



Disboxid 460 EP-Ground

Transparent, fast-curing, liquid 2-component epoxy resin for priming and scratch filler application on mineral floor spaces.

Product Description

Field of Application	<p>Suitable for priming coats and as scratch filler on mineral substrates under floor coatings. Suitable as binder for Disboxid 946 Mörtelquarz (mortar quartz) to create grooves/fillets and for reprofiling spillings.</p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p>Note: Do not use for finishing sealing (top sealer coat).</p> </div>
Material Properties	<ul style="list-style-type: none"> ■ Good hardening/curing even at 10 °C. ■ Weather-resistant. ■ Stressable by permanent moisture. ■ Good chemical resistance.
Material Base / Vehicle	Low-viscous, liquid 2-component epoxy resin, total solid according to "Deutsche Bauchemie".
Packaging/Package Size	<p>25 kg packaging (base/component A: 17.5 kg hobbock, hardener/component B: 7.5 kg bucket) 600 kg packaging (base/component A: 210 kg barrel (2 x), hardener/component B: 180 kg barrel (1 x))</p>
Colours	<p>Transparent</p> <p>Can be pigmented with Disboxid 980 NEFA®POX-Farbpasten (colourants). Discolouration may occur with weathering and UV light exposure. The organic pigmentation in, e.g. coffee, red wine or leaves and various chemicals, e.g. disinfectants, acids, etc., may cause discolouration, but proper functioning of the coating will not be affected by these changes.</p>
Storage	<p>Store in a cool, dry and frost-free place. Shelf life of original, tightly closed containers: min. 1 year. If temperatures are low, the product should be stored at approx. 20 °C before use.</p>
Technical Data	<ul style="list-style-type: none"> ■ Density: Approx. 1.1 g/cm³ ■ Dry film thickness: Approx. 95 µm/100 g/m² ■ Pendulum hardness to König: Approx. 150 seconds ■ Shore hardness (A/D): Approx. D 78 ■ Compression strength: Approx. 58 N/mm² ■ Viscosity: Approx. 700 mPas ■ Tensile strength under flexion: Approx. 75 N/mm²

