




KOSTER 2 IN 1

Technical Data Sheet IN 201

Issued: 04-15-25

Water reactive, elastic polyurethane injection resin for single and two stage injections of dry and water-bearing cracks and joints

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|  0761 | IN 201 EN 1504:2004 Concrete Injection for the elastic filling of cracks, voids, and defects U(D1)(W5)(1/2/3/4)(8/30) |
| Adhesion capacity | ≥ 0.3 MPa |
| Elongation capacity | > 10 % |
| Water tightness | D1 |
| Glass transition temperature | NPD |
| Injectability into dry medium | Injectability class: 0.3 filling degree > 90% |
| Injectability into non-dry medium | Injectability class: 0.3 filling degree > 90% |
| Durability | No failure during compressive tests; loss of deformation capability 20 % |
| Corrosion behaviour | deemed to have no corrosive effect |
| Dangerous substances | NPD |

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| Pot Life | 45 min. |
| Reaction time without water contact at 68 °F | approx. 24 hrs. |
| Mixing ratio (by weight) | 1 : 1 (A : B) |
| Mixing ratio (by volume) | 1.2 : 1 (A : B) |

Fields of Application

For elastic sealing of cracks in concrete and masonry e.g., in concrete elements or engineering structures such as bridges or tunnels, underground garages, etc. The material stops active leaks and seals cracks and construction joints permanently and elastically. It can be injected in dry and wet cracks. The material can also be used for filling of voids. The injection is carried out in a two-step process with just one material.

- Stopping fast large water leakages with a foaming action
- Permanently sealing cracks with an elastic solid body resin
- Waterproofing and sealing horizontal and vertical cracks
- Sealing wall-floor joints

Application

The A and the B component are recommended to be mixed at 59 °F (15 °C) in the given mixing ratio using a slowly rotating electrical mixer preferably equipped with a KOSTER 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 41 °F (5 °C). Ideally the material should be tempered to 59 °F (15 °C) before mixing and injection. Temperatures above 77 °F (25 °C) will increase the reaction rate and reduce the pot life. The mixture may be applied using conventional single component injection pumps such as the electrical KOSTER 1C Injection Pump. Prior to the injection, the cracks may be sealed using KOSTER KB-Fix 5 or other suitable repair mortar. Holes are drilled on alternating sides along the course of the crack at an interval of approx. 4-6 in. (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 size of injection packers chosen. The injection is carried out in two stages:

Injection of KOSTER 2 IN 1 until the resin is discharged as foam from the adjoining drill hole or respectively the surface of the crack.

Follow-up injection with KOSTER 2 IN 1 within 10 to 15 minutes of the initial injection. The follow-up injection must be carried out within the pot life of the initially injected material. (When filling large, wet voids; inject in two stages. Waiting time between the first and second injection

Features

When KOSTER 2 IN 1 resin comes into contact with water, it reacts to form a highly elastic foam. When injected under dry conditions, it reacts to form a solid body elastic resin. KOSTER 2 IN 1 remains permanently elastic after reacting, enabling it to follow crack movement and seal cracks permanently, eliminating follow-up injections. KOSTER 2 IN 1 is a fast reacting foam for the short term sealing of leaks, as well as an elastic solid resin for the permanent sealing of cracks. It is solvent-free and resistant to hydrolysis. KOSTER 2 IN 1 will not corrode steel or iron.

Technical Data

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| Mixing viscosity at 77 °F (ISO 2555) | approx. 150 mPa.s |
| Volume increase at water contact: | max. 1:20 |
| Density of the mixture at 68 °F (DIN 53479) | approx. 9.18 lb/gal |
| Solid Content (mixed) | approx. 91% |
| Viscosity A Component | 95 cps |
| Viscosity B Component | 106 cps |
| Flashpoint | >215 °F |
| Spec. gravity of the cured foam | approx 0.05-0.1 g/cm ³ |
| Ideal application temperature | 59 °F |
| Application temperature | 41 °F to 86 °F |
| Starting time at water contact: | approx. 30 sec. |
| Expansion time: | approx. 240 sec. |
| Non-sticky after | approx. 8 min. |

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 installer is responsible for the correct application taking into consideration the specific conditions of the construction site and 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 deviate from the specifications contained in any Company literature may not be relied upon in the absence of written confirmation from the Company. The installer must comply with all testing, technical requirement, guidelines, and industry customs at all times. The terms, conditions, and limitations contained in the written warranty for the product controls over the specifications contained herein. This guideline has been technically revised; all previous versions are invalid.

is at least 1 hour).

Coverage

Approx. 0.1 gal / gal void (foam)
Approx. 1 gal / gal void (solid resin)

Cleaning

Clean tools immediately after use with KOSTER KB-Pur Cleaner.

Packaging

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| IN 201 005 | 1.19 gal kit |
| IN 201 020 | 4.8 gal kit |

Storage

Store the material between 50°F and 90°F. Material can be stored in original sealed packages 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. Consult Safety Data Sheet prior to use.

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 areas", 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 the Injection 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.

Limited Warranty

KOSTER warrants that its product shall be in accordance with the specifications published in the current revision of the product data sheet. KOSTER covenants that in the event any of its products fail to meet their published specifications, KOSTER shall replace those products proved to be defective. KOSTER shall not be responsible for any incidental or consequential damages due to the breach of its warranties. Notwithstanding the foregoing, KOSTER's sole liability hereunder shall not exceed the cost of the defective product originally purchased. EXCEPT AS SET FORTH ABOVE, KOSTER MAKES NO OTHER WARRANTIES EXPRESS OR IMPLIED AND MAKES NO WARRANTY AS TO THE MERCHANTABILITY OR FITNESS OF THE PRODUCT FOR A PARTICULAR PURPOSE. THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THE DESCRIPTION ON THE FACE HEREOF. The user must determine if the product is suited for the intended use and the user must bear the risks and liabilities associated with it.

Other

- Due to water displacements, reinjections may be necessary to address localized areas
- KOSTER 2 IN 1 is not suitable for wide moving joints with considerably high dynamic movements

Related products

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| KOSTER KB-FIX 5 | Art.-Nr. C 515 |
| KOSTER KB-Pur Cleaner | Art.-Nr. IN 900 |
| KOSTER Impact Packer 12 | Art.-Nr. IN 903 001 |
| KOSTER Lamella Impact Packer | Art.-Nr. IN 909 001 |
| KOSTER Superpacker 10 mm x 85 mm CH | Art.-Nr. IN 912 001 |
| KOSTER 1C Injection Pump | Art.-Nr. IN 929 001 |
| KOSTER Hand Pump | Art.-Nr. IN 953 002 |
| KOSTER Resin Mixer | Art.-Nr. IN 988 |

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