

# Disbon 404 ELF 1K-Acryl-BodenSiegel



One-component, PU-reinforced, emission- and solvent-free acrylate coating for interior and exterior floor surfaces.

## Product Description

Field of Application

Protective coating for mineral floor surfaces indoors and outdoors as well as hard asphalt screed in interiors, subjected to normal pedestrian traffic loads.

Material Properties

- Emission minimized, solvent and plasticizer free (ELF)
- AgBB-compliant
- Suitable for DGNB (German Sustainable Building Council) quality levels 1-4
- PU-reinforced
- Weather- and UV-resistant
- Very good cleanability
- Very good abrasion resistance
- Low wear
- Elastic

Tested according to AgBB testing criteria for VOC emissions from building materials used for interior spaces. The criteria of AgBB (German Commission for the Sanitary Evaluation of Building Materials) are elaborated by the ecological and sanitary authorities for the use of building materials in delicate/sensitive areas, as e.g. recreation rooms.

Material Base / Vehicle  
Packaging/Package Size

PU-reinforced methacrylate dispersion

- **Standard:**  
2.5 l, 5 l and 12.5 l plastic bucket
- **ColorExpress:**  
2.5 l, 7.5 l and 12.5 l plastic bucket

Colours

- **Standard:**  
12.5 l plastic bucket: concrete gray (ca. RAL 7023), stone gray (ca. RAL 7030), gravel gray (ca. RAL 7032), agate gray (ca. RAL 7038)  
2,5 l, 5 l plastic bucket: stone gray (ca. RAL 7030), gravel gray (ca. RAL 7032), agate gray (ca. RAL 7038)  
Special tints are available on request.

- **ColorExpress:**  
Over 28,000 shades are available in the ColorExpress stations.

Exclusive color schemes are possible due to the shades of FloorColor collection. Depending on the shade, base 1, base 2 or base 3 can be mixed via ColorExpress stations.

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, etc., may cause discolouration. The functional capability of the coating will not be affected by these changes.



Gloss Level	Semi-gloss
Storage	Cool, dry, and frost-free. Tightly closed, original container has a minimum shelf life of two years. If temperatures are low, the material should be stored at 20 °C before application.
Technical Data	<ul style="list-style-type: none"> <li>■ Density: approx. 1.3 g/cm<sup>3</sup></li> <li>■ Dry film thickness: approx. 45 µm/100 ml/m<sup>2</sup></li> <li>■ Abrasion to Taber (CS 10/1000 U/1000 g): 160 mg/30 cm<sup>2</sup></li> <li>■ Ultimate elongation to DIN 53504: approx. 45 %</li> </ul>

