

Technical Data Sheet Issue: 27-04-2016

POLINIT

General Building Inspectorate Approval for crack injection CE-marking *RUBBERTITE / POLINIT* according to EN 1504-5 CE-marking *VARIOTITE / POLINIT* according to EN 1504-5







Properties:

POLINIT is a polyacrylic-based polymer initiating component for the acrylate gels *RUBBERTITE* for crack and hose injection and *VARIOTITE* for renovation of expansion joints.

POLINIT is used instead of water for mixing the B components.

The use of *POLINIT* increases flexibility and adhesion of acrylate gels on siliceous surfaces. Furthermore it significantly reduce the tendency for shrinkage (in case of ventilation).

POLINIT in combination with *RUBBERTITE* has a German General Building Inspectorate Approval as injection product according to DAfStb Directive "Protection and repair of concrete building materials".

POLINIT in combination with acrylate gels *RUBBERTITE* or *VARIOTITE* is a concrete injection product for swelling fitted filling of cracks in accordance with EN 1504-5.

Technical Data:

Substance data:

Consistency liquid Colour white

Odour almost odourless
Spec_density (20°C) 1.01 - 1.02 g/cm³

 Spec. density (20°C)
 1.01 - 1.02 g/cm³
 DIN EN ISO 3675

 Dyn. viscosity (20°C)
 8 - 15 mPas
 DIN EN ISO 2555

Processing temperature 5 - 40°C substrate temperature

Properties after curing:

RUBBERTITE / POLINIT

Consistency rubber-elastic

Colour white

E-modulus approx. 0.45 MPa DIN EN ISO 527
Tensile strength approx. 0.07 MPa DIN EN ISO 527
Elongation at break approx. 260 % DIN EN ISO 527
Water absorption approx. 20 % DIN EN ISO 62



VARIOTITE / POLINIT

Consistency rubber-elastic

Colour white

E-modulus approx. 0.49 MPa DIN EN ISO 527
Tensile strength approx. 0.16 MPa DIN EN ISO 527
Elongation at break approx. 710 % DIN EN ISO 527
Water absorption approx. 40 % DIN EN ISO 62

Processing:

POLINIT is used instead of water for mixing the B components of acrylate gels *RUBBERTITE* or *VARIOTITE*. At least 3 minutes of mixing are required for dissolving the B salt.

The B component prepared in this way is ready for use and is then processed in a mixing ratio of 1:1 (parts by volume) to the A component by means of an 2K injection pump.

Indicated injection pumps: BOOSTER 10 A MINIBOOSTER 5U

The ready-for-use B component remains stable for approx. 5 hours (depending on temperature).

Safety information:

POLINIT is not classified as hazardous according to Regulation (EC) 1272/2008 (CLP).

Even in the case of not classified products, the standard precautionary measures applicable for chemical products should be observed.

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:

20 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:

Renovation of defective expansion joint with *VARIOTITE / POLINIT*; MFPA Leipzig 2002

Resistance test of VARIOTITE / POLINIT to freeze-thaw cycling; MFPA Leipzig 2004



Application technology test of injection product *RUBBERTITE / POLINIT* (for crack injection in reinforced concrete structures); MFPA Leipzig 2004

Resistance test of *RUBBERTITE* and *RUBBERTITE / POLINIT* to freeze-thaw cycling; MFPA Leipzig 2005

Determination of electrical conductivity of the acrylate gels *RUBBERTITE* and *RUBBERTITE/POLINIT*; MFPA Leipzig 2008

Examination of corrosion protection of an acrylate gel system for crack injection in reinforced concrete; IBAC Aachen 2008

Expert opinion on the application of acrylate gel *RUBBERTITE* with *POLINIT* as injection product for sealing of reinforced concrete structures; Prof. Dr. Raupach, IBAC Aachen 2008

Determination of electrical conductivity of the acrylate gels *VARIOTITE* and *VARIOTITE / POLINIT*; MFPA Leipzig 2010

Acrylate gel RUBBERTITE / POLINIT - Evidence of watertightness of injected cracks with cyclic movement; MFPA Leipzig 2011

Test of watertightness of *RUBBERTITE/POLINIT* according to DIN EN 14068 at a water pressure of 7 bar; MFPA Leipzig 2011

Testing of watertightness of *VARIOTITE / POLINIT* polyacrylate gel according to DIN EN 14068 at a water pressure of 7 bar; MFPA Leipzig 2011

Resistance test of injection products to concrete-corrosive fluids; MFPA Leipzig 2011

Testing of acrylate gel *RUBBERTITE* + *POLINIT* for obtaining a General Building Inspectorate Approval as injection product for filling of cracks in reinforced concrete structures; MFPA Leipzig 2013

General Building Inspectorate Approval "Concrete injection product RUBBERTITE / POLINIT acrylate gel"; DIBt Berlin 2015

RUBBERTITE / POLINIT - Examination of the leaching behaviour of an injection product based on acrylate; MFPA Leipzig 2016



 $\it RUBBERTITE$ in combination with $\it POLINIT$ is an concrete injection product for swelling fitted filling of cracks according to EN 1504-5



TPH Bausysteme GmbH Nordportbogen 8 D-22848 Norderstedt

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GER0513/06

EN 1504-5:2004

RUBBERTITE / POLINIT

Concrete injection product

Watertightness	S2
Viscosity	≤ 60 mPas
Corrosion behaviour	tested, no corrosive effect
Development and ratio of expansion	air drying: approx15 %
after immersion in water	water immersion: approx. +20 %
Sensitivity to water	passed
Sensitivity to wet-dry cycles	passed
Durability (compatibiliy with concrete)	passed
Release of dangerous substances	NPD



VARIOTITE in combination with *POLINIT* is an concrete injection product for swelling fitted filling of cracks according to EN 1504-5



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EN 1504-5:2004

VARIOTITE / POLINIT

Concrete injection product

Watertightness	S2
Viscosity	≤ 60 mPas
Corrosion behaviour	deemed to have no corrosive effect
Development and ratio of expansion	air drying: approx15 %
after immersion in water	water immersion: approx. +40 %
Sensitivity to water	passed
Sensitivity to wet-dry cycles	passed
Durability (compatibiliy with concrete)	passed
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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