



BEECK Insil

Solvent-free interior silicate paint to VOB/C DIN 18363 2.4.1. for living areas and commercial premises

1. Product Properties

Ready-to-use, open-pored universal interior silicate paint for use in residential and commercial premises, for administration buildings and public facilities. For use on all firm surfaces such as lime and cement plaster, woodchip wallpaper and glass fabric. BEECK Insil contains silicifiable potassium water glass and pure mineral pigments. Supports healthy living with excellent building physics.

1.1. Composition

- Pure mineral potassium water glass
- Mineral pigments: lightfast and of natural origin
- Organic content < 5% (VOB/C DIN 18363 2.4.1.)
- Free from solvents, low VOC content
- Without addition of any preservatives and biocides

1.2. Technical properties

1.2.1. Overview

- For universal use on interior surfaces
- Water vapour permeable and non-vapour retarding
- High opacity, high wet-scrub resistance
- Nonflammable
- Natural alkalinity helps to prevent bacteria and mould

1.2.2. Important building physics characteristics*

Parameter	Value	Conformity
Density 20°C:	1.49 kg / L	
pH value 20°C:	11	
s _d value (H ₂ O):	0.01 m	
Colour fastness of pigmentation**:	100 %	
Contrast ratio / hiding power:	Class 2	EN 13300
Wet-scrub resistance:	Class 2	EN 13300
Grain size:	fine	EN 13300
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 / a

* applicable to White | ** applicable to tinted | *** valid for yield 7 m²/l

1.2.3. Colour

- White and Off-White.
- Only factory tinting in pastel colour shades, see product range.

2. Use

2.1. Substrate requirements

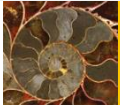
- The substrate must be clean, dry, firm and stable and must be free from efflorescent, bleeding and separating substances.
- Test new plaster or render for drying and strength.
- Carefully make good chips and misses with the same type of material and the same texture.
- Use plaster to repair cracked substrates. Plastered areas with hairline cracks and minor structural defects: precoat the whole surface with BEECK Gypsum Primer Coarse. Try out on a test area on site.
- Ensure uniform substrates and careful application on high visual quality surfaces and in glancing light.

2.2. Brief information on the standard system

- Apply one or two coats of BEECK Insil, as required.
- On critical surfaces, prime with BEECK Gypsum Primer Fine / Coarse (grain size 0.4 mm), make samples.

2.3. Substrate and preparatory treatment

- **Lime plaster (PI/CSII), lime-cement plaster (PII), cement plaster (PIII) gypsum plaster, plaster stucco:**
Check plaster for drying and strength. Use BEECK Etching Fluid to remove sinter skin on solid lime plaster, or grind off. Do not etch thin coat plasters and composite systems. Prime absorbent lime plaster with BEECK Fixative, thinned with 2 parts water. Before using on superficially sanding, however firm lime plasters, flow



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coat the substrate several times first with 1 part BEECK Fixative and 5 parts water until it is saturated. Precoat whole surface of gypsum plaster or stucco with BEECK Gypsum Primer Fine / Coarse if necessary.

- **Gypsum boards:**
Ensure proper installation and required surface quality and evenness tolerances under glancing light conditions, given on site and according to good practice. Apply gypsum filler on whole surface, followed by primer coat to whole surface with BEECK Gypsum Primer Fine / Coarse.
- **Calcium silicate masonry, brick:**
Clean and check for absorbency, moisture damage and efflorescence (e.g. salt edges). Make good crumbling bricks and joints. Apply primer coat of BEECK Gypsum Primer Fine / Coarse or directly with BEECK Insil.
- **Concrete:**
Thoroughly clean with BEECK Formwork Oil Remover according to the factory specifications and rinse off with clean water. Test the wettability of the cleaned substrate by spraying on water. Primer coat of BEECK Gypsum Primer Fine / Coarse advisable, alternatively directly with BEECK Insil.
- **Clay or loam:**
Allow to dry, brush off any unbound grain from surface. Prime with BEECK Insil, diluted with approx. 20 % water. Make samples on critical or crumbly surfaces.
- **Fabric, textured/embossed wallpapers, woodchip wallpaper:**
Only for alkali-proof, water-wettable fabric and paper. Not for metal foils, plastics or vinyl wallpapers. Ensure homogeneous bonding over whole surface, without overlapping. Coat directly with BEECK Insil.
- **Old coatings:**
Brush down mineral coatings and if chalking, solidify with BEECK Fixative, thinned with 2 parts water. Completely rinse off distempers and tempera paints. Old plasto-elastic, synthetic resin-based coatings, glossy coatings: strip or blast clean, pore-deep. Clean firmly adhering, old, matt, emulsion coatings and precoat with BEECK Gypsum Primer Fine / Coarse, if necessary. Make samples before applying on critical and unknown surfaces.
- **Unsuitable substrates** are less stable, efflorescent, organic and non alkali-resistant substrates, e.g. wood-based materials (MDF, OSB) and plastics.
- **Defective substrates** require a differentiated approach. Apply renovation plaster to damp, salt contaminated areas, basement walls and base areas.

2.4. Application instructions

2.4.1. General information

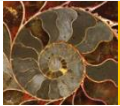
Check substrate suitability as required (see 2.1 and 2.3). Pay particular attention to the absorbency, strength and texture of the respective substrate. Try out on a test area before using on high quality and critical surfaces. Ensure that the product is used by qualified persons only.

- 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, thoroughly stir BEECK Insil with a powered mixing paddle.
- Add water to make optimally coatable.
- Minimum application temperature: +8°C
- Minimum application temperature: +12°C; maximum +25°C room and surface temperature.
- Drying time: at least 8 hours per coat under standard conditions (23°C / 50 % air humidity)

2.4.2. Application

Apply using roller, brush or an airless spraying method. Apply on self-contained areas with an absolutely thin coating, no overlapping and uniformly in one continuous pass with a cross coat.

- **Application with roller or brush:**
 - Rollers and brushes with a uniform coating finish are suitable.
 - Avoid roller edges, overlapping and overcoating coats that have already begun to dry.
 - 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 in any particular direction.
 - Coats:
Primer coat: mix with approx. 5 % – 15 % water to improve coatability.
Topcoat: after at least 8 hours, diluted with approx. 5 – 10 % water.
One coat may be sufficient when applying very carefully on suitable surfaces.
- **Spraying method (airless):**
 - Nozzle: 0.79 mm / 0.031 inch; 150 – 180 bar; spray angle 50°
 - Always sieve the product before use.
 - Apply uniformly and as a thin coat; if necessary, use a brush or roller to uniformly lay-off.



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2.5. Auxiliary products

- BEECK Gypsum Primer Fine / Coarse (grain size 0.4 mm), as an opaque white, efficient substrate on gypsum board and old emulsion coatings.
- BEECK Quartz Filler P, fibre reinforced slurry additive (powder) for coarse-grained primer and intermediate coats. Mix a 12.5 L bucket of BEECK Insil with 4 to 8 kg BEECK Quartz Filler P and thin with approx. 2 – 3 l water. Apply uniformly with roller or brush, smoothly, seamlessly and without grain pockets. Topcoat with BEECK Insil fine, without slurry additive.

3. Application Rate and Container Sizes

The application rate, i.e. the quantity required for normally absorbent substrates with a fine or medium structure is approx. 0.10 – 0.15 L BEECK Insil per m² and pass. Try out on a test area on site to determine substrate-related application rate differences, especially when using tinted or on very smooth or rough surfaces.

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 Insil 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: 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 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.