D-33



Two-component injectable epoxy resin





PROPERTIES

Two-component, injectable epoxy resin. The product has low viscosity and 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 is not 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 repairing cracks in bridges, tunnels, dams, columns, and 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 into horizontal or vertical existing concrete surfaces. It bonds similar and dissimilar materials with exceptional adhesive strength.

USE

1. Surface preparation

The substrate must be free from 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 the mixture is completely homogenized. During the mixing process, try to avoid trapping air in 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 the entire length of the crack using DUROSTICK D-38 epoxy putty, and place nozzles evenly spaced at 25cm apart over the crack. Fill vertical cracks using the multipurpose barrel gun, DUROSEAL 600 of DUROSTICK, starting from the lowest elevation point and working upward. Make sure to cap each nozzle

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after injecting D-33 epoxy resin. Continue injecting resin into the next nozzle, and repeat this process until the entire crack is filled.

b) Rebar anchoring:

Drill holes larger than the reinforcing rebars (at least 3mm) and as deep as possible. On vertical surfaces, angle the holes 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 temperature and humidity until fully hardened. Increased temperatures will reduce the pot life of the mixture, while high humidity levels can cause matte or discolored spots on the surface and increase curing time.

• During and after mixing the two components together, the temperature of the mixture increases.

PACKAGING

Carton box with12 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 No3)
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

DUROSTICK S.A.,

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