

System Data Sheet

Disboxid ArteFloor-System

For the decorative design of floor surfaces in representative interiors.
Unmatched design flexibility due to approx. 150 glaze colours of the Caparol 3D System.



System Description

Disboxid ArteFloor System is a designing system for floor surfaces in selling rooms & showrooms, consisting of 4 system products:

Due to the emission-minimised, ecologically compatible formula of the system products, particularly suitable for all »sensitive/delicate« areas, as e.g. lounges, hospitals, nurseries, play schools, schools, etc.

System	Product
Prime coat	Disbopox 443 EP-Imprägnierung
Intermediate coat	Disbopox 447 E.MI Wasserepoxid (base 1)
Colour designing	Capadecor Arte-Lasur
Finishing coat	Disboxid 422 E.MI ClearCoat

Note: On rough-textured, uneven substrates an additional levelling scratch-filler application with Disbopox 453 Verlaufschrift is essential. In this case Disbopox 453 Verlaufschrift may also be used as a primer. Please follow the Technical Information No. 453. For the intermediate coat other shades than Disbopox 447 E.MI Wasserepoxid (Base 1 – White) matching the Arte-Lasur tone may as well be used. According to the desired tone the base material (Base 1, 2 or 3) has to be tinted via ColorExpress stations (Capamix).

Apply an additional top coat of matt-transparent Disbopur 458 PU-Aquasiegel, if a matt surface aspect is desired.

Areas of Application

Absorbent, mineral substrates (concrete, cement-based screed) in representative interiors, e.g. in entrance halls, selling rooms and showrooms.

Material Base / Vehicle

Disbopox 443 EP-Imprägnierung:
Water-thinnable, liquid 2-component epoxy resin

Disbopox 447 Wasserepoxid Base 1:
Water-thinnable, solid 2-component epoxy resin

Capadecor Arte-Lasur:
Acrylate dispersion

Disboxid 422 E.MI Clear Coat:
Low-viscous, 2-component liquid epoxy resin, total solid according to German Construction Chemistry

Gloss Level

Glossy (finishing coat)

Technical Data

	Disbopox 443 EP-Imprägnierung	Disbopox 447 E.MI Wasserepoxid	Capadecor Arte-Lasur	Disboxid 422 E.MI ClearCoat
Density	approx. 1.0 g/cm ³	approx. 1.4 g/cm ³	approx. 1.09 g/cm ³	approx. 1.1 g/cm ³
Dry Film Layer Thickness per 100 g/m²	approx. 30 µm	approx. 35 µm	–	approx. 95 µm
Mixing Ratio Base material Hardener	4 parts by weight 1 part by weight	3 parts by weight 2 parts by weight	–	2 parts by weight 1 part by weight
Workability *	approx. 90 min.	approx. 90 min.	–	approx. 60 min.
Consumption	approx. 200 g/m ²	approx. 250 g/m ² + approx. 13–25 g/m ² Disboxid 942 Mischquarz	approx. 120-150 ml/m ²	approx. 800–1,000 g/m ²
Drying Times * Walkable Ready for mechanical loads Completely cured	approx. 1 day approx. 3 days approx. 7 days	approx. 24 hours approx. 3 days approx. 7 days	approx. 24 hours – –	approx. 24 hours approx. 3 days approx. 7 days

* Approximate values at 20 °C and 60% relative humidity. The exact rate of consumption is best established by trial application on site.

Package Size / Colours

Product	Packaging	Colour
Disbopox 443 EP-Imprägnierung	10 kg plastic-combi-packaging 5 kg plastic-combi-packaging	Transparent
Disbopox 447 E.MI Wasserepoxid Base 1*	10 kg plastic-combi-packaging	White
Capadecor Arte-Lasur **	5 litre plastic bucket	White-transparent
Disboxid 422 E.MI ClearCoat	25 kg packaging 16,67 kg tin-hobbock (base) 8,33 kg tin-bucket (hardener) 10 kg tin-combi-packaging	Transparent

* If required use tinted base 1, 2 or 3. Tinting via ColorExpress stations (Capamix).

** Approx. 150 shades of Caparol 3D System plus can be tinted via ColorExpress stations (see Technical Information Capadecor Arte-Lasur).

Note: 12 designing examples out of a variety of possibilities have been created by the Caparol ColourDesign Studio as an orientation guide – see separate brochure. For the depicted colour designs the shades used for the intermediate coats and glazes are also described in this brochure (see table, page 4). If other tints are selected, bear in mind to use only material harmonised in tones for intermediate coat (Disbopox 447 Wasserepoxid) and glaze coat (Capadecor Arte-Lasur). If required apply a second intermediate coat to achieve a uniform basic colour. A test application is recommended (including finishing coat Disboxid 422 E.MI Clear Coat and, where required, a matt-transparent top sealing).

