

Amphisil

Siloxane-reinforced, matt façade paint with silicate characteristics.



Product Description

Field of Application	For high-grade exterior coatings. Particularly suitable for coating mineral renders/plasters. Amphisil coatings are highly efficient on sound, solid substrates, because a special priming coat can mostly be omitted by thinning the material with CapaSol LF primer.
Material Properties	<ul style="list-style-type: none"> ■ Water-thinnable, ecologically compatible, low odour ■ Weather-resistant ■ Wet scrub resistance class 2 according to DIN EN 13 300 ($\geq 5 - 20 \mu\text{m}$), corresponds to "scrub resistant" according to DIN 53778 ■ Alkali-resistant, hence unsaponifiable ■ Low tension ■ Easy to apply ■ Due to a special combination of binder and pigments, Amphisil incorporates the positive properties of dispersion and silicate paints
Material Base / Vehicle	Synthetic resin dispersion/emulsion to DIN 55945 + siloxane
Packaging/Package Size	<ul style="list-style-type: none"> ■ Standard Product: 12.5 litres ■ ColorExpress: 2.5 litres, 12.5 litres
Colours	<p>White</p> <p>Amphisil can be tinted with CaparolColor or Amphibolin colourants. If more than one can/bucket is manually tinted, all material must be thoroughly mixed before use in order to avoid colour differences. Quantities of 100 litres or more in individual colour shades may be ordered ready-tinted from the factory.</p> <p>Amphisil can be tinted to all current colour collections via ColorExpress tinting machine system. Check tinted material prior to the application to avoid colour differences. Use always material of the same batch, when applying on continuous surfaces. Brilliant, intensive colour shades may have a lower opacity (hiding/covering power). It is therefore advisable to apply a first coat in a similar hiding pastel tint, based on white. Possibly a second finishing coat may be necessary.</p> <p>Colour Resistance according to BFS Data Sheet No. 26: Class: C Group: 1</p>
Gloss Level	Matt, G ₃
Storage	Keep in a cool, but frost-free place.



Technical Data

Characteristics according to DIN EN 1062:

- Maximum particle (grit) size: < 100 µm, S¹
- Density: Approx. 1.6 g/cm³
- Dry film thickness: 100–200 µm, E₃
- Water permeability (w-value): > 0.5 [kg/(m² · h^{0.5})] (high), W₁
- Water vapour permeability (sd-value): < 0.07 m (high), V₁
Tinting may cause variations.

Application

Suitable Substrates

The substrate must be sound/stable, dry, clean, and free from all materials that may prevent good adhesion. In Germany: Follow VOB, part C, DIN 18363, paragraph 3.

Substrate Preparation

Renders/Plasters of Mortar Group/Class PII (Lime-Cement Mortars) and PIII (Cement Mortars):
New renders/plasters must be left untreated for a sufficiently long time, normally for 2 weeks at 20 °C and 65% relative humidity. Adverse weather conditions, influenced e.g. by wind or rain, extend the curing process and correspondingly longer idle times must be respected.

The risk of calcareous efflorescence is reduced by an additional priming coat of CapaGrund Universal and the alkaline finishing render/plaster may be coated after a delay of 7 days.

Existing renders/plasters: Repairs must have adequate time to cure and dry. Highly porous, absorbent, slightly sanding renders/plasters: Apply one priming coat of OptiGrund E.L.F. or CapaSol LF. Prime highly sanding, chalking renders/plasters with Dupa-grund. Coat mineral lightweight renders/plasters of mortar group PII with Sylitol or AmphiSilan materials.

Concrete:

Concrete surfaces with dirt deposits or fines/sintered layer must be cleaned mechanically or with high-pressure jet, in compliance with the regulations. Apply a priming coat of CapaGrund Universal on slightly absorbent or even surfaces. Apply a priming coat of CapaSol LF on highly porous, slightly sanding or absorbent surfaces. Prime chalking surfaces with Dupa-grund.

Cement-Bound Wood Chipboards (Particle Boards):

Due to the high alkalinity of cement-bound wood chipboards (particle boards) a priming coat of Disbon 481 EP-Uniprimer must be applied, to prevent the forming of calcareous efflorescence.

Fair-Faced Brick Masonry:

Only absorbent clinker bricks of frost resistant quality and free of foreign inclusions are suitable for exterior coatings. Masonry must be dry and free of salts/salty efflorescence, jointing must be free of cracks. Apply one priming coat of Dupa-grund. If brown discolouration appears on the intermediate coat, then recoat with solvent-based façade paint Duparol.

Sound Coatings of Matt Dispersion Paint:

Wash off existing soiled, chalking layers by high-pressure water jet, in compliance with the regulations. Apply one first coat of Amphisil, diluted max. 10% with CapaSol LF. Prime with Dupa-grund, when other cleaning methods are used (washing, wire brushing, hosing with water).

Sound Synthetic Resin-Bound (Organic) Renders/Plasters:

Clean existing renders/plasters by suitable means. In case of wet cleaning, allow the surface to dry thoroughly before further treatment. Prime with CapaGrund Universal. Coat new renders without pre-treatment.

Sound Existing Silicate Paints and Renders/Plasters:

Coat with Sylitol or AmphiSilan materials.

