

## Chelfix EP 3000 Injection

Low Viscosity Epoxy Injection Resin



**Product Description** It is an injection product with two component, epoxy based and solvent-free

**Areas of Usage**

- Reinforced concrete construction, prefabricated construction elements, stone and solid brick structures.
- It is used in all kinds of engineering constructions such as highways, bridges, tunnels, metro, and in reinforcing the structure by filling static cracks.

**Features and Benefits**

- Excellent adherence to concrete and steel surfaces
- It can be applied very easily with simple kits that are mounted to the front of the hand drill.
- Non-shrink
- It can be applied in dry and low humidity environment.
- After the product completes curing, it has higher compressive pull-off strength than concrete.

**Application Instructions**

There should be no loose particles in the cracks by keeping compressed air in the cracks to be applied. Static cracks to be applied should be dry. The surface should be become to be applied epoxy injection resin with heaters etc. In the summer months, the product will react very quickly, so it

1) Adhesive Bonding Method: Through the cracks, the nipples with the hole are adhered to the concrete surface by using Chelfix EP 4000 for once at 20 cm in the middle of the cracks. After Chelfix EP 4000 is hardened, it is pulled with a spatula or trowel between epoxy nipple during injection with the same product.

to prevent leakage between the cracks

2) Drilling Method: Through the cracks and in the middle of the cracks, holes are made at intervals of 20 cm. There should be no loose particles, dirt and dust in the holes. By keeping the compressed air, the dust and loose particles in the holes are removed. After then, the expansion bolts are placed to the holes. Chelfix EP 4000 is applied to the around of the expansion bolts and between the holes with spatula and trowel to prevent epoxy from coming out of the cracks. Chelfix EP 3000 Injection is two-component and should be stored at room temperature for approximately 24 hours before application. Components A and B should be mixed with a low-speed mixer (under 400rpm) and should be mixed with mixer until homogenous consistency is obtained. It is recommended to continue mixing for a short time by transferring the mixture to a clean plate to avoid making compound mistakes. The prepared mixture is ready to be applied bubbles to be removed. after a short period of waiting for air No special curing method is required. It is cured by reaction with mixing component A and component B proportionally.

is recommended that the application should be done in mornings or nights.

The epoxy injection applications can be done in two different ways.

Depending on the drilling and adhesive bonding methods, cracks injection is made on the surface that the surface preparation is completed. The application can be made with one-component and high compressed injection pump. Manual or motorized pump can be used. The prepared mixture is transferred to the injection pump and injected into the cracks with the help of injection expansion bolt. Injection should be made from bottom to top and injection resin should not be leaked from the front area of the cracks. Injection application should be continued until loss of pressure is shown on the compression meter and the resin should certainly be penetrated even in the hair crack. The application can be made by pouring in special cases (wide cracks in the surface etc.) For more information contact our technical services.

## Application Notes / Restrictions

- The application should not be made at temperatures below 5°C. Epoxy-based products have limited pot life. Pot life and drying time will decrease at high temperature and will extend at low temperature.
- Mixing should be done to be used immediately in an especially hot environment. The mixture which has started to become gelling should not be applied.
- After the application, clean with THINNER immediately.

## Technical Data

General Information	
Appearance of Component A	Clear, liquid
Appearance of Component B	Yellow, clear, liquid
Appearance of compound of Component A and B	Straw yellow, liquid
Viscosity of Components A and B mixed	600 - 800 mPa.s (at + 23°C )
Density of Component A (+ 20°C)	1,07±0,02 kg/lt
Density of Component B (+ 20°C)	1,02 ±0,02 kg/lt
Density of Components A and B mixed (+ 20°C)	1,04±0,02 kg/lt
Mixture Proportion	10,25:4,75-A:B (by weights)
Pot life	~35 minutes (+ 20°C /1 lt)
Package	5 kg set
Application Information	
Reaction Time	1 - 3 hours
Full curing period	7 days
Bending Resistance	> 25 N/mm <sup>2</sup> (TS EN196-1)
Compressive Resistance	> 55 N/mm <sup>2</sup> (TS EN196-1)
Bond Strength	> 4 N/mm <sup>2</sup> (Break off from the concrete) (EN4624)