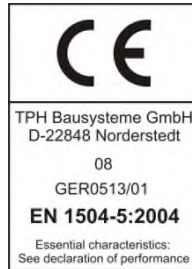


PUR-O-RIP

CE-marking in accordance with EN 1504-5



Properties:

PUR-O-RIP is a dual component, urethane based injection resin, for injection of small bearing water cracks and fissures within concrete and brickwork structures.

PUR-O-RIP hardens by the reaction of both A and B components as well as with water or moisture in the environment.

PUR-O-RIP is a particularly elastic and flexible injection product that maintains its elasticity down to temperatures of -35°C .

Technical data:

Substance data of components:

Component A

Consistency	liquid	
Colour	transparent yellowish	
Odour	hardly noticeable	
Spec. density (23°C)	approx. 0.98 g/cm ³	DIN EN ISO 2811-1
Dyn. viscosity (23°C)	approx. 440 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. 30 mPas	DIN EN ISO 2555

Mixture of A- and B-component:

Processing temperature	5 - 30°C	substrate temperature
Mixing ratio A : B	3.17 : 1 (parts by weight) 4 : 1 (parts by volume)	
Viscosity of mixture (23°C)	approx. 230 mPas	DIN EN ISO 2555

Reaction data (at 23°C):

String gel time (Pot-life)	approx. 60-70 min	ASTM D7487
Final curing	approx. 24 h	

Properties after curing:

E-modul us	approx. 0.30 MPa	DIN EN ISO 527
Tensile strength	approx. 0.17 MPa	DIN EN ISO 527
Elongation at break	approx. 80 %	DIN EN ISO 527

Bond strength at concrete		DIN EN 1542
dry	approx. 0.5 N/mm ²	
slightly moist	approx. 0.8 N/mm ²	

Processing:

Mix components A and B of *PUR-O-RIP* 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-RIP 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	19 kg metal canister 9.5 kg metal canister
Component B	6 kg metal canister 3 kg metal canister
Combined packaging	1.29 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:

Technical application tests of injection material *PUR-O-RIP* (for crack and hose injection); MFPA Leipzig 2003

Properties test for surface injections in brickwork of *PUR-O-RIP*, a polyurethane based injection material; MFPA Leipzig 2008

Determination of the chemical resistance to sewage, liquid manure and silage effluent (JGS); TPH Lab 2009



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EN 1504-5:2004

PUR-O-RIP

Concrete injection product

Adhesion capacity	Concrete (dry): approx. 0.5 N/mm ² Concrete (slightly moist): approx. 0.8 N/mm ²
Elongation capacity	> 10 %
Watertightness	D1
Glass transition temperature	< - 35°C
Injectability into dry medium	Injectability class: 0.1
Injectability into non dry medium	Injectability class: 0.1
Durability (compatibility 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.

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