



EPOTEK FIX

BICOMPONENT EPOXY ADHESIVE PASTE, SOLVENT-FREE,
FOR STRUCTURAL BONDING AND REPAIRS

DESCRIPTION

EPOTEK FIX is a bicomponent solvent free epoxy resin based product formulated with special fillers and thixotropic agents to be used as adhesive and filler. **EPOTEK FIX** is solvent-free, has a high adhesion to all building materials and makes structural bonding possible. The hardening of the **EPOTEK FIX** is carried out without shrinkage even under difficult environmental conditions such as moisture or water.

FIELDS OF APPLICATION

- Bonding of prefabricated concrete elements;
- Anchoring of machinery, bolts, plates, etc...;
- Edge construction of joints;
- Structural restorations and reinforcements between different materials (steel and concrete);
- Surface cracks;
- Structures repairing in permanent contact with water;
- Filling of cracks and anchoring of injectors in the EPOTEK INJECTION system;
- Holes sealing, tie rods of strands and formwork, etc.
- Levelling and bonding in structural reinforcement cycles with carbon fibers.

CHARACTERISTICS / ADVANTAGES

- Thixotropic product, free of shrinkage;
- High adhesive power to all materials normally used in construction (concrete, natural stone, wood, masonry, etc.);
- High mechanical strength, both compression and tensile;
- Structural adhesive;
- High resistance to water, salts, hydrocarbons, aggressive acidic, alkaline and saline solutions;
- High resistance to water, salts, hydrocarbons, acids and salts.

MODE OF USE

EPOTEK FIX has a soft paste consistency and is applied with a spatula or trowel. **EPOTEK FIX** must be applied on both surfaces to be bonded to each other and they will be adhered by exerting a strong pressure with the possible use of clamps.

SUPPORT PREPARATION

The surfaces to be treated must be clean, free of efflorescence and incoherent parts.



TECHNICAL SPECIFICATIONS

Physical state:	Thixotropic paste
Specific weight:	1.6 kg/dm ³
Dry residue:	100%
Color:	grey
Ratio A: B	1:1 in weight
Working time:	approx. 30 minutes
Total hardening:	7 days at 20°C
Minimum application temperature:	10°C
Compression resistance:	70 MPa
Bending strength:	25 MPa

PREPARATION OF COMPONENTS

EPOTEK FIX is composed of:

A - basic preparation

B - Hardener

Remove components A and B and mix with a spatula or drill at low speed or suitable mixer until a homogeneous mixture is obtained. Avoid taking partial quantities from the packs in order to avoid any errors in the ratio that would cause incorrect hardening. In winter, if the product is hardened, it is advisable to heat in bain-marie the pots before they are removed, in order to have a normal consistency for use.

PERFORMING

1.6 kg/m² per mm of thickness



TEKNA CHEM S.p.A.

Stabilimento: Renate (MB) Via Sirtori snc – z.i. 20838
Tel. +39 (0)362.91.83.11 Fax: +39 (0)362.91.93.96
E-mail: info@teknachem.it Web: www.teknachem.it

The information contained in this data sheet, while representing the current state of knowledge, do not release the user from the accurate preliminary tests in their conditions of employment and exercise. We assume no responsibility for the improper use of the product.



TECHNICAL DATA SHEET

**PACKAGING AND STORAGE**

EPOTEK FIX is available in packaging:

of kg (A+B) = 1+1 = 2 kg

of kg (A+B) = 5+5 = 10 kg

of kg (A+B) = 10+10 = 20 kg

of kg (A+B) = 20+20 kg

In the original packaging and properly stored in a dry place, at a temperature of not less than +10°C, the product retains its characteristics for one year.

PRECAUTIONS / WARNINGS

Use rubber gloves and protective goggles when working and cleaning tools.

If the temperature falls below 10°C, the resin may have increased viscosity and lumps. In this case, before using it, heat the closed pack by soaking the bucket in hot water until the lumps disappear.

SPECIFICATIONS ITEM

Particular attention must be paid to the choice of the structural adhesive with regard to mechanical resistance, thixotropy, absence of shrinkage and durability. These characteristics can be found in the product **EPOTEK FIX**, a thixotropic structural adhesive that will be applied on concrete, iron, wood, etc. surfaces in order to obtain a perfect structural bonding between the various elements. The product must guarantee excellent resistance to water, oils, gasoline, aggressive, acidic and alkaline solutions, saline solutions and can be applied even in the presence of humidity. **EPOTEK FIX** must be used in accordance with the recommendations of the manufacturer Tekna Chem, who will provide technical assistance on request.

Characteristics	Test method	UNI EN 1504-4 requirements	Product performance
Application temperature			+5°C - +40°C
Mixture ratio A: B (by weight and volume)			1 : 1
Life in pot (workability)	EN ISO 9514	Declared value	a 10°C : 180 min a 20°C : 120 min a 30°C : 60 min
Density (A+B)	EN 1183-1	Declared value	1,60 ± 0,03 kg/dm ³
Performances			
Direct tensile adhesion to steel	EN 1542		≥ 18 N/mm ²
Direct tensile strength concrete adhesion	EN 1542		≥ 3 N/mm ² concrete breakage
Adhesion for cutting on inclined surface	EN 12188	≥ 12 N/mm ²	Inclination 50° > 55 MPa Inclination 60° > 60 MPa Inclination 70° > 70 MPa
Compressive strength	EN 12190	≥ 30	> 70 MPa Flexo-fraction
Resistance Shear strength	EN ISO 178		> 25 N/mm ²
Cutting resistance	EN 12615	≥ 6	> 9 N/mm ² concrete breakage
Breakage by separation (direct stress)	EN 12188	≥ 14 N/mm ²	> 15 N/mm ²
Elastic compression module	EN 13412	≥ 2000 N/mm ²	> 2080 N/mm ²
Flexibility elastic module	EN ISO 178		> 1200 N/mm ²
Glass transition temperature	EN 12614	≥ 40° C	> 50°C
Thermic Expansion Coefficient	EN 1770	≤ 100x10 ⁻⁶ for °C	< 70x10 ⁻⁶ for °C
Durability, measured as bonding after thermal and humidity cycles	EN 13733	Test passing	Test passed - concrete breakage
Determination of electrical resistance	EN 1081		≥ 50*10 ⁹ Ω
Linear shrinkage	EN 12617-1	≤ 0.1%	< 0.022%
Fire reaction	EN 13501-1	Euroclass	B s2 d0

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