ThermoSan® NQG® Nespri

High-end facade paint with integrated nano-quartz grid technology for clean, fast-drying facades for efficient facade coating using the Nespri spraying method.

Product Description

Can be applied mist-free using the Nespri spray method.
The premium facade paint with the decisive advantage: organically cross-linked nano-quartz structures form a dense, mineral-hard, three-dimensional nano-quartz grid (NQG) that protects against dirt and keeps facades clean for longer.

The special combination of NQG and silicone resin binders creates rain-repellent, highly water vapour-permeable facade coatings that ensure rapid drying after precipitation and dew.

Field of Application

ThermoSan® NQG® Nespri is particularly suitable for ETICS with mineral and dispersion-bound, coated and uncoated plasters. It can also be used in solid construction, on VHF (ventilated curtain walls) and in renovation work, as well as on exposed masonry and panel materials.

Material Properties

- Nespri = mist-free paint application for precise, fast and efficient working
- Low covering effort
- Dirt-repellent thanks to the nano-quartz grid (NQG)
- Highest color stability
- Film protection against algae and fungal growth
- Highly CO_2 permeable, micro-porous
- Minimal chalking tendency

Material Base / Vehicle

Hybrid binder made from nano-quartz binder and silicone resin emulsion on an inorganic/organic basis.

Packaging/Package Size

- **Standard Product:** 25 l hobbock, 120 l paint barrel
- **ColorExpress:** 12.5 l

Colours

White.

Further colours are available via ColorExpress. Factory tinted available for orders of 100 litres or more in one colour and order. ThermoSan® NQG® can also be tinted with suitable AmphiColor solid colours and a maximum addition of 20%.

Before processing, check the material for colour accuracy and quality. Complaints regarding deviations from the delivery specifications cannot be accepted after processing. Please refer to the VDPM's "Leitfaden zu Prüfpflichten bei Anlieferung von Tönware im Rahmen der Untersuchungs- und Rügepflicht (§ 377 HGB)" ('Guidelines on inspection obligations for the delivery of coloured goods within the scope of the obligation to inspect and give notice of defects, § 377 of the German Commercial Code HGB)'.

Only process material from the same batch on contiguous surfaces or mix material from different batches beforehand.

CAPAROL

For intense and poorly covering colours, we recommend a base coat in the appropriate Caparol primer system colour, or alternatively a pastel, white-based base coat comparable to the desired colour or a pigmented primer.
An additional top coat may be necessary.

Colour fastness according to BFS leaflet No. 26:
Class: A
Group: 1

Gloss Level

Reflectometer value:
Class G_3 (matt) according to DIN EN 1062-1
Measuring angle 85°, requirement ≤ 10

Storage

Store in a cool, frost-free place and avoid large temperature fluctuations. Protect from direct sunlight. Keep opened containers tightly closed.
Can be stored for at least 12 months in the original sealed packaging.

Technical Data

■ Density:	$\rho \approx 1.5$ g/cm^3
■ Maximum grit size:	Class S_1 (fine) according to DIN EN 1062-1 S < 100 µm according to EN ISO 1524
■ Dry film thickness:	Class E_3 according to DIN EN 1062-1 E = > 100 – ≤ 200 µm according to ISO 3233
■ Diffusion-equivalent air layer thickness s_dH_2O:	Category V_1 (high) according to DIN EN 1062-1 s_d < 0.14 m according to DIN EN ISO 7783-2
■ Water permeability (w-value):	Class W_3 (low) according to DIN EN 1062-1 W ≤ 0.1 kg/(m²h1/2) according to DIN EN 1062-3

Supplementary Product

CapaGrund Universal, OptiSilan TiefGrund, Dupa-Putzfestiger, Minera Universa

Note

Please note the general building authority approval/general type approval and the technical information for the systems/products.
The data provided represents average values, which may vary slightly from delivery to delivery due to the use of natural raw materials. The information refers to white goods or standard goods. Deviations are possible due to colouring.

