



Renosil Fine

Efficient, highly UV resistant, silicate-based renovation coating for remineralising the surfaces of synthetic resin coated façades and for external thermal insulation composite systems (ETICS)

Water-thinnable, open-pored silicate system with outstanding adhesion. Can be used universally for the renovation of synthetic resin bonded façade areas such as firmly adhering, microporous old emulsion-based coatings, synthetic resin renders and external thermal insulation composite systems (ETICS). BEECK Renosil enables cost-effective renovations while creating matt mineral and water vapour permeable surfaces. Due to sole use of inorganic pigments is highly UV resistant.

1. Product Properties

BEECK Renosil Fine is a solvent-free one-pack silicate system and contains silicifiable potassium water glass as a binder. Silicification, the chemical reaction between substrate and potassium water glass, produces uniform inseparable bonding with the mineral substrate. The purely mineral pigmentation is also optimally incorporated.

1.1. Composition

- Pure mineral potassium water glass
- Mineral pigments: lightfast and of natural origin
- Organic auxiliary agents and binder
- Water thinnable, solvent free

1.2. Technical properties

1.2.1. Overview

- Use on façades
- Remineralises surfaces
- Matt and mineral
- Highly opaque
- Maximum colourfastness A1 (BFS leaflet No. 26)
- Nonflammable
- Water vapour permeable and valuable building physics properties
- Natural alkalinity helps to prevent algae and mould

1.2.2. Important building physics characteristics*

Parameter	Value	Conformity
Density _{20°C} :	1.45 kg/L	
pH value _{20°C} :	11	
Dynamic viscosity _{20°C} :	5,000 mPas	
W ₂₄ value:	< 0.12 kg/(m ² h ^{1/2})	
s _d value (H ₂ O):	0.08 m	
Colourfastness**:	Class A1	BFS Information Sheet No. 26
Gloss level at 85°:	matt (< 10)	EN ISO 2813
Flammability class:	A2 nonflammable	EN 13501-1, DIN 4102
VOC content (max.):	10g/L	ChemVOCFarbV, Cat. A/c

* applicable to white
 ** applicable to tinted

1.2.3. Colour

- White and Off-White and ready-mixed in the 200 mixed colours of the BEECK Mineral Paint Colour Chart.
- Colour groups: I–IV
- Tintable and full colour coatings with BEECK Universal Full Colour Silicate.
- Due to the heating effect, only use light colours (lightness value LV > 40) on external thermal insulation composite systems (ETICS).

2. Use

2.1. Substrate requirements

- The substrate must be clean, dry, firm and stable and must be free from efflorescent and separating substances.
- Check drying and strength of new plaster or render.



Renosil Fine

- Carefully make good chipped surfaces and misses with the same type of material and the same texture.
- Use plaster to repair cracked substrates. Pretreat surfaces with local areas of filler or hairline cracks all over with BEECK Quartz Filler, alternatively with BEECK Renosil Coarse in case of minor structural defects.
- Ensure uniform substrates and careful application on high visual quality surfaces and in glancing light.

2.2. Brief information on the standard system

- Apply two coats of BEECK Renosil Fine.
- Optimally adjust BEECK Renosil Fine to the substrate and use by adding water – especially important on rough substrates.
- Critical substrates: apply BEECK Quartz Filler or BEECK Bonding Coat Fine / Coarse over the whole area first as preparatory treatment. Try out on a test area on site.
- Precoat with BEECK Renosil Coarse also possible; topcoat in same colour with BEECK Renosil Fine.

2.3. Substrate and preparatory treatment

- **Old film-forming coatings, synthetic resin renders, external thermal insulation composite systems (ETICS):**
Remove cracked, less adherent old coatings as pore-deep as possible. Check the adhesion and firmness of remaining coats. Thoroughly clean firmly adhering coatings and renders. Prepare and re-treat algae infested surfaces with BEECK Fungicide according to the factory specifications. Prime highly absorbent or crumbling surfaces with BEECK MBA-Fixative, thinned with 2 parts water. Information on façade cleaning: As synthetic resin renders swell if they absorb water and are slow to dry again, allow for sufficiently long waiting periods between cleaning and coating. Clean composite systems, insulating renders and similar pressure-sensitive surfaces gently, without damaging the material.
- **Lime render (PI/CSII), lime-cement render (PII), cement render (PIII), concrete, fibrated cement:**
Check drying and strength of render. Use BEECK Etching Fluid to remove sinter skin on solid new render. Do not etch thin coat renders and composite materials (for example, ETICS). Prime highly absorbent render with BEECK Fixative, thinned with 2 parts water. Flow coat superficially sanding however firm renders several times with 1 part BEECK Fixative and 5 parts water until saturated. Use a high-pressure cleaner and formwork release oil remover to clean concrete pore-deep and to remove any residual release agent, then rinse with plenty of clean water. Prime fibrated cement with BEECK Silane Primer and BEECK Bonding Coat Fine / Coarse, try out on a test area.
- **Unsuitable substrates** are horizontal weathered, efflorescent, gypsum or lime-based substrates as well as non-firm old coatings, plastics and pure air-lime renders.
- **Defective substrates** require a differentiated approach. Apply a renovation render to damp, salt contaminated surfaces and base areas, and treat the whole surface with BEECK Quartz Filler.

