

# Disboxid 462 EP-Siegel

Epoxy Primer & Sealer · Transparent, 2-component liquid epoxy resin for priming and sealing of mineral floorages.



## Product Description

Field of Application	Used as a primer or scratch-filler under floor coatings. Binder for crystalline aggregate Disboxid 946 Mörtelquarz, for producing highly wear-resistant industrial floor coatings, grooves (fillets) and for reprofiling spallings. As smooth or anti-skid (antislip) sealer. For filling cracks.
Material Properties	<ul style="list-style-type: none"> <li>■ Excellent penetration power</li> <li>■ Good chemical resistance</li> <li>■ Resistant to permanent water exposure</li> <li>■ Very long coating time without additional treatment (sprinkling) of surfaces with quartz sand</li> </ul>
Material Base / Vehicle	Low-viscous, 2-component liquid epoxy resin. Free of aromatic hydrocarbons, solvent-free.
Packaging/Package Size	25 kg packaging (Base material: 18.75 kg tin hobbock, Hardener: 6.25 kg tin bucket) 10 kg combined tin packaging, 5 kg combined tin packaging.
Colours	Transparent.  The product can be pigmented with Diboxid 980 NEFA@POX pigment paste. Discolouration and chalking effects may occur with weathering and UV light exposure. The pigmentation in e.g. coffee, red wine or leaves (organic dyestuffs) and various chemicals, e.g. disinfectants, acids, etc., may cause discolouration. The functionality of the coating will not be affected by these changes.
Storage	Cool, dry and frost-free. Tightly closed original containers have a minimum shelf life of 2 years. If temperatures are low, the material should be stored at 20 °C before application.



## Technical Data

■ Density:	approx. 1.1 g/cm <sup>3</sup>
■ Dry film thickness:	approx. 95 µm/100 g/m <sup>2</sup>
■ Compression strength:	> 65 N/mm <sup>2</sup>
■ Viscosity:	20 °C, approx. 500 mPas

## Application

### Suitable Substrates

All types of mineral substrates.  
The substrates must be sound, dimensionally stable, solid, free from all materials that may prevent good adhesion, e.g. loose materials, dust, oils, fats / greases or abraded rubber contamination (skid marks).  
Cementitious flow mortars - ameliorated with synthetic resin – must be checked for suitability by trial application, if required. The adhesive tensile strength of substrates must be 1.5 N/mm<sup>2</sup> on an average, with a minimum individual value of 1.0 N/mm<sup>2</sup>.  
Equivalent-humidity must be achieved for the substrates:  
Concrete and cement-based composition floor (screed) max. 4% by weight  
Anhydrite screed max. 0.5 % by weight  
Magnesite screed 2 – 4 % by weight  
Xyloliithe screed 4 – 8 % by weight

Rising damp/moisture must be avoided. In case of anhydrite and magnesite screeds, complete sealing from contact with the ground is essential.

### Substrate Preparation

Prepare substrates by suitable means, e.g. grit blasting (shot peening) or milling, in order to fulfil the above mentioned requirements. Repair spallings and defects with Disbocret/EPCC mortars or Disboxid EP mortars, filling defects flush with the surface.

### Preparation of Material

Add the hardener to the base material and stir intensively with a low-speed electrical paddle (agitator; max. 400 rpm). Pour the mixture into another clean container and continue stirring. For pigmentation add the pigmented paste to the base material (1 plastic bag of Disboxid 980 NEFA@POX-Farbpaste for 25 kg of Disboxid 462 EP-Siegel) and stir up.

### Mixing Ratio

Base material : Hardener = 3 : 1 parts by wt.

### Method of Application

Depending on the application with a rubber wiper/scrapper, sealer brush, medium-fibre roller or smoothing trowel.

### Surface Coating System

#### Priming Coat

Pour the mixed material onto the surface to be primed and spread evenly with a rubber wiper / scraper. Then treat the surface with a medium-fibre roller or sealer brush to avoid the forming of glossy areas. For poorly absorbent substrates, the material may be thinned up to 15% by weight with thinner Disboxid 419. In this case ventilate well. Spread quartz sand onto the freshly applied material according to requirements.  
For anti-skid coatings -applied with a roller- and mortar coats spread (sprinkle) with quartz sand Disboxid 943/944 Einstreuquarz. For subsequent scraper applied levelling/flow coating spread (sprinkle) the surface with Disboxid 942 Mischquarz. Priming coats, untreated with sand, must be recoated with following coatings within 3 days.

#### Sealing

Material is applied in 1 – 2 coats as described under point 1. For anti-skid topsealing the first freshly applied coat is covered with Disboxid 943/944 Einstreuquarz according to the desired roughness, or other suitable materials, e.g. Durop, granite chips or SiliciumCarbide.

#### Scratch filler application

##### *Even, semi-rough substrates*

Prepare a filler mixture consisting of 1 part by wt. of Disboxid 462 EP-Siegel and 1.5 parts by wt. of Disboxid 942 Mischquarz.

##### *Uneven, rough-textured substrates*

Produce a filler mixture consisting of 1 part by wt. of Disboxid 462 and 1.5 parts by wt. of quartz sand (mixture of Disboxid 942 and Disboxid 943 in a 1:1 ratio).  
Pour the filler mixture onto the primed surface and spread evenly with a smoothing trowel. Then remove bubbles using a spiked roller. Treat the finished scratchfiller surface with sand according to the requirement. Highly porous and rough textured substrates must be primed with Disboxid 462 EP-Siegel before applying the scratch filler.

