

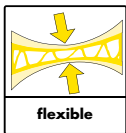
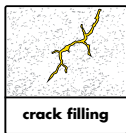
Polyinject PU+

Flexible 2-component foam forming polyurethane injection resin

For cracks which are carrying small amounts of water and cannot be stopped or plugged.

CHARACTERISTICS

- ▶ 2-component and solvent free
- ▶ Withstands high hydrostatic pressure
- ▶ Foam forming in contact with water
- ▶ Good adhesion to dry and moist substrates
- ▶ Cures to form a permanent and impermeable flexible seal



SCOPE OF USE

Polyinject PU+ is a two-component, solvent free and flexible injection resin on polyurethane base. Polyinject PU+ hardens through reaction of the A and B component and forms a foam through reaction with water. It is perfectly suited for cracks which are carrying small amounts of water and cannot be stopped or plugged. Due to its low viscosity it is recommended for sealing cracks between 0.1 and 10mm and minor cavities to form a flexible and impermeable barrier in reinforced concrete structures in both, dry and damp conditions.

APPLICATION INSTRUCTIONS

Surface preparation

The surface must be stable and free of separating substances. Insufficiently firm layers and concrete slurry must be removed. For this purpose the surface may be prepared by suitable mechanical processes such as e.g. shot blasting, milling or any other suitable mechanical means. Blow the cracks and treated surface with oil free air to ensure complete removal of all dust and loose particles. In the presence of running water the flow must be stopped using Polyinject Stop which produces a rapid setting water-stopping foam. When the water is stopped the cracks are re-injected with Polyinject PU+.

Work preparation

Polyinject PU+ is applied as injection resin using injection packers and 1- or 2-C pumps. The injection packers may be fixed into holes drilled directly into the crack or drilled diagonally from concrete adjacent to the crack or by the fixing of injection nipples.



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For further assistance and instructions regarding the packer fixing and design please refer to our method Statement.

MIXING

Pour the hardener (component B) into the resin (component A) in the indicated mixing ratio (3:1 by volume) and mixed with an electrical mixer (max. 300 rpm) until a homogenous mixture is produced. Assure that the B component is evenly dispersed. Only mix sufficient resin that can be used within the pot life of the material.

Injection

Polyinject PU+ can be injected with using 1- component or 2-component injection pumps. The injection pressure should be at least 4 bar. After the work is finished the injection system shall be allowed to cure for 24 hours and shall be left undisturbed for this time.

CLEANING

Remove the packers once Polyinject PU+ is fully cured and make good any holes or voids with Polypoxy NF. Polyinject PU+ and Polypoxy NF should be removed from tools, equipment and mixers with an appropriate solvent immediately after use. Hardened material can only be removed mechanically.

STORAGE & SHELF LIFE

Store all material between 10 and 25°C in a cool, covered dry place. Do not expose the containers to direct sunlight and keep away from all sources of heat. In tropical climatic conditions, the product has to be stored in an air-conditioned environment and protected from high humidity. The shelf life of the product is 12 months in unopened condition if stored as per the recommendations. Exposure to high temperature and humidity will result in considerable deterioration of the product and reduce its shelf life.

HEALTH & SAFETY

As with all construction chemical products caution should be always be exercised whilst usage. Protective clothing such as gloves and goggles should be worn. Treat any splashes to the skin or eyes with fresh water immediately and seek medical advice. Should any of the product be accidentally swallowed do not induce vomiting, but call for medical assistance immediately. Ensure that the container is available for medical attendant to examine any relevant instructions and contents details.

For any further information please refer to the material Safety datasheet.

TECHNICAL SPECIFICATION

Mixing ratio A : B	3 : 1 (by volume) 2.5 : 1 (by weight)	
Viscosity of mixture (@25°C)	Approx. 270 mPas	
Processing temperature	5 - 40°C (at structural element)	
Processing time	Approx. 2 hours (dependant on temperature)	
Packaging	Comp. A 20kg metal can Comp. B 8kg metal can	
	A-Component	B-Component
Consistency	Liquid	Liquid
Color	Transparent	Brown
odor	Small	Musty
Spec. gravity (20°)	Approx. 1.01 g/cm ³	Approx. 1.23 g/cm ³
Dynamic viscosity (25°C)	Approx. 300 mPas	Approx. 115 mPas

All values given are subject to 5-10% tolerance

Apart from the information given here it is also important to observe the relevant guidelines and regulations of various organisations and trade associations as well as the respective standards. The aforementioned characteristics are based on practical experience and applied testing. Warranted properties and possible uses which go beyond those warranted in this information sheet require our written confirmation. All data given was obtained at an ambient and material temperature of +23°C and 50 % relative air humidity at laboratory conditions unless specified otherwise. Please note that under other climatic conditions hardening can be accelerated or delayed.

The information contained herein, particularly recommendations for the handling and use of our products, is based on our professional experience. As materials and conditions may vary with each intended application, and thus are beyond our sphere of influence, we strongly recommend that in each case sufficient tests are conducted to check the suitability of our products for their intended use. Legal liability cannot be accepted on the basis of the contents of this data sheet or any verbal advice given, unless there is a case of wilful misconduct or gross negligence on our part. This technical data sheet supersedes all previous editions relevant to this product.