



DisboPUR 305

Pigmented, resilient two-component polyurethane coating for balconies, terraces and arcades.

Product Description

Field of Application	Coating for exterior mineral floor spaces, such as balconies, terraces and access balconies/arcades.
Material Properties	<ul style="list-style-type: none"> ■ Low-temperature flexible, crack bridging. ■ UV resistant, weatherproof. ■ Resistant to permanent water exposure (moisture loads). ■ Resistant to mechanical loads. ■ Solvent-free.
Material Base / Vehicle	Two-component polyurethane resin
Packaging/Package Size	10 kg combined tin packaging
Colours	<p>■ 10 kg packaging: Approx. RAL 7032 (Pebble Grey/Kieselgrau), approx. RAL 7035 (Light Grey/Lichtgrau), approx. RAL 7037 (Dust Grey/Staubgrau).</p> <p>Special/individual colours on request.</p> <p>Exclusive colour design is feasible with the shades of FloorColor collection.</p> <p>The cured coating has a high UV resistance and colour stability. Colourants (organic dyestuffs) in e.g. coffee, red wine or leaves and various chemicals, e.g. disinfectants, acids, etc. may cause discolouration. Abradant mechanical loads may cause visible scratches on the surface. Proper functioning of the coating will not be affected by these changes.</p>
Gloss Level	Gloss
Storage	<p>Keep in a cool, dry and frost-free place.</p> <p>Shelf life of the original, tightly closed packaging: minimum 9 months. If temperatures are low, the material should be stored at approx. 20 °C before application.</p>
Technical Data	<ul style="list-style-type: none"> ■ Crack bridging classes according to DIN EN 1062-7: at 0 °C Class A 4 (crack width > 1250 µm) at -10 °C Class A 3 (crack width > 500 µm) ■ Density: approx. 1.4 g/cm³ ■ Dry film thickness: approx. 70 µm/100 g/m² ■ Abrasion to Taber (CS 10/1000 U/1000 g): approx. 46 mg/30 cm² ■ Shore hardness (A/D): ca. A 85/ D 35 ■ Ultimate elongation to DIN 53504: > 70 % (at 0 °C) ■ Viscosity: approx. 4000 mPas



Chemical resistance

Chemical Resistance Table according to DIN EN ISO 2812-3:2007 at 20 °C	
	7 Days
Test liquid group 5b: Monovalent and polyhydric alcohols (except methanol), glycol ether	+ / -
Test liquid group 9: Aqueous solutions of inorganic acids (carboxylic acids) up to 10 % and their salts (in aqueous solution)	+ (D)
Test liquid group 10: Mineral acids up to 20 % and their salts in aqueous solution (pH <6), except hydrofluoric acid and oxidizing acids and their salts	+ (D)
Test liquid group 11: Inorganic bases and alkaline hydrolysing, inorganic salts in aqueous solution (pH < 8), except ammonia solutions and oxidizing solutions of salts (e.g. hypochlorite)	+
Ethanol 50 % solution	+ / -
Ammonia 25 % solution	+ (D)
Caustic soda solution 50 %	+ (D)
Citric acid 10 %	+
VE Water	+
Sodium chloride (common/de-icing salt)	+
Coffee	+ (D)
Cola	+ (D)
Red wine	+ (D)

Legend: + = Resistant, +/- = Limited resistant, D = Discolouration

Application

Suitable Substrates

Concrete and cement screed.
The substrate must be dry, sound, dimensionally stable, solid and free from all substances that may prevent good adhesion, e.g. loose/brittle materials, dust, oils, fats/greases or rubber abrasion (skidmarks).
The average value for adhesive tensile strength must be 1.5 N/mm², with a single minimum value of 1.0 N/mm². Substrates must have achieved their equilibrium moisture content (EMC): Concrete and cement screed: max. 4 % by weight. Rising damp/moisture must be avoided.

