

PT PUR-Combi-Injection-Resin DUO 600

**- PUR injection resin -
(solid elastic resin, in contact with water foaming)**

Product description

PT PUR-Combi-Injection-Resin-DUO 600 200 is a two component (component A+B), hydrophobic, phthalate-free, low viscous and elastic DUO injection resin. It consist on a 2-phase-reaction property. In contact with water it reacts to a closed cell elastic foam within seconds. If there is no water PT PUR-Combi-Injection-Resin-DUO 600 it reacts to a solid resin body. This new developed injection resin combines two injection resin systems in one product (foam and solid resin).

Application areas

PT PUR- Combi-Injection-Resin-DUO 600 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. It is used as a one component system. Also usable for injection of walls and cavity injection in masonry. Especially used in injection of floor-wall joints.

Product advantages


- **Used as an one component system**
 - **Two components (A + B)**
 - **Hydrophobic**
 - **Elastic**
 - **In contact with water, foaming in seconds**
 - **Closed cell foam**
 - **Water stopper**
 - **Very low viscosity**
 - **Phthalate-free**
 - **Reactiv foam and solid resin in one product (DUO)**
 - **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	: brown
Mixing ratio	: 1 : 1 by weight parts
Processing temperature	: from + 5°C up to + 35°C
Density	: approx. 1.06 g/ml (DIN 53 479)
Viscosity (Brookfield)	: approx. 170 mPas (+25°C) (EN ISO 3219)
Elongation	: approx 17 % (DIN EN 53 455)
Shore-A-Hardness	: approx. 30 (ISO 868)
Glas transition temperature	: approx. -23°C (EN 12 614)
Reaction time in contact with water	: approx. 50 seconds
Curing time in contact with water	: approx. 2 minutes (foam)
Pot life	: approx. 40 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

	<p>proof-tec GmbH Wiesedermeerer Hauptstr. 24 D-26446 Friedeburg</p> <p>17 EN 1504-5:2004 Unique identification code of the product-type proof-tec-0160 EN 1504-5:ZA.1b Concrete injection for elastic filling of cracks U(D1) W (1)(1/2/3)(5/30)</p>
<p>Adhesion</p> <p>Elongation</p> <p>Water tightness</p> <p>Glass transition temperature</p> <p>Injectability into dry medium</p> <p>Injectability into non dry medium</p> <p>Durability (Compatibility with concrete)</p> <p>Corrosion behavior</p> <p>Release of dangerous substances</p>	<p>≥0,2 N/mm²</p> <p>< 10%</p> <p>D1</p> <p>-23°C</p> <p>0.1</p> <p>0.1</p> <p>No failure by compressive testing, Lost deformation work <20%</p> <p>It is assumed that no corrosive effects are present</p> <p>NPD</p>

Delivery form

1 kg metal canister (A-comp. 05 kg metal canister + B-comp. 0,5 kg metal canister)	Article-No. 01600001
5 kg metal canister (A-comp. 2,5 kg metal canister + B-comp. 2,5 kg metal canister)	Article-No. 01600005
10 kg metal canister (A-comp. 5 kg metal canister + B-comp. 5 kg metal canister)	Article-No. 01600010
400 kg metal drum (A-comp. 200 kg metal drum + B-comp. 200 kg metal drum)	Article-No. 01600400

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-Combi-Injection-Resin-DUO 600 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-Combi-Injection-Resin-DUO 600 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-Combi-Injection-Resin-DUO 600 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 02/2017

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