Slight discolouration and chalking effects may occur, caused by weathering and UV light exposure. The pigmentation in e.g. coffee, red wine or leaves (organic dyestuffs) and various chemicals, e.g. disinfectants, acids, softeners, etc., may cause discolouration. Scratch marks may appear on the surface due to continued rubbing/sliding. (Disbon cleaning instructions and maintenance recommendations are to be followed).

The functional capability of the coating will not be affected by these changes.

Storage

Product	Storage	Shelf life
Disbopox 443 EP-Imprägnierung	cool, dry, frost-free	1 year, in the originally closed packaging
Disbopox 447 E.MI Wasserepoxid	cool, dry, frost-free	2 years, in the originally closed packaging
Capadecor Arte-Lasur	cool, dry, frost-free	1 year, in the originally closed packaging
Disboxid 422 E.MI ClearCoat	cool, dry, frost-free	2 years, in the originally closed packaging

At low temperatures store the materials at 20 °C before application.

Application

Suitable Substrates	<p>All types of mineral substrates in the interiors. The substrates must be sound, dimensionally stable, solid and free from all materials that may prevent good adhesion, e.g. loose/brittle materials, dust, oils, fats/greases or abraded rubber contamination (scuff/skid marks).</p> <p>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 Xylo-lite screed: 4 – 8 % by weight</p> <p>Rising damp/moisture must be avoided. In case of anhydrite and magnesite floors, complete sealing from contact with the ground is essential.</p>
Substrate Preparation	<p>Prepare the substrate by suitable means, e.g. grit blasting (shot peening) or milling, in order to meet the above mentioned requirements. Repair spallings and defects with Disbocret® PCC or Disboxid EP mortars and fillers, filling them flush with the surface.</p>
Preparation	<p>Disbopox 443 EP-Imprägnierung: Add the hardener to the base material and stir intensively with a low-speed electrical paddle (agitator, max. 400 rpm). Pour the mixture in another container and stir again thoroughly.</p> <p>Disbopox 447 E.MI Wasserepoxid: Add the hardener to the base material and stir intensively with a low-speed electrical paddle (agitator, max. 400 rpm). Continue stirring until a uniform tint, without streaks, is achieved. Pour the mixture in another container and stir again thoroughly. After having poured into another (clean) container add 5 – 10 % by weight of mixing quartz Disboxid 942 Mischquarz and stir thoroughly. The material has to be applied undiluted.</p> <p>Capadecor Arte-Lasur: The material is ready for use. Stir up thoroughly before application.</p> <p>Disboxid 422 E.MI ClearCoat: Add the hardener to the base material and stir intensively with a low-speed electrical paddle (agitator, max. 400 rpm). Continue stirring until a uniform tint, without streaks, is achieved. Pour the mixture in another clean container and stir again thoroughly.</p> <p>Material preparation for anti-slip top sealing coat: After having poured into another clean container add the required quantity of mixing quartz Disbon 947 SlideStop Rough or Disboxid 947 SlideStop Medium according to Technical Information Disboxid 422 E.MI ClearCoat and mix thoroughly.</p>

Exemplary colour combinations created by the ColourDesignStudio:

Classic Colours	Product	Product-shade
Piacenza	Disbopox 447 E.MI Wasserepoxid Capadecor Arte-Lasur	Piacenza Piacenza
Bergamo	Disbopox 447 E.MI Wasserepoxid Capadecor Arte-Lasur	Bergamo Bergamo
Merano	Disbopox 447 E.MI Wasserepoxid Capadecor Arte-Lasur	Merano Merano
Messina	Disbopox 447 E.MI Wasserepoxid Capadecor Arte-Lasur	Messina Messina
Marsala	Disbopox 447 E.MI Wasserepoxid Capadecor Arte-Lasur Color	Marsala Ferrara
Modena	Disbopox 447 E.MI Wasserepoxid Capadecor Arte-Lasur	Modena Modena
Nature Colours		
Aversa	Disbopox 447 E.MI Wasserepoxid Capadecor Arte-Lasur	3D Plus Venato 25 3D Plus Jura 30
Ravenna	Disbopox 447 E.MI Wasserepoxid Capadecor Arte-Lasur	3D Plus Venato 10 3D Plus Jura 20
Trend Colours		
Savona	Disbopox 447 E.MI Wasserepoxid Capadecor Arte-Lasur	3D Plus Papaya 10 3D Plus Onyx 5
Firenze	Disbopox 447 E.MI Wasserepoxid Capadecor Arte-Lasur	3D Plus Venato 10 3D Plus Grenadin 65
Portofino	Disbopox 447 E.MI Wasserepoxid Capadecor Arte-Lasur	3D Plus Lavendel 155 3D Plus Laser 90
Milano	Disbopox 447 E.MI Wasserepoxid Capadecor Arte-Lasur Color	3D Plus Granit 5 Livorno

Surface Coating System

Priming Coat:

Prime mineral substrates with EP Impregnation Disbopox 443 EP-Imprägnierung. Apply the material in one operation, uniformly and intensively with a sealer brush.

