ADHESIVO CARBOTEC IMPREGNANTE

Bi-component epoxy resin, free from solvents,transparent, made out of an amine hardening

DESCRIPTION

Carbotec impregnante adhesive is a resin which, due to its impregnation and thixotropy allows the adherence of the carbotec tissue on concrete elements, reinforced concrete or brickwork.

ADVANTAGES AND USES

- Highly thixotropic, no dripping
- The adherence to the concrete exceeds the material cohesion.
- Curing without retraction.
- High resistance.
- Once the curing process is over it will be resistant to bases, dissolved acids, mineral and aliphatic oils and saline solutions.
- Resistant to temperature changes within -30ºC to 80ºC in dry exposition, and superior to +40ºC in humid exposition.

SUITABLE SUBSTRATES

- In order to ensure an optimum distribution when having roughness in excess, it should be filled and levelled with adequate materials.
- The substrate must be dry, clean and free from dust in order to apply adhesivo carbotec impregnante.
- The adherence of the ready substrate should be verified by adhesion tests in random areas. The concrete should have 1,0 N/mm2 minimum adhesion.

APPLICATION PROCEDURE

- Pour component A and B in a clean container and mix them properly for 3 minutes with a low velocity mixer until getting a homogeneous mixture.
- Mix everything carefully and make sure that the hardener is also uniformly distributed.
- The temperature of both the components should be 15ºC-20ºC when mixing; higher temperatures may reduce the open time.
- Protect the resin against humidity for 6 -8 hours after the application. Any contact with humidity will turn the surface white and will loose its adherence. If the product is used as a
- Apply the adhesivo carbotec impregnante with a roll (300g/m2)in continuous thickness and with a primer, preventive measures should be increased. The width should tower over 5 cm more than the carbotec tissue.
- Pressure the carbon fibre mesh against the adhesivo carbotec impregnante with a special roll: solid rubber roll that allows the adhesive penetration through the tissue's fibre.
- Always work from the from to the back following the carbon fibres direction. Start in one of the corners and work towards the other; or start in the middle and move towards both the sides; this will eliminate all the air that may be trapped.

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RECOMMENDATIONS

- Consult our Technical Department for any application that might not be specified in this Technical data sheet.
- In order to clean the tools, we suggest cleaning them with a solvent such as ethylic alcohol, toluene before it gets hard.
- For additional information regarding the safe handling, transport, storage and use of the product please refer to the label and the updated version of the product Safety data sheet.

PACKAGING AND STORAGE

6 kg containers.
Keep it in its original container with temperatures that may go from 5ºC to 25ºC, 24 months.

TECHNICAL DATA

(Data based on tests at 20ºC and 50% relative humidity)

PROPERTY	ADHESIVO CARBOTEC IMPREGNANTE Comp. A	ADHESIVO CARBOTEC IMPREGNANTE Comp. B
Aspect	Viscous	Yellowish liquid
Viscosity at 25ºC mPa s	Tixotrópic	100 - 500
Density at 25ºC g/cm^3	1,13 ± 0,02	1,13 ± 0,02

Properties of the mixture	Value
Aspect	Viscous tixotrópic
Time of use at 25ºC 100g/mix	45 min
Gelling time at 25ºC 100g/mix	aprox. 60 min
Hardening time at 25ºC 100g/mix	24 horas
Optimal properties at 25ºC	7 días
Performance	0,4 - 0,8* Kg/m^2
Shore D hardness	80
Curing Cycle	24h a TA + 8h a 80ºC o 30 días a TA
Traction module	2700 - 3000 MPa
Tensile strength	70 - 80 MPa
Tensile elongation at break	7 - 10%
Resistance to bending	110 - 135 MPa
Elongation at break in bending	10 - 13%
Glass transition temperature (Tg)	+55 º C

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CE MARK

CE

1504-4
ADHESIVO CARBOTEC IMPREGNANTE

Epoxy resin for gluing and bonding. Reinforcement in repair of concrete structures. Lamination of glass and carbon fibres

Lifetime variation in adhesion	3.6 Mpa (initial)
	3.6 Mpa (15 min)
	3.3 Mpa (30 min)
Adhesion to steel/tensile strength	≥ 14 N/mm^2
Adhesion to steel/Shear resistance	≥ 50 N/mm^2 (50ºC)
	≥ 60 N/mm^2 (60ºC)
	≥ 70 N/mm^2 (70ºC)
Modulus of elasticity in compression	> 2000N/mm^2
Glass transition temperature (Tg)	≥ 40 ºC
Linear shrinkage	≤ 0.1%
Coefficient of thermal expansion	≤ 100 µm/mºC

LEGAL DISCLAIMER

The instructions for use are given according to our tests and knowledge and do not imply any commitment by GRUPO PUMA nor free the consumer from the examination and verification of the products for their correct use. Claims must be accompanied by the original packaging to allow a proper traceability.

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