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

Interior 1	Interior 2	Interior 3	Exterior 1	Exterior 2
–	–	–	+	+
(–) inapplicable / (○) of limited suitability / (+) suitable				

Application

Suitable Substrates

- Mineral substrates, e.g. plasters from CS II according to DIN EN 998-1 (compressive strength min. 1.5 N/mm²) or from PII according to DIN 18550, concrete, exposed masonry, fibre cement, cement-bonded wood fibre boards
- Pasty (organic) plasters and coatings based on dispersion, silicone resin and dispersion silicate and silicate
- Can be used in ETICS and VHF, in solid construction and renovation

The substrate must be solid, load-bearing, free of contamination, separating substances and dry. Observe VOB, Part C, DIN 18363, Section 3. To achieve colour-uniform coatings, ensure that the substrate has uniform absorbency.

The substrate must be checked in accordance with information sheets no. 20 and 20.1 issued by the German Federal Committee for Paint and Material Protection (Bundesausschuss Farbe und Sachwertschutz e.V.).
The cause of cracks in substrates must be identified and cracks repaired appropriately depending on the type and extent of the cracks.
Please refer to Caparol Technical Information No. 650 "Untergründe und deren Vorbehandlung" (‘Substrates and their pre-treatment’).

Substrate Preparation

The following information is provided as examples and is not exhaustive. The coating is applied after any necessary substrate preparation.

Protective measures:
Carefully cover glass, ceramics, clinker, natural stone, lacquered, glazed, anodised and other surfaces to be protected. Remove splashes immediately with water.

Cleaning the substrates:
Clean dirty areas and remove any loose layers using a suitable method. Observe legal requirements. Allow sufficient drying time after treatment with water.
Possible methods (not exhaustive):

- Dry cleaning: sweeping, brushing.
- Pressure washing: max. temperature 60 °C, max. pressure 60 bar.
- Mechanical cleaning: pickling, grinding, scraping, local dismantling, etc.

The **waiting time** before new plaster can be reworked depends, among other things, on weather conditions and the layer thickness. It is longer at low temperatures and high humidity. The information is based on 20 °C and 65 % relative humidity and is provided for guidance only.

New mineral plasters:
Guideline: at least 1 day per mm of total layer thickness of base and top coat, but at least 14 days. Longer waiting times reduce the risk of lime efflorescence.

- A coats with CapaGrund Universal reduces the risk of lime efflorescence in mineral top coats, meaning that the top coat can be applied after a minimum of 7 days. Alternatively, mineral plasters can be coated with Sylitol Finish 130(-W).
- Specially tinted colours may require additional measures (e.g. longer standing times for the plaster substrate, priming with CapaGrund Universal (-W), weather protection).

New paste-like plasters:
Repaint after complete drying, at the earliest after 2-3 days.
If necessary, apply a base coat with CapaGrund Universal.

Old mineral plasters, concrete, mineral coatings:
Slightly absorbent, smooth: Prime coat with *CapaGrund Universal*.
Coarse, porous, absorbent, slightly sandy: Prime coat with *OptiSilan TiefGrund* or *CapaSol RapidGrund*.
Heavily sandy, chalky: Prime coat with *OptiSilan Tiefgrund* or *Dupa-Putzfestiger.*

Old, pasty, matt coatings:
Moderately absorbent: *CapaGrund Universal* diluted with max. 3% water.
Highly absorbent, chalky, sandy: Base coat with *OptiSilan TiefGrund* or *Dupa Putzfestiger*.
If necessary, apply an intermediate coat with *CapaGrund Universal*.

Shiny and water-repellent (hydrophobic) surfaces:
Roughen mechanically if necessary. Apply a base coat of *CapaGrund Universal*.
If water still beads after mechanical roughening, we recommend applying a base coat of *Dupa-HaftGrund*.

Plaster/concrete with sintered layer, plaster repairs:
Coat with *Histolith® Fluat* and rinse.
Repaired plaster must be well bonded and dry.

Concrete with requirements according to DIN EN 1504-3:
Please refer to the Disbon product range.

