

KÖSTER PUR Gel

Technical guideline / Article number **6.12**

Issued: Jan. 16, 2012

- Application-technical test certificate of the MPA Leipzig
- Tested and certified by the Water Quality Association according to ISO / IEC Guide 67:2004



Water activated polyurethane gel for curtain and 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, it is resistant to pressurized water. It does not contain free isocyanides and is chemically stable after reacting. It does not contribute to corrosion. It has been tested according to WQA recommendations.

Technical data

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

Field of application

KÖSTER PUR Gel is intended for the retroactive external waterproofing of areas in ground contact using curtain injection, for 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.

Application

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

Curtain injection

Holes are drilled through the construction member to be waterproofed 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 Injection Lances,

KÖSTER Distributor Lances or KÖSTER Impact Packers 18 plus 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 Injection Lances or KÖSTER Impact Packers 18 plus 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 Injection Lances or KÖSTER Impact Packers 18 Plus are recommended.

Consumption

Area injections (at 1 : 13)	min. 2 kg PUR Gel / m ²
Curtain injections (at 1 : 10)	min. 3 kg PUR Gel / m ²
Expansion joints (at 1 : 4)	approx. 0.2 kg / l void

The mixing ratio is adjusted according to the amount of water in the material. The more water present, the less water is given to the mixing ratio. Changing mixing ratios are to be allowed for.

Cleaning of tools

Clean tools immediately after use with KÖSTER PUR Cleaner.

Packaging

210 kg barrel, 25 kg and 2.5 kg canisters.

Storage

In originally sealed packages, the material can be stored for 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.

Technical guidelines cited

KÖSTER PUR Cleaner	Art. No.	9.10
KÖSTER Impact Packer 18 plus	Art. No.	12.05011
KÖSTER Injection Lance	Art. No.	12.067 ff.
KÖSTER Distributor Lance	Art. No.	12.068 ff.

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.