Application

Suitable Substrates	<p>All types of mineral substrates. The substrates must be sound, dimensionally stable, solid and free from all substances that may prevent good adhesion, e.g. loose/brittle materials, dust, oils, fats/greases or abraded rubber contamination (scuff/skid marks). Cementitious flow mortars, ameliorated with synthetic resin, must be checked for compatibility by trial application, if necessary. The adhesive tensile (pull-off) strength of substrates must be 1.5 N/mm² on an average, with a minimum individual value of 1.0 N/mm².</p> <p>Substrates must have achieved their equilibrium humidity: Concrete and cement-based composition floor (screed): max. 4 % by weight Anhydrite screed: max. 0.5 % by weight Magnesite screed: 2 – 4 % by weight Xyloithe (Magnesium Oxychloride) screed: 4 – 8 % by weight Rising damp/moisture must be avoided. In case of anhydrite and magnesite screeds, complete sealing from contact with ground is essential.</p>
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Substrate Preparation	<p>Prepare the substrate by suitable means, e.g. grit blasting (shot peening) or milling, in order to fulfil the above mentioned requirements.</p> <p>Repair spallings and defects with Disbocret® PCC or Disboxid EP mortars and fillers, filling them flush with the surface.</p>														
Preparation of Material	<p>Add the hardener (component B) to the base material (component A) and stir intensively with a low-speed electric paddle mixer (max. 400 rpm). Then pour the mixture in another clean mixing vessel and continue stirring thoroughly.</p> <p>Preparation of pigmented product: First of all the colourant must be added to the base material (1 plastic bag of colourant Disboxid 980 NEFA®POX-Farbpaste per 25 kg of Disboxid 460 EP-Ground) and the mixture must be stirred/agitated.</p>														
Mixing Ratio	Base (component A) : hardener (component B) = 7 : 3 parts by weight														
Method of Application	Apply with rubber wiper/scrapper/spreading knife, sealer brush or medium-pile paint roller or smoothing trowel, depending on intended use.														
Surface Coating System	<p>Priming Coat</p> <p>Pour mixed product onto the surface and spread evenly with a hard rubber scraper, then treat with a medium pile paint roller or sealer brush in order to avoid the forming of shiny spots.</p> <p>Strew/scatter quartz sand onto the freshly applied priming coat, if required.</p> <p>For subsequently roller-applied antislip coatings strew/scatter quartz sand Disboxid 943/944 Einstreuquarz onto the surface.</p> <p>For subsequently scraper applied flow coatings (self-levelling) strew/scatter quartz sand Disboxid 942 Mischquarz onto the surface.</p> <p>Priming coats that have not been sand-treated must be coated within 24 hours with successive coatings.</p> <p>Scratch Filler</p> <p><i>Even, finely textured (semi-rough) substrates</i></p> <p>Prepare the filler using Disboxid 460 EP-Ground, 1 Gew.-Teil Disboxid 942 Mischquarz, 1,5 Gew.-Teilen</p> <p><i>Uneven, rough substrates</i></p> <p>Prepare the filler using Disboxid 460 EP-Ground, 1 part by weight Quartz sand, 1.5 parts by weight (Disboxid 942 Mischquarz + Disboxid 943 Einstreuquarz, mixture in 1 : 1 ratio)</p> <p>Pour the filler to the primed surface and spread evenly with a smoothing trowel. Then deareate with a spiked roller. When ready, strew/scatter quartz sand onto the full surface, according to requirements. Prime strongly porous and rough-textured substrates with Disboxid 460 EP-Ground before scratch filler application.</p> <p>Concave Fillets (Radius of 5 cm)</p> <p>Prime floor spaces as described before. Prepare a mortar using Disboxid 460 EP-Ground, 1 part by weight Disboxid 946 Mörtelquarz, 10 parts by weight</p> <p>Apply the fresh mortar with suitable tools, e.g. fillet trowel, as a fillet/groove with a radius of 5 cm.</p>														
Consumption	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="background-color: #e0f2f7;">Priming Coat</td> <td style="background-color: #e0f2f7;">approx. 200 - 400 g/m²</td> </tr> <tr> <td colspan="2" style="background-color: #e0f2f7;">Scratch Filler <i>for semi-rough, even substrates</i></td> </tr> <tr> <td style="background-color: #e0f2f7;">Disboxid 460 EP-Ground Disboxid 942 Mischquarz</td> <td style="background-color: #e0f2f7;">approx. 660 g/mm/m² approx. 1 kg/mm/m²</td> </tr> <tr> <td colspan="2" style="background-color: #e0f2f7;"><i>for rough, uneven substrates</i></td> </tr> <tr> <td style="background-color: #e0f2f7;">Disboxid 460 EP-Ground Disboxid 942 Mischquarz Disboxid 943 Einstreuquarz</td> <td style="background-color: #e0f2f7;">approx. 660 g/mm/m² approx. 500 g/mm/m² approx. 500 g/mm/m²</td> </tr> <tr> <td colspan="2" style="background-color: #e0f2f7;">Fillets</td> </tr> <tr> <td style="background-color: #e0f2f7;">Disboxid 460 EP-Ground Disboxid 946 Mörtelquarz</td> <td style="background-color: #e0f2f7;">approx. 150 g/m approx. 1.5 kg/m</td> </tr> </table> <p>Determine the exact consumption by a trial coating on site.</p>	Priming Coat	approx. 200 - 400 g/m ²	Scratch Filler <i>for semi-rough, even substrates</i>		Disboxid 460 EP-Ground Disboxid 942 Mischquarz	approx. 660 g/mm/m ² approx. 1 kg/mm/m ²	<i>for rough, uneven substrates</i>		Disboxid 460 EP-Ground Disboxid 942 Mischquarz Disboxid 943 Einstreuquarz	approx. 660 g/mm/m ² approx. 500 g/mm/m ² approx. 500 g/mm/m ²	Fillets		Disboxid 460 EP-Ground Disboxid 946 Mörtelquarz	approx. 150 g/m approx. 1.5 kg/m
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Workability	At 20 °C and 60 % relative humidity approx. 30 minutes. Higher temperatures shorten and lower temperatures extend the pot life.														
Application Conditions	<p>Material, Atmospheric, and Substrate Temperature: Min. 10 °C, max. 30 °C during application and curing. Relative humidity must not exceed 80 %. Substrate temperature should always be min. 3 °C above the dew point temperature.</p>														
Waiting Time	<p>Waiting time between work steps: Min. 12 hrs at 20 °C.</p> <p>For longer periods the surface of the preceeding coat must be roughened, when not being sand-treated. Higher temperatures shorten and lower temperatures extend this time period.</p>														

