

BEECK Silane Primer

Water-repellent silane-based primer for efflorescent mineral façades substrates. Only for commercial use

1. Product Properties

Deep penetrating primer containing solvents based on organic silicon components. Suitable for porous, solid mineral building materials such as brick, natural stone, calcium silicate masonry and aerated concrete. Protects the surface zone from moisture penetration and capillary water transport as well as the associated activation of structurally harmful or discolouring, water-soluble constituents and salts. Not to be used against rising damp, e.g. if there is no horizontal insulation (damp proof course) in the base area. BEECK Silane Primer causes water-repellent, "hydrophobic" lining of the building material pores resulting in deep-action water repellency of the porous mineral building material. By preventing capillary water transport, the activation of structurally damaging salts and bleeding through constituents. Durable protection against discolouration and salt transport is only possible by preventing the dynamic capillary pressure, for example, by "draining" and damp proofing foundations or removing other causes of continuous moisture. Water-vapour diffusion, that is to say the exchange of gaseous water vapour between the building material and atmosphere, remains effective without limitation even after treatment with BEECK Silane Primer.

1.1. Composition

- Low-molecular active organosilicon components (alkylalkoxysilanes). Dissolved in isoaliphatic hydrocarbons.

1.2. Technical properties

1.2.1. Overview

- Use only on façades
- Prevents activation and capillary transport of structurally damaging salts and discolouring ingredients
- Provides long-term protection of building fabric against rainwater, penetration of moisture and contaminant input
- Highly penetrative deep-action preparation
- For alkaline and also for chemically neutral substrates
- Non vapour retarding, valuable in building physics terms
- Does not block pores, is not thermoplastic or film-forming
- Binder free, without consolidating effect
- Stimulates neither dirt nor algae
- Coat over with one-pack silicate systems

1.2.2. Important building physics characteristics

Parameter	Value	Conformity
Density 20°C:	0.79 kg / L	
Dynamic viscosity 20°C:	< 500 mPas	
W ₂₄ value:	0.05 kg/(m ² h ^{1/2})	
s _d value (H ₂ O):	0.03 m	
W*s _d value:	< 0.002 kg/(m ² h ^{1/2})	
VOC content (max.):	750 g / L	ChemVOCFarbV Cat. A / h

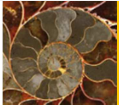
1.2.3. Colour

- Colourless transparent

2. Use

2.1. Substrate requirements

- The substrate must be clean, dry, firm and stable and must be free from separating substances.
- Only use BEECK Silane Primer as a deep-action preparation on highly absorbent, solid, porous mineral building materials.
- Can be used in case of low concentrations of water-soluble salts on balanced dry, "healthy" and firm building fabric; the extent and cause of the salt contamination must be determined beforehand.
- Qualified associated measures to dewater and remove moisture damage must be carried out, e.g. subsequent horizontal insulation, drainage or removal of defective water drainage.
- If necessary, use renovation render in case of moisture damage.
- Brush down dry crumbling surfaces, efflorescence and crusts. Remove sweepings daily.
- Remove algae and biogenic crusