

DIN EN ISO 2811-1

DIN EN ISO 2555

Technical Data Sheet Issue: 18-08-2021

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

Consistency liquid
Colour transparent yellowish
Odour hardy noticeable
Spec. density (23°C) approx. 1.01 g/cm³
Dyn. viscosity (23°C) approx. 115 mPas

Component B

Consistency liquid
Colour brown
Odour characteristic
Spec. density (23°C) approx. 1.21 g

Spec. density (23°C)approx. 1.21 g/cm³DIN EN ISO 2811-1Dyn. viscosity (23°C)approx. 40 mPasDIN 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	Pot-life
[g]	[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

Two different different versions with fixed pot-lifes (*PUR-O-CRACK PLUS* incl. 40 g of FS-C or *PUR-O-CRACK PLUS F* incl. 300 g of FS-C) can be used instead of *PUR-O-CRACK PLUS L*.



PUR-O-CRACK PLUS, PUR-O-CRACK PLUS L and *PUR-O-CRACK PLUS F* injection resins can be combined with each other. The component B of these products is identical.

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 1000 kg-IBC

200 kg-Barrel 20 kg metal canister 10 kg metal canister 5 kg metal canister

1.0 kg tin

PUR-O-CRACK PLUS

Component B 1200 kg-IBC 240 kg-Barrel

24 kg metal canister 12 kg metal canister 6 kg metal canister

1.2 kg tin

Combined packaging 1500 ml double cartridge incl. mixer

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

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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