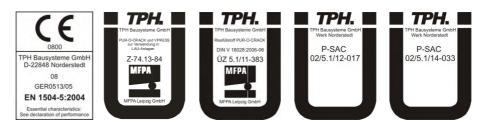


Technical Data Sheet Information as of: 07-08-2014

# PUR-O-CRACK

CE-marking in accordance with EN 1504-5
General Building Inspectorate Approval
Concrete injection product in accordance with DIN V 18028
General Building Authority Test Certificate with VPRESS
General Building Authority Test Certificate with ECOPRESS
BASt listed



### **Properties:**

*PUR-O-CRACK* is a dual component, slow reacting, elastic, polyurethane based injection resin. It hardens by the reaction of both A and B components as well as with water or moisture in the environment.

*PUR-O-CRACK* is a injection product for ductile filling of cracks, voids and interstices in concrete according to EN 1504-5.

*PUR-O-CRACK* can be used for the injection of in concrete embedded hoses like *VPRESS* and *ECOPRESS* (General Building Authority Test).

In combination with injection hose *VPRESS*, *PUR-O-CRACK* is certified for the application within facilities for storage, filling and transferring of water-hazardous substances.

## **Technical Data:**

#### Substance data of components:

Component A
Consistency liquid

Colour transparent yellowish Odour hardly noticeable

Spec. density (20°C) approx. 1.00 g/cm³ DIN EN ISO 2811-1 Dyn. viscosity (25°C) approx. 540 mPas DIN EN ISO 3219

Component B

Consistency liquid
Colour brown
Odour characteristic

Spec. density (20°C) approx. 1.23 g/cm³ DIN EN ISO 2811-1 Dyn. viscosity (25°C) approx. 40 mPas DIN EN ISO 3219

Mixture of A- and B-component:

Processing temperature 5 - 30°C substrate temperature

Mixing ratio A : B 2 : 1 (parts by weight) 2.5 : 1 (parts by volume)

Viscosity of mixture (21°C) approx. 230 mPas DIN EN ISO 3219



Reaction data (at 21°C):

String gel time (Pot-life) approx. 60 min ASTM D7487

Final curing approx. 24 h

Properties after curing:

E-modul us approx. 1.30 MPa DIN EN ISO 527-3
Tensile strength approx. 0.85 MPa DIN EN ISO 527-3
Elongation at break approx. 100 % DIN EN ISO 527-3

**Processing:** Mix components A and B of *PUR-O-CRACK* in the prescribed proportions in a

dry and clean container with the aid of a mixing device until reaching an homogeneous appearance (no streaks). Afterwards the mix is to be pumped.

Indicated injection pump: CONTRACTOR 1U

For cleaning of pump and injection devices we recommend the use of

PUR-O-CLEAN (see specific TDS).

**Safety information:** PUR-O-CRACK component B contains isocyanates and is classified as

hazardous according to Regulation (EC) 1272/2008 (CLP).

It is therefore necessary, before beginning processing, to become familiar with the precautions and safety advice as indicated in the material safety data

sheet.

Packaging: Component A 20 kg metal canister

12 kg metal canister 6 kg metal canister

Component B 10 kg metal canister

6 kg metal canister 3 kg metal canister

Combined packaging 1.2 kg combined can

Bigger packaging on request.

**Storage:** Shelf life at least 12 month in original packaging when stored in dry

conditions between 15-25°C, protected from heat, frost and direct sunlight.

After the expiration the use of the product is generally not recommended, unless an approval has been provided by TPH. This approval can only be obtained by the quality assurance department of TPH releasing the material

after verification of main properties being within specification.

Disposal: Small quantities of cured product residues can be disposed of as normal

domestic waste. Dispose of not cured product components must be effected in accordance with the corresponding local regulations. For further information

please refer to the material safety data sheets.



#### **Test certificates:**

General Building Authority Test Certificate for the injection hose system VPRESS with injection materials F8000, F9200 and PUR-O-CRACK; MFPA Leipzig 2005

General Building Authority Test Certificate for the injection hose system *ECOPRESS* with injection materials *F8000* and *PUR-O-CRACK*; MFPA Leipzig 2005

Test of the influence of different storage modalities of *PUR-O-CRACK* in the mechanical properties according to DIN EN 12637-1; MFPA Leipzig 2006

Determination of the identification properties and performances of polyurethane resin *PUR-O-CRACK* according to EN 1504-5; MFPA Leipzig 2008

Tests to obtain certification for the injection hose system *VPRESS* together with injection good *PUR-O-CRACK* within facilities for storage, filling and transferring of water-hazardous substances as well as sewage, liquid manure and silage effluent; MFPA Leipzig 2010

General Building Inspectorate Approval for "PUR-O-CRACK and VPRESS injection system to the use within facilities for storage, filling and transferring of waterhazardous substances; DIBt Berlin 2010

Test of watertightness of polyurethane resin *PUR-O-CRACK* according to DIN EN 14068 with a water pressure of 7 bar; MFPA Leipzig 2011

Injection behavior in concrete elements - test of the crack filling material *PUR-O-CRACK* according to DIN V 18028:2006-06; MFPA Leipzig 2011

Test of the effect of polyurethane resin *PUR-O-CRACK* on elastomers in concrete according to DIN EN 12637-3; MFPA Leipzig 2011

Included in the "List of Certified Polyurethanes and Injection Processes" according to the TL/TP FG-PUR for *PUR-O-CRACK*; Federal Board for Roads (BASt - Bundesanstalt für Straßenwesen) Bergisch-Gladbach 2011

*PUR-O-CRACK* - Adhesion and elongation tests within own production controls; MFPA Leipzig 2012





TPH Bausysteme GmbH Nordportbogen 8 D-22848 Norderstedt

80

GER0513/05

EN 1504-5:2004

Conrete injection product EN 1504-5: U(D2) W(1)(1/2/3) (5/30)

Adhesion and elongation capacity	> 10 %
Watertightness	D2
Glass transition temperature	- 11°C
Injectability into dry medium	Injectability class: 0.1
Injectability into non dry medium	Injectability class: 0.1
Durability (compatibilty with concrete)	No failure by compressive testing
	Lost deformation work < 20 %
Corrosion behavior	deemed to have no corrosive effect
Release of dangerous substances	NPD

Legal notice:

The correct and thus successful application of our products is not subject to our control. A guarantee can be issued for the quality of our products within the framework of our sales and supply conditions, however not for successful processing. All data and specifications in this specification sheet are based on the present state of the art and the right to changes and adaptations for the sake of development remains explicitly reserved. The consumption specifications designated by us can be only average empirical values, where deviations are possible on an individual basis and therefore cannot be excluded by us.

TPH Bausysteme GmbH Nordportbogen 8 D-22848 Norderstedt

Tel.: +49 (0)40 / 52 90 66 78-0 Fax: +49 (0)40 / 52 90 66 78-78 e-mail info@tph-bausysteme.com Web www.tph-bausysteme.com

