

Nespri-TEC System AmphiSilan Nespri-TEC



Matt, silicone resin based façade paint, especially for efficient application using the Nespri-TEC spraying method. The consequent further development of the Caparol Clean Concept.

Product Description

Field of Application	<p>For efficient application in the special, mist free (dust-free) Nespri-TEC spraying method. Paint with essential benefit: Organically cross-linked nano-quartz particles form a compact, mineral-hard, three-dimensional quartz matrix structure against soiling and keep façades clean for a longer period.</p> <p>The special silicone resin/binder combination generates water-repellent, highly water vapour permeable façade paint coatings. AmphiSilan Nespri-TEC is suitable for coating mineral renders/plasters and for renovation of sound, adherent silicate paints, matt dispersion/emulsion paints, synthetic resin renders/plasters and intact external thermal insulation composite systems (ETICS/EWI systems).</p>
Material Properties	<ul style="list-style-type: none"> ■ Mist (dust-)free application using the special Nespri-TEC spraying method ■ Low surface tension, non-thermoplastic ■ Non-film-forming, micro-porous ■ Permeable to CO₂ ■ Resistant to aggressive air pollutants ■ Provided with film preservative against algal & fungal attack ■ Provided with special photo-catalytic reactive pigments
Material Base / Vehicle	Combination of silicone resin emulsion and special synthetic resin dispersion/emulsion.
Packaging/Package Size	<ul style="list-style-type: none"> ■ Standard Material: 25 litres hobbock, 120 litres barrel ■ ColorExpress: 12.5 litres
Colours	<p>White</p> <p>Factory-made individual colours on request. Check tinted material prior to the application to avoid colour differences. Use always material of the same batch, when applying on continuous surfaces.</p> <p>AmphiSilan Nespri-TEC can be tinted via ColorExpress tinting machine system in limited colour shades of current colour collections.</p> <p>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: A Group: 1</p>
Gloss Level	Matt



Storage	Keep in a cool, but frost-free place. Shelf life: 12 months.
Technical Data	<p>Characteristics according to DIN EN 1062:</p> <ul style="list-style-type: none"> ■ Maximum particle (grit) size: < 100 µm, S₁ ■ Density: Approx. 1.5 g/cm³ ■ Dry film thickness: 100–200 µm, E₃ ■ Diffusion-equivalent air layer thickness s_dH₂O: (sd-value): < 0.14 m (high), V₁ ■ Water permeability (w-value): (w-value): < 0.1 [kg/(m² · h^{0.5})] (low) W₃ Tinting may cause variations.
Supplementary Product	AmphiSilan-Grundierfarbe

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	<p>New and Existing, Sound ETICS/EWI Systems with Surfaces of Synthetic Resin-Bound (Organic) Render/Plaster, Silicate Render/Plaster, Silicone Resin Render/Plaster, Lime Plaster (Plc) and Lime Cement Plaster (PII): Clean existing renders/plasters by suitable wet cleaning method. Maximum temperature for high pressure water jet: 60 °C. Pressure: max. 60 bar. Allow to dry thoroughly. Coat with AmphiSilan Nespri-TEC according to the type of existing finish render and details as mentioned below.</p> <p>Renders/Plasters of Mortar Groups/Classes P Ic (Hydraulic Lime Plaster), PII (Lime-Cement Mortars), P III (Cement Mortars) or Silicate Based: 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, e.g. influenced by wind or rain, extend the curing process and correspondingly longer idle times must be respected. The risk of calcareous efflorescence on alkaline finish renders of mortar classes Plc, PII and PIII can be minimised by an additional priming coat of CapaGrund Universal and the finishing render/plaster may be coated after an idle time of 7 days.</p> <p>Existing renders/plasters: Repairs must have adequate time to cure and dry. Highly porous, absorbent, slightly sanding renders/plasters: Apply one priming coat of AmphiSilan-Tiefgrund LF. Prime highly sanding, chalking substrates with AmphiSilan-Putzfestiger.</p> <p>Sound Dispersion/Emulsion Paint Coatings: Clean dirty, chalking coatings by high pressure water jet, in compliance with the regulations. Apply one priming coat of AmphiSilan-Grundierfarbe. Prime with AmphiSilan-Putzfestiger, when other cleaning methods are used (washing, wire brushing, hosing with water).</p> <p>Sound Coatings of Synthetic Resin-Bound (Organic) or Silicone Resin Render/Plaster: Clean existing coatings by suitable means. Allow wet surfaces to dry thoroughly before further treatment.</p> <p>Unsound Coatings of Dispersion/Emulsion 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 water jet, in compliance with the regulations. Apply one priming coat of AmphiSilan-Grundierfarbe on slightly absorbent or even surfaces. Prime chalking, sanding, absorbent surfaces with AmphiSilan-Putzfestiger.</p> <p>Unsound Mineral Paint 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 AmphiSilan Putzfestiger.</p> <p>Fair-Faced Brick Masonry: Only bricks and clinkers of frost-resistant quality and free of foreign inclusions are suitable for exterior coats of paint. Masonry must be dry and free of salts/salty efflorescence, jointing must be free of cracks. Apply one priming coat of AmphiSilan-Putzfestiger. If brown discolouration appears on the intermediate coat, then recoat with solvent-based façade paint Duparol.</p> <p>Sand-Lime Brick Masonry: Only frost resistant bricks, free of foreign inclusions, e.g. sand or loam, are suitable for coats of paint. Jointing must be free of cracks. Clean chalking surfaces. Remove salty efflorescence by dry wire brushing. (In Germany: Follow BFS Data Sheet No. 2) Prime with AmphiSilan-Tiefgrund LF.</p>

