

DisboPUR W 458

2K-PU-Versiegelung



Transparent, aqueous 2-component polyurethane resin for matt top sealing of rigid and viscous-rigid polyurethane- and epoxy-based interior coatings. Emission minimised, technically controlled and supervised (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.
For matt sealing of rigid and viscous-rigid polyurethane- and epoxy-based interior coatings with low resistant of mechanical loads.
Component of the Disboxid StoneColor System for interior and exterior use.
Additional top sealer within the Disboxid Multicolor Systems interior, and Disboxid ArteFloor System to achieve a matt surface.
Enhances anti-slip properties if applied in combination with Disbon 947 Slidestop.

Material Properties

- Emission minimised.
- Tested as to harmful substances by German Technical Control Board (TÜV)
- General Building Approval by the German Institute for Structural Engineering.
- Enhances the scratch resistance of rigid and viscous-rigid polyurethane- and epoxy-based coatings.
- Allows better surface cleaning.
- Reduces the forming of stripes caused by rubber abrasion (skid marks).
- Proper resistance to chemicals and UV rays.

Tested according to AgBB test criteria for VOC emissions of building materials in interior rooms. The evaluations scheme of AgBB (Ausschuß zur gesundheitlichen Bewertung von Bauprodukten / Committee for the evaluation of building materials regarding health effect) has been derived by the Environmentally and Health Authorities for the use of building materials in sensitive areas, e.g. lounges / occupied spaces.

Material Base / Vehicle

Water-thinnable 2-component polyurethane dispersion.

Packaging/Package Size

4 kg plastic combi-packaging

Colours

Transparent.

The pigmentation 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. The functionality of the coating will not be affected by these changes.

Gloss Level

Matt

Storage

Dry, cool, frost-free.
Tightly closed, original packaging has a shelf life of minimum 6 months. If temperatures are low the material should be stored at 20 °C before application.

Technical Data

- Density: approx. 1.05 g/cm³
- Dry film thickness: approx. 44 µm/100 g/m²
- Abrasion to Taber (CS 10/1000 U/1000 g): 17 mg/30 cm²



Chemical resistance

Chemical Resistance according to DIN 53 168 at 20 °C	
	7 days
Test groups to testing principles of DIBT, Berlin	
Group 1: Motor fuels	+
Group 3: Heating fuel (to DIN 51 603-1)	+
Group 4: All hydrocarbons	+
Group 7b: Biodiesel (to DIN EN 14214)	+
Group 8: Aqueous solutions of aliphatic aldehydes up to 40%	+
Group 9: Aqueous solutions of inorganic acids (carboxylic acids) up to 10%	+ (D)
Group 10: Mineral acids up to 20%	+
Group 11: Inorganic bases	+
Group 14: Aqueous solutions of organic tensides	+
Skydrol	+
Citric acid, 10% sol.	+
Fe III chloride sol., saturated	+
Phosphoric acid, 85% sol.	+
Xylene (xylol)	+
Ammonia, 25% sol.	+
Cola	+
Coffee	+ (D)
Red wine	+ (D)
Ethanol, 40% sol.	+
Ethanol, 96% sol.	+
Distilled water	+
White spirit (turpentine substitute)	+
Hydrochloric acid, 10% sol.	+
Hydrochloric acid, 30% sol.	+ (D)
Legend: + = Resistant D = Discolouration	

Application

Suitable Substrates

Sound, adherent, rigid to viscous-rigid chipsprinkled polyurethane and epoxy coatings, Disboxid MultiColor Systems, StoneColor and ArteFloor Systems. The substrates must be dry, sound, dimensionally stable, solid, and free from all materials that may prevent good adhesion, e. g. loose materials, dust, oils, fats/greases or abraded rubber contamination (skid marks), etc.

Substrate Preparation

Prepare the substrate by suitable method, e.g. thorough sweeping or suction cleaning (particularly in case of chip-sprinkled surfaces), fulfilling the above mentioned substrate requirements.

Roughen existing coatings to achieve a matt surface, avoiding the forming of scratch marks (do not use coarse-grained abrasive). Seal freshly applied 2-component coatings on the following day.

Respect without fail the waiting times given for recoating, if temperatures are low. For longer waiting periods the coating must be slightly sandpapered (use fine-grained abrasive medium). At lower temperatures the waiting time may be accordingly longer. Water-thinnable reaction resin systems require adequate time for drying.

