

AmphiSilan

Mineral matt facade paint in a special silicone resin binder combination with a capillary-hydrophobic surface for clean, fast-drying facades



Product Description

Field of Application

Special silicone resin facade paint for use on mineral and dispersion-bound renders, as well as for renovation coatings on firmly adhering silicate paints and matt dispersion paints.

Can be used on intact external thermal insulation composite systems and on listed buildings, as well as on renders rich in lime.

The microporous and robust surface ensures weather-resistant, water-repellent, highly water vapour permeable façade coatings with fast re-drying after precipitation and dew.

Material Properties

- Protected against algae and fungal attack
- Fast re-drying after exposure to moisture for low soiling tendency
- Robust, weather-resistant surface
- Very good hiding power
- Alkali-resistant, therefore unsaponifiable
- CO²-permeable

Material Base / Vehicle

Binder combination of silicone resin emulsion and polymer dispersion

Packaging/Package Size

Standard goods: 25 l
ColorExpress: 2,5 l, 7,5 l, 12,5 l

Colours

White.

Further colour shades can be tinted via "ColorExpress". Available tinted at the factory for orders of 100 litres and more in one colour shade and application.

In order to detect possible tinting errors, please check for colour accuracy before processing. In case of conspicuities or deviations from the delivery target (e.g. colour deviations) or from the usual quality, please also observe the guidelines on inspection obligations for delivery of tinted products of the "Verband für Dämmsysteme, Putz und Mörtel e.V. (VDPM)" (Association for Insulation Systems, Plaster and Mortar): Brochures and leaflets - VDPM.

Only use colour shades of one production (batch) on continuous surfaces. "AmphiSilan" can also be tinted with suitable "AmphiColor Volltonfarben". In case of self-tinting, mix the required total quantity to avoid differences in colour shade. Intense colours may have a lower hiding power. It is therefore advisable to apply a comparable, opaque, white-based, pastel colour shade first. A second top coat may be necessary.

Color resistance according to German BFS*-Merkblatt (Data Sheet) No. 26:

Class: B (binder)
Group: 1 (pigmentation)

*Bundesausschuss Farbe und Sachwertschutz
(German committee dealing with paint and protection of properties)



Gloss Level	Matt, Class: G ₃
Storage	Please store in a cool place and keep the container tightly closed.
Technical Data	<p>Characteristics according to DIN EN 1062:</p> <ul style="list-style-type: none"> ■ Maximum particle (grit) size: < 100 µm, Class: S₁ ■ Density: approx. 1,5 g/cm³ ■ Dry film thickness: 100–200 µm, Class: E₃ ■ Diffusion-equivalent air layer thickness s_dH₂O: < 0,14 m, Class: V₁ (high) Due to tinting, there are deviations in the technical characteristics possible. ■ Water permeability (w-value): < 0,1 [kg/(m² · h^{0,5})] Class: W₃ (low) Due to tinting, there are deviations in the technical characteristics possible.

Supplementary Product

"Capatect AmphiSilan Fassadenputz"
 "OptiSilan TiefGrund"
 "Dupa-Putzfestiger"
 "CapaGrund Universal /-W"
 "Minera Universal"
 "AmphiColor Vollton- und Abtönfarbe"

Suitability according to
 Technical Information No. 606
 Definition of Application Areas

Interior 1	Interior 2	Interior 3	Exterior 1	Exterior 2
–	–	–	+	+
(–) not suitable / (○) conditionally suitable / (+) suitable				