Substrate Preparation

Prepare the substrate by suitable means, e.g. ball blasting (shot peening) or milling, in order to fulfill the above mentioned requirements. Always remove existing 1-component coatings and non-adherent 2-component coatings.
Clean and roughen (flatten) vitreous surfaces and surfaces of rigid 2-component coatings by sanding/grinding or blasting. Roughen (sand/grind) stable existing PU coatings to achieve a matt (flat) surface. Repair spallings and defects with Disbocret® PCC or Disboxid EP mortars (only suitable for limited areas), filling them flush with the surface.

Preparation of Material

Stir component A (base material), then add component B (hardener/catalyst) to the base and mix intensively with a low-speed paddle mixer (max. 400 rpm) until a homogeneous colour shade, free of streaks, is achieved. Pour the mixture into another clean mixing vessel and continue stirring.

DisboPUR 305 can be thixotropized to a max. of 3 % by weight with Disbon 913 PU-Stellmittel, if necessary. Flow and surface appearance may be detrimentally influenced by adding a set-up agent.

Note: DisboPUR 305 can only be thixotropized with Disbon 913 PU-Stellmittel. Other types of set-up agents may interrupt the hardening procedure.

Mixing Ratio

Component A (base): Component B (hardener) = 72:28 parts by weight

Method of Application

Apply with short- to medium-pile roller or suitable wiper/squeegee/scrapper (e.g. notched hard rubber squeegee), depending on the intended use.

See related System Data Sheets for Disboxid ColorQuarz System outdoors and Disboxid MultiColor system outdoors.

Priming Coat

Prime mineral substrates with Disboxid 420 E.MI Primer, filling all pores. Then roll over the surface, working cross-wise with a medium pile roller to avoid any agglomeration of material (gloss areas). For strongly absorbent substrates (when the resin is fully absorbed, without forming a closed primer film on the surface) a second priming coat is necessary to fill all pores.

Scratch Filler Coat

A scratch filler coat is necessary to level surface roughness > 1 mm (measured as per sand surface method*).

Prepare a scratch filler as follows:

Disboxid 420 E.MI Primer: 1.0 part by weight

Disboxid 942 Mischquarz: 0.75 parts by weight

Disboxid 943 Einstreuquarz: 0.75 parts by weight

Pour the thoroughly mixed material to the previously primed (priming coat) surface and draw sharply with a smoothing trowel in order to level surface unevenness.

Then scatter quartz sand Disboxid 942 Mischquarz to the full surface of freshly applied priming or scratch filler coat (without surplus).

* Sand surface method as per German Richtlinie/Guideline DAfStb, repair guideline Part 3: Determination of surface roughness / Priming coat

Coating

Pour mixed material to the surface and spread evenly with a notched wiper/squeegee (triangular notching, 6 mm). After having respected a waiting time of approx. 10 minutes remove all blistering with a spiked roller, working cross-wise.

For coating vertical and inclined surfaces the product must be thixotropized with approx. 0.5 - 3 % by weight of Disbon 913 PU-Stellmittel.

Renovation Coating on a Stable PU Coating

Pour mixed material to the prepared/grinded surface and spread evenly with a notched wiper/squeegee (triangular notching, 2 mm). Then roll over the surface very evenly, using a short- or medium-pile roller.

Note: When using a notched tool the chosen triangular notching does not lead automatically to compliance with given consumption values. Notching is depending on the wear resistance of tools, temperature, degree of filling and substrate requirements.

Surface Design

Scatter Disbon HS 8255 FastChips to the freshly applied coating.

Alternatively (optionally):

Scatter Disboxid 948 Color-Chips to the freshly applied coating and seal with Disbothan 446 PU-Klarschicht (either smooth or with slip resistant surface), following Technical Information No. 446.

Sealing

For smooth sealing: Apply a thin coat of Disbothan 446 PU-Klarschicht with a short-bristle roller, resistant to solvents.

