Technical Data Sheet
Issue: 01-10-2015

PUR-O-STOP FS-F

Properties:

PUR-O-STOP FS-F is a highly reactive, rigid, two-component injection resin based on polyurethane for water proofing and stabilisation of water bearing structures.

PUR-O-STOP FS-F penetrates well into structures to be sealed. Upcoming water gets mostly forced out due to the viscous and hydrophobic mixture. At borders of resin/water the mixture develops stable and solid foam.

PUR-O-STOP FS-F is used for stabilisation and solidification of water bearing rocks, ground, sand as well as for stopping in rushing water in tunnels, shafts, dams and other building structures made from concrete or brickwork.

Technical Data:

Substance data of components:		
Component A		
Consistency	liquid	
Colour	transparent yellowish	
Odour	hardy noticeable	
Spec. density (23°C)	approx. 1.03 g/cm^3	DIN EN ISO 2811-1
Dyn. viscosity (23°C)	approx. 150 mPas	DIN EN ISO 2555
Component B		
Consistency	liquid	
Colour	brown	
Odour	characteristic	
Spec. density (23°C)	approx. 1.23 g/cm^3	DIN EN ISO 2811-1
Dyn. viscosity (23°C)	approx. 100 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. 120 mPas	DIN EN ISO 2555
Reaction data (at 23°C):		
String gel time (pot-life)	approx. 45 s	ASTM D7487
Final curing	approx. 10 min	
Properties after curing:		
Bending tensile strength	approx. 29 N/mm^2	DIN EN 12390-5
Compressive strength	approx. 74 N/mm^2	DIN EN 12390-3

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* *MAN-2000* (for double cartridges) *PN-2000* (for double cartridges)
Indicated mixer:	static mixer 13-32

At contact with water the resin starts foaming and prevents the following resin to foam up. Therefore *PUR-O-STOP FS-F* can be processed in one step of work.

With strong outflow of water or in case of cold water we recommend to use *PUR-O-STOP FS-F* (F = fast reaction time) or *PUR-O-STOP FS* combined with *PUR-O-STOP FS-TX* thixotropic agent (see Technical Data Sheet).

In case of very cold water an additional acceleration of the reaction may be necessary by adding *PUR-O-STOP FS-C* (see Technical Data Sheet). The maximum addition rate of 2.5 % related to quantity of A component may not be exceeded.

With longer reaction times, as in the case of crack injection and ground stabilisation, we recommend the use of *PUR-O-STOP FS-L* (L = long reaction time).

PUR-O-STOP FS-F, *FS* und *FS-L* can be combined with each other. The component B of these products is identical.

Safety information:

PUR-O-STOP FS-F 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-STOP FS-F	
Component A	20 kg metal canister
PUR-O-STOP FS	
Component B	24 kg metal canister
Combined packaging	395 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:

Examination of the leaching behaviour with reversed flow direction of an injection resin based on polyurethane (column trial referring to DIBt Guideline "Assessments of the effects of construction products on soil and ground water"); MFPA Leipzig 2012

PUR-O-STOP FS-L and *PUR-O-STOP FS-F* Determination of resistance when stored in liquid; MFPA Leipzig 2014

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

Waterproofing Systems