Cracked plaster or concrete surfaces:
Identify the cause of cracks in substrates and repair cracks appropriately depending on the type and extent of the crack. Depending on the crack class, coat with *FibroSil*, *PermaSilan* or the *Cap-elast system*.

Areas affected by fungus or algae:
Clean areas affected by fungus or algae using wet blasting in accordance with legal regulations. Once dry, pre-treat with *Capatox* in accordance with the manufacturer's instructions. Prime absorbent substrates with *FungiGrund*.

Salt efflorescence, moisture:
Mineral salts cause premature destruction of coatings. Brush off efflorescence until dry. When coating surfaces with salt efflorescence and (rising) moisture, no guarantee can be given for the permanent adhesion of the coating or the prevention of salt efflorescence.
Please refer to the *Histolith®* product range.

Aerated concrete with load-bearing old coating:
A base coat with *CapaGrund Universal* is recommended. For aerated concrete coatings that are not intact, follow the Caparol Building Protection Programme.

Exposed brickwork:
Only frost-resistant facing bricks or clinker bricks without foreign inclusions are suitable for coatings. The masonry must be free of cracks, dry and salt-free.
Apply a base coat of *Dupa-Putzfestiger*. If brown discolouration appears in the intermediate coat, continue with the water-free *Duparol* facade paint.

Sand-lime brick masonry:
The masonry must be free of cracks, dry and salt-free. Clean chalky/powdery surfaces. Observe BFS data sheet no. 2. Apply a base coat of *CapaSol RapidGrund* or *Sylitol RapidGrund 111*. For more absorbent surfaces, apply a base coat of *OptiSilan TiefGrund*.

Fibre cement panels:
Clean if necessary, remove less resistant layers in accordance with legal requirements. For coatings on fibre cement panels, observe BFS data sheet no. 14. Uncoated, non-load-bearing panels containing asbestos must no longer be treated with paint in accordance with the Hazardous Substances Ordinance (GefStoffV). For asbestos fibre-containing panels with existing load-bearing old coatings, also observe TRGS 519.

Cement-bonded wood chip boards:
Prime with Disbon 481 EP-Uniprimer to prevent lime efflorescence.

Method of Application

Spray mist-free application with Nespri devices:
Stir the material well.

- 20° double nozzle 215 (for trimming work)
- 30° double nozzle 317 (for smooth surfaces)
- 30° double nozzle 319 (for rough surfaces)

The material temperature is regulated automatically.
The spray pressure (spray gun open) on the Nespri device is in the green range of the pressure gauge. With the NespriKIT hose reel, this must be set on the respective airless device on your own responsibility.

Surface Coating System

To avoid wet-on-wet deposits, coat in a single pass.

Base coat: Follow the instructions under ‘Substrate preparation’.

Spray mist-free application with Nespri equipment
Intermediate and final coating: Apply the undiluted material using the special Nespri equipment. Lightly roll over the wet coating with a roller.

Consumption

- Approx. 250 ml/m² per coat on smooth surfaces.
  Use more on rough surfaces. Determine exact consumption by applying a test coat.

To achieve the best possible protection against algae and fungal growth, it is necessary to apply two coats with a total of at least 500 ml/m². The average layer thickness should be at least 250 µm. Each additional coat with a consumption of at least 250 ml/m² increases the layer thickness by approx. 120 µm.

Application Conditions

During the application and in the drying phase, the ambient and substrate temperatures must not be below +5 °C and above +30 °C.
Do not apply in direct sunlight, strong wind, fog or high humidity. Please refer to the leaflet "Verputzen, Wärmedämmen, Spachteln, Beschichten bei hohen und tiefen Temperaturen" (Rendering, Thermal Insulation, Filling, Coating at High and Low Temperatures) from the Bundesverband Ausbau und Fassade (Federal Association for Finishing and Façades).
In unfavourable weather conditions, take suitable measures to protect the facade surfaces being treated.