Method of Application	<p>Surfaces with Salty Efflorescence: Remove salty efflorescence thoroughly by dry wire brushing and apply one priming coat of AmphiSilan-Putzfestiger. 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> <p>Only to be applied with special Nespray airless equipment.</p>
Surface Coating System	<p>Spray application: AmphiSilan Nespri-TEC Spray angle: 30° Nozzle: Special Nespray 0.016" - 0.019" double nozzle The material temperature is automatically controlled by the Nespray airless unit. Closure pressure (closed pistol) should be set on device in the blue marked field of indicator. Spray pressure (opened pistol) is then in the green marked field.</p> <p>Other coating materials, especially primers, may also be applied with the Nespray airless unit, but a spray dust reducing (mist free) effect cannot be guaranteed. Apply those materials with corresponding precautions.</p> <p>Remove algal or fungal attack (mildew/mould) by wet blasting, in compliance with the regulations. Treat the surface with Capatox or FungiGrund and allow to dry well.</p> <p>Apply a first or intermediate and finishing coat of undiluted AmphiSilan Nespri-TEC with special Nespray airless equipment and then, without delay, treat evenly with a standard façade roller. On sound existing coatings one restorative coat (min. 350 ml/m²) is sufficient in many cases.</p> <p>Two coats are necessary to achieve an adequate protection against algae and fungi (mildew/mould). Minimum drying time between coats: 12 hours.</p>
Consumption	<p>■ AmphiSilan Nespri-TEC Approx. 250 ml/m²</p> <p>Consumption is indicated per coat on an even substrate. On rough-textured surfaces correspondingly more. The exact rate of consumption is best established by a trial coating.</p>
Application Conditions	<p>Lower Temperature Limit for Application and Drying: +5 °C for material, substrate and ambient air.</p>
Drying/Drying Time	<p>At + 20 °C and 65 % relative humidity surface-dry after 2–3 hours and recoatable after 12 hrs. Completely dry after 2–3 days. Lower temperatures and higher relative humidity extend the drying time.</p>
Tool Cleaning	<p>Clean tools (paint rollers and Nespray airless equipment) immediately after use with water.</p>
Note	<p>The materials should not be applied on sun heated substrates, during strong wind, fog or rain, high relative humidity or imminent rain or frost. To avoid lapping, the material should be applied wet-on-wet and without interruption. Do not use on wood, metal, enamels, etc. Do not apply on horizontal surfaces exposed to rain or moisture. Scaffolding nets or protective tarpaulins should be used, if necessary, depending on weather conditions. Façade plates, also if covering some levels of scaffolding, are to be coated plate by plate and wet-on-wet, followed by very thoroughly and evenly rolling in one direction, thus avoiding texture irregularities which otherwise may be noticeable in adverse lighting conditions, e.g. sidelight.</p> <p>AmphiSilan Nespri-TEC is provided with a preservative against damage to the coating due to algae and fungi (mildew/mould) growth. The depot of agents offers a long lasting protection, but the algicidal & fungicidal effect is limited by the special façade conditions, e.g. intensity of algal/fungal attack and moisture content. A durable protection cannot be guaranteed.</p> <p>Mechanical loads on matt façade paints in dark shades may produce bright-toned stripes as a product specific property (no writing resistance). 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) Compatibility: Do not mix AmphiSilan Nespri-TEC with other paint materials.</p>

Advice

German Certificates

- AmphiSilan Nespri-TEC Efficiency of film preservative
- AmphiSilan Nespri-TEC Efficiency against algal and fungal attack
- AmphiSilan Nespri-TEC Water vapour permeability

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

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Keep out of the reach of children. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. After contact with skin, wash immediately with plenty of water and soap. Do not empty into drains, water courses and onto the ground. Protect eyes and skin against paint splashes. If swallowed, seek medical advice immediately to avoid harm to the intestinal bacteria. In case of spray application: Do not breathe spray dust. Further information: See Safety Data Sheet (MSDS).

Disposal

Materials and all related packaging must be disposed of in a safe way in accordance with the full requirements of the local authorities. 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.

EU limit value for the VOC content

of this product (category A/c): max. 40 g/l (2010). This product contains max. 10 g/l VOC.

Product Code Paints and Enamels

M-SF01F

Substances of Content - Declaration

Silicone resin, acrylic resin dispersion/emulsion, titanium dioxide, calcium carbonate, silicates, water, film forming agent, additives, preservative agent, film preservative

Technical Assistance

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.

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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. 146 · Nespri-TEC System
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