

Nespri-TEC System AmphiSilan Nespri-TEC and Nespray Airless Unit

Matt, silicon-resin based exterior paint, especially for economic spray application in Nespri-TEC technique.

Moisture regulating properties.

AmphiSilan Nespri-TEC is protected against algae & mildew contamination.

Product Description

Field of Application:

For application in the special, mist-free Nespri-TEC spraying method. For rain repellent, highly water vapour permeable coatings on exterior renders/plasters and mineral substrates. For renovation of sound, adherent silicate paints, matt synthetic resin dispersion paints or organic renders/plasters, and intact external thermal insulation composite systems (ETICS / EWI Systems).

Properties:

- Economic application with special, mist-free Nespri-TEC spraying method.
- Water-thinnable, ecologically compatible, and low odour.
- Weatherproof.
- Highly water-repellent
- Low surface tension, non-thermoplastic.
- Soiling-minimised, keeps the facade clean for a long period.
- Non-film-forming, micro-porous.
- Permeable to CO₂.
- Good covering power.
- Resistant to aggressive air pollutants.
- This product is provided with a preservative against deterioration in the coating due to algae and mildew growth.
- Provided with special photo-catalytic reactive pigments

Characteristics to DIN EN 13 300:

- **Gloss level:** matt G₃
- **Dry film thickness:** 100 – 200 µm E₃
- **Maximum particle size:** <100 µm S₁
- **Water vapour permeability: (s_a-value):** < 0.14 m (high) V₁
- **Water permeability: (w-value):** 0.1 [kg/(m² · h^{0.5})] (low) W₃

Packaging / Standard Material:

25 lit. hobcock
120 lit. barrel
220 lit. Quick-Box

ColorExpress: 15 lit.

AmphiSilan-Grundierfarbe Nespri-TEC:

25 lit. hobcock
120 lit. barrel

ColorExpress: 15 lit.

Vehicle:

Combination of silicone resin emulsion and special synthetic resin dispersion.

Density:

Approx. 1.5 g/cm³

Colour:

White.
Factory-made individual tints on request. Check the tinted material before application to avoid differences in shade. Do not use materials of different batches for coating a large surface.

AmphiSilan Nespri-TEC can be tinted via ColorExpress tinting machine system to current colour collections in light pastel tints. Brilliant, intensive tones, e.g. yellow, orange, red, etc. have a lower covering power. It is therefore recommended to apply a first coat in a similar covering pastel tint, based on white. Possibly a second finishing coat may be necessary.

Please Note (Status of November 2006):

Keep out of reach of children. On contact with eyes or skin, rinse immediately with plenty of water. During spray application: Do not breathe spray. Do not empty into drains, water courses and onto the ground. Cover the surroundings carefully to protect from splashes. Wash off splashes on enamels, glass, ceramics, metals and natural stones immediately with plenty of clean water. Further information: See Safety Data Sheets.

Storage:

Cool, but frost-free. Shelf life is 12 months.



For clean facades



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 residues of liquid materials as water-based paints, dried materials as hardened materials or via domestic waste.

Product-Code for Paints & Enamels:

M-SF01F

Substances of Content - Declaration:

Silicone resin, acrylic resin dispersion, titanium dioxide, calcium carbonate, silicates, water, film forming agent, additives, preservatives (microbiocides), film preservative.

Complementary Materials:

AmphiSilan-Grundierfarbe Nespri-TEC Water-thinnable, pigmented priming paint for adhesion promoting prime-coats on compact, smooth substrates. Solidifies weathered organic renders/plasters using the Nespri-TEC spraying method.

AmphiSilan-Grundierfarbe Nespri-TEC can be tinted via ColorExpress tinting machine system in the shades of all current colour collections up to a luminosity of approx. 70.

Product-Code for Paints & Enamels:

M-GP01

Substances of Content - Declaration:

Silicone resin, acrylic resin dispersion, titanium dioxide, calcium carbonate, silicates, water, film forming agent, additives, preservatives (microbiocides).



Application

System of Application for Special Nespri-TEC Spraying Method:

Apply a first or intermediate & finishing coat of AmphiSilan Nespri-TEC with special Nespray airless unit and then (immediately) treat uniformly with a standard roller. Observe a minimum waiting time of 12 hours between the coats.

Method of Application:

Only to be applied with special Nespray airless unit.

Spray application:

AmphiSilan Nespri-TEC and AmphiSilan Grundierfarbe Nespri-TEC
Spraying 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. Clean tools immediately after use with water. Other coating materials, especially primers, may also be applied with the Nespray airless unit, but a spray fume reducing (mist-free) effect cannot be guaranteed. Apply those materials with corresponding precautions.

Consumption:

Consumption values are indicated per coat on smooth substrates. Rough-textured surfaces will require correspondingly more material. The exact rate of consumption is best established by a trial application. AmphiSilan Nespri-TEC approx. 250 ml/m² AmphiSilan Grundierfarbe Nespri-TEC approx. 140 – 250 ml/m²

Minimum Temperature for Application and Drying:

+5 °C for material, substrate and surrounding air.

Drying Time:

At + 20 °C and 65% relative humidity: surface-dry after 2 – 3 hours, recoatable after 12 hrs. Completely dry after 2 – 3 days. Lower temperatures and higher relative humidity will lengthen the drying process.