Consumption:

Disbopox 443 EP-Imprägnierung approx. 200 g/m²

Scratch Filler Application (if required)

Equalise rough-textured, porous substrates additionally with a scratch filler application by scraper.

Consumption:

Disbopox 453 Verlaufschrift approx. 1,040 – 1,200 g/mm/m²

Disboxid 942 Mischquarz approx. 210 – 240 g/mm/m²

Intermediate Coat

Apply the mixed Disbopox 447 (adding 5 – 10 % by weight of mixing quartz Disboxid 942) with a medium- to short pile paint roller. Apply the material undiluted and uniformly, rolling crosswise.

Consumption:

Disbopox 447 E.MI Wasserepoxid approx. 250 g/m²

Disboxid 942 Mischquarz approx. 13 – 25 g/m²

Adjust the colour of Disbopox 447 E.MI Wasserepoxid to match the used Capadecor Arte-Lasur in shade. If required apply an additional intermediate coat to achieve a uniform shade. The present substrate should be free of unevenness and marks caused by trowel application.

Glaze / Scumble

Apply Capadecor Arte-Lasur with a suitable brush, e.g. sealer brush, on the complete surface of hardened intermediate coat. The brush should be used as a scraper in the smoothing technique (short crosswise application). After approx. 5 – 10 minutes the brush marks can be softened with a dry brush. According to requirements a second glaze coat may be applied after a waiting time of approx. 12 – 24 hours at 20 °C and 60 % of relative humidity.

Note: Avoid soiling and high mechanical loads while walking on the glaze coat surfaces. Protect working shoes with clean clothes or wear textile (fabric) over-shoes.

Finishing Coat:

Smooth Surface:

Pour mixed Disboxid 422 E.MI ClearCoat material onto the hardened glaze coat and spread uniformly with a hard rubber made scraper (2 mm V-notched wiper). Deaerate (remove bubbles) after a waiting time of approx. 10 minutes with a spiked roller (crosswise).

Consumption:

Disboxid 422 E.MI ClearCoat approx. 800 – 1,000 g/m²

Additional anti-slip, glossy top sealer coating

Apply a uniform, thin coat of Disboxid 422 E.MI ClearCoat adding approx. 30 % by weight of Disboxid SlideStop Rough or Disboxid SlideStop Medium with a PE-smoothing trowel. Then roll crosswise over it with a rough-textured Moltoprene roller (5 mm diameter of pores). Therefore the surface may be walked on with suitable hobnailed boots. Stir up the material in between (after breaks).

Consumption:

Disboxid 422 E.MI ClearCoat approx. 150 g/m²

Disboxid SlideStop Medium approx. 50 g/m²

Disboxid SlideStop Rough approx. 50 g/m²

Additional matt-transparent top sealer coating (R9)

Apply a thin coat of Disbopur 458 PU-Aquasiegel with a short pile paint roller (crosswise application). Continuous surfaces should be sealed in one application to avoid visible lapping.

Consumption: approx. 100-150 g/m²

Additional anti-slip, matt-transparent top sealer coating (R11)

Apply a thin coat of Disbopur 458 PU-Aquasiegel mixed with 2 % by weight of Disbon 947 SlideStop Fine with a short pile paint roller (crosswise application). Connected surfaces should be sealed in one application to avoid visible lapping.

Consumption:

Disbopur 458 PU-AquaSiegel approx. 130 g/m²

Disbon 947 SlideStop Fine approx. 5 g/m²

Working Temperature

Material, atmospheric, and substrate temperature:

Min. 10 °C, 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.

Drying Time

At 20 °C and 60% relative humidity, the system materials are recoatable after 16 – 24 hours. The finishing coat is walkable after approx. 1 day (only limited loads). Ready for mechanical loads after approx. 3 days and completely hardened after approx. 7 days.

Tool Cleaning

Immediately after use or during longer breaks with with the appropriate means, see table.

Product	Cleaner
Disbopox 443 EP-Imprägnierung Disbopox 447 E.MI Wasserepoxid Arte-Lasur	Water or warm, soapy water.
Disboxid 422 E.MI ClearCoat	Disboxid 419 Verdünner

Advice

	<p>Special hazards/risks, safety advice, Giscodes, disposal, VOC and CE labelling for each system product: Follow the corresponding Technical Information: Disboxid 422 E.MI ClearCoat Disbopox 443 EP-Imprägnierung Disbopox 447 E.MI Wasserepoxid Capadecor Arte-Lasur</p>
German Certificates	<ul style="list-style-type: none"> ■ 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, Adendorf (Disbon 947 SlideStop Medium) ■ 1-1164 Certificate of the fire behaviour to DIN EN 13501-1, C_{fl-s1} MPA, Braunschweig
Cleaning and Maintenance	<p>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.</p> <p>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.</p> <p>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.</p>
Further Details	<p>See Material Safety Data Sheets (MSDS). Follow the application recommendation and advice for care and maintenance while applying our products.</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 www.caparol.com</p>

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