



EUFIX EP

Three-component epoxy adhesive for bonding of tile elements

DESCRIPTION AND APPLICATION

Eufix EP is a thixotropic three-component, solvent-free epoxy adhesive, based on epoxy resins and special additives.

Eufix EP is suitable for bonding of concrete elements, prefabricated elements, elements from fused basalt and bonding steel elements to concrete and etc. Eufix EP can be also used as a repairing mortar for repair of edges, vertical and overhanging surfaces, repair of crack at concrete constructions.

ADVANTAGES

- For bonding of many construction materials including concrete, stone, fused basalt bricks, ceramics, steel, iron, aluminium, wood and glass
- Excellent mechanical strength
- Excellent resistance to abrasion and shocks
- Good chemical resistance
- Thixotropic, can be used on vertical or overhanging surfaces
- Easy application

TECHNICAL PARAMETERS

Part A

Based on	Epoxy resin
Appearance	Clear liquid
Density (at 20°C)	1130 kg/m ³

Part B

Based on	Epoxy hardener
Appearance	Yellow liquid
Density (at 20°C)	1050 kg/m ³

Part C

Based on	Special fillers and additives
Appearance	Grey powder
Density (at 20°C)	1800 kg/m ³

Mixture

Mixing ration A : B (by weight)	A : B : C 0.244 : 0.165 : 0.597
Appearance	Thixotropic paste
Density (at 20°C)	1650 kg/m ³
Compressive strength	70 MPa
Time of workability	
at 20 °C	Approx. 30 min.
at 10 °C	Approx. 45 min.

Initial shear adhesion	> 8 MPa
Shear strength after thermal shock	> 8 MPa
Shear strength after immersion in water	> 8 MPa
Adhesion to basalt:	
- after 24h	> 4 MPa
- after 48h	> 6 MPa

TVOC content (mg/m³) 5.72

INSTRUCTION AND DATA FOR USE

Surface preparation

Concrete

The glued surface should be dry, consistent, free of dust contamination, free of moss, efflorescence and old paint residuals should not be contaminated by oil stains, fats and surface coatings against evaporation. If needed, the polluted surface should be cleaned by water jet (WAP). The cohesion of surface must be at least 1,5MPa.

Fused basalt bricks

The glued surface should be dry, consistent, free of dust contamination, should not be contaminated by oil stains, fats and surface coatings. The glued surfaces should be cleaned, respectively degreased by using industrial degreaser or grinded or sand blasted.

Steel

The glued steel should be dry, free of oil stains, fats, and rust and cleaned to grade S21 / 2 by grinding or sand blasting.

Mixing

Add all part B into part A and mixing well together. For mixing do you use electric mixer with slow speed. After good mixing part A with part B (approx. 2min.) add all part C and mixing very well for next 2-3 minutes. The time of workability of jointing mortar is approx. 30minutes in temperature of +20 °C. The time period needed for hardening shortens in higher temperatures and gets longer in temperatures below +10 °C.

Application

Eufix EP is applied on the prepared surface using serrated smoother, trowel or spatula. It is necessary to very carefully fill all caverns and pores of the substrate by adhesive. Bonded elements should be uniformly press to force out excess adhesive. Bonded element is necessary to fixate with care to prevent any movement. Thickness of adhesive applied in one working step could be up to 30 mm.

Cleaning

Unhardened material can be removed from all tools and equipment immediately after use with organic solvent type S6300 or Acetone. Hardened material can be removed mechanically only.

Restriction

Application temperature for Eufix EP is between +5 °C and 25 °C.

CONSUMPTION

Eufix EP 1.65 kg/m²/mm of thickness

PACKAGING

Eufix EP

Set 6kg (A/B/C)	0.732kg/0.495kg/1.791kg
Set 3kg (A/B/C)	1.464kg/0.990kg/3.582kg


STORAGE AND TRANSPORT

The product's shelf life is 24 months providing it is stored in unopened original packing, dry and ventilated environment in temperatures between +5 °C and 30 °C. It is important to protect the product against direct solar radiation and sources of heat. These products should be transported by covered means of transport.

HEALTH AND SAFETY PRECAUTIONS

For further information, please see the Safety Sheet.

The production is subject to integrated quality system according ČSN EN ISO 9001:2009 and 14001:2005.

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1020-CPR-010036107
EUFIX EP – epoxy adhesive class R2 according EN 12004:2007+A1:2012
Initial shear adhesion ≥ 2 MPa Shear adhesion after thermal shock ≥ 2 MPa Shear adhesion after storage in water ≥ 2 MPa Time to set - Tensile adhesion ≥ 0.5 MPa (not less than 20 minutes) Reaction to fire – class E Release of dangerous substances - see. MSDS

CHEMICAL RESISTANCE

Fully hardening and matured EUFIX EP resists, for example, the following substances (tested at 20°C):

Substance - concentration	Permanent load (continuous immersion)	Live load (dripping with regular cleaning)
Ammonia 25%	resistant	resistant
Sodium hydroxide 50%	resistant	resistant
Potassium hydroxide 50%	resistant	resistant
Sodium hypochlorite in solution 6.4g/l	resistant/ color change	resistant
Nitric acid 10%	resistant/ color change	resistant
Hydrochloric acid 35%	resistant/ color change	resistant
Acetic acid 1%	resistant	resistant
Sulfuric acid 75%	resistant/ color change	resistant
Formic acid 2%	resistant	resistant
Phosphoric acid 50%	resistant/ color change	resistant/ color change
Oxalic acid 120g/l	resistant/ color change	resistant/ color change
Lactic acid 2%	resistant	resistant
Tartaric acid 10%	resistant	resistant
Citric acid 10%	resistant	resistant
Diesel	resistant	resistant
Engine oil	resistant	resistant
Edible oil	resistant	resistant
Gear oil	resistant	resistant
Acetone	not resistant	resistant
Benzine	not resistant	resistant
Glycerin	resistant	resistant
Ethanol 96%	resistant	resistant

Does not withstand aromatic, chlorohydrocarbons, esters and ketones, in which it swells.

This information is for your orientation only. For information regarding other chemicals or resistance in temperatures higher than 20 °C, please contact technical support of distributor.

Important notification

In the case of disagreement between Technical Data Sheet and information referred-to the packaging, information on the packaging should be considered to be correct. The company EUTIT s.r.o guarantees the material and production; the distribution is subjected to their current terms and conditions of sales. The company EUTIT s.r.o. ensure that all given advices, recommendations, specifications or information are correct and truthful; they are based on current knowledge and experiences, but present no warranty in respect of merchantability or of fitness for a particular purpose. New edition of Technical Data Sheet replaced and cancels the previous version.