Application

Suitable Substrates	<p>The substrates must be free from dirt, separating substances and dry. In Germany observe "VOB, Part C, DIN 18363, Para. 3".</p> <p>For substrate pre-treatment, please also observe our Technical Information No. 650 "Substrates and their pre-treatment".</p>
Substrate Preparation	<p>New and existing, intact external thermal insulation composite systems with surfaces made of synthetic resin, silicone resin, lime-cement render/ solid mortar class according to DIN EN 998-1 class CS II 1.5 - 5.0 N/mm²:</p> <p>Old renders can be wet cleaned using a suitable method. When cleaning, use pressure water jets with a max. temperature of 60 °C and a max. pressure of 60 bar. Allow sufficient drying time after cleaning. Apply coatings of Caparol materials according to the existing finishing render type and the following substrate specifications.</p> <p>Finish renders according to DIN EN 998-1 class CS II 1.5 - 5.0 N/mm²:</p> <p>New renders are to be applied after sufficient standing time, usually after 2 weeks, at approx. 20 °C and 65 % rel. Humidity, they can be coated. In case of unfavourable weather conditions, e.g. influenced by wind or rain, significantly longer standing times must be observed. By applying an additional priming coat of "CapaGrund Universal" reduces the risk of lime efflorescence with alkaline finishing renders, so that coating can be applied after a standing time of only 7 days.</p> <p>Old plasters:</p> <p>Renewd renders/ touch-ups must be well set and dried. Prime coarsely porous, absorbent, slightly sanding plasters with OptiSilan TiefGrund. Prime very sandy, chalky plasters with Dupa-Putzfestiger.</p> <p>New silicate finishing renders:</p> <p>Prime with Sylitol® NQG-W facade paint.</p> <p>New silicate finishing renders:</p> <p>Coat with products from our silicate Sylitol® products.</p> <p>Old mineral paints and renders:</p> <p>Clean firmly adhering coatings mechanically or by pressure water jetting in compliance with the legal regulations. Remove non-sticking, weathered coatings by scraping, sanding, scraping off. Apply one priming coat of "Dupa-Putzfestiger".</p> <p>Load-bearing/ stable dispersion plaster and silicone resin plaster coatings:</p> <p>Clean old renders with a suitable method. In case of wet cleaning, allow the surfaces to dry thoroughly before further treatment. Prime with "CapaGrund Universal" or "Dupa-Putzfestiger". Coat new synthetic resin or silicone resin renders without pre-treatment.</p> <p>Sound dispersion, dispersion-silicate or silicone resin paint coatings:</p> <p>Clean old coatings by pressure water blasting in compliance with the legal regulations. Observe substrate test according to BFS* Leaflet No. 20.</p>

Old coatings with the following properties :

Weakly absorbent, solid, dry, load-bearing:
See coating structure.

Moderately absorbent:
"CapaGrund Universal" diluted with max.3% water.

Highly absorbent:
"OptiSilan TiefGrund" or "Dupa-Putzfestiger".

Old coatings on ETICS:

Highly absorbent, firmly adhering, fine hairline cracks:
Dupa-Putzfestiger.

Chalking or powdery:

(also under water load following BFS* No. 20, B.13 "Oberflächenfestigkeit, Kreidung"(Surface strength, chalking)):
Prime with "Dupa-Putzfestiger".

Glossy and water-repellent (hydrophobic) surfaces:

Mechanically roughen. Prime with "CapaGrund Universal". If water beading is still present after mechanical roughening, we recommend a priming coat of "Dupa-HaftGrund".

Non-bearing paint and render coatings:

Remove completely with a suitable method, e.g. by sanding, brushing, scraping, stripping and subsequent cleaning with pressurised water jets in compliance with legal regulations or other suitable measure. In case of wet cleaning, allow the surfaces to dry thoroughly before further treatment. Prime chalky, sanding, absorbent surfaces with "Dupa-Putzfestiger".

Facing brickwork:

Only frost-resistant facing bricks or clinker without foreign inclusions are suitable for painting. The masonry must have crack-free joints and be free of salt. Prime with "Dupa-Putzfestiger". Intermediate coat with "Minera Universal". If brown discolouration occurs after the intermediate coat with "Minera Universal", apply the final coat with "Duparol".

Sand-lime brickwork:

Only frost-resistant facing bricks that do not contain any driving or discolouring foreign inclusions such as sand or clay are suitable for painting. The jointing must be free of cracks. Clean chalking/flouring surfaces. Brush off salt efflorescence dry. Please observe BFS* Leaflet No. 2. Prime with "OptiSilan TiefGrund". Intermediate coat with "Minera Universal".

Surfaces with salt efflorescence:

Remove salt efflorescence dry by brushing. Apply one priming coat of "Dupa-Putzfestiger". When coating surfaces with salt efflorescence, no guarantee can be given for the permanent adhesion of the coating or the prevention of salt efflorescence.

Defects:

Repair small defects with "Caparol Fassaden-Feinspachtel". Large defects up to 20 mm should preferably be repaired with "Histolith-Renovierspachtel". Re-priming of filler areas.

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Method of Application

Apply with brush and roller.
Airless application is possible, please observe protective equipment.

Surface Coating System

Priming coat:
According to the specifications under point "Substrate preparation".