For slip resistant sealing: Mix with Disbon 947 SlideStop Rough and Disbocolor 499 Verdünner (thinner), then apply evenly above grain using a PE smoothing trowel (float). Stir the mixture in between for longer holding times. Roll crosswise over the surface with a coarse-cellular Moltopren/foam paint roller (Ø of pores: 5 mm). Do not walk-on the surface with nailed shoes.

Consumption

Priming Coat Disboxid 420 E.MI Primer	approx. 0.3-0.4 kg/m ²
Scratch Filler Coat surface roughness down to 1.0 mm	
Disboxid 420 E.MI Primer Disboxid 942 Mischquarz Disboxid 943 Einstreuquarz	approx. 0.66 kg/mm/m ² approx. 0.5 kg/mm/m ² approx. 0.5 kg/mm/m ²
Coating	
<i>As flow coat (self-levelling)</i> DisboPUR 305	2.3 - 2.8 kg/m ²
<i>For renovation</i> DisboPUR 305	approx. 0.5 kg/m ²
Surface Design	
<i>Scattering chips without sealing</i> Disbon 8255 FastChips	approx. 20 g/m ²
<i>Scattering chips with slip resistant sealing</i> Disboxid 948 Color-Chips Disbothan 446 PU-Klarschicht Disbon 947 SlideStop Rough (approx. 10 %) Disbocolor 499 Verdünner (approx. 6 %)	approx. 30 g/m ² approx. 150 g/m ² approx. 15 g/m ² approx. 9 ml/m ²
<i>Scattering chips with a smooth sealing</i> Disboxid 948 Color-Chips Disbothan 446 PU-Klarschicht	approx. 30 g/m ² approx. 150 g/m ²

Determine the exact amount of material required by coating a test area on site.

Workability

Processing time: At 20 °C and 60 % relative humidity (RH) approx. 45 minutes. Higher temperatures shorten and lower temperatures extend the pot life.

Application Conditions

Material, Ambient Air and Substrate Temperature:

Temperature must remain at a min. of 10 °C, max. 30 °C.

Relative humidity (RH) must not exceed 80 %. The substrate temperature should always be min. 3 °C above the temperature of dew point.

Waiting Time

Waiting time between operations (priming coat or scratch filler coat) and DisboPUR 305: min. 12 hours, max. 24 hours at 20 °C.

For longer waiting times the surface of the preceding coat must be roughened/slightly grinded, when not being sand-treated (scattered with quartz sand).

Waiting time between DisboPUR 305 and the following coat: min. 20 hours, max. 48 hours. Higher temperatures shorten and lower temperatures extend the given period.

Drying/Drying Time

At 20 °C and 60 % relative humidity, walkable/recoatible after approx. 20 hours. Ready for mechanical and chemical stress/loads after approx. 7 days. Correspondingly longer at lower temperatures. During hardening, the applied coat/material should be protected from moisture to avoid the forming of surface-faults and loss of adhesion.

Tool Cleaning

Immediately after use and during longer breaks with thinner Disbocolor 499 Verdünner.

Advice

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

Restricted to professional users.

Component A (base):

Not a hazardous substance or mixture.

Component B (hardener):

May cause an allergic skin reaction. Harmful if inhaled. May cause respiratory irritation. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Use personal protective equipment as required. IF SWALLOWED: Get immediate medical advice/ attention. 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.

Contains isocyanates. May produce an allergic reaction.

Contains: Homopolymer of 1,6-diisocyanatohexane (CAS No. 28182-81-2).

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.

Germany: Only completely empty containers should be handed in for recycling.

Material residues: Allow the basic substance (component A) to harden with hardener (component B) and dispose of as paint waste. Uncured product residues are special/hazardous waste.

EU limit value for the VOC content

of this product (category A/j): max. 500 g/l (2010). This product contains max. 35 g/l VOC.

Giscode

PU40 (Germany)

Further Details

See Material Safety Data Sheets (MSDS).

Follow the application references and Disbon advice for care/cleaning and maintenance of floor spaces while applying our products.

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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.305 · DisboPUR 305 · Issued: July 2017

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