



KÖSTER IN 5

Technical Data Sheet IN 250

Issued: 2022-05-04

MPA Braunschweig, testing of physical characteristics according to the DIN EN 1504-5.

Elastic, low viscosity 2 component polyurethane injection resin for crack- and hose-injection

 0761	KÖSTER BAUCHEMIE AG Dieselstraße 1-10, 26607 Aurich 10 IN 250 EN 1504-5:2004 Concrete injection for the elastic filling of cracks, voids, and defects U(D1)-W(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 Durability Corrosion behaviour Dangerous substances	> 1.0 MPa > 30 % D1 NPD Injectability class: 0.3 Injectability class: 0.3 No failure during compressive tests; loss of deformation capability 6.7 % deemed to have no corrosive effect NPD

Features

KÖSTER IN 5 is a solvent-free, low viscosity, 2 component polyurethane for permanently and elastically injecting, filling, and sealing cracks and construction joints.

KÖSTER IN 5 does not react aggressively when coming into contact with steel or iron, so that a corrosion protection is achieved. Due to its slow reaction, the material can be processed for up to 4 hours.

Advantages

- Low viscosity for deeper penetration
- Long pot life for hose injection
- Suitable on dry, moist, and wet cracks
- Elastic solid body resin with high elongation capacity

Technical Data

Mixing ratio Comp. A : B	by volume 1 : 1 by weight 1 : 1.2
Viscosity (25 °C)	Comp. A approx. 65 mPa.s Comp. B approx. 90 mPa.s
Flashpoint	> 200 °C
Pot life (20 °C)	approx. 4 hours
Application temperature	above + 5 °C
Ideal application temperature	+ 15 °C

Fields of Application

The material is intended for the pressure injection of construction joints via injection hoses. It can also be used for permanently and elastically sealing dry, moist and water-bearing cracks and joints as well as for

solidifying granular soils.

Application

The A and the B components are mixed 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. 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.

Crack injection

Active water leaks are stopped through injection with KÖSTER IN 1. The placement of the injection packers depends on the course of the crack. The drill holes are placed on alternating sides of the crack at a distance of approx. 10 to 20 cm from each other at an angle of 45° to the surface of the structural member. The diameter of the drill holes depends on the chosen injection packers. All customary resin injection devices are suitable.

Prior to injection, the crack is sealed with KÖSTER KB-Fix 5. The injection is carried out using a customary injection device such as the KÖSTER 1C Injection Pump, from bottom to top along the course of the crack. When using a single component injection pump, no moisture may come into contact with the injection material during the application. In cases of moist cracks and joints, material is injected until bubble-free material leaks from the crack or adjacent packers. Subsequent injections with KÖSTER IN 5 can only be carried out within the pot life of the material. After the removal of the injection packers, the drill holes can be closed with KÖSTER KB-Fix 5.

Hose injection

The injection hoses are installed in the middle of the wall in lengths of approximately 10 to 15 m. The minimum concrete cover must be 8 to 10 cm. The injection hoses must be in continuous contact with the concrete substrate. The sealing caps of the holder boxes must be flush with the surface of the formwork and remain accessible. No injection should take place within the first 28 days of the concrete being cast.

The injection is carried out using customary low pressure injection systems in conjunction with suitable injection ports, (packers). When using a single component pump, no moisture may come into contact with the injection material during the application.

The injection hose is filled until material comes out of the other hose end. That end of the hose is then sealed and material is injected until the gauge pressure on the injection pump remains constant. Subsequent injections with KÖSTER IN 5 can only be carried out within the pot life of 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,

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packers, drill holes, etc. Do not stand directly behind the packers during injection.

Consumption

Approx. 1.1 kg / l void

Cleaning

Clean tools immediately after use with KÖSTER PUR Cleaner.

Packaging

IN 250 010

10 kg combipackage

Storage

Store the material at temperatures between + 10 °C and + 30 °C; in originally sealed containers it can be stored for 12 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 5 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
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 Hand Pump without manometer	Prod. code IN 953 001
KÖSTER Hand Pump with manometer	Prod. code IN 953 002

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