

D-33



Two component injectable epoxy resin



■ PROPERTIES

Two component, injectable epoxy resin, without solvents. The product is of low viscosity with zero shrinkage. Its fluidity allows for the restoration of fine cracks. It presents high strength adhesion to concrete and steel. It is highly durable against flexion, compression and acids. It does not get affected by alkalis, frost and moisture. Classified as concrete injection product, per EN 1504-5 and classified R2 per EN 12004.

■ APPLICATIONS

D-33 is used as injectable resin into concrete cracks, of 0.1-1mm width. It is recommended for crack repairs on bridges, tunnels, dams, columns, concrete beams that cracked due to overloading, earthquakes etc. It ensures the complete restoration (original strength) of load bearing elements.

It is the most appropriate product for bonding new to an existing concrete. It is the only solution for anchoring steel rebars in horizontal or vertical existing concrete surfaces.

It bonds similar and dissimilar materials with extreme adhesive strength.

■ USE

1. Surface preparation

The substrate must be free from any loose materials, dust, oils and standing water.

2. Preparation for application

Mix the two components, A and B with a narrow spatula for approximately 3-4 minutes, until complete homogenization of the mixture is achieved. During the mixing process, try to avoid the entrapment of air into the product.

3. Application

a) Resin injections:

Remove any plaster from both sides of the crack (if any), and remove all the dust from the concrete using compressed air. Seal throughout the length of the crack using DUROSTICK D-38 epoxy putty, and place nozzles over the crack, spaced evenly at 25cm apart. Fill vertical cracks using the multipurpose barrel gun, DUROSEAL 600 of DUROSTICK, from the lowest elevation point up. Make sure to cap each nozzle after injecting D-33 epoxy resin. Continue by

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injecting resin to the next nozzle and so on until finishing.

b) Rebar anchoring:

Make holes larger than the reinforcing rebars (at least 3mm) and as deep as possible. On vertical surfaces, holes should be angled upwards.

After removing all the dust, pour enough D-33, so that the resin will just overflow after the rebar installation.

■ CONSUMPTION

Crack sealing: 1.1kg/lt of void.

■ CLEANING

Clean all tools with THINNER 201 of DUROSTICK, immediately after use.

■ STORAGE

Store in tightly closed containers, in dry places and at temperatures of +10°C and above, for 12 months from production date.

■ SAFETY DIRECTIONS

The product is classified as irritant and corrosive. It is recommended to keep away from the reach of children.

Before use, refer to the cautions on the product packaging or the Safety Data Sheet.

■ NOTES

- Epoxy systems are susceptible to the temperature and the humidity of the environment until their complete hardening. Increased temperatures will result in the reduction of the pot life of the mixture. Increased humidity levels will result in matte or discolored spots on the surface and increase curing time.
- During and after mixing of the two components together, the temperature of the mixture will increase.

■ PACKAGING

Carton box with 12 pcs. of 1kg each one (A: 650gr, B: 350gr).

TECHNICAL SPECIFICATIONS

■ Chemical base	Two component epoxy resin
■ Color (A+B)	Transparent off yellow (A: Transparent B: off yellow)
■ Viscosity (A+B)	970±100 cP (Brookfield, 20 rpm, spindle No 3)
■ Density (A+B)	1.10±0.05kg/lt
■ Mixing ratio (A/B)	1.9:1 by weight
■ Pot life	60 minutes at 20°C (shorter time with increased temperatures)
■ Application temperature	From +5°C to +40°C
■ Temperature resistance	From -20°C to +100°C
■ Final strengths	After 7 days at 23°C

MECHANICAL STRENGTHS

■ Strength, per EN 196-1, to:	
• Flexion	37.0 N/mm ²
• Compression	72.0 N/mm ²
■ Tensile adhesion strength (EN 12618-2)	6.10 N/mm ²
■ Corrosive behavior	No

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