Primer or intermediate coat:
AmphiSilan diluted with max.5 % water or "OptiSilan TiefGrund".

Top coat:
AmphiSilan diluted with max. 5% water or "OptiSilan TiefGrund".

Consumption

Approx. 150-200 ml/m² for one coat on smooth surfaces.
On rough surfaces, the consumption increases accordingly. Determine exact consumption by trial coating.

To achieve the best possible protection against algae and fungal attack, it is necessary to apply two coats with a total of at least 400 ml/m² to achieve an average layer thickness of at least 200 µm.

Each additional coat increases the layer thickness by approx. 100 µm at a consumption of at least 200 ml/m² per coat. On rough surfaces, the consumption is correspondingly higher.

Application Conditions

Lower temperature limit during application and drying:
Material, ambient air and substrate temperature: min. + 5° C to max. + 30° C

Drying/Drying Time

Surface-dry after 2-3 hours at +20 °C and 65 % relative humidity, recoatable after 12 hours. Fully dry after 2-3 days.

Tool Cleaning	At lower temperatures and higher humidity, allow longer drying times. Clean tools with water after use, observing the legal regulations.
Note	To avoid laps, coat larger surfaces wet-on-wet in one go. Do not use on horizontal surfaces exposed to water. AmphiSilan is a product with special active ingredients to prevent fungal and algal growth on the coating. This depot of active substances provides long-lasting protection for a limited period of time, the effectiveness of which depends on object conditions, such as the severity of the infestation and the moisture load. Therefore, a permanent prevention of fungal and algal growth is not possible. In the case of dark colour shades, mechanical stress can lead to light streaks (writing effect). In the case of dense, cool substrates or in the case of drying delays due to weather conditions, auxiliary substances may form yellowish/transparent, slightly glossy and sticky run-off marks on the surface of the coating due to exposure to moisture (rain, dew, fog). These auxiliary substances are water-soluble and are removed independently with sufficient water, e.g. after several heavy rainfalls. The quality of the dried coating is not adversely affected by this. If, nevertheless, a direct recoating should be carried out, the runners/auxiliary materials must be pre-wetted and washed off completely after a short exposure time. Apply an additional priming coat of CapaGrund Universal. If the coating is applied under suitable climatic conditions, these run-off marks will not occur. Markings of touch-ups in the surface depend on many factors and are therefore unavoidable (observe BFS* Leaflet No. 25). *Bundesausschuss Farbe und Sachwertschutz (German committee dealing with paint and protection of properties)

Advice

Special Risks (Hazard Note) / Safety Advice (Status as at Date of Publication)	May cause an allergic skin reaction. Harmful to aquatic life with long lasting effects. If medical advice is needed, have product container or label at hand. Keep out of reach of children. Do not get in eyes, on skin, or on clothing. Avoid release to the environment. Wear protective gloves/ eye protection. IF ON SKIN: Wash with plenty of soap and water. Contains: 1,2-benzisothiazol-3(2H)-one, 2-methylisothiazol-3(2H)-one, octhilinone (ISO), reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1), . Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist. According to European Regulation 528/2012 this product is defined as a "treated article" (not a biocidal product) and contains the following biocidal substances: octhilinone (ISO) (CAS-No. 26530-20-1), 4,5-dichloro-2-octyl-2H-isothiazol-3-one (CAS-No. 64359-81-5), diuron (ISO) (CAS-No. 330-54-1). Hotline for allergy enquiries: 0800/1895000 (free of charge from the German fixed network).
Disposal	Materials and all related packaging must be disposed of in a safe way in accordance with the full requirements of the local authorities. Observe the relevant national regulations. In Germany: Dispose of liquid material residues at the collection point for old paints/lacquers, dispose of dried material residues as construction and demolition waste or as municipal or household waste.
EU limit value for the VOC content	(Cat. A/c): 40 g/l (2010). This product contains max. 20 g/l VOC.
Product Code Paints and Enamels	BSW50
Substances of Content - Declaration	polyacrylic resin, polysiloxane, silicates, titanium dioxide, mineral pigments / fillers, water, glycol ethers, glycols, additives, Preservative, film preservatives.
Customer Service Centre	Tel.: +49 6154 71-71710 Fax: +49 6154 71-71711 e-mail: kundenservicecenter@caparol.de International Distribution: Please see www.caparol.com

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