## Application

Suitable Substrates	<p>Mineral substrates, e.g. concrete, cement-based composition floor/screed, render/plaster, masonry, hard asphalt screeds (only indoors) and floorages with existing unplasticized, adherent paint coatings.</p> <p>The substrate must be sound, dimensionally stable, solid, and free from brittle substances, release agents, dust, oils, fats/greases, rubber abrasion (skid marks) and all materials that may prevent good adhesion. Check cementitious, synthetic resin improved flow mortars for compatibility by a trial coating, if necessary. The minimum adhesive tensile strength must be <math>\geq 1.0</math> N/mm<sup>2</sup>. Substrates must have achieved their equivalent humidity:</p> <p>Concrete and cement-based composition-floor (screed): max. 5 % by weight          Anhydrite screed: max. 1 % by weight          Magnesite screed: 2–4 % by weight          Xylo-lite (Magnesium Oxychloride) screed: 4–8 % by weight</p> <p>Hard asphalt screeds have to correspond at least to hardness class IC 15 and should not warp on the given temperature and mechanical load conditions. Moist-loaded substrates must have a sufficient incline in order to exclude stagnant water.</p>
Substrate Preparation	<p>Prepare substrates by suitable means in order to fulfil the above mentioned requirements. Remove all loose existing coatings or unsound paint coatings. Unsustainable, heavily soiled surfaces which are contaminated by oils, greases, rubber abrasion, sandy or glass-like cement stone must be intensively mechanically prepared. Treat oil stains with a commercially available oil remover.</p> <p>Clean adherent dispersion coatings. Thoroughly clean rigid EP coatings, then sand or matt blast (until white break). Alternatively, matt the surface with a sanding pad and prime with Disbon 481 2K-EP-Universalprimer.</p> <p>No residual materials, cleaning agents or the like may be present on the surface to be coated.</p> <p>When revising diffusible old coatings, it may be necessary to check whether there is sufficient diffusibility for the overall structure. Fill substrate defects and spallings flush with the surface using DisboCRET-PCC mortars.</p>
Preparation of Material	Disbon 404 ELF is ready to use. Stir thoroughly before application.
Method of Application	The material may be applied by paint brush, roller or spraying equipment (airless device, no filter, nozzle size 0.013 to 0.015 inch).
Surface Coating System	<p><b>Mineral Substrates</b></p> <p><b>Priming Coat (exterior)</b>          Apply Caparol CapaSol Concentrate, diluted in a 1:2 ratio (parts by volume) with tap water or apply undiluted OptiGrund.</p> <p><b>Priming Coat (interior)</b>          Apply Disbon 404 ELF diluted with 30 % of tap water or Caparol CapaSol Concentrate, diluted in a 1:2 ratio (parts by volume) with tap water.</p> <p>For hard asphalt screeds, a primer is not mandatory.</p> <p><b>Coating</b></p> <p><i>Crack-free substrates</i>          Apply two coats of undiluted Disbon 404 ELF.          To increase the anti-skid properties, add 3 % by weight DisboADD 947 glass beads to the last coat.</p> <p><i>Cracked substrates</i>          Apply one coat. Embed suitable fabric (e.g. from Kobau, glass fabric 5/5, with an overlap of min. 5 cm), in the wet coating. Then apply an intermediate coat. Isolated cracks can be covered in their run with fabric strips (15–20 cm wide). Allow the intermediate coat to dry thoroughly and apply one finishing coat.</p>

Disbon 404 ELF 1K-Acryl-Bodensiegel is not approved for coating oil-collecting basins (oil sumps).

**Alternative Surface Design**

*Strewing/scattering chips*

Scatter DisboADD 948 Color-Chips 2-4 mm over the fresh coating and seal the surface, either smooth or slip resistant.

Alternatively, chip interspersation without additional sealing with DisboADD 8255 color chips 1-2 mm (Fast Chips) is possible.

*Smooth top-sealing*

Apply DisboTHAN 446 1K-PU-Versiegelung for exteriors or for interiors Disbon 405 1K-Acryl-Versiegelung onto the surface.

*Top-sealing anti-skid for exteriors*

DisboTHAN 446 1K-PU-Versiegelung: 100 % by weight

DisboADD 947 glass beads rough: 10% by weight

DisboADD 499 Verdünner: 5 - 10 % by weight

Do not use the coating in areas where permanent contact with plastics containing plasticizers (e.g. car tires) is to be expected. Do not use on surfaces with stagnant water and permanently wet load.

