	< 1 N/mm ² > 10 % 1 x 10 ⁵ Pa NPD < 0,3 mm < 0,3 mm < 0,3 mm No failure during compressive tests; loss of deformation capability <20 % deemed to have no corrosive effect NPD

Features

KÖSTER IN 2 is a solvent-free, 2 component polyurethane injection resin for crack injection. It is permanently elastic and thus allows a permanent crack and joint sealing even in case of movement of the crack.

Advantages

- Suitable for use in drinking water environment
- Suitable on dry and slightly moist cracks
- Forms an elastic solid body resin allowing movement of the structure while maintaining a watertight system

Technical Data

Mixing ratio Component A : B	
by volume	2 : 1
by weight	5 : 3
Viscosity (A + B component)	approx. 200 mPa.s
Pot life (+ 20 °C, 1 l mixture)	30 min
Shore-hardness D / DIN 53505	25 – 35
Application temperature	above + 5 °C
Density (of the mixture)	approx. 1.1 kg / l

Fields of Application

The material can be used in combination with KÖSTER IN 1 for the permanent, elastic sealing of water bearing cracks and joints in concrete, screeds, masonry etc. as well as for solidifying granular soils.

It can be used without the pre-injection of KÖSTER IN 1 for sealing dry cracks, joints and voids. KÖSTER IN 2 is used in cases where future movements of the building structure cannot be excluded. KÖSTER IN 2

is also suited for slightly moist cracks.

- Permanently sealing cracks with an elastic solid body resin
- Waterproofing and sealing horizontal and vertical cracks
- Sealing wall-floor joints
- Sealing cracks when working in drinking water environment

Application

Water flow in water bearing cracks, joints and voids are first stopped and dried through the injection of KÖSTER IN 1. The A and the B components of KÖSTER IN 2 are recommended to be mixed at + 15 °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. The injection is carried out with conventional injection devices such as the KÖSTER Hand Pump press or the KÖSTER 1C Injection Pump. After the removal of the injection packers, the drill holes can be sealed with KÖSTER KB-Fix 5.

Crack injection in walls and floors

The arrangement of the injection packers results from the course of the crack or from the construction element to be injected. The holes are placed alternately at a distance of approx. 10 - 20 cm, at an angle of approx. 45 ° to the component surface. The borehole diameter results from the choice of injection packer. Prior to the injection, the cracks can be sealed using KÖSTER KB-Fix 5. The wall area is injected with conventional injection devices such as the KÖSTER 1C Injection Pump once or more times from bottom to top (when possible).

Wall-Floor joint injection

The injection packers are placed following the course of the wall. If possible, the holes are set at a distance of approx. 10 - 15 cm, at an angle of approx. 45 ° to the component surface. The drilling channel should hit the floor slab slightly behind the center of the wall contact area. The borehole diameter results from the choice of injection packer. Prior to the injection, the cracks or joint can be sealed using KÖSTER KB-Fix 5. The injection is carried out with conventional injection devices such as the KÖSTER 1C Injection Pump once or more times.

Consumption

Approx. 1.1 kg/l void

Cleaning

Clean tools immediately after use with KÖSTER PUR Cleaner.

Packaging

IN 220 001	1 kg combipackage
IN 220 008	8 kg combipackage
IN 220 040	40 kg combipackage

Storage

Store the material at temperatures between + 10 °C and + 30 °C. In originally sealed packages, the material can be stored for 12 months.

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.

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

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.

Other

- Due to water displacements, reinjections may be necessary to address localized areas.
- KÖSTER IN 2 is not suitable for wide moving joints with considerably high dynamic movements.

The containers must be closed immediately after partial removal. Do not mix up the caps.

Related products

KÖSTER KB-Fix 5	Prod. code C 515 015
KÖSTER IN 1	Prod. code IN 110
KÖSTER PUR Cleaner	Prod. code IN 900 010
KÖSTER Impact Packer 12 mm x 70 mm	Prod. code IN 903 001
KÖSTER Lamella Impact Packer	Prod. code IN 909 001
KÖSTER Superpacker 13 mm x 115 mm	Prod. code IN 915 001
CH	
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 Injection Gun	Prod. code IN 929 016
KÖSTER Hand Pump without manometer	Prod. code IN 953 001
KÖSTER Hand Pump with manometer	Prod. code IN 953 002

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.

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