2.4. Application instructions

2.4.1. General information

Check substrate suitability as required (see 2.1 and 2.3). Pay particular attention to the absorbency, strength and texture of the respective substrate. Try out on a test area before using on high quality and critical surfaces. Ensure that the product is used by qualified persons.

- Carefully cover surfaces which are not to be treated – especially glass, ceramics, window sills, expansion joints, lacquer and anodic coatings – and protect them from splashes.
- Provide personal protective equipment.
- Only use containers from the same production batch to coat self-contained areas.
- Before use, stir BEECK Renosil Fine thoroughly with a powered mixing paddle.
- Make BEECK Renosil Fine optimally coatable by adding water.
- Do not use in wet conditions, if there is a risk of frost, on hot surfaces or in the blazing sun.
- Minimum application temperature: +8°C
- Drying time: at least 12 hours per coat
- Protect freshly coatings from the rain; hang up scaffolding sheeting in front of the surface worked on.

2.4.2. Application

With roller, brush or using an airless spraying method. Apply to self-contained areas with an absolutely thin coating, no overlapping, in one continuous pass by cross coating.

- **Application with roller or brush:**

- Rollers and brushes with a uniform coating finish are suitable.
- Avoid roller edges, ridges, overlapping and overcoating coats that have already begun to dry, especially in scaffold working areas.
- Cut-in edges smoothly and seamlessly, wet-on-wet, together with the main area.
- As a brushed surface, use a BEECK Mineral Paint Brush to spread without brushing in any particular direction.



Renosil Fine

- Coats

1. Primer coat: Thin product with no more than 10 % water to improve coatability.
2. Topcoat: After at least 12 hours, unthinned or make coatable with no more than 5 % water.

■ **Spraying method (airless):**

- Nozzle: 0.79 mm/0.031 inch
- Always sieve product before use, apply uniformly and as a thin coat.
- If necessary, uniformly lay-off with a brush or roller.

2.5. Auxiliary products

- BEECK Etching Fluid for removing sinter layers on solid new plaster: Thin BEECK Etching Fluid with 3 parts water and apply with a brush. After a few minutes, clean with plenty of water. Do not etch thin coat renders or composite material (ETICS).
- BEECK Fungicide, against algae growth. Apply thickly and allow to take effect at least overnight, then clean the façade with high-pressure hot water. Subsequent treatment with BEECK Fungicide is recommended after cleaning and drying to protect against regrowth. Determine effectiveness on specific property beforehand by trying out on a test area on site exposed to long-term weathering.
- BEECK Silane Primer, water-repellent primers for reducing moisture transport and salt efflorescence.
- BEECK Quartz Filler P, fibre reinforced powder slurry additive for coarse-grained primer and intermediate coats. Mix a 12.5 L bucket of BEECK Renosil Fine with 4 kg BEECK Quartz Filler P and thin with 2 kg – 4 kg BEECK Fixative. Apply smoothly and seamlessly with a brush. Alternatively:
- BEECK Quartz Filler, fibre reinforced, silicate-based, slurry priming coat for covering hairline cracks and minor structural defects. Apply over whole surface with the brush. BEECK Quartz Filler can also be mixed 1:1 with BEECK Renosil Fine as a coarse-grained primer and/or intermediate coat. Same colour topcoat with BEECK Renosil Fine.
- BEECK Renosil Coarse, with texture grain (0.4 mm) for coarse-grained primer and intermediate coatings. Same colour topcoat with BEECK Renosil Fine.

3. Application Rate and Container Sizes

The application rate, i.e. the quantity required for smooth, normally absorbent substrates is approx. 0.13 L BEECK Renosil Fine per m² and pass. Try out on a test area on site to determine substrate-related application rate differences.

Container sizes: 5 L / 12.5 L

4. Cleaning

Thoroughly clean equipment, tools and soiled clothing with water immediately after use.

5. Storage

Stored cool and frost-free, BEECK Renosil Fine can be kept for at least 12 months.

6. Safety Instructions

- Comply with the EU Safety Data Sheet. The product is alkaline. Avoid contact with skin and eyes. Wear eye/face protection. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Carefully cover the area surrounding the surfaces to be coated, wash off splashes immediately with water. Keep out of the reach of children. Repeated contact may cause allergic reactions in people who are particularly sensitive. Do not breathe vapour, spray and dust. Dispose of in accordance with the legal regulations.
- Waste code (EWC code): 080112

7. Declaration

This technical information is offered as advice based on our knowledge and practical experience. All information is provided without guarantee. It does not release the user from their responsibility to check the product suitability and application for the specific substrate on which it is to be used. Subject to change without notice as part of our product development. Additives for tinting, thinning, etc. are not permitted. Check the colours before use. This information sheet automatically becomes invalid when a new edition is issued. The information in the current version of the EU Safety Data Sheets is binding for classification according to the Hazardous Substances Regulations, disposal, etc.