Drying/Drying Time

At 20 °C and 60 % relative humidity, walkable after approx. 12 hours. Ready for mechanical loads after approx. 3 days and fully cured after approx. 7 days.
Lower temperatures extend the curing time.
Protect the applied product during the curing process (approx. 24 hours at 20 °C) from moisture, in order to avoid surface irregularities and diminished (low) adhesion.

Tool Cleaning

Immediately after use or during longer breaks with Disboxid 419 Verdünner (thinner).

Advice

Special Risks (Hazard Note) / Safety Advice (Status as at Date of Publication)

For professional users only.

Mass:

Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. Toxic to aquatic life with long lasting effects. Do not breathe dust or mist. Do not get in eyes, on skin, or on clothing. Avoid release to the environment. Use personal protective equipment as required. IF ON SKIN: Wash with plenty of soap and water. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Dispose of contents/ container to an approved waste disposal plant. Contains epoxy resin. Can cause allergic reactions.

Hardener:

Harmful if swallowed. Causes severe skin burns and eye damage. May cause an allergic skin reaction. Harmful if inhaled. May cause damage to organs through prolonged or repeated exposure if swallowed. Toxic to aquatic life with long lasting effects. Do not breathe dust or mist. Do not get in eyes, on skin, or on clothing. Avoid release to the environment. Use personal protective equipment as required. IF ON SKIN: Wash with plenty of soap and water. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Dispose of contents/ container to an approved waste disposal plant.

Disposal

Materials and all related packaging must be disposed of in a safe way in accordance with the full requirements of the local authorities. Particular attention should be paid to removing wastage from site in compliance with standard construction site procedures.
In Germany: Only completely emptied containers must be given for recycling.
Residues of material: Allow base material (component A) and hardener (catalyst/component B) to cure and dispose as paints waste.

EU limit value for the VOC content

of this product (category A/j): max. 500 g/l (2010). This product contains max. 270 g/l VOC.

Giscode

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Further Details

See Material Safety Data Sheet (MSDS).
Follow the application references while applying our materials.

CE Labelling

EN 13813
CE labelling is based on EN 13813 "Screed mortars, screed compounds and screeds – screed mortars and screed compounds – Properties and Requirements" defining the requirements for screed mortars being used for floor constructions in the interiors. The standard also include synthetic resin coatings and sealing.

Products matching the above mentioned standards are to be labelled with the CE mark.

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All suggestions and application instructions herein are based on our latest technical experience. Due to the wide variety of individual project conditions, we cannot be held responsible for their content. These instructions do not release the purchaser/ applicator from his responsibility to determine the suitability of the product in consideration of the project characteristics. These instructions are to be considered void when a new edition is released. Our general conditions of sale and delivery in their latest edition apply. This document is a translation of our German Technical Information No.460 · Disboxid 460 EP-Ground · Issued: March 2016