



# Disboxid 422 E.MI ClearCoat

Transparent, 2-component liquid epoxy resin. Suitable for sealing chips-treated rigid EP floor coatings, sealing top coat for Disboxid ArteFloor-System & Disboxid MultiColor-System. Emission-minimised, technically controlled and externally monitored (TÜV)

## Product Description

### Field of Application

Due to the emission-minimised, ecologically compatible formula, particularly suitable for all »sensitive/delicate« areas, as e.g. lounges, hospitals, nurseries, play schools, schools, etc.  
High-gloss, protective sealing top coat on rigid epoxy coatings that have been colour designed or strewn/scattered with coloured paint flakes (chips).  
Component of the Disboxid MultiColor-System for representative interior spaces.  
Component of the Disboxid ArteFloor-System.

Tested & approved according to AgBB testing criteria for VOC emissions from building material that is used for interior work. The criteria of AgBB (**A** usschuss zur **g** esundheitlichen **B** ewertung von Bauprodukten; Commission for the sanitary evaluation of building material) are elaborated by the ecological and sanitary authorities for the use of building material in „delicate/sensitive“ areas, as e.g. lounges.

### Material Properties

- Emission-minimised
- Tested for harmful substances by Technical Control Board (TÜV)
- Transparent
- Low yellowing tendency
- Enhances the colour saturation of designed floor coatings
- Durable/hard-wearing and abrasion-resistant
- Adjustable to achieve a slip-resistant surface

### Material Base / Vehicle

Low-viscous, liquid 2component epoxy resin, free of Bisphenol A and B-based epoxy resins, total solid (as per Deutscher Bauchemie / German Construction Chemicals).

### Packaging/Package Size

10 kg tin-combi-packaging, 25 kg bucket (Base material: 16.67 kg tin hobbock, Hardener: 8.33 kg tin bucket)

### Colours

Transparent

Discolouration and chalking effects may occur with weathering and UV light exposure. The colourants in e.g. coffee, red wine or leaves (organic dyestuffs) and various chemicals, e.g. disinfectants, acids, etc., may cause discolouration. The surface may be scratched by abrasive stress. Proper functioning of the coating will not be affected by these changes.

### Gloss Level

Glossy

### Storage

Keep in a cool, dry and frost-free place.  
Tightly closed original packaging has a minimum shelf life of 2 years. If temperatures are low, the product 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>
■ Abrasion to Taber (CS 10/1000 U/1000 g):	23 mg/30 cm <sup>2</sup>
■ Pendulum hardness to König:	Approx. 175 seconds
■ Shore hardness (A/D):	Approx. D 82

## Chemical resistance

### Chemical Resistance Table according to DIN EN ISO 2812-3:2007 at 20 °C

	7 Days
Acetic acid 5 % solution	+ (D)
Hydrochloric acid 10 % solution	+ (D)
Sulphuric acid 10 % solution	+ (D)
Citric acid 10 % solution	+
Lactic acid 10 % solution	+
Ammonia solution 25 % (ammonium hydroxide)	+
Caustic potash solution 50%	+
Caustic soda/sodium hydroxide solution 50%	+
Distilled water	+
Common salt solution, saturated	+
PG 1* (petrol/gasoline)	+
PG 3* (heating oil & unused combustion engine motor oils)	+
PG 7b* (biodiesel)	+
Coca-Cola	+
Coffee	+
Red wine	+ (D)

Legend: + = Resistant, D = Discolouration

\* Complies with construction & testing principles for water pollution control of the DIBt (German Institute of Building Techniques).

## Application

### Suitable Substrates

Adherent, rigid epoxy resin coatings and coverings on mineral substrates. The substrate must be sound, dimensionally stable, solid, free from all materials that may prevent good adhesion, e.g. loose/brittle substances, dust, oils, fats/greases or rubber abrasion (skid marks). Rising damp/moisture must be avoided.

### Substrate Preparation

Prepare substrates by suitable means, e.g. sweep the dust off or use vacuum cleaner (particularly for surfaces strewn with coloured flakes/chips, all edges have to be broken by sanding), in order to fulfil the above mentioned requirements. Roughen the surface of existing coatings. Seal freshly applied reaction resin coatings the following day. When the waiting time is longer, the coating must slightly be sanded using fine-grit emery/ sandpaper paper. Lower temperatures extend the time.

### Preparation of Material

Add the hardener to the base material and stir intensively with a low-speed electric paddle mixer (max. 400 rpm) until a homogeneous and streak-free mixture is achieved. Pour the mixture into another mixing vessel and continue stirring thoroughly.

### Mixing Ratio

Base material (component A) : Hardener (component B) = 2 : 1 parts by weight

### Method of Application

Apply with short- to medium pile paint roller or use a suitable V-notched hard rubber coating knife/ wiper/scrapper, depending on the intended use. For anti-slip coating use PE smoothing trowel.

### Surface Coating System

#### Finishing Sealer Coat

Disboxid ArteFloor-System and Disboxid MultiColor-System for representative internal spaces: Follow the corresponding System Data Sheet.

#### Even/Smooth Sealing

Roller application:

Apply the thoroughly mixed Disboxid 422 E.MI ClearCoat evenly with a medium pile roller in cross-coat technique.

Coating knife/scrapper application (advisable for high-quality surfaces):  
 Pour mixed Disboxid 422 E.MI ClearCoat onto the hardened coating and spread evenly with a V-notched hard rubber scrapper (notching 2 mm). After a waiting time of approx. 10 minutes, deaerate the sealer coat crosswise with a spiked roller.

Advice: When application is effected with a V-notched scrapper, the selected notching does not automatically lead to compliance with the given values. Notching size depends on the wear resistance of the used tool, temperature, filling degree and substrate conditions.

