

The information in this technical data sheet is valid for the S&P range of products, systems and solutions.  
Please note that the information in your country may vary. Visit [sp-reinforcement.eu](http://sp-reinforcement.eu) to find your local branch.

### DESCRIPTION

S&P Tecnogrout-IN is a non-shrink injection mortar, formulated on the basis of mineral products, with high fluidity and excellent mechanical characteristics. It can be poured on site or installed under pressure with a pump, making it highly suitable for fillings that are difficult to access and fast repairs.

### WHERE TO USE

- Reinforcement of concrete structures (pillars, beams, etc.)
- Anchoring of bolts
- Ground consolidation
- Underpinning of foundations
- Binding of rocks
- Injection of difficult access honeycombs and hollows in bridges, dams and tanks
- Injection of cracks and pre-stressing sleeves
- Fillings of small thickness

### PERFORMANCE FEATURES

- Non-shrinkage (slight expansion)
- Applicable underwater
- Excellent adhesion to concrete (monolithic bond)
- Excellent mechanical strength
- Resistant to de-icing salts
- Unaffected by weathering agents
- Ideal for low thicknesses
- High fluidity
- Water resistant
- Non-bleeding
- Quick in-service time
- Good resistance against sulphates and sea waters
- Chloride-free

### PRODUCT DATA

#### Generic description

S&P Tecnogrout-IN

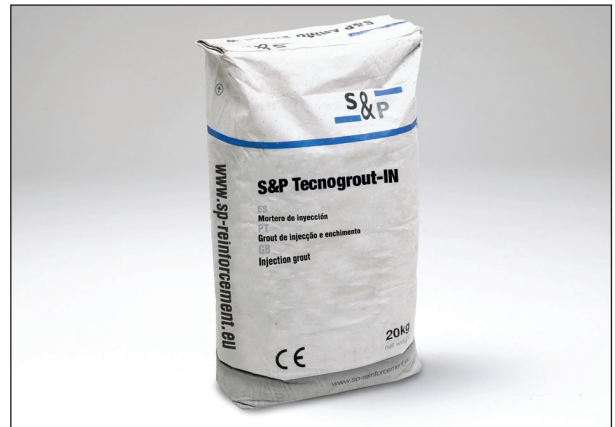
#### Size

20 kg bags

50 x 20 kg bags per pallet

#### Storage

12 months in original unopened sealed bags in a dry and cool place



S&P Tecnogrout-IN conforms to EN 1504-5

### MECHANICAL PROPERTIES

S&P Tecnogrout-IN	Test method	Value
Adhesion by tensile bond strength	EN 12168-2	Dry conditions: 2.6 N/mm <sup>2</sup> & Humid conditions: 2.8 N/mm <sup>2</sup>
Compressive strength	EN 12190	≥ 60 N/mm <sup>2</sup>
Bleeding	EN 445/3.3	0%
Volume change	EN 445/3.4	0%
Injection in humid conditions (crack width = 0.5 mm)	EN 12168-2	100% filling of the crack
Injection in dry conditions (crack width = 0.5 mm)	EN 12168-2	100% filling of the crack
Flow time	EN 14117	Average value: 472 seconds
Working time	EN ISO 9514	5 °C: 45 min, 21 °C: 30 min & 35 °C: 15 min
Hardening time	EN 196-3	Initial (21 °C): 165 min & final (21 °C): 195 min.
Tensile strength (thermal cycling)	EN 12618-2	Pass (decreased tensile strength < 30 % from initial values)
Compatibility with concrete	EN 12168-2	Pass (decreased tensile strength < 30% from initial values)
E-modulus (compression)	EN 83316-96	> 15 Gpa
Capillary absorption	EN 1015-18	< 0,5 kg/m <sup>2</sup> h. <sup>0.5</sup>
Adhesion to corrugated rebar	N/A	> 11 N/mm <sup>2</sup>

*\*Tests carried out at +20°C and 65 % RH*

### APPLICATION

#### Substrate preparation:

Mechanically abrade concrete surface to completely remove debris and loose particles. Wet the surface until complete saturation is achieved and allow standing water to either evaporate or be absorbed into the substrate. Alternatively, remove standing water using a sponge.

#### Mixing:

Mix the grout either by hand or in a concrete mixer, adding 26-28 % of water (5.2-5.6 litres per 20 kg bag). Mix for 4-5 minutes until completely lump-free, ensuring that a homogenous mix is achieved.

#### Application:

The formwork must be sealed to prevent material from leaking.

Either pour from one end until completion of the the filling with the assistance of gravity or use a suitable pressure-pump.

#### Curing:

Once the grout is installed surfaces must be kept damp for at least 24 hours, in order to prevent superficial dehydration of the cement. If located in direct sunlight, the installation must be covered/protected to prevent the grout from curing too quickly.

### TESTING

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

### CLEANING

#### Tools cleaning

Tools and application equipment must be washed immediately after use. If the product hardens, it can only be removed by mechanical means.

### CE-MARKING

S&P Tecnogrout-IN meets the requirements of EN 1504: "Products and systems for the protection and repair of concrete structures - Definitions, requirements, quality control and evaluation of conformity - Part 5: Concrete injection.

### 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](http://www.sp-reinforcement.eu) or you can contact us on +41 41 825 00 70.

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.

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The information and data in this technical data sheet serve to ensure the normal intended use and normal application suitability; the information and data are based on our knowledge and experience. They do not absolve the user from their own responsibility to check the suitability and application method.

The rights to make changes to product specifications are reserved. Furthermore, our general sales and delivery terms apply. The current, most recent product data sheet is valid, and should be requested from us.

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