

## System Data Sheet

# Disboxid StoneColor-System - innen



For decorative industrial floors.

Unique combination of highly resilient floor coating and colored slate cladding.

Slip-resistant and abrasion resistant.

Diffusible, thus suitable for floor slabs with ground contact as well as magnesite and anhydrite screeds.

Appealing look through four selected colored cladding mixes.

Due to its emission-minimised formula particularly suitable for sensitive areas such as lounges, hospitals, kindergartens and daycare centers, schools, etc.

## System Description

The Disboxid StoneColor System results in a multi-coloured, slip-resistant surface by means of self-leveling floor coatings. The system for application on industrial floors consists of 3 products.

System	Product
Priming coat and scratch filling (if necessary)	Disbopox 453 Verlaufschiicht
Intermediate coat with colour-designing	Disbopox 453 Verlaufschiicht Disboxid 958 StoneColor
Sealing	Disbopur 458 PU-AquaSiegel

### Areas of Application

Diffusible coating for mineral and ceramic floor spaces in the industrial and commercial sector, where design and functionality are equally demanded, e.g. showrooms, exhibition halls, workshops and manufacturing facilities, garages.

The system products are emission-minimised and tested for harmful substances by the Technical Control Board TÜV and therefore are particularly suitable for sensitive areas such as lounges, hospitals, kindergartens and daycare centers, schools, etc.

Note: Tested & approved according to AgBB testing criteria for VOC emissions from building material that is used for interior work. The criteria of AgBB (Ausschuss zur gesundheitlichen Bewertung 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.

Product Base / Vehicle	<b>Disbopox 453 Verlaufschiicht:</b> Water-thinnable 2-component epoxy resin  <b>Disboxid 958 StoneColor:</b> Coloured slate cladding  <b>Disbopur 458 PU-AquaSiegel:</b> Water-thinnable 2-component polyurethane
Gloss Level	Matt (Sealing)

## Technical Data

	Disbopox 453 Verlaufschiicht **	Disboxid 958 StoneColor	Disbopur 458 PU-AquaSiegel
<b>Density</b>	approx. 2.0 g/cm <sup>3</sup>	–	approx. 1.05 g/cm <sup>3</sup>
<b>Dry Film Thickness</b> per 100 g/m <sup>2</sup>	approx. 40 µm	–	approx. 44 µm
<b>Mixing Ratio</b> Base material: Hardener:	9 parts by weight 1 part by weight	–	5 parts by weight 1 parts by weight
<b>Workability*</b>	approx. 30 min.	–	approx. 90 min.
<b>Consumption</b>	<i>Priming coat:</i> approx. 500–800 g/m <sup>2</sup>  <i>Intermediate coat:</i> 1.6 kg/mm/m <sup>2</sup> + 320 g/mm/m <sup>2</sup> Disboxid 942 Mischquarz	approx. 700–900 g/m <sup>2</sup>	approx. 130 g/m <sup>2</sup> /apply 1–2 x
<b>Drying Time*</b> Walkable Ready for mechanical loads Thoroughly hardened	approx. 1 day approx. 3 days approx. 7 days	– – –	approx. 1 day approx. 3 days approx. 7 days
<b>Surefootedness</b>	–	–	very safe

\* Reference values at 20 °C and 60% relative humidity.

\*\* Min. consumption: 3.5 kg/m<sup>2</sup> with a min. layer thickness of 2 mm.