Unsound Mineral Coatings:

Remove the coating completely by sanding off, brushing off, scraping off, using high-pressure water jet in compliance with the regulations, or treat with other suitable methods. Allow wet cleaned surfaces to dry thoroughly before further treatment. Prime with Dupa-grund.

Unsound Coatings of Enamel, Dispersion Paint or Synthetic Resin-Bound (Organic) Render/Plaster:

Remove completely by suitable means, e.g. mechanically or via paint stripper, followed by surface cleaning with a high-pressure steam jet in compliance with the regulations. Apply a priming coat of CapaGrund Universal on slightly absorbent or even surfaces. Apply a priming coat of Dupa-grund on chalking, sanding, absorbent surfaces.

Surfaces Contaminated with Industrial Gases or Soot:

Coat with solvent-based façade paint Duparol.

Surfaces with Fungal or Algal Attack:

Coat with the special fungicidal and algicidal façade paint Amphibolin-W.

Cracks in Renders/Plasters or Concrete:

Coat with the crack covering system Cap-elast.

	<p>Unpainted Sand-Lime Brick Masonry: Coat with Syllitol or AmphiSilan materials.</p> <p>Surfaces with Salty Efflorescence: Remove salty efflorescence thoroughly by dry wire brushing and prime with Dupa-grund. Coating of such surfaces must be considered a risk for which we cannot accept responsibility, since even after the most thorough treatment the efflorescence may recur.</p> <p>Defects: Repair small defects with Caparol-Fassaden-Feinspachtel, deeper damages up to 20 mm preferably with Histolith Renovierspachtel and prime repaired areas subsequently.</p>
Method of Application	Apply with paint brush, roller and spraying equipment.
Surface Coating System	<p>Airless application: Spray angle: 50° Nozzle size: 0.026" - 0.031" Spray pressure: 150 - 180 bar</p> <p>Priming or Intermediate Coat Amphisil, diluted up to a max. of 10% with tap (potable) water or with 10% of CapaSol LF, depending on the substrate requirements.</p> <p>Finishing Coat Amphisil, diluted up to a max. of 5% with tap water.</p>
Consumption	Approx. 160-200 ml/m ² per coat on an even substrate. On rough-textured surfaces correspondingly more. The exact rate of consumption is best established by a trial coating.
Application Conditions	Lower Temperature Limit for Application and Drying: +5 °C for material, substrate and ambient air.
Drying/Drying Time	At +20 °C and 65% relative humidity surface-dry and recoatable after 4 - 6 hours. Completely dry and ready for stress after approx. 3 days. Lower temperatures and higher humidity extend the drying time.
Tool Cleaning	Clean tools (brushes/rollers) and airless equipment immediately after use with clean water.
Note	<p>The materials should not be applied in direct sunlight or on sun heated substrates, during strong wind, fog or rain, high relative humidity or imminent rain or frost, etc. To avoid lapping, the material should be applied wet-on-wet and without interruption. In case of airless spray application stir and sieve well before application. Do not apply on horizontal surfaces exposed to rain or moisture.</p> <p>Façades in special climatic conditions (high degree of moisture) or subjected to a higher influence of atmospheric exposure: It is advisable to apply our special products, e.g. ThermoSan, Amphibolin-W or Duparol-W, provided with special agents delaying the forming of organic growth (fungi & algae).</p> <p>Mechanical loads on matt façade paints in dark shades may produce bright-toned stripes as a product specific property (no writing resistance).</p> <p>In case of moist weather conditions (rain, dew, fog) yellowish transparent traces of additives, showing a slightly glossy shine and stickiness, may occur on the surface of compact, cool substrates or by means of delayed drying caused by the weather. The traces of additives are water-soluble and will disappear under the influence of a sufficient water quantity, e.g. repeated intensive rainfalls. The quality of the dried coating will not be affected by these changes. In case of direct reworking, all traces of additives must be pre-wetted and completely removed after a short reaction time. An additional priming coat of CapaGrund Universal must be applied. The traces cannot occur when the material is applied under suitable climatic conditions.</p> <p>Touching up surfaces is depending on many parameters and may be visible after drying. (In Germany: See BFS Data Sheet No. 25)</p>

Advice

<p>German Certificates</p> <p>Please Note (Status as at Date of Publication)</p> <p>Disposal</p> <p>EU limit value for the VOC content</p> <p>Product Code Paints and Enamels</p> <p>Substances of Content - Declaration</p> <p>Further Details</p> <p>Technical Assistance</p> <p>Customer Service Centre</p>	<p>■ Certification of properties (s_d-value, w-value, CO₂-permeability, gloss level, etc.)</p> <p>Keep out of the reach of children. In case of contact with eyes, rinse immediately with plenty of water. In case of spray application: Do not breathe spray dust. Do not empty into drains, water courses and onto the ground.</p> <p>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. Dispose containers with residues of liquid material as remnants of water-based paints and dried material as hardened paints waste or via domestic waste.</p> <p>of this product (category A/c): max. 40 g/l (2010). This product contains max. 25 g/l VOC.</p> <p>M-DF02</p> <p>Acrylic resin dispersion, titanium dioxide, calcium carbonate, silicates, water, film forming agent, additives, preservative agent</p> <p>See Safety Data Sheet (MSDS).</p> <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> <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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