Note:

The materials should not be applied under a glaring sun, during strong wind, fog, high relative humidity, or imminent rain or frost. To avoid lapping on large surfaces, the material should always be applied wet on wet and without interruptions. Do not use for application on wood, metal, enamels, etc. Do not apply on horizontal surfaces exposed to rain or moisture. Protective tarpaulins should be used, if required (depending on weather conditions). Facade plates, also covering some levels of scaffolding, are to be coated plate by plate (wet on wet) and should be uniformly and thoroughly rolled over in one direction to avoid the forming of different textures, visible in adverse lighting conditions (sidelight). For colourful AmphiSilan coatings it is recommended to thin the original material with 10% of ThermoGrund, if the visibility of repairs should be diminished.

AmphiSilan Nespri-TEC contains special algicidal and fungicidal agents to counteract the forming of organic growth (fungi & algae) on the coating.

The depot of agents offers a long-lasting protection, but the algicidal & fungicidal effect is limited by the special facade conditions, e.g. intensity of organic growth and moisture. A durable protection cannot be guaranteed.

Compatibility with other Paint Materials:

AmphiSilan Nespri-TEC must not be mixed with other paint materials.

Suitable Substrates and their Preparation

The substrate must be sound, dry, clean, and free from all materials that may prevent good adhesion. Observe the recommendations of VOB, part C, DIN 18 363, paragraph 3.

Renderers/Plasters:

P Ic Hydraulic Lime Mortars
Class P II Lime-Cement Mortars
Class P III Cement Mortars

Allow new renderers/plasters to set for 2 – 4 weeks before the application of any paint or primer. Repairs must have adequate time to cure and dry.

Remove non-adherent, chalking or sintered layers from the surface. Clean existing render/plaster coatings by mechanical means or with a high-pressure water jet, in compliance with the regulations. Allow the surface to dry completely. Prime-coat with ThermoGrund.

Prime chalking, sanding or otherwise critical substrates with AmphiSilan-Grundfestiger, if necessary two coats, wet on wet.

Existing Silicate Paints or Renderers/Plasters:

Clean adherent, sound coatings mechanically or with high-pressure water jet, in compliance with the regulations. Remove unsound, weathered coatings by abrading, grinding or by scraping off. Prime-coat with AmphiSilan-Grundfestiger.

Sound Existing Synthetic Resin-Bound Renderers/Plasters and Intact ETICS/EWI Systems:*

Clean existing renderers/plasters by suitable means. Allow wet surfaces to dry completely.

Apply a priming coat with AmphiSilan-Grundierfarbe Nespri-TEC.

New synthetic renderers/plasters can be coated without pre-treatment.

Prime textured mineral renderers/plasters with AmphiSilan-Grundierfarbe Nespri-TEC.

* External Thermal Insulation Composite Systems / *Brit. term:* External Wall Insulation

Sound Coatings of Matt Dispersion Paint:

Clean soiled or chalking coatings with a high-pressure water jet, in compliance with the regulations. Allow the surface to dry completely.

Prime-coat with AmphiSilan-Grundierfarbe Nespri-TEC.

Unsound Coatings of Enamel, Dispersion Paint or Synthetic Resin-Bound Renderers/Plasters:

Remove existing coatings by suitable means e.g. mechanically or with a paint stripper and subsequently cleaning with a high-pressure water jet, in compliance with the regulations. Allow the substrate to dry completely.

Prime-coat with AmphiSilan-Grundierfarbe Nespri-TEC.

Prime chalking, sanding, absorbent substrates with AmphiSilan-Grundfestiger.

Fair-Faced Brick Masonry:

Only frost-resistant bricks and clinkers free of foreign inclusions are suitable for coatings. The jointing must be free of cracks and salts (salty efflorescence).

Prime-coat with AmphiSilan-Grundfestiger.

If brown discolouration appear on the intermediate coat, solvent-based paint Duparol has to be used for the finishing coat.

Sandlime Brick Masonry:

Only frost-resistant bricks free of foreign inclusions like sand or clay are suitable for coating. The jointing must be free of cracks.

Clean chalking surfaces, remove salty efflorescence by dry brushing.

Observe the recommendations of BFS Data Sheet No. 2.

Prime-coat with ThermoGrund.

Surfaces Infested with Organic Growth (Fungi/Mildew, Algae):

Remove mildew or algae growth by wet-blasting in compliance with the regulations.

Then treat the surface with Capatox (**no spray application !**) and allow to dry.

Apply a prime-coat of ThermoGrund, AmphiSilan-Grundierfarbe Nespri-TEC or AmphiSilan-Grundfestiger, depending on the substrate to be coated.

Surfaces with Salty Efflorescence:

Remove completely by dry brushing. Prime-coat with AmphiSilan-Grundfestiger. 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. Use a restoration render/plaster system, if extensive restoration is required.

Defects:


Repair small defects with Caparol-Fassaden-Feinspachtel, deeper defects up to 20 mm preferably with Capalith-Fassadenspachtel P (observe Technical Information No. 710 and No. 720), and prime repairs subsequently.

Advice

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.

Customer Service Center:

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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 Technical Information is a translation of the German Technical Information No. 146 Nespri-TEC-System, release date: April 2006

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