Package Size / Colours	<b>Product</b>	<b>Packaging size</b>	<b>Colour</b>
	Disbopox 453 Verlaufschiicht	40 kg packaging: 36 kg hobbock (base) 4 kg tin-bucket (hardener) 10 kg plastic-combi-packaging	Medium grey
	Disboxid 958 StoneColor	25 kg bag	Classic: Indigo, Orissa, Amabel Nature: Albero, Graphite Trend: Kishanda, Karubwe
	Disbopur 458 PU-AquaSiegel	4 kg plastic-combi-packaging	Transparent
	<b>Note:</b> The above mentioned shades can only be achieved in combination with the medium grey shade of the intermediate coat Disbopox 453 Verlaufschiicht.		
	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. Scratch marks may appear on the surface due to mechanical loads with grinding effect. Proper functioning of the coating will not be affected by these changes. The general maintenance and cleaning recommendations for Disbon floors are to be respected.		
Storage	<b>Product</b>	<b>Storage</b>	<b>Shelf life</b>
	Disbopox 453 Verlaufschiicht	Cool, dry, frost-free	min. 6 months, in the original packaging
	Disboxid 958 StoneColor	Dry	unlimited
	Disbopur 458 PU-AquaSiegel	Cool, dry, frost-free	min. 6 months, in the original packaging

If stored at low temperatures, the material should be stored at 20 °C before application.

## Application

Suitable Substrates

All types of mineral and ceramic substrates as well as rigid, indoor 2-component coatings. 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). 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/mm<sup>2</sup> on an average, with a minimum individual value of 1.0 N/mm<sup>2</sup>.

Substrates must have achieved their equilibrium moisture content:  
 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 (Magnesium Oxychloride) screed: 4–8 % by weight

Substrate Preparation

Prepare the substrate by suitable means, e.g. grit blasting (shot peening) or milling, in order to meet the above mentioned requirements. Vitreous surfaces and surfaces of rigid existing 2-component coatings must be cleaned and roughened (flattened) by sanding or blasting. Repair spallings and defects with Disbocret® PCC or Disboxid EP mortars and fillers, filling them flush with the surface.

Preparation

### Disbopox 453 Verlaufschiicht

Stir up the hardener and the base material separately, then add the hardener to the base material and stir intensively with a low-speed electric paddle (agitator; max. 400 rpm) until a homogeneous, streak-free mass is achieved. Pour the mixture in another clean container and stir again very thoroughly, while adding the required amount of sand or water, until a lump-free homogeneous mix is achieved.

Mixing ratio	
Base material	9 parts by weight
Hardener	1 part by weight
<b>Priming coat</b>	
<i>Brush application</i>	
Disbopox 453 Verlaufschiicht ungefüllt	unfilled *
<b>Scratch filler and self-leveling mortar</b>	
Disbopox 453 Verlaufschiicht	100 parts by weight
Water	max. 2 parts by weight
Disboxid 942 Mischquarz	20 parts by weight
<b>Repair mortar</b>	
Disbopox 453 Verlaufmörtel	1 part by weight
Disboxid 946 Mörtelquarz	5 parts by weight

\* The material may be diluted with up to 2 % by weight with water in order to adjust the working properties.

### Disboxid 958 StoneColor:

The material is ready for use. For connected surfaces only use slate claddings of one production batch.

### Disbopur 458 PU-AquaSiegel:

Add the hardener to the base material and stir intensively with a low-speed electric paddle (agitator; max. 400 rpm) until a homogeneous, streak-free colour shade is achieved. Pour the mixture into another clean container and continue stirring.

Surface Coating System

### Priming coat

*Mineral substrates:*

Apply Disbopox 453 Verlaufschiicht evenly generous with a sealing brush.

Consumption\*:

Disbopox 453 Verlaufschiicht approx. 500–800 g/m<sup>2</sup>

Alternatively Disbopox 443 EP-Imprägnierung can be applied floating with a smooth rubber scraper. In case material puddles occur, rework them with a medium pile roller or a sealing brush. For detailed information see TI 443.

*Ceramic substrates:*

Apply Disbopox 453 Verlaufschiicht with a brush.

Note: Ceramic substrates show a variety of different surfaces, adequate adhesion is therefore best verified by a trial application. Prior to the coating, the joints in the covering must be filled.

*Consumption\*:*

Disbopox 453 Verlaufschiicht approx. 500–800 g/m<sup>2</sup>

**Scratch Filler Application (if necessary)**

Level primed, rough-textured, porous mineral substrates by scratch-filler application. Due to its extremely porous surface, a scratch filling has to be applied on mechanically pre-treated magnesite screeds.

