

Two-component, water-based epoxy primer

Description

EPOXYPRIMER-500 is a two-component, water-based epoxy system. It provides high hardness and abrasion resistance. It can be applied on dry or slightly damp substrates, without standing water. It is classified as SR-B2,0 according to EN 13813.

Fields of application

EPOXYPRIMER-500 is used as a primer of ISOFLEX-PU 500 and other polyurethane systems, when applied on non-absorptive substrates or old waterproofing layers.

It may also be used as a primer, as well as for preparing (with the addition of quartz sand) a repairing (filling) material for cement-based substrates, such as concrete or cement-screeds, that will be covered with DUROFLOOR epoxy resins.

Technical data

Basis:	two-component epoxy resin
Color:	pale yellow
Viscosity (A):	900 mPa·s
Viscosity (B):	4400 mPa·s
Viscosity (A+B):	8000 mPa·s
Density (A):	1.1 kg/l
Density (B):	1.0 kg/l
Density (A+B):	1.02 kg/l
Mixing ratio (A:B):	25:75 by weight
Pot Life:	approx. 60 min at +20°C
Minimum hardening temperature:	+8°C
Walkability:	after 18 h at +23°C

Successive layer:	after 24 h at 23°C
Final strength:	after 7 days at +23°C
Adhesion:	> 3 N/mm ² (breaking point of concrete)

Cleaning of tools:
Tools should be cleaned with water immediately after use.

Directions for use

1. Substrate preparation

The substrates to be coated should be:

- Stable.
- Free of materials that prevent bonding, e.g. dust, loose particles, grease etc.
- Protected from underneath moisture attack.

In case of applying epoxy resins of DUROFLOOR system, they should meet the following requirements:

Concrete quality:	at least C20/25
Cement screed quality:	cement content 350 kg/m ³

In addition, substrates should be prepared by brushing, grinding, milling, sand blasting, water blasting, shot blasting etc., depending on their nature. Then, the surface should be well cleaned from dust with a high-suction vacuum cleaner.

2. Mixing of the components

Components A (resin) and B (hardener) are packed in two separate containers, having the correct predetermined mixing ratio by weight. The whole quantity of component B is added into component A. The two components should be mixed for about 2-3 minutes with a low-speed mixer (300 rpm), until the mixture becomes uniform. It is important to stir the mixture thoroughly near the sides and bottom of the container, to achieve uniform dispersion of the hardener. The addition of water (10-30% by weight) will then ensure that the mixture obtains the desired workability.

EPOXYPRIMER-500



3. Application-Consumption

Depending on the application, EPOXYPRIMER-500 may be used in the following ways:

a) As a primer of ISOFLEX-PU 500

The substrate is primed with EPOXYPRIMER-500, thinned with water up to 30% by weight. The product is applied by brush or roller in one coat.

Consumption: 150-200 g/m².

Depending on the weather conditions, ISOFLEX-PU 500 is applied within 24-48 hours from priming, as soon as the moisture content falls below 4%.

b) As a primer of epoxy resins

The substrate is primed with EPOXYPRIMER-500, thinned with water up to 30% by weight. The product is applied by brush or roller in one coat.

Consumption: 150-200 g/ m².

After the primer has dried, any existing imperfections (cracks, holes) should be filled with EPOXYPRIMER-500, mixed with quartz sand of 0.0-0.4 mm particle size (or Q35) in a proportion of 1:2 up to 1:3 by weight.

The qualified system DUROFLOOR is applied within 24-48 hours from priming and just when the moisture content of the EPOXYPRIMER-500 layer falls below 4%. In case the moisture content of the EPOXYPRIMER-500 layer remains over 4% after 48 hours, the same procedure should be followed.

In case DUROFLOOR is to be applied beyond the above time limits, quartz sand of 0.4-0.8 mm particle size should be spread on the surface, while the primer is still fresh, in order to ensure good bonding. After the primer has hardened, any loose grains should be removed with a high-suction vacuum cleaner.

Packaging

EPOXYPRIMER-500 is available in packages (A+B) of 1 kg, 4 kg and 20 kg, with components A and B at a fixed proportion by weight.

Shelf-life/Storage

12 months from production date, if stored in original unopened packaging, at temperatures between +5°C and 35°C. Protect from direct sun exposure and frost.

Remarks

- It is recommended to check the compatibility with the substrate, before applying the product on plastic substrates (e.g. PVC, polycarbonate sheets).
- Working time of epoxy materials is affected by the ambient temperature. The ideal temperature of application is between +15°C and +25°C, for which the product obtains optimal workability and curing time. Room temperature below +15°C will expand the curing time, while temperatures above +30°C will reduce it. It is recommended to mildly preheat the product in the winter, and store the product in a cool room before application in the summer.
- In case the time between the application of successive layers is longer than predicted, or in case old floors are going to be overlaid, the surface should be thoroughly cleaned and ground, before applying the new layer.
- After hardening, EPOXYPRIMER-500 is totally safe for health.
- Before application, consult the directions for safe use and precautions written on the package.

Volatile Organic Compounds (VOC)

According to the Directive 2004/42/CE (Annex II, table A), the maximum allowed VOC content for the product subcategory j, type WB is 140 g/l (2010) for the ready-to-use product.

The ready-to-use product EPOXYPRIMER-500 contains a maximum of 140 g/l VOC.



EPOXYPRIMER-500



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EN 13813 SR-B2,0

DoP No.: EPOXYPRIMER-500/1832-01

Primer

Reaction to fire: NPD

Release of corrosive substances: SR

Water permeability : NPD

Wear resistance: NPD

Adhesion: B2,0

Impact resistance: NPD

Sound insulation: NPD

Sound absorption: NPD

Thermal resistance: NPD

Chemical resistance: NPD

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