Note: Before applying Disbopur 458 PU AquaSiegel as finishing sealing coat on Disboxid 437 EP-Klarschicht (transparent coat), a thorough cleaning is always required, using undiluted basic cleaner Grundreiniger R*, Dr. Schutz or GR-S*, TANA Chemie. For basic cleaning of Disboxid 437 EP Klarschicht the drying times must be respected.

Preparation of Material Add the hardener to the base material and stir intensively with a low-speed electrical paddle (agitator; max. 400 rpm) until a homogenous material, free of streaks, is achieved. Pour the mixture into a second clean container and continue stirring.

Mixing Ratio Base material : Hardener = 5 : 1 parts by weight.

Method of Application Apply with a textured polyamide roller, e.g. Rotanyl roller 8 mm, pile height 11 mm, manufacturer: Rotaplast. Always work wet on wet to achieve a uniform aspect.

Surface Coating System

Smooth surface
Apply the material crosswise and uniformly in a thin layer (cross-coat). Connected surfaces should be sealed in one application without interruption to avoid visible lapping.

Anti-slip surface
Add 2–3% by weight of Disbon 947 Slidestop to the material, mix thoroughly and seal as described above (Smooth surface). For longer breaks the material should be stirred in between.

Consumption	Smooth surface	
	Disbopur 458 PU-AquaSiegel	80–120 g/m ² * each work step
	Anti-slip surface	
	Disbopur 458 PU-AquaSiegel Disbon 947 Slidestop	approx. 130 g/m ² approx. 4 g/m ²

* Two coats are required for rough-textured substrates, e.g. Disboxid StoneColor System exterior/interior, to achieve a porous-free surface. The exact rate of consumption is best established by a trial coating on site.

Workability At 20 °C and 60% relative humidity approx. 90 minutes. Higher temperatures shorten and lower temperatures extend the pot life.

Note: The end of pot life is not noticeable. Exceeding the time limit will cause variation of gloss level and diminishing of strength and adhesion to the substrate. Apply uniformly to avoid different gloss levels and traces, visible in the sidelight (especially for deeper shades). Do not apply in a high layer thickness (increased consumption > 200 g/m²) to avoid the forming of bubbles in the film. Ventilate well during the drying and hardening period.

Application Conditions Never apply the material at temperatures below 10 °C and below the dew point temperature, to avoid everlasting white discolouration. Material, atmospheric, and substrate temperature must remain at a min. of 10 °C and a max. of 30 °C during application and hardening. Relative humidity must not exceed 80%. The substrate temperature should always be minimum 3 °C above the dew point temperature.

Drying/Drying Time At 20 °C and 60% relative humidity, walkable/recoatable 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.

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

Advice

German Certificates

- 1-1129 Test of anti-slip property R11, Professional Association Institute, St. Augustin
- 1-1102 Test of anti-slip property R09 ,Material Testing Institut Hellberg, Lüneburg
- 1-1215 Certification emission minimised coating, TÜV Nord
- 1-1244 General Building Approval for the use in living spaces, Z-156.605-640, German Institute for Structural Engineering, Berlin
- 1-1242 General Building Approval for the use in living spaces, Z-156.605-639, German Institute for Structural Engineering, Berlin

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

For professional use only.

Base material: not applicable.

Hardener: May cause sensitization by skin contact. Keep out of reach of children. Avoid contact with eyes and skin. In case of 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 empty into drains, water courses or onto the ground. Wear suitable protective gloves and eye/face protection. Contains isocyanates. See information supplied by the manufacturer (see Material Safety Data Sheets).

Hardener and mixed material (ready for use) may irritate skin and respiratory system and may cause sensitization and allergic reactions. Ventilate well during application and hardening period. Do not breathe vapours. Spraying/spray-application is not permitted. Allergic persons and people having respiratory ailments should not be assigned job at such places.

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 made to removing wastage from site in compliance with standard construction site procedures. In Germany: Only completely emptied containers should be given for recycling. Residues: Harden the base material with the hardener and dispose of as paints waste.

EU limit value for the VOC content

of this product (category A/j): max. 140 g/l (2010). This product contains max. 20 g/l of VOC.

Giscode

PU 10

Further Details

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

CE Labelling

EN 13813

CE labelling is based on EN 13813 "Screed mortars, screed compounds and screeds – screed mortars and screed compounds – Properties and Requirements" 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. Additional engineer standards are effective for the use in Germany in structural safety relevant areas. Conformity is documented by the Ü sign (Überwachung = supervision) on the container. Established by documented evidence of conformity 2+ with controls and tests on the part of the manufacturer and notified bodys.

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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.458 · Disbopur 458 PU-AquaSiegel · Issued: January 2017

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