



KÖSTER PUR Gel

Technical Data Sheet IN 285

Issued: 2022-09-30

- Application-technical test certificate of the MPA Leipzig

Water activated polyurethane gel for area injections as well as for waterproofing expansion and dilation joints

Features

KÖSTER PUR Gel is a solvent-free, water activated polyurethane gel. Depending on the amount of water added, a highly elastic, waterproof gel or respectively hydro-gel foam is formed. After it has reacted in dilutions up to 1:10 (vol.), it is resistant to pressurized water. It does not contain free isocyanides and is chemically stable after reacting. It does not contribute to corrosion. KÖSTER PUR Gel reacts with water and can bind up to ten times its own weight in water. Oakum soaked in KÖSTER PUR Gel can be an elegant method for solving difficult active water ingress problems in pipes, joints, and cavities. It is often used where large amounts of free water must be bound.

Technical Data

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| Solubility | mixable with water |
| Material viscosity | 600 - 800 mPa·s |
| Application viscosity | 2 - 300 mPa·s |
| Application temperature | > 0 °C |
| Reaction time | 1.5 to 3 minutes |

Fields of Application

KÖSTER PUR Gel is intended for waterproofing below ground structural elements through area injection in highly porous, jointed and cracked building materials, and for waterproofing dilation and expansion joints as well as for the sealing of cavities, waterproofing pipe couplings, pipe and cable penetrations, joints in masonry, concrete and soils. The material is specifically used as waterproofing in permanently moist environments. In other cases protect from drying out.

Application

The application of the material is generally carried out with a two-component pump such as the KÖSTER Gel Pump.

Curtain injection*

The component to be waterproofed is drilled through in a grid of max. 30 cm, horizontally and vertically, offset in the middle every second row, with a drill hole diameter corresponding to the packers used. KÖSTER Gel Packers (Basis) are recommended.

Area Injection

Holes are drilled into the construction member to be sealed to a depth of 2/3 of its thickness in a grid of max. 30 cm horizontally and vertically, every second row is offset. The diameter of the drill holes depends on the packers chosen. As packers, KÖSTER Gel Packers (Basis) are recommended.

Expansion joints

Existing joints are cleaned out and are closed using suitable means prior to the injection. Along the course of the crack, holes are drilled on alternating sides of the crack at an angle of 45° to the surface at a max. distance of 50 cm from each other on each side. As packers, KÖSTER Gel Packers (Basis) are recommended.

Consumption

Depends on the field of application.

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| curtain injection with a mixing ratio of 1:10 (vol.) | approx. 3 kg / m ² |
| Area injection with a mixing ratio of 1:10 (vol.) | approx. 3 kg / m ² |
| Expansion joints with a mixing ratio of 1:4 (vol.) | approx. 0,2 kg / liter void |

The mixing ratio in volume is adjusted according to the amount of water present. The more water present, the less water is given to the mixing ratio. Changing mixing ratios during the course of injection must be taken into account. The specified values refer exclusively to the KÖSTER PUR Gel.

Cleaning

Clean tools immediately after use with KÖSTER PUR Cleaner.

Packaging

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| IN 285 002 | 2.5 kg jerrycan |
| IN 285 025 | 25 kg jerrycan |
| IN 285 210 | 210 kg drum |

Storage

In originally sealed packages, the material can be stored for a minimum of 12 months.

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. Adhere to all governmental, state, and local safety regulations when processing the material.

Related products

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| KÖSTER PUR Gel | Prod. code IN 285 |
| KÖSTER Injection Gel G4 | Prod. code IN 290 |
| KÖSTER Injection Gel S4 | Prod. code IN 294 |
| KÖSTER PUR Cleaner | Prod. code IN 900 010 |
| KÖSTER PUR Gel Pump | Prod. code IN 928 001 |
| KÖSTER Gel Hose for KÖSTER PUR Gel Pump | Prod. code IN 928 003 |
| KÖSTER Manometer for KÖSTER PUR Gel Pump | Prod. code IN 928 004 |
| KÖSTER Mix head for KÖSTER PUR Gel Pump | Prod. code IN 928 005 |
| KÖSTER Injection Whip for Gel Pumps | Prod. code IN 928 006 |
| KÖSTER Slide Coupling for pan-head fitting | Prod. code IN 928 007 |
| KÖSTER Swivel Joint | Prod. code IN 928 008 |
| KÖSTER Material Hose | Prod. code IN 930 002 |
| KÖSTER Gel Packer (Base) | Prod. code IN 931 001 |
| KÖSTER Gel Packer (End piece) | Prod. code IN 932 001 |

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.

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| KÖSTER Gel Packer extension pipe 800 mm | Prod. code IN 933 001 |
| KÖSTER Drive-in Aid for Gel Packers | Prod. code IN 935 001 |
| KÖSTER Cutting Device for Gel Packers | Prod. code IN 936 001 |

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