Consumption

<b>Floor Coating</b>	
<b>Priming Coat (interior/exterior)</b>	
Caparol CapaSol concentrate	approx. 150 - 200 ml/m <sup>2</sup> 1:2 parts by volume diluted with tap water
<b>Priming Coat (interior)</b>	
Disbon 404 ELF 1K-Acryl-Bodensiegel diluted 30 % with tap water	approx. 150 - 200 ml/m <sup>2</sup>
<b>Coating</b>	
Disbon 404 ELF 1K-Acryl-Bodensiegel to increase the slip resistance of the last coat, add 3 % by weight of Disbon SlideStop Fine	approx. 2 x 150 ml/m <sup>2</sup>
<b>Surface Designing</b>	
<i>Chips to be strewn</i> DisboADD 948 Color-Chips 2-4 mm DisboADD 8255 Color-Chips 1-2 mm (FastChips)	approx. 30 g/m <sup>2</sup> approx. 20 g/m <sup>2</sup>
<i>Smooth top-sealing (exterior)</i> DisboTHAN 446 1K-PU-Versiegelung	approx. 150 ml/m <sup>2</sup>
<i>Smooth top-sealing (interior)</i> Disbon 405 1K-Acryl-Versiegelung	approx. 130 ml/m <sup>2</sup>
<i>Anti-skid top-sealing (exterior)</i> DisboTHAN 446 1K-PU-Versiegelung DisboADD 947 glass beads rough	approx. 150 ml/m <sup>2</sup> approx. 15 g/m <sup>2</sup>
<i>Anti-skid top-sealing (interior)</i> Disbon 405 1K-Acryl-Versiegelung DisboADD 947 glass beads rough	approx. 130 ml/m <sup>2</sup> approx. 4 g/m <sup>2</sup>

Determine the exact rate of consumption by a trial application on site. Fabric-embedding increases material consumption.

Application Conditions

**Temperature of Material, Ambient Air and Substrate:**

Min. 5 °C, max 30 °C.

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

Waiting Time

The waiting time between work steps should be minimum 5 hours at 20 °C. If applied with Disbon 404 ELF and Disbon 405, then recoatable after approx. 5 hours, and with DisboTHAN 446 after approx. 1 day.

Higher temperatures shorten and lower temperatures extend this time period.

Drying/Drying Time

At 20 °C and 60 % relative humidity, walkable after approx. 5 hours.

Ready for mechanical loads after approx. 3 days.

Lower temperatures extend the drying time.

Tool Cleaning

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

Advice

German Certificates  
 Please Note (Status as at Date of Publication)  
 Disposal  
 EU limit value for the VOC content  
 Giscode  
 Product Code Paints and Enamels  
 Further Details  
 CE Labelling

Expert's reports available on request.

If medical advice is required, have packaging or identification label ready. Keep out of the reach of children. Material Safety Data Sheet is available on request.

Contains: 1,2-Benzisothiazol-3(2H)-one, mixture of 5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No. 220-239-6] (3:1), 2-methyl-2H-isothiazol-3-one. May produce an allergic reaction. Ensure good ventilation during use and drying. Do not eat, drink or smoke while using the product. In case of contact with eyes or skin, immediately and thoroughly rinse with water. Do not allow product to enter drains, waterways or soil. Do not breathe spray dust. Advice for people with allergies: Hotline 0800 / 1895000 (free of charge from the German landline network)


Materials and all related packaging must be disposed of in a safe way in accordance with the full requirements of the local, regional, national and international authorities. Waste should not be disposed via wastewater.

of this product (category A/i): max. 140 g/l (2010). This product contains max. 1 g/l VOC.

BSW20

M-LW01 (obsolete)

When processing the material, the DISBON application references as well as the cleaning and care instructions for floors must be observed.

	
Disbon GmbH Roßdörfer Straße 50, D-64372 Ober-Ramstadt	
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DIS-404 ELF-001263	
EN 13813:2002 Synthetic resin screed/coating for interior use EN 13813:SR-E <sub>fl</sub> -B1,5-AR1-IR4	
Reaction to fire	E <sub>fl</sub>
Release of corrosive substances	SR
Water permeability	NPD
Wear resistance	≤ AR1
Adhesive tensile strength	≥ B1,5
Impact strength	≥ IR4

EN 13813  
 DIN EN 13813 "Screed mortars, screed compounds and screeds - screed mortars and screed compounds - Properties and Requirements" defines the requirements for screed mortars being used for floor constructions in the interiors. The standard also includes synthetic resin coatings and sealing. Products matching the above mentioned standard are to be labeled with the CE mark. Labeling is carried out on the container and in the appendix to the declaration of performance in accordance with BauPVO (German Constructions Product Act), which can be downloaded at [www.disbon.de](http://www.disbon.de)

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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.404 · Disbon 404 ELF  
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