L'UNICFLOOR · EPOXY COMPOUNDS

Unepox Compound FLEX 2K

Flexible solvent-free epoxy putty

COLOURS

White · beige-grey

solvent-free putty

1.69 g/cm³	up to 1 cm	> 65 N/mm²	approx. 45 min	1.7 kg/m²
Mass density (mixed)	Layer thickness, no sagging	Compressive strength (7 d)	Pot life (20 °C)	per 1 mm thickness

Product description

UNEPOX COMPOUND FLEX 2K is a two-component, high-build, polyamine-cured, solvent-free flexible epoxy putty for concrete and other suitable substrates. It combines a thixotropic, solvent-free epoxy resin with a special hardener, graded fillers and characteristic agents.

Application areas

- Bedding and gap filling in concrete repair
- Floor and surface resurfacing before topcoat application
- Repair of spots, pinholes, minor depressions and cracks
- Damaged concrete surfaces

Advantages

- Outstanding water and crude-oil resistance
- Good abrasion and impact resistance
- Up to 1 cm thickness without sagging
- Cures down to +10 °C
- Excellent adhesion to steel, concrete and metal
- Good flexibility
- Excellent water and corrosion resistance
- High strength, easy application

Position in the system

Topcoat
L'unicfloor epoxy topcoat / self-levelling

Intermediate coat
UNEPOX PRIMER · PRIMER WB · UNDERCOAT

Epoxy putty / repair layer — THIS PRODUCT
UNEPOX COMPOUND FLEX 2K · 1.7 kg/m² per mm

Substrate
Concrete · steel · metal

L'unicfloor repair system

Solvent-free epoxy putties for concrete repair

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Mechanical performance · after 7 days

Typical values of the cured **UNEPOX COMPOUND FLEX 2K** at 20 °C.

> 65 N/mm²	> 14 MPa	> 9 MPa	> 2150 psi	4.6 MPa
Compressive · ASTM C579	Flexural · ASTM C348	Tensile · ASTM C307	Shear bond · ASTM C882	Pull-off (concrete failure)

Pull-off adhesion is an average value; failure occurred in the concrete.

Technical data (at +20 °C)

Colours	**White, beige-grey**	Overcoating interval	**min. 24 h – max. 48 h**
Mass density (mixed, 20 °C)	**approx. 1.69 g/cm³**	Full cure	**7 days**
Solids (by volume)	**approx. 100 %**	Mixing ratio	**9 : 1 by weight**
Pot life	**approx. 45 min (20 °C) · 25 min (30 °C)**	Spreading rate	**1.7 kg/m² at 1 mm**
Touch dry	**4–6 h**	Electrical resistance	**approx. 10^{13} Ohm**
Curing time	**12–16 h**	Application method	**Putty knife or spatula**

Chemical resistance · spillages

- Diluted acids (sulphuric, hydrochloric, acetic, lactic)
- Diluted alkalis (sodium hydroxide, ammonia)
- Toluene
- Petrol
- Kerosene
- Hydraulic oil
- Vegetable oils
- Used sump oil
- Sodium chloride

Application procedure

01

Surface preparation

Remove oil, grease, salts and other contaminants by high-pressure water jet; abrasive or sand blasting if necessary.

02

Mixing

Mix both components thoroughly until a homogeneous light grey. Mixed material above +10 °C. Never add thinner or water – it causes sagging.

03

Application

Apply with a putty knife to the required smoothness, on dry, clean surfaces above dew point. Ensure ventilation.

04

Subsequent coat

Topcoats need an intermediate coat – UNEPOX PRIMER, UNEPOX PRIMER WB or UNDERCOAT is highly recommended.

Mixing ratio (by weight)



9 parts
Base

1 part
Hardener

Supplied as 4.5 kg base + 0.5 kg hardener.

Application conditions
above +10 °C
Mixed material above +10 °C; surface dry and above dew point.

Consumption
1.7 kg/m²
Theoretical, per 1 mm thickness – depends on surface permeability and porosity.

Pot life
45 min
At +20 °C; approx. 25 min at +30 °C.

Important: do not add thinner or water to the product – it causes sagging.

Points to consider

- Drying at 10 / 23 / 40 °C – touch dry: 30 / 18 / 12 h.
- Walk-on dry at 10 / 23 / 40 °C: 42 / 24 / 16 h.
- Dry to overcoat at 10 / 23 / 40 °C: 46 / 30 / 20 h.
- Full curing at 10 / 23 / 40 °C: 10 / 7 / 3 days.
- Electrical resistance approx. 10^{13} Ohm; thermal expansion 20–22 × 10^{-6}.
- Resists dry heat up to 110 °C.

Packaging

- 4.5 kg base + 0.5 kg hardener in cans

Safety

- Avoid eye contact and swallowing; flush eyes with plenty of fresh water and seek medical advice.
- Ensure ventilation and avoid inhaling vapours.
- Wear suitable clothing, gloves and goggles; barrier cream recommended.
- See the Material Safety Data Sheet.

Cleaning

- Clean tools with SPECIAL THINNER UP-002.

LEGAL NOTE

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