

Technical Datasheet

EPOXYPRIMER-500

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.

Certified according to EN 13813 and classified as SR-B2,0. CE marked.

EPOXYPRIMER-500 has received an Environmental Product Declaration (EPD) following an assessment of its life-cycle environmental impacts. Registration No: S-P-09185, The International EPD® System.

Fields of application

EPOXYPRIMER-500 is used as a primer of ISOFLEX-PU 500 and other polyurethane systems, when applied on non-absorbent 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: yellowish
Viscosity (A): 900 mPa·s
Viscosity (B): 4,400 mPa·s
Viscosity (A+B): 8,000 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

Overcoat: after 24 h at 23°C

Final strength: after 7 days at +23°C

Adhesion: > 3 N/mm²

(failure 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 might impair bonding, e.g. dust, loose particles, grease, etc.
- Protected from underneath moisture attack.

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

Concrete quality: at least C20/25

Cement screed

quality: cement content

350 kg/m³

In addition, substrates should be prepared by brushing, grinding, milling, sandblasting, 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 packaged in two separate containers, having the correct predetermined mixing ratio by weight. The entire contents of component B is added to 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.







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3. Application-Consumption

Depending on the application, EPOXYPRIMER-500 can 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 0-0.4 mm particle size (or Q35) in the ratio 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 0.3-0.8 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 containers (A+B) of 1 kg, 4 kg, 10 kg and 20 kg, with components A and B at a fixed ratio 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 sunlight 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 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 extend 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 recoat time (between successive layers) is longer than predicted or in case old floors are to be overlaid again, the surface should be thoroughly cleaned and ground before applying the new layer.
- After hardening, EPOXYPRIMER-500 is totally safe for health.
- Please consult the safety instructions written on the packaging before use.
- EPOXYPRIMER-500 is intended for professional use only.

Volatile Organic Compounds (VOC)

According to 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.



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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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