### Antislip Sealing

#### Apply

Disboxid 422 E.MI ClearCoat, 100 % by weight  
 Disbon 947 SlideStop Rough, 30 % by weight or  
 Disbon 947 SlideStop Medium, 30 % by weight  
 evenly with PE smoothing trowel in grain thickness. Then roll crosswise with a coarse pile Moltopren roller (pore size Ø 5 mm). Therefore the surface can be walked on with hobnailed boots. Stir up the mixture from time to time.

Consumption

#### Sealing

<i>Even/smooth top sealing, roller applied:</i>	Approx. 300 - 400 g/m <sup>2</sup>
<i>Even/smooth top sealing, scrapper applied:</i>	Approx. 800 g/m <sup>2</sup>
<i>Antislip top sealing coat:</i>	Approx. 150 g/m <sup>2</sup> + approx. 45 g/m <sup>2</sup> Disbon 947 SlideStop Rough or Disbon 947 SlideStop Medium

Determine the exact consumption by a trial coating on site.

Workability

At 20 °C and 60 % relative humidity, approx. 60 minutes. Higher temperatures shorten and lower temperatures extend the pot life.

Application Conditions

#### Material, atmospheric, and substrate temperature

must be min. 12 °C and max. 30 °C during application and hardening. Relative humidity must not exceed 80 %. Substrate temperature should always be min. 3 °C above the dew point temperature.

Drying/Drying Time

At 20 °C and 65 % relative humidity walkable after approx. 24 hours. Ready for mechanical loads after approx. 3 days and completely hardened after approx. 7 days. Lower temperatures extend the drying time. During the hardening process (approx. 24 hours at 20 °C), the coat should be protected against moisture, as it may lead to surface faults and loss of adhesion.

Tool Cleaning

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

## Advice

German Certificates

1-1132 Testing of anti-slip property R10, Material Testing Institute Hellberg, Aldendorf (MultiColor-System innen/interior with Disbon 947 SlideStop Medium)  
 1-1256 Testing of anti-slip property R10, Material Testing Institute Hellberg, Aldendorf (MultiColor-System innen/interior with Disbon 947 SlideStop Rough)  
 1-1258 Testing of anti-slip property R10, Material Testing Institute Hellberg, Aldendorf (Disbon 947 SlideStop Rough)  
 1-1257 Testing of anti-slip property R10, Material Testing Institute Hellberg, Aldendorf (Disbon 947 SlideStop Medium)

Cleaning and Maintenance

Cleaning and care at regular intervals is indispensable to preserve the noble look of coated surfaces. For a long-term maintenance of value apply felt pads to chair & table legs. Carefully arrange the furniture and all other contents, avoiding scratch marks and partial damages. Always lift the furniture & fixtures and never relocate with direct and abrading contact to the surface. Only soft bottom rollers are suitable for chairs, e.g. office chairs.

Protect entrance areas against soiling by suitable means (e.g. floormats). 1-2 basic cleanings per year with following sealing are required for the industrial sector, depending on the loads. In between the sealed surface has to be cleaned/wiped at regular intervals with a suitable care product. Flattened surfaces may be slightly polished up (brightened) in order to extend the time period for subsequent basic cleaning.

It is advisable to check the cleaning method or floor care product for suitability by trial application on a partial area (not all customary products are suitable). Before the first use of finished coating, a suitable floor care sealer should be applied (e.g. care dispersion/emulsion B 250 of TANA-Chemie GmbH, Mainz). Adhesion problems may occur when using other care sealers on the new coating. A trial care sealer application is advisable. For basic cleaning use e.g. basic cleaner GR 10 of TANA-Chemie GmbH, Mainz. Maintenance cleaning is effected with suitable wet cleaning & floor care product. Follow the General Advice for Cleaning and Care/Maintenance of Disbon Floor Coatings. The product specific advice for care is available at the Caparol Customer Service Centre.

Special Risks (Hazard Note) / Safety Advice (Status as at Date of Publication)	<p>For professional use only.</p> <p><i>Base material (component A):</i> 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. Avoid contact with skin. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. After contact with skin, wash immediately with plenty of water and soap. Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point. Wear suitable gloves and eye/face protection. Contains epoxy constituents. See information supplied by the manufacturer (Safety Data Sheet).</p> <p><i>Hardener (component B):</i> Harmful by inhalation, in contact with skin and if swallowed. Causes burns. May cause sensitization by skin contact. Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Do not breathe vapour/spray (aerosol). Keep locked up and out of the reach of children. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. After contact with skin, wash immediately with plenty of water and soap. Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point. Wear suitable protective clothing, gloves and eye/face protection. If swallowed, seek medical advice immediately and show this container or label. Contains 3-Aminomethyl-3,5,5-trimethyl-cyclohexylamin, 4,4'-Isopropylidendiophenol, benzyl alcohol, polyoxypropylene diamine. Further details: See Safety Data Sheet.</p>
Disposal	<p>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 with hardener (catalyst) to cure and dispose as paints waste.</p>
EU limit value for the VOC content	of this product (category A/j): 500 g/l (2010). This product contains max. 130 g/l VOC.
Giscode	RE 1
Further Details	<p>See Safety Data Sheet (MSDS). Follow the application recommendation and advice for care and maintenance while applying our products.</p>
CE Labelling	<p>CE labelling is based on 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 standards are to be labelled with the CE mark.</p>
Technical Assistance	<p>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. We will describe appropriate working methods, if a substrate not specified above is to be coated.</p>
Customer Service Centre	<p>Tel.: (+49) 0 61 54 / 71 17 10 Fax: (+49) 0 61 54 / 71 17 11 e-mail: kundenservicecenter@caparol.de</p> <p>International Distribution: Please see <a href="http://www.caparol.com">www.caparol.com</a></p>