



# **KÖSTER IN 8**

**Technical Data Sheet IN 271** 

Issued: 2023-08-22

# Water-reactive, viscoelastic 1C PU injection foam for single and multiple step waterproofing of water-bearing cracks and joints

# Features

KÖSTER IN 8 is a water-reactive polyurethane prepolymer. The product only reacts in contact with water and then spontaneously forms a firm, tough, elastic, waterproof polyurethane foam. Contact with water is required for curing and foaming reaction.

After the reaction, KÖSTER IN 8 remains viscoelastic and is therefore able to follow crack movements and to permanently waterproof without an elastic solid polyurethane resin re-injection. KÖSTER IN 8 is hydrolysis-resistant.

KÖSTER IN 8 can be accelerated by adding max. 10 % by weight of KÖSTER IN 8 Accelerator. The time until the material is tack-free is then only approx. 2.5 minutes.

# Advantages

- The fast foaming effect stops water in seconds
- Very high expansion volume, up to 30 times
- Long pot life
- Resistant to hydrolysis and acid
- The material remains viscoelastic and is therefore able to follow crack movements
- Injectable on moist and water-bearing cracks
- Free of solvents and fillers

# **Technical Data**

Viscosity at + 25 °C	approx. 160 mPa⋅s
Volume increase	max. 1 : 30
Flash point	>+100 °C
Ideal installation temperature	+ 15 °C
Density of mixture at + 20 °C	approx. 1.1 kg / l
Density of reacted foam	approx. 0.1 g / cm <sup>3</sup>
Start of reaction	approx. 30 seconds
Reaction time	approx. 3 minutes
Non-tacky after	approx. 3,5 a 4 minutes
Reaction time (with accelerator)	approx. 2 minutes
Non-tacky after (with accelerator)	approx. 2.5 minutes

#### **Fields of Application**

For one-step and multiple step waterproofing of water-bearing cracks in concrete and masonry using the pressure injection method without reinjection with a solid resin. As a sealing injection in concrete and masonry.

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

# Application

KÖSTER IN 8 is a 1 component material ready to use and can be processed with conventional one-component injection devices such as the KÖSTER 1C injection pump. Before the injection, the cracks to be worked on are sealed with KÖSTER Injection Barrier. Along the course of the crack, holes are drilled alternately set at a distance of approx. 10-15 cm, the packers are installed, and (if possible) progressing from bottom to top, injected in one or several stages (at least two injection stages). The multi-stage injection is recommended in case of heavy water pressure. KÖSTER IN 8 does not require a reinjection with KÖSTER solid resins. The borehole diameter depends on the injection packers used. The drill holes can be closed with KÖSTER KB-Fix 5 after removing the injection packers.

If a faster reaction is required, a maximum of 10 % by weight of KÖSTER IN 8 Accelerator can be added to the KÖSTER IN 8. It reduces the reaction time by approx. 1 minute.

## Consumption

Approx. 0.1 kg/l void

#### Cleaning

Clean immediately after use with KÖSTER PUR Cleaner. Hardened material must be mechanically removed.

#### Packaging

IN 271 005

5 kg jerrycan

#### Storage

In originally sealed containers the material can be stored for at least 6 months.

After partial removal and further storage, the containers must be closed immediately 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. Obey all local, state, and federal safety regulations when processing the material.

# Other

- KÖSTER IN 8 reacts with moisture. Avoid contact with rain, spashes, etc. at all costs. A skin can form in the material container of the injection pump due to the humidity. This skin should only be removed when the material hopper is refilled.

- Due to water displacements, reinjections may be necessary to address localized areas

- KÖSTER IN 8 is not suitable for wide moving joints with considerably high dynamic movements

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 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.

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Related products	
KÖSTER KB-Fix 5	Prod. code C 515 015
KÖSTER IN 8 Accelerator	Prod. code IN 272
KÖSTER Injection Barrier	Prod. code IN 501 025
KÖSTER PUR Cleaner	Prod. code IN 900
KÖSTER Impact Packer 12 mm x 70 mm	Prod. code IN 903 001
KÖSTER Lamella Impact Packer Adapter	Prod. code IN 908 001
KÖSTER Lamella Impact Packer	Prod. code IN 909 001
KÖSTER Superpacker 10 mm x 85 mm	Prod. code IN 912 001
СН	
KÖSTER Superpacker 10 mm x 115 mm	Prod. code IN 913 001
СН	
KÖSTER Packer 13 mm x 130 mm CH	Prod. code IN 913 002
KÖSTER Superpacker 13 mm x 130 mm	Prod. code IN 915 001
CH	
KÖSTER One-Day-Site Packer 13 mm x	Prod. code IN 918 001
90 mm CH	
KÖSTER One-Day-Site Packer 13 mm x	Prod. code IN 919 001
120 mm CH	Dural and IN 004 004
KÖSTER One-Day-Site Packer 13 mm x 90 mm PH	Prod. code IN 921 001
	Dred and IN 000 001
KÖSTER One-Day-Site Packer 13 mm x 120 mm PH	Prod. code IN 922 001
	Prod. code IN 929 001
KÖSTER 1C Injection Pump	Prod. code IN 929 001 Prod. code IN 931 001
KÖSTER Gel Packer (Base) KÖSTER Hand Pump without manometer	Prod. code IN 953 001
KÖSTER Hand Pump with manometer	Prod. code IN 953 001 Prod. code IN 953 002
NOSTER Rand Fump with manometer	FIDU. COUE IN 953 002

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IN - Injection systems