

Technical Data Sheet

PT PUR-Injection-Resin 200

**- PUR injection resin -
(two components, elastic, low viscosity)**

Product description

PT PUR-Injection-Resin 200 is a two component (component A+B), phthalate-free, very low viscous and elastic polyurethane injection resin. Due to the very low viscosity it leads to a very deep penetration into hairline cracks and fine structures. The resin has a limited volume expansion in contact with water / humidity. PT PUR-Injection Resin 200 is not used against flowing water.

Application areas

PT PUR-Injection-Resin 200 is used for elastic sealing injection of hairline cracks, concrete joint, fractures and cavities in buildings and civil engineering. Typical application areas are for example tunneling, mining and civil engineering. In addition it is used for injection of injection hoses. If an injection of PT SPUR-Injection-Foam 100 (stopping of flowing water) is done first, the subsequent injection for elastic sealing of cracks has to be done with PT PUR-Injection-Resin 200. It is used as an one component system. Also usable for injection of walls and cavity injection in masonry.

Product advantages

- **Used as an one component system**
 - **Two components (A + B)**
 - **Elastic**
 - **Very low viscosity**
 - **Phthalate-free**
 - **Form stable**
 - **Very good adhesion to the surface**
 - **Excellent penetration properties**
 - **Mixing ratio 1:1 by weight**
 - **For injection works according DIN EN 1504 and DIN V 18028**
 - **Usable for injection of injection hoses**
 - **Alkaline stable**
 - **Does not attack reinforcement steel**
 - **Application with 1C equipment/machinery**
 - **„Made in Germany“**
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Specification

Base : Polyurethane
Color :
Component A : transparent

Component B	: dark brown
Mixing ratio	: 1 : 1 by weight parts
Working temperature	: from + 5°C up to + 35°C
Density	: approx. 1.03 g/ml (DIN 53 479)
Viscosity (Brookfield)	: approx. 70 mPas (+25°C) (EN ISO 3219)
Elongation	: approx 45% (DIN EN 53 455)
Shore-A-Hardness	: approx. 35 (ISO 868)
Glas transition temperature	: approx. -18°C (EN 12 614)
Pot life	: approx. 60 minutes (1 liter at +23°C) (EN 1504-5)
Consumption	: depend of cavity occurrence

All technical datas are measured in our laboraty.

Please take notice about the safety information and advice given on the safety data sheets and packaging labels. GISCODE: PU40

	proof-tec GmbH Wiesedermeerer Hauptstr. 24 D-26446 Friedeburg 17 EN 1504-5:2004 Unique identification code of the product-type proof-tec – 0120 EN 1504-5:ZA.1b Concrete injection for elastic filling of cracks U(D1) W (1)(1/2/3)(8/30)																	
	<table> <tr> <td>Adhesion</td> <td>≥ 0,2 MPa</td> </tr> <tr> <td>Elongation</td> <td>> 10%</td> </tr> <tr> <td>Water tightness</td> <td>D1</td> </tr> <tr> <td>Glass transition temperature</td> <td>NPD</td> </tr> <tr> <td>Injectability into dry medium</td> <td>0.3</td> </tr> <tr> <td>Injectability into non dry medium</td> <td>0.3</td> </tr> <tr> <td>Durability (Compatibility with concrete)</td> <td>No failure by compressive testing, Lost deformation work <20%</td> </tr> <tr> <td>Corrosion behavior</td> <td>It is assumed that no corrosive effects are present</td> </tr> <tr> <td>Release of dangerous substances</td> <td>NPD</td> </tr> </table>	Adhesion	≥ 0,2 MPa	Elongation	> 10%	Water tightness	D1	Glass transition temperature	NPD	Injectability into dry medium	0.3	Injectability into non dry medium	0.3	Durability (Compatibility with concrete)	No failure by compressive testing, Lost deformation work <20%	Corrosion behavior	It is assumed that no corrosive effects are present	Release of dangerous substances
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Delivery form

1 kg metal canister (A-comp. 0,5 kg metal canister + B-comp. 0,5 kg metal canister)	Article-No. 01200001
5 kg metal canister (A-comp. 2,5 kg metal canister + B-comp. 2,5 kg metal canister)	Article-No. 01200005
10 kg metal canister (A-comp. 5 kg metal canister + B-comp. 5 kg metal canister)	Article-No. 01200010
400 kg metal drum (A-comp. 200 kg metal drum + B-comp. 200 kg metal drum)	Article-No. 01200400

Storage

12 months (frost-free and dry, +5°C up to +25°C in original packaging).

Application

Surface preparation

Before starting injection procedure, an analysis of the to be waterproofed subject is required. On hand of analysis results (water situation, crack properties, crack width, cavity occurrence, water temperature etc.) choose the right injection material. For crack and concrete joint PT Injection Packers must be installed in a 45° direction to the crack or concrete joint. The diameter of boreholes depends on the diameter of the used injection packers (For example: 13 mm packer diameter = 14 mm borehole diameter). The packers must be set tightened by using the right tools, so they do not release even at high injection pressures.

Material

PT PUR-Injection-Resin 200 will be injected through 1K-injection devices (please send inquiry). The material (components A + B) should be mixed in the predetermined mixing ratio and is filled in injection device (material hopper) afterwards. The injection proceeds with an initial pressure of 15 bar for concrete and 3 bar in masonry. Depending on site situation, the injection pressure can rise.

The ready mixed material should be injected within the specified processing time / pot life. PT PUR-Injection-Resin 200 has to be injected as long as the crack or concrete joint is filled with resin. Change to the next installed packer after the injection material came out of the next packer, of the crack surface or out of the joint. Changes in temperatures can change the reaction characteristics of the material. We recommend a subsequent injection within the processing time / pot life through the same injection packer.

After complete curing (reaction) of PT PUR-Injection-Resin 200 the boreholes are sealed with PT Waterstop Mortar or PT Swelling Mortar. Depend on cavity occurrence the mentioned material consumption can change. Changes in temperatures changing the reaction properties of material.

Tools and equipment should be cleaned immediately after use with PT Cleaner PUR. Cured material can only be removed mechanically.

Recommended tools

1-K injection device, gloves, safety glasses
PT Injection Packer
PT One-Day-Packers
PT Waterstop-Mortar
PT Swelling Mortar
PT Cleaner PUR

Application areas:**Remarks**

The information given in this technical data sheet corresponds to the current state of development and is based on our experience, our knowledge and is non-binding. An investigation has to be done with focus on the respective building project and the area of application. The technical expert advice of proof-tec employees does not exclude the planning or control by an engineer. We are liable within the scope of our general delivery and sales conditions, we are not liable for the application of our materials. The generally accepted rules of technology must be observed. If necessary, preliminary tests have to be carried out.

Version 08/2021

All previous versions of this technical data sheet are not valid anymore and should not be used anymore.