

Beecko-SOL Coarse

Slurry primer coat in the Beecko-SOL system for façades

1. Product Properties

Coarse-grained silicate emulsion paint modified with silica sol in accordance with VOB/C DIN 18363 2.4.1 for priming coat. Thanks to a selected grading curve and fibre reinforcement with attractive diffuse light effect, levelling of minor structural defects and bridging over of localised hairline cracks.

Silicification, the chemical reaction between substrate and potassium water glass, produces a microporous unit, inseparably bonded with the substrate. The perfect adhesion and silicification, even on synthetic-resin coated façades enables cost-effective mineral coating solutions with optimum durability. Suitable for external thermal insulation composite systems (ETICS), synthetic resin renders and weathered, matt emulsion and silicone resin coatings. Also universally suitable on firm lime and cement render, brick and calcium silicate masonry. Texture grain 0.4 mm. Topcoat: in the same colour with Beecko-SOL Fine.

BEECKASF®
Aktiv Silikat Formulierung

1.1. Composition

- Pure mineral potassium water glass
- Silica sol
- Mineral pigments: lightfast and of natural origin
- Silicification-active extenders, texture grain approx. 0.4 mm
- Organic content < 5% (VOB/C DIN 18363 2.4.1.)
- Solvent free

1.2. Technical properties

1.2.1. Overview

- Use on façades
- BEECK ASF® Active Silicate Formulation
- Highly adherent even on synthetic-resin based substrates
- Levels out minor structural defects and hairline cracks
- Low tension
- Highly opaque
- Highly water vapour and CO₂ permeable
- 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: | 1.60 kg / L | |
| pH value 20°C: | 11 | |
| Dynamic viscosity 20°C: | 8,000 mPas | |
| W ₂₄ value: | 0.08 kg / (m ² h ^{1/2}) / class W3 | EN 1062-3 |
| s _d value (H ₂ O): | 0.01 m / class V1 | EN 1062-1 |
| Colourfastness**: | Class A1 | BFS Information Sheet No. 26 |
| Gloss level at 85°: | dull matt | EN ISO 2813 |
| Flammability class: | A2 nonflammable | EN 13501-1, DIN 4102 |
| VOC content (max.): | 2 g / 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 Paints Card.
- Tintable in pastel colours with BEECK Universal Full Colour Silicate (colour groups I, II), and as a full colour coating.
- Different technical and building physics characteristics are possible if using full colours (colour groups III, IV).
- Due to the heating effect, only use light colours (lightness value LV > 40) on ETICS.
- Topcoat: in the same colour with Beecko-SOL Fine.

2. Use

2.1. Substrate requirements

- The substrate must be clean, dry, firm and stable and must be free from efflorescent and separating substances.
- Suitable substrates are: mineral, porous, absorbent, water repellent as well as organically bonded surfaces with at least partly mineral character.



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- If applying on new render, ensure sufficient life, drying and curing.
- Critical and algae infested substrates: depending on the requirement, prepare first by applying BEECK Fungicide, BEECK Quartz Filler, or BEECK Bonding Coat Fine / Coarse to the whole surface. Try out on a test area on site.
- Use plaster to repair cracked substrates. Carefully make good chipped surfaces and misses with the same type of material and the same texture. If necessary reinforce with fabric. Precoat areas with individual hairline cracks and minor structural defects with Beecko-SOL Coarse over whole surface. Use BEECK Quartz Filler in case of greater defects. Try out on a test area.
- Ensure uniform substrates and careful application on visually high-quality surfaces and in glancing light.

2.2. Brief information on the standard system

- Slurry primer coat with Beecko-SOL Coarse.
- Topcoat: in the same colour with Beecko-SOL Fine.
- Add BEECK Fixative to make Beecko-SOL Coarse optimally coatable.
- Apply a primer coat of BEECK Bonding Coat Fine / Coarse or BEECK Quartz Filler on critical surfaces.

2.3. Substrate and preparatory treatment

- **Old film-forming or mineral coatings, synthetic resin renders, external thermal insulation composite systems (ETICS):**
Remove cracked, less adherent and glossy film-forming old coats as pore-deep as possible. Check the adhesion and firmness of matt, weathered coatings, brush off chalking mineral coatings. Use high-pressure methods to thoroughly clean firmly adhering coats and renders. Prepare algae infested façades with BEECK Fungicide according to the factory specifications, see auxiliary products. Prime absorbent, chalking or crumbling surfaces with BEECK Fixative, thinned with 2 parts water. Use BEECK Bonding Coat Fine / Coarse or BEECK Quartz Filler if necessary. 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. Critical, unknown and highly algae infested substrates: try out on a test area on site.
- **Lime render (PI/CSII), lime-cement render (PII), cement render (PIII):**
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 absorbent render with BEECK Fixative, thinned with 2 parts water. Superficially sanding but nonetheless firm renders: saturate several times with 1 part BEECK Fixative and 5 parts water. Check pure air-lime renders for stability.
- **Concrete, fibrated cement:**
Use high pressure cleaner and BEECK Formwork Oil Remover according to the factory specifications to clean concrete pore-deep and to remove any residual release agent, and then rinse with plenty of clean water. Prime with BEECK Fixative, thinned with 2 parts water. Coat over entire area of made good surfaces with BEECK Quartz Filler or BEECK Bonding Coat Fine / Coarse as required. Prime fibrated cement with BEECK Silane Primer and BEECK Bonding Coat Fine / Coarse, try out on a test area.
- **Natural stone, brick, calcium silicate masonry:**
Clean thoroughly, check for moisture damage and efflorescence (e.g. salt edges, iron salts) and make good defective joints and bricks. Preset absorbent substrates with BEECK Fixative, thinned with 2 parts water. Flow coat weakly efflorescent substrates and aerated concrete with BEECK Silane Primer. Use BEECK Quartz Filler as required.
- **Unsuitable substrates** are horizontal or sloping surfaces exposed to the weather, less stable, efflorescent surfaces and non-alkali-resistant substrates such as wood-based materials (MDF, OSB), clay or loam, gypsum, and plastics as well as glossy, pore-free, non- firm and plasto-elastic coatings.
- **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.
- Stir Beecko-SOL Coarse thoroughly with a powered mixing paddle before use.
- Add BEECK Fixative to Beecko-SOL Coarse to make it optimally coatable.



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- Do not use in wet conditions, if there is a risk of frost, on heated surfaces or in the blazing sun.
- Minimum application temperature: +8°C
- Drying time: at least 12 hours per coat
- Protect fresh 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 on self-contained areas with an thin coating, free from overlapping and uniformly in one cross coat.

- **Application with roller or brush:**

- Preferably using a BEECK Mineral Paint Brush, applied without direction and uniformly with cross coating produces a "brushed surface". Slurry hairline cracks well, brush out surplus material on surface.
- Rollers and brushes with a uniform coating finish are suitable.
- Avoid roller edges, ridges, grain pockets, 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.

- Coats:

Primer and possible intermediate coat: Add around 10 % BEECK Fixative to Beecko-SOL Coarse to make it optimally coatable, depending on the absorbency, texture and roughness of the substrate.

Topcoat: After 12 hours at the earliest, in the same colour with Beecko-SOL Fine.

2.5. Auxiliary products

- BEECK Fixative, Primer and Thinner. Use BEECK MBA-Fixative on water-repellent substrate.
- BEECK Etching Fluid for removing sinter layers on solid new render. Do not etch thin coat renders and composite material (ETICS), please refer to the technical data sheet and safety data sheet.
- BEECK Fungicide against algae infestation. Use according to the factory specifications. Determine effectiveness of the fungicide 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 Bonding Coat Coarse / Fine on critical, e.g. smooth or water repellent substrates. Slurrying effect with "coarse".
- BEECK Quartz Filler, fibre reinforced, silicate-based, slurry priming coat for covering hairline cracks and minor structural defects. Natural White. Apply over whole surface with the brush.
- Beeck-SOL Fine, as topcoat in the same colour without texture grain.

3. Application Rate and Container Sizes

The application rate, i.e. the quantity required for smooth, normally absorbent substrates is approx. 0.25 kg Beecko-SOL Coarse per m² and pass. Try out on site first to determine substrate-related application rate differences, especially on rough substrates.

Container sizes: 8 kg / 20 kg

4. Cleaning

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

5. Storage

Stored cool and frost-free can be kept for at least 12 months.

6. Hazard notes, safety instructions and disposal

Comply with the EC Safety Data Sheet. Safety data sheet available on request.

Precautionary statements: Do not get in eyes, on skin, or on clothing. Keep out of reach of children. Wear eye/face protection. The product is alkaline. Do not breathe vapours, spray-mist and dust. Carefully protect the area surrounding the surface to be coated, wash off splashes immediately with water. Disposal in accordance with the official regulations.

Waste disposal number: 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. Non-system 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 EC Safety Data Sheets is binding for classification according to the Hazards identifications, disposal considerations, etc.