

S&P Tecnopox-FL

Crack injection resin



A Simpson Strong-Tie® Company

The information in this technical data sheet is valid for the S&P range of products, systems and solutions.
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DESCRIPTION

S&P Tecnopox-FL is based on epoxy resins, specially developed for crack injection. Injection is made easy due to its low viscosity and very good impregnation.

S&P Tecnopox-FL is suitable for monolithic bonding applications.

WHERE TO USE

- Reinforcement of structures
- Filling of cracks by gravity
- General injections
- Injections of cracked structures
- Injections of pillars, floor-slabs, base-plates and walls
- Injection of cracked road structures

PERFORMANCE FEATURES

- Good wettability
- Low viscosity
- No shrinkage
- High bonding power
- High mechanical resistance
- Easy to mix and apply
- Solvent free

GENERAL FEATURES

PRODUCT DATA

Generic description

S&P Tecnopox-FL

Appearance

Comp. A - Translucent epoxy resin solution

Comp. B - Transparent hardener for epoxy resin

Size

5 kg unit

Density

Mixed: Approx. 1.1 kg/l

Storage

Optimal storage +10°C to +25°C, 24 months



This product conforms to EN 1504-5: 2005 /
Classification U(F2) W(5) (1) (8/35) (0)

Principles and methods according to EN 1504-9: 2008

Principle 1: Protection Against Ingress (PI) - Method 1.5: Filling cracks

Principle 4: Structural strengthening (SS) - Method 4.5: Injecting in cracks, voids or interstices

Principle 4: Structural strengthening (SS) - Method 4.6: Filling cracks, voids or interstices



MECHANICAL PROPERTIES

Property	Test method	Minimum requirement according to EN 1504-5: 2005	Value
Density	EN 12190	-	1.1 kg/dm ³
Viscosity	EN ISO 3219:1995	-	~ 290 mPa*s
Ratio A:B	-	-	2:1
Pot life	-	-	60 min at 8°C 25 min at 21°C 10 min at 35°C
Tensile strength development (necessary time to achieve 3 MPa)	EN 1543:1999	≤ 72 h (4 320 min.) at the minimum use temperature	~ 3 000 min at 8°C ~ 1 850 min at 21°C ~ 1 250 min at 35°C
Final cure	-	-	7 days
Application temperature	-	-	+8 to +35 °C
Compressive strength	EN 12190	-	> 60 MPa
Tg Glass transition temperature	EN 12614:2006	> 40°C	> 45°C
Shrinkage	EN 12617-2:2006	< 3 %	2.5 %
Adhesion by tensile bond strength	EN 12618-2:2006	Cohesive failure in the substrate	Pass
Adhesion by tensile bond strength after thermal and wet-drying cycles	EN 12618-2:2006	Cohesive failure in the substrate	Pass
% of filling of the fissure 0.5 mm	EN 12618-2:2006	> 90 %	Pass

APPLICATION

S&P Tecnopox-FL should be applied by well-trained and experienced specialists.

It is delivered in the prescribed mixing ratios. The hardener (Comp. B) is poured into the resin (Comp. A). It is important that the hardener is used up completely. Mixing of both components is preferably done by means of a low speed drill equipped with a mixing paddle. Mix thoroughly and carefully, ensuring to scrape the sides and bottom of the container while mixing to ensure that the hardener is evenly distributed. After blending, the mix must be homogeneous, i.e. without streaks. The temperature of both components at the moment of mixing should ideally be 15–20°C. Higher temperatures reduce the pot life considerably.

Substrate preparation

In order to achieve the best results, regarding the works involving adhesives, the most strict cleaning works of the substrate must be observed. Surfaces of concrete must be free of oil, grease, paints or any other dirt. Substrate moisture content maximum of 4%.

Consumption

Approx. 0.2 to 0.4 kg/m². Product consumption depends on the size of the crack to be injected, temperature, roughness and porosity of the substrate, meaning the actual consumption can vary.

S&P Tecnopox-FL should preferably be applied by injection equipment or by pouring/gravity.

TESTING

Please contact us if you require any information regarding tests that have been conducted. Test reports may be available.

CLEANING

Tools cleaning

Mixture that has not yet hardened can be washed off with solvents (alcohol, acetone). Mixture that has hardened can only be removed by mechanical means.

WARNING

The shelf life of the resin must be respected.

S&P's range of products are for industrial use. They must be installed by specialised personnel and competent professionals with adequate training. The installation instructions must be followed and can be found in S&P application manuals and several "Guideline" documents / existing technical notes.

HEALTH & SAFETY

Important safety instructions

For detailed safety information, we recommend that you see the current safety data sheet which is available on www.sp-reinforcement.eu or you can contact us on +41 41 825 00 70.

The information contained in this Technical Data Sheet ("TDS"), and, in particular, the recommendations relating to the application and end-use of our range of products, systems, and solutions, are given in good faith to ensure the normal intended use or the normal suitability for use and correspond to the best of our knowledge and experience when our range of products, systems, and solutions are properly stored, handled, and applied under normal conditions. Please note that the information in your country may vary.

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All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product, concerned copies of which will be supplied on request or are available on our website www.sp-reinforcement.eu.

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