**Mortar floor-coating**

Prime the flooring as described under point 1. Prepare a mortar mixture of 1 part by weight of Disboxid 462 EP-Siegel and 10 parts by weight of Disboxid 946 Mörtelquarz.

The binder in the 5 kg packaging is matched to be mixed with two 25 kg bags of Mörtelquarz. Fill the Mörtelquarz (mortar quartz) in a pug mill mixer and add the mixed binder into the running mixer. Mix intensively for 3 minutes.

Apply the mortar wet-on-wet onto the fresh priming coat or on the hardened, sand-treated priming coat. Compress and finally smoothen with a plastic or a stainless steel trowel. The mortar sub-floor-coating first must be levelled on a levelling straight-edge.

For realisation of a fluid-sealing or antiskid surface, the coating must be sealed, as described under point 2. Prime the mortar layer before a possible revision with Disboxid 462, adding approx. 2 % by weight of Disboxid 952 Stellmittel, filling all pores.

**Grooves (Concave fillets)**

Prime the flooring as described under point 1. Prepare a mortar mixture of 1 part by weight of Disboxid 462 EP-Siegel and 10 parts by weight of Disboxid 946 Mörtelquarz. Apply the fresh material as a groove (radius: 5 cm) using suitable tools, e.g. groove trowel.

Consumption

<b>Priming coat</b>	approx. 200–400 g/m <sup>2</sup>
<b>Top sealing</b>	approx. 250–500 g/m <sup>2</sup> per coat
<b>Scratch-filler application</b> <i>for semi-rough, even substrates</i>	
Disboxid 462 EP-Siegel Disboxid 942 Mischquarz	approx. 660 g/mm/m <sup>2</sup> ca. 1 kg/mm/m <sup>2</sup>
<i>For rough-textured, uneven substrates</i>	
Disboxid 462 EP-Siegel Disboxid 942 Mischquarz Disboxid 943 Einstreuquarz	approx. 660 g/mm/m <sup>2</sup> approx. 500 g/mm/m <sup>2</sup> approx. 500 g/mm/m <sup>2</sup>
<b>Mortar floor-coating</b>	
Disboxid 462 EP-Siegel Disboxid 946 Mörtelquarz	approx. 190 g/mm/m <sup>2</sup> approx. 1.9 kg/mm/m <sup>2</sup>
<b>Hohlkehlen</b>	
Disboxid 462 EP-Siegel Disboxid 946 Mörtelquarz	approx. 1.50 g/m approx. 1.5 kg/m

The exact rate of consumption is best established by a trial application on site.

Workability

Workability/Pot Life at 20 °C and 60% relative humidity, approx. 40 minutes. Higher temperatures shorten and lower temperatures extend the potlife.

Application Conditions

**Material, atmospheric, and substrate temperature**

must be min. 10 °C and max. 30 °C during application and drying. Relative humidity must not exceed 80%. Substrate temperature should always be min. 3 °C above the dew point temperature.

Waiting Time

The waiting time between coats should be at least 16 hours and max. 3 days at 20 °C.

After longer breaks, the surface of the preceding coat must be roughened / grinded, if it has not been sand-treated. Higher temperatures shorten and lower temperatures extend the waiting time.

Drying/Drying Time

At 20 °C and 60% relative humidity, walkable after approx. 1 day. Ready for mechanical stress (loads) after approx. 3 days and hardened after approx. 7 days. Time period is correspondingly longer at low temperatures. Protect the coat from moisture during the hardening process (approx. 24 hours at 20 °C) to avoid irregularities in the surface and diminished adhesion.

Tool Cleaning

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

Advice

German Certificates

■ Advice 1-1136 Testing of anti-slip properties R11  
Berufsgenossenschaftliches Institut (Institute of Professional Association), St. Augustin

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

For professional use only.

*Base material:* Irritating to eyes and skin. May cause sensitisation by skin contact. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. On contact with eyes rinse immediately with plenty of water and seek medical advice. On contact with skin, wash immediately with plenty of water and soap. Do not breathe vapours/aerosol. In case of insufficient ventilation, use suitable respiratory equipment. Do not empty into drains, water courses or onto the ground. Wear suitable gloves and eye/face protection. Contains epoxy-based compounds. Observe information (Material Safety Data Sheets) supplied by the manufacturer.

*Hardener:* Causes severe burns. May cause sensitisation by skin contact. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Keep locked up and out of reach of children. Do not breathe vapour/aerosol. On contact with eyes rinse immediately with plenty of water and seek medical advice. Do not empty into drains, water courses or onto the ground. Wear suitable protective clothing, gloves and eye/face protection. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

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 should be given for recycling. Residues of material: Allow base material and hardener 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. 250 g/l of VOC.

Giscode

RE 1

Further Details

See Material Safety Data Sheets.  
Follow the application references while applying our materials.

CE Labelling

CE labelling is based on DIN EN 13813 "Screed mortars, screed compounds and screeds ≠ screed mortars and screed compounds – Properties and Requirements" (January 2003) 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 standard are to be labelled with the CE mark.

Technical Assistance

As it is impossible to list herein the wide variety of substrates and their specific problems, please request our technical assistance in case of queries.

Customer Service Centre

Tel.: (+49) 0 61 54 / 71 17 10  
Fax: (+49) 0 61 54 / 71 17 11  
e-mail: kundenservicecenter@caparol.de

International Distribution: Please see [www.caparol.com](http://www.caparol.com)