*Consumption\*\*:*

Disbopox 453 Verlaufschiicht approx. 1,040–1,200 g/mm/m<sup>2</sup>

Disboxid 942 Mischquarz approx. 210–240 g/mm/m<sup>2</sup>

**Intermediate Coat with Colour-Designing**

Pour Disbopox 453 Verlaufschiicht and Disboxid 942 Mischquarz on the primed or scratch-filled surface and spread the material uniformly using a hard rubber scraper (V-notch, size 8 mm), then deaerate with a spiked roller, working crosswise.

*Consumption\*:*

Disbopox 453 Verlaufschiicht approx. 1,600 g/mm/m<sup>2</sup>

Disboxid 942 Mischquarz approx. 320 g/mm/m<sup>2</sup>

Note: Minimum consumption must not be less than 3.5 kg/m<sup>2</sup>, as this can cause flow problems.

Spray Disboxid 958 StoneColor over the freshly deaerated coating using a hopper-gun (type "Flüstertüte", company: Putzmeister), working pressure approx. 2 bar, nozzle size 6 mm. Walk over the freshly applied coating with spiked shoes. Apply the crushed slate cladding uniformly in one procedure and without surplus. Defined surface areas should always be coated in one operation to avoid lapping. Spray in the area of rising walls in equal fashion. Reduce pressure in the corners to avoid accumulations of crushed slate cladding.

*Consumption\*:*

Disboxid 958 StoneColor approx. 700 - 900 g/m<sup>2</sup>

**Top-Sealing**

Remove loose slate cladding by sweeping or suction cleaning. Push off projecting slate cladding with a scraper. Finally apply a uniform finishing coat of PU-AquaSiegel 458 onto the intermediate coat, working crosswise with a medium pile roller. Depending on the scattered material a second coat may be necessary for complete bonding/covering.

*Consumption\*:*

Disbopur 458 PU-AquaSiegel approx. 130 g/m<sup>2</sup> per coat

\* The exact rate of consumption should be determined by a trial application on site.

\*\* The given indication of consumption is only a recommendation. Size depends on wear resistance of the notching tools, temperature, degree of filling and substrate conditions.

Working Temperature

**Disbopox 453 Verlaufschiicht:**

Material, atmospheric, and substrate temperature:

Min. 10 °C, max. 25 °C during application and drying. Relative humidity must be between 40 % and 80 %. Values outside this range may lead to optical impairment of the surface. Substrate temperature should always be min. 3 °C above the dew point temperature.

**Disbopur 458 PU-AquaSiegel:**

Do not process under 10 °C or below dew point temperature, as permanent white discoloration may occur.

Drying Time

At 20 °C and 60 % relative humidity, the system products are reworkable after 16-24 hours. The sealing is walkable after 1 day, ready for mechanical loads after approx. 3 day and completely hardened after 7 days. During the hardening process (approx. 12 hours at 20 °C), the applied coat should be protected against moisture for at least 24 hours, to avoid permanent white discoloration.

Tool Cleaning

Immediately after use or during longer breaks with water or warm soapy water.

## Advice

German Certificates

Special hazards/risks, safety advice, Giscodes, disposal, VOC and CE labelling for each system product:

Follow the corresponding Technical Information:

Disbopox 453 Verlaufschiicht

Disbopur 458 PU-AquaSiegel

- 1-1267 Testing of anti-slip property R12  
Material Testing Institute Hellberg, Adendorf

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 &amp; table legs. Carefully arrange the furniture and all other contents, avoiding scratch marks and partial damages. Always lift the furniture &amp; 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>Maintenance cleaning is effected with suitable wet cleaning &amp; 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 Safety Data Sheet (MSDS).</p> <p>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.</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>

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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 System Data Sheet StoneColor-System - innen · Issued: August 2010

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