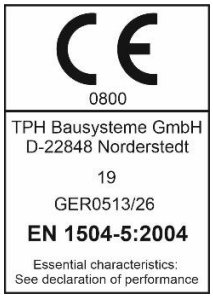
Technical Data Sheet
Issue: 10-01-2023

PUR-O-CRACK PLUS L

General Building Inspectorate Approval for curtain grouting
CE-marking in accordance with EN 1504-5



Properties:

PUR-O-CRACK PLUS L is a two-component, slow reacting, highly elastic injection resin based on polyurethane for water proofing and stabilization of water bearing structures with pressing water and non-pressing water.

PUR-O-CRACK PLUS L is used for stabilization and solidification of water bearing rocks, ground, sand, for injection of brickwork as well as a concrete injection product for ductile filling of cracks according to EN 1504-5.

PUR-O-CRACK PLUS L has a German General Building Inspectorate Approval as an injection product for curtain grouting.

Technical data:

Substance data of components:		
Component A		
Consistency	liquid	
Colour	transparent yellowish	
Odour	hardy noticeable	
Spec. density (23°C)	approx. 1.01 g/cm^3	DIN EN ISO 2811-1
Dyn. viscosity (23°C)	approx. 115 mPas	DIN EN ISO 2555
Component B		
Consistency	liquid	
Colour	brown	
Odour	characteristic	
Spec. density (23°C)	approx. 1.21 g/cm^3	DIN EN ISO 2811-1
Dyn. viscosity (23°C)	approx. 40 mPas	DIN EN ISO 2555
Mixture of A- and B-component:		
Processing temperature	5 - 30°C	substrate temperature
Mixing ratio A : B	1 : 1 (parts by volume)	
Viscosity of mixture (23°C)	approx. 61 mPas	DIN EN ISO 2555
Surface tension (23°C)	approx. 35.7 mN/m	DIN ISO 1409
Reaction data (at 23°C):		
String gel time	approx. 130 min	ASTM D7487
Pot-life	approx. 30 min	DIN EN ISO 9514
Properties after curing:		
E-modulus	approx. 0.25 MPa	DIN EN ISO 527
Tensile strength	approx. 0.60 MPa	DIN EN ISO 527

Elongation at break	approx. 220 %	DIN EN ISO 527
Shore A hardness	approx. 10	DIN ISO 7619-1

Processing:

Both components are taken directly from the original packaging by means of a 2K injection pump and mixed homogeneously in a static mixer. Injection is done over packer or injection lances.

Indicated injection pumps: *TPH INJECT PS 25-II*
TPH INJECT PS 5-II
TPH INJECT EL 5 II

Indicated mixer: static mixer 13-32
inline static mixer, plastic Ø 9.4 mm
art.no. 333902

Due to the relatively long reaction time *PUR-O-CRACK PLUS L* may be alternatively processed by means of a 1K injection pump. Therefore mix components in a dry and clean container with the aid of a slow-speed mixing device until reaching a homogeneous appearance (no streaks). Afterwards the mix is to be pumped.

Indicated injection pump: *CONTRACTOR 1U*
ME 1K ELECTRIC

Shorter reaction times can be adjusted by adding the *PUR-O-STOP FS-C* catalyst to component A (see pot-life table).

Pot-life dependent on *PUR-O-STOP FS-C* quantity *:

Quantity of FS-C [g]	**Pot-life [min : s]**
20	77 : 58
40	55 : 24
60	28 : 18
80	15 : 32
100	10 : 46
120	08 : 53
140	07 : 35
160	06 : 12
180	05 : 01
200	04 : 08
220	03 : 52
240	03 : 44
260	03 : 40
280	03 : 38
300	03 : 24

* Pot-life determined at 23°C without water contact; standard ASTM D7487
Catalyst quantities with reference to 20 kg component A

Safety information:

PUR-O-CRACK PLUS 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:

PUR-O-CRACK PLUS L	
Component A	20 kg plastic canister
	10 kg plastic canister
	5 kg plastic canister
PUR-O-CRACK PLUS	
Component B	24 kg plastic canister
	12 kg plastic canister
	6 kg plastic canister

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:

PUR-O-CRACK PLUS, PUR-O-CRACK PLUS-L, PUR-O-CRACK PLUS-F - Examination of the leaching behaviour of an injection system based on polyurethane; MFPA Leipzig 2018

Determination of the identification properties and performances of crack injection product *PUR-O-CRACK PLUS* / *PUR-O-CRACK PLUS L* according to EN 1504-5; MFPA Leipzig 2019

PUR-O-CRACK PLUS and *PUR-O-CRACK PLUS L* - Examination of the leaching behaviour of the injection products based on polyurethane resins; MFPA Leipzig 2019

General Building Inspectorate Approval "*PUR-O-CRACK PLUS* and *PUR-O-CRACK PLUS L* for curtain grouting"; DIBt Berlin 2020

VPRESS 10 mm with *PUR-O-CRACK PLUS L* Testing the suitability of an injection hose for use on rough joints; MFPA Leipzig 2021

Testing of the injection material *PUR-O-CRACK PLUS L* according to WTA-Leaflet 4-10; WTA 2022

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.

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