



## KÖSTER IN 7

Technical Data Sheet IN 270

Issued: 2022-10-25

### Single component viscoplastic PU-injection foam for the single injection sealing of water-bearing cracks and joints

#### Features

KÖSTER IN 7 is a single component polyurethane prepolymer used with 10 % catalyst. The product reacts when it comes into contact with water and forms a compact, viscoplastic waterproof polyurethane foam. KÖSTER IN 7 remains viscoplastic after reacting and is thus able to follow crack movements and to seal permanently without the necessity of subsequent injections with an elastic polyurethane massive resin. KÖSTER IN 7 is resistant to hydrolysis.

#### Advantages

- The fast foaming effect stops water in seconds
- Very high expansion volume
- Long pot life when not in contact with water
- The material remains viscoplastic allowing movements of the structure while maintaining a watertight system
- Injectable on moist and water-bearing cracks
- Resistant to hydrolysis
- Free of solvents and fillers

#### 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 <sup>3</sup>
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)
Pot life (without contact to water)	over 6 hours

#### Fields of Application

KÖSTER IN 7 is an injection foam for waterproofing of cracks in concrete and masonry. It stops leakages even under pressurized water. KÖSTER IN 7 is applied in a single step without necessity of subsequent injection with a solid body resin.

- Stopping fast large water leakages with a foaming action
- Waterproofing horizontal and vertical cracks
- Capable of filling voids
- Sealing wall-floor joints
- Create a flexible bond

#### Substrate

KÖSTER IN 7 reacts only in contact with water. In dry cracks pre-wet the crack before application.

#### Application

The A-component and the catalyst (B) are mixed ideally at + 15 °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. The ready mixed material must be used within the given pot life. The

minimum application temperature is + 5 °C. Ideally the material should be tempered to + 15 °C before mixing and injection, temperatures above + 25 °C will increase the reaction rate and reduce the 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.

In case there is extremely high water flow, the reaction time of the foam can be further reduced by means of a reduction of the A-component. A maximum reduction of 5% is allowed.

#### Consumption

Approx. 0.1 kg/l void

#### Cleaning

Clean tools immediately after use with KÖSTER PUR Cleaner.

#### Packaging

IN 270 005	5.5 kg combipackage
IN 270 027	27.5 kg combipackage

#### Storage

Store the material at temperatures between + 10 °C and + 30 °C. In originally sealed packages, the material can be stored for 6 months. After partial removal, the containers must be closed immediately (do not mix up the caps) and turned "upside down" once to seal the closures from the inside.

#### Safety

Contains diisocyanate. When working with the material, work clothing that covers arms and legs or a protective suit must be worn. When working in confined spaces or in the "overhead area" hoods or covers must be worn. Wear suitable protective gloves (e.g., nitrile gloves) and protective goggles. When processing the material, pressure is created. Please do not stand directly behind Packer. 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.

#### Other

- Due to water displacements, reinjections may be necessary to address localized areas
- KÖSTER IN 7 is not suitable for wide moving joints with considerably high dynamic movements

#### Related products

KÖSTER KB-Fix 5	Prod. code C 515 015
KÖSTER PUR Cleaner	Prod. code IN 900 010
KÖSTER Impact Packer 12 mm x 70 mm	Prod. code IN 903 001

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 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

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](mailto:info@koester.eu) • [www.koester.eu](http://www.koester.eu)**