Drying/Drying Time

Base- or intermediate coats must be dry and plaster must be sufficiently set before further processing.

The waiting time before recoating depends, among other things, on weather conditions and the thickness of the coat. It is longer at low temperatures and high humidity.
The information is based on 20 °C and 65 % relative humidity and is intended as a guide.

- Surface dry after approx. 3 hours
- Can be painted over after approx. 12 hours
- Completely dry and resistant to stress after approx. 3 days

Tool Cleaning

Rinse with water immediately after use in accordance with legal regulations.

Note

Facade surfaces that are exposed to higher than normal moisture levels due to special conditions or natural weathering are at increased **risk of mould and algae growth**. Permanent prevention of mould and algae growth cannot be guaranteed. The deposit of active substances against microbiological attack in coatings provides long-lasting but temporary protection.

For **light reflectance values (HBW)** below 20, the plaster in ETICS must be coated with a solar-reflective facade paint with a TSR value ≥ 25 (*CoolProtect*) in at least two coats after thorough drying, depending on requirements.
On plastered, solid, highly thermally insulated wall elements, special measures must be taken if HBW < 30, e.g. additional reinforcement plaster with full-surface fabric insert on the lightweight plaster, and if HBW < 20, additionally a solar-reflective facade paint with TSR ≥ 25.
Please note the limits of feasibility in the respective system structure.

With dark colours, mechanical stress on the surface can lead to light streaks (**writing effect**). This is a product-specific property of all matt to silk matt facade paints and does not affect the product quality or functionality. *ThermoSan® NQG®* (Nespri) reduces this product-specific property in all matt facade paints.

On dense, cool substrates or if drying is delayed due to weather conditions, moisture (rain, dew, fog) can cause additives to form yellowish/transparent, slightly shiny and sticky flow marks on the surface of the coating (**emulsifier streaks)**. These auxiliary substances are water-soluble and are removed automatically with sufficient water, e.g. after several heavy rainfall. This does not adversely affect the quality of the dried coating. If direct reworking is nevertheless necessary, the flow marks/auxiliary materials must be pre-wetted and washed off completely after a short exposure time. An additional primer coat with *CapaGrund Universal* is recommended.

Repairs / **variations** on the surface may be more or less visible, even when using the original coating material. According to BFS data sheet 25, variations are unavoidable. Whether a variation is considered visually disturbing depends on many factors such as colour tone, gloss level, layer thickness, substrate, lighting, etc.

Protect **horizontal surfaces** constructively (e.g. by sheet metal cladding).

Advice

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

Warning
May cause an allergic skin reaction. Harmful to aquatic life with long lasting effects. Avoid breathing mist or vapors. Avoid release to the environment. Wear protective gloves. If skin irritation or rash occurs: Get medical advice/ attention. Take off contaminated clothing and wash it before reuse. Dispose of contents/ container to an approved waste disposal plant.
Contains: 1,2-benzisothiazol-3(2H)-one, 2-methylisothiazol-3(2H)-one, octhilinone (ISO), 4,5-dichloro-2-octyl-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. For professional/industrial applications. Treated article, contains a biocidal product. Film preservative: OIT, DCOIT, terbutryn, isoproturon (ISO). In-can preservative: CIT/MIT (3:1), BIT, MIT.
Disposal: Materials and all related packaging must be disposed of in a safe way in accordance with the full requirements of the local, regional, national and international authorities. Washing water must not be discharged into the sewage system or the environment.
GISCODE: BSW50.
EU limit value for the VOC content of this product (category A/c): 40 g/l (2010). **This product contains max. 20 g/l VOC.**
Declaration of ingredients according to VdL directive 01 (Germany): polysiloxane, polyacrylic resin, silicone resin, hybrid binder (Organo-silicate / acrylate), calcium carbonate, titanium dioxide, silicates, mineral pigments / fillers, water, glycol ethers, additives, Preservative, film preservatives.

Further Details

See Safety Data Sheet (SDS).

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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.1277 · ThermoSan® NQG® Nespri · Issued: March 2025

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