



Tŷ-Mawr Caring for the future, respecting the past...

Manufacturer and supplier of traditional and environmentally-friendly building materials.

# BEECK Quartz Filler

Siliceous, fibre-reinforced primer to VOB/C DIN 18363 2.4.1. for bridging over hairline cracks and structural defects. Natural white, texture grain 0.4 mm

#### **1. Product Properties**

Filling primer coating for silicifiable substrates, interior and exterior, such as lime and cement plaster and render, concrete and calcium silicate masonry. Can also be used on firm old coatings and external thermal insulation composite systems (ETICS). Ideal as full surface levelling slurry coating on façades with



hairline cracks, made good plaster or render, small misses and texture defects. Further treatment, for example, with Beeckosil or BEECK Concrete / Stone Glaze. Can also be used as a slurry additive, e.g. for BEECK Pure Crystalline Finish. High filling property combined with fibre reinforcement for permanent siliceous bridging of static hairline cracks and crazing and for levelling out texture defects and made good areas. Also durably remineralises synthetic resin-based, critical substrates and enables stain and join free silicate coatings on suboptimum substrates. Dispersion silicate system to VOB/C DIN 18363 2.4.1., thanks to the BEECK ASF® Active Silicate Formulation, unsurpassed silicification-active and durable. Silicification, the chemical reaction between mineral substrate, extenders and potassium water glass does not create a surface film, but instead produces a microporous, inseparable unit of substrate and coating. BEECK Quartz Filler is therefore optimally compatible with porous mineral substrates and subsequent siliceous coatings. Even when used for renovation, a surplus thickness of organic material does not form. Neither embrittling nor thermoplastic. Decidedly economical to use, increases the durability and attractiveness of silicate coatings and verifiably protects the render layer against weathering.

#### 1.1. Composition

- Pure mineral potassium water glass
- Filled with silicification-active extenders with texture grain 0.4 mm
- Cellulose fibres for reinforcing hairline cracks
- Organic content < 5% (VOB/C DIN 18363 2.4.1.)</li>
- Free from solvents, biocides and preservatives

#### 1.2. Technical properties

#### 1.2.1. Overview

- For use on interior surfaces and façades
- BEECK ASF® Active Silicate Formulation
- Extremely water vapour permeable, ideal building physics properties
- Brightens up smooth structures through texture grain 0.4 mm
- Bridges hairline cracks and minor structural defects
- Attractive, brushed, mineral surface
- Optimum silicification with subsequent coat
- Can be coated over practically an unlimited number of times, as is non film-forming
- Unsurpassed durability and economical to use
- Nonflammable
- Natural alkalinity helps to prevent algae and mould

#### 1.2.2. Important building physics characteristics

| Parameter                                | Value                                      | Conformity               |
|--|--|--------------------------|
| Density 20°C:                            | 1.56 kg / L                                |                          |
| pH value <sub>20°C</sub> :               | 11   |                          |
| Dynamic viscosity <sub>20°C</sub> :      | approx. 9,000 mPas                         |                          |
| W <sub>24</sub> value:                   | 0.30 kg/(m <sup>2</sup> h <sup>1/2</sup> ) |                          |
| s <sub>d</sub> value (H <sub>2</sub> O): | 0.02 m                                     |                          |
| Flammability class:                      | A2 nonflammable                            | EN 13501-1, DIN 4102     |
| VOC content (max.):                      | 4 g / L                                    | ChemVOCFarbV, Cat. A / c |

#### 1.2.3. Colour

Natural white opaquely pigmented

#### 2. Use

#### 2.1. Substrate requirements

 Can be used on porous, absorbent to water-repellent mineral, silicifiable substrates in interiors and on façades.





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- 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.
- Carefully make good chipped surfaces and misses with the same type of material and the same texture.
- Use plaster or render to repair cracked substrates, e.g. finishing compound with fabric mesh reinforcement. Precoat whole surfaces with crazing-like, static hairline cracks, locally made good plaster or render and minor structural defects directly with BEECK Quartz Filler.
- Gently clean pressure-sensitive surfaces.
- Prepare algae infested façades with BEECK Fungicide according to the factory specifications.
- Pay particular attention to uniform substrates and careful use on visually high-quality surfaces and in glancing light. Avoid grain pockets, overlapping and joins, e.g. in scaffold working areas.

#### 2.2. Brief information on the standard system

- All over coating with BEECK Quartz Filler, apply using the BEECK Mineral Paint Brush.
- Make BEECK Quartz Filler optimally coatable to the substrate and use by adding 10 % 20 % BEECK Fixative. Use a brush to fill cracks and misses with slurry, intensively and with the same texture.
- Subsequent coats with, for example, Beeckosil or BEECK Concrete / Stone Glaze.
- For use as a slurry additive, e.g. to BEECK Pure Crystalline Finish: see 2.4. Application instructions:

#### 2.3. Substrate and preparatory treatment

Lime plaster or render (PI/CSII), lime-cement plaster or render (PII), cement plaster or render (PIII), external thermal insulation composite system (ETICS): Remove sinter skin on solid plaster or render using BEECK Etching Fluid according to the factory

specifications. Do not etch thin coat plasters or renders or composite material (e.g. ETICS). Preset absorbent, weakly sanding plaster or render with BEECK Fixative, thinned with 2 parts water. Use BEECK MBA-Fixative on water-repellent substrates. Check pure air-lime plasters or renders for stability.

- Concrete, fibrated cement, calcium silicate: 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. Rinse off formwork release oil thoroughly including in interior areas. Prime fibrated cement in façade areas with BEECK Silane Primer and BEECK Bonding Coat Coarse. Try out on a test area.
- Natural stone, brick, calcium silicate masonry, aerated concrete: 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 in exterior areas with BEECK Silane Primer.

### Existing coats, synthetic resin render, external thermal insulation composite systems (ETICS):

Thoroughly clean old mineral coatings and brush off. Remove cracked, less adherent and film-forming old coats as pore deep as possible. Check the adhesion and firmness of remaining coatings. Clean firmly adhering matt coatings, plasters and renders. Prepare algae infested surfaces with BEECK Fungicide according to the factory specifications. Prime absorbent, chalking and crumbling surfaces with BEECK Fixative, thinned with 2 parts water. BEECK Bonding Coat Fine/Coarse can also be used as a highly adherent, white primer coating. In case of hairline cracks or minor structural defects, roughly precoat the whole surface of the facade with BEECK Quartz Filler. Try out on a test area. Gently clean pressure-sensitive surfaces.

- Unsuitable substrates are horizontal weathered, 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 old, non-firm, glossy and plasto-elastic coatings.
- Defective substrates require a differentiated approach. Apply renovation plaster or render to damp, salt contaminated surfaces, basement walls and base areas, then apply a primer coat of BEECK Quartz Filler to the whole surface.

#### 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, cracked 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. •
- Before use, stir BEECK Quartz Filler uniformly with a powered mixing paddle.
- Make BEECK Quartz Filler coatable by adding 10 % 20 % BEECK Fixative.





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- Always use containers of product from the same production batch to coat self-contained areas. Ensure
  sufficient qualified workers and smooth, uninterrupted coating process.
- 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 pass.
- Protect fresh coats from rain and the blazing sun; hang up scaffolding sheeting in front of the surface.

#### 2.4.2. Application

#### • As a slurry primer coat:

Use the BEECK Mineral Paint Brush to apply BEECK Quartz Filler. Uniformly apply and lay-off all over on self-contained areas, smoothly and seamlessly, with the same texture. As an attractive, brushed surface by cross coating, i.e. with directionless brush movements.

 Make BEECK Quartz Filler optimum coatable by adding 10 % – 20 % BEECK Fixative, depending on the substrate. Apply one or two coats, depending on the substrate and specification.

#### As a slurry additive to BEECK Pure Crystalline Finish:

Primer coat:

- All over with BEECK Quartz Filler, thinned with 10 % 20 % BEECK Fixative.
- Alternatively, advisable for tinted coatings: Soak 25 kg BEECK Powdered Pigment in 30 kg BEECK Fixative and, while stirring, add 40 kg BEECK Quartz Filler. Make optimum coatable by adding approx.
   10 kg BEECK Fixative. Apply uniformly, smoothly and seamlessly with a brush.

Intermediate coat:

 Soak 25 kg BEECK Powdered Pigment in 30 kg BEECK Fixative and, while stirring, add 20 kg BEECK Quartz Filler. Thin with a further approx. 5 kg BEECK Fixative.

Topcoat:

- Apply a coat of BEECK Pure Crystalline Finish in the same colour.
- Without addition of BEECK Quartz Filler.

#### As a slurry additive to Beckosil or BEECK Renosil:

Primer coat:

- All over with BEECK Quartz Filler, thinned with 10 % - 20 % BEECK Fixative.

Intermediate coat:

- Mix a 15 L or 12.5 L bucket of e.g. Beeckosil Fine respectively with a 20 kg bucket of BEECK Quartz Filler.
- Add no more than 4 kg BEECK Fixative to make coatable and apply smoothly and seamlessly with a brush.

Topcoat:

- In the same colour with e.g. Beeckosil Fine. Without addition of BEECK Quartz Filler.

### As an opaque, natural white or pastel coloured, tinted glaze primer for silicate glazing technique:

- Primer coat:
  - All over with BEECK Quartz Filler, thinned with 10 % 20 % BEECK Fixative, as a uniform slurry substrate on mineral plaster or render, concrete and fair-faced masonry.
  - Ensure uniform and smooth, seamless application, preferably by directionless cross coating.
  - One to two coats depending on requirement. BEECK Quartz Filler can be tinted in a pastel colour as a glaze primer by adding maximum 10 % BEECK Full Colour Silicate Paint; the whiteness can be significantly increased by adding 10 % Beeckosil White.

Silicate glazing technique:

- With BEECK Concrete-/Stone Glaze or alternatively with BEECK MBA-Fixative and BEECK Powdered Pigment.
- 2 3 aquarelle-like glazing coats according to factory specifications.
- On exposed façades: Subsequent long-term preservation with BEECK SP Plus is advisable.

#### 3. Application Rate and Container Sizes

The application rate, i.e. the quantity required is approx. 0.25 kg – 0.4 kg BEECK Quartz Filler per m<sup>2</sup> and pass. Determine substrate-related application differences for slurry primer coats by preparing a sample area on site, especially on roughcast plaster or render. *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, BEECK Quartz Filler can be kept for at least 12 months.

#### 6. Hazard notes, safety instructions and disposal





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## **BEECK Quartz Filler**

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

**Precautionary statements:** Keep out of reach of children. Do not get in eyes, on skin, or on clothing. 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 ubstrate 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.