

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	<p>Special silicone resin facade paint can be used on mineral and dispersion-bound plasters, as well as for renovation coatings on firmly adhering silicate paints and matt emulsion paints.</p> <p>Can be used on intact thermal insulation composite systems and on listed buildings, as well as lime-rich plasters.</p> <p>The microporous and robust surface ensures weather-resistant, water-repellent, highly water-vapor-permeable facade coatings with quick drying after rain and dew.</p>
Material Properties	<ul style="list-style-type: none"> ■ Good protection against algae and fungal attack ■ Fast drying after exposure to moisture for a low tendency to soiling ■ Robust, weather-resistant surface ■ Very good coverage power ■ Alkali-resistant, therefore unsaponifiable ■ CO₂-permeable
Material Base / Vehicle	Binder combination of silicone resin emulsion and polymer dispersion
Packaging/Package Size	<p>Standard product: 12.5 l</p> <p>ColorExpress: 2.5 l, 7.5 l, 12.5 l</p>
Colours	<p>White.</p> <p>Other colors can be tinted via ColorExpress. When purchasing 100 liters and more in one color and order, also available tinted at the factory on request.</p> <p>In order to identify possible tinting errors, please check the color shade accuracy before processing.</p> <p>Only use shades of one production (batch) on contiguous surfaces. AmphiSilan can also be tinted with suitable AmphiColor-Volltonfarbe tinting colors. In the case of self-tinting, mix the required total amount with each other in order to avoid color differences. Intense color tones may have a lower hiding power. It is therefore advisable to prepaint a comparable, opaque, white-based, pastel color for these colors. A second top coat may be necessary.</p> <p>Color resistance according to German BFS*-Merkblatt (Data Sheet) No. 26: Class: B (binder) Group: 1 (pigmentation)</p> <p>*Bundesausschuss Farbe und Sachwertschutz (German committee dealing with paint and protection of properties)</p>
Gloss Level	Matt, G3



Storage
Technical Data

Please store in a cool place and keep the container tightly closed.

Characteristics according to DIN EN 1062:

- 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)

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

The substrates must be free of dirt, separating substances and dry. Please note our Technical Information No. 650 "Substrates and their pretreatment" with regard to their suitability for different substrates and their necessary pre-treatment.

Substrate Preparation

New and existing, intact thermal insulation composite systems with surfaces made of synthetic resin, silicone resin, lime-cement plaster with the compressive strength class according to DIN EN 998-1 class CS II, 1.5 - 5.0 N/mm²:

Clean old plasters by a suitable wet cleaning method. When cleaning with pressurized water jets: max. 60°C and max. 60 bar. Allow sufficient drying time after cleaning. Apply the coating with Caparol products in accordance with the existing type of finishing coat in accordance with the following substrate information.

Finishing plasters according to DIN EN 998-1 class CS II, 1.5 - 5.0 N/mm²:

New plasters can be coated after a sufficient waiting period, usually after 2 weeks at approx. 20°C and 65% rel. humidity. In unfavorable weather conditions, e.g. influenced by wind or rain, significantly longer waiting times must be observed. An additional key coat of CapaGrund Universal reduces the risk of lime efflorescence with alkaline finishing plasters, so that the paint can be applied after a waiting period of 7 days.

Old plasters:

Renewed plaster areas must be well set and dried out. Apply a key coat of OptiSilan TiefGrund on coarsely porous, absorbent, slightly sanding plasters. Apply a key coat of Dupa-Putzfestiger on heavily sanding, powdery plasters.

New silicate finishing renders:

Coat with products from our silicate Syllitol® range.

Old mineral paints and renders:

Clean adherent, stable coatings mechanically or with high-pressure water jet, in compliance with the regulations. Remove unstable, weathered coatings by abrading, sanding/grinding or by scraping off. Apply a key coat of Dupa-Putzfestiger.

Load-bearing dispersion plaster or silicone resin plaster coatings:

Clean old plasters with a suitable method. In the case of wet cleaning, allow the surfaces to dry thoroughly before further treatment. Apply a key coat of CapaGrund Universal or Dupa-Putzfestiger. Coat new synthetic resin or silicone resin plasters without pretreatment.

Load-bearing dispersion, dispersion silicate or silicone resin paint coatings:

Clean old coatings with high pressure water jets in compliance with the legal regulations.

Germany: Observe the substrate test in accordance with BFS-Merkblatt No. 20.

Old coatings with the following properties:

Slightly absorbent, firm, dry, stable: see point "Surface Coating System".

Moderately absorbent: CapaGrund Universal diluted up to 3% with water.

Strongly absorbent: OptiSilan TiefGrund or Dupa-Putzfestiger

Old coatings on ETICS:

Strongly absorbent, firmly adhering, fine hairline cracks:

Dupa-Putzfestiger

Chalking or powdering (also under the action of water based on BFS No. 20, B.13

"Oberflächenfestigkeit, Kreidung"):

First prime with Dupa-Putzfestiger

Shiny and water-repellent (hydrophobic) surfaces:

Roughen mechanically. First prime with CapaGrund Universal. If there is still a water repellent effect after the mechanical roughening, we recommend a primer coat with Dupa-HaftGrund.

Paint and plaster coatings that are not stable:

Remove completely using a suitable method, e.g. by sanding, brushing, scraping, stripping and subsequent cleaning with high-pressure water jets in compliance with legal regulations or other suitable measures. In the case of wet cleaning, allow the surfaces to dry thoroughly before further treatment. Prime powdery, sandy, absorbent surfaces with Dupa-Putzfestiger. Intermediate coat with Caparol PutzGrund 610.

Brick exposed masonry:

Only frost-resistant facing bricks or clinker bricks without foreign inclusions are suitable for painting. The masonry must be dry, free of salt and the joints free of cracks. First prime with Dupa-Putzfestiger. If brown discolouration occurs after the intermediate coat with AmphiSilan or Minera Universal, the top key coat must be carried out with Duparol.

Sand-lime brick masonry:

Only frost-resistant facing bricks that do not contain any floating or discoloring foreign inclusions such as sand or clay are suitable for painting. The joints must be free of cracks. Clean chalking/ powdery surfaces. Brush off salt efflorescence when dry. Observe BFS-Merkblatt No. 2. First prime with OptiSilan TiefGrund and then apply an intermediate coat of Minera Universal.

Fungal or algae-infested areas:

Coat with the fungicidal and algicidal special paint ThermoSan NQG. Surfaces with salt efflorescence: remove salt efflorescence dry by brushing. Then first prime with 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 fine filler Caparol Fassaden-Feinspachtel. Repair big defects up to 20 mm preferably with Histolith-Renovierspachtel. Prime the repaired areas subsequently.

Observe the technical information of the products mentioned.

Method of Application

Can be used with a paint brush or roller.
Airless application is possible, please observe protective equipment.

Surface Coating System

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

First key coat or intermediate coat:
AmphiSilan diluted with max. 5% water or OptiSilan TiefGrund.

Finishing key coat:
AmphiSilan diluted with max. 5% water or OptiSilan TiefGrund.

Consumption

Approx. 150–200 ml/m² per application on a smooth surface. On rough surfaces, the exact consumption must be determined by applying a test coat.

In order to achieve the best possible protection against algae and fungal attack, it is necessary to apply two coats of at least 400 ml/m² in total in order to achieve an average layer thickness of at least 200 µm. With a consumption of at least 200 ml/m² per coat, each additional coat increases the layer thickness by another approx. 100 µm. The consumption is correspondingly higher on rough surfaces.

Application Conditions

Temperature limits during processing and drying:Material, air and substrate temperature: min. +5 °C to max. +30 °C

Drying/Drying Time

At +20 °C and 65 % relative humidity surface-dry after 2 - 3 hours and recoatable after 12 hours. Completely cured and ready for stress after approx. 3 days.

Observe longer drying times at lower temperatures and higher humidity.

Tool Cleaning

Clean tools with water after use. Observe waste water regulations.

Note	<p>To avoid paint deposits, coat larger areas wet-on-wet in one go. Do not use on horizontal surfaces exposed to water. There is an increased risk of fungus and algae formation on facade surfaces that are exposed to more moisture than usual under special building conditions or due to natural weather influences.</p> <p>In the case of dark colors, mechanical stress can lead to light stripes (writing effect). AmphiSilan reduces this product-specific property of all matt facade paints.</p> <p>In the case of dense, cool substrates or if the drying time is delayed due to the weather, auxiliary substances can become visible on the surface of the coating as yellowish/ transparent, slightly shiny and sticky paint tears due to exposure to moisture (rain, dew, fog). These auxiliary substances are water-soluble and are removed automatically with sufficient water, e.g. after repeated heavy rainfall. This does not adversely affect the quality of the dried coating. Should a direct rework still take place, the paint tears/ auxiliary substances must be pre-moistened and washed off completely after a short exposure time. An additional key coat of CapaGrund Universal must be carried out. If the coating is applied under suitable climatic conditions, these paint tears do not occur.</p> <p>Markings of repairs in the surface depend on many factors and are therefore unavoidable (BFS-Merkblatt No. 25).</p> <p>Copper paint tears (CU ions in rainwater) react with the constituents of AmphiSilan to create a brownish discoloration. Corresponding copper surfaces must therefore be protected from oxidation. Alternatively, our ThermoSan NQG or Muresko products can be used.</p>
------	---

Advice

Special Risks (Hazard Note) / Safety Advice (Status as at Date of Publication)	<p>May cause an allergic skin reaction. If medical advice is needed, have container or label ready. Keep out of the reach of children. Do not get in eyes, on skin, or on clothing. Wear protective gloves/ eye protection. IF ON SKIN: Wash with plenty of soap and water. Hotline for allergy inquiries: 0800/1895000 (free of charge from the German landline network). Contains: 1,2-benzisothiazol-3 (2H)-one, 2-octyl-2H-isothiazol-3-one, 2-methyl-2H-isothiazol-3-one, 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. This product is a "treated product" according to EU regulation 528/2012 (not a biocidal product) and contains the following biocidal active ingredients: Isoproturon (ISO) (CAS No. 34123-59-6), Terbutryn (CAS No. 886 -50-0), 2-octyl-2H-isothiazol-3-one (CAS No. 26530-20-1), pyriithione zinc (CAS No. 13463-41-7).</p>
Disposal	<p>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. <u>In Germany:</u> Dispose of liquid material residues at the collection point for old paints/ varnishes, dispose of dried material residues as construction and demolition waste or as municipal waste or household waste.</p>
EU limit value for the VOC content	Category A/c: 40 g/l (2010). This product contains max. <20 g/l VOC.
Product Code Paints and Enamels	Giscode: BSW50
Substances of Content - Declaration	Polyacrylate resin, silicone resin, polysiloxanes, titanium dioxide, silicates, calcium carbonate, mineral pigments / fillers, water, glycol ethers, additives, film protection agents, preservatives.
Further Details	See Material Safety Data Sheet (MSDS).
Technical Assistance	All substrates that occur in practice and their technical processing cannot be dealt within this publication. If substrates are to be processed that are not listed in this technical information, it is necessary to consult with us or our sales representatives. We are happy to advise you in detail and on a building-related basis.
Customer Service Centre	<p>Tel.: +49 6154 71-71710 Fax: +49 6154 71-71711 e-mail: kundenservicecenter@caparol.de</p> <p>International Distribution: Please see www.caparol.com</p>

Technical Information No.144 · Issue: April 2021

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.144 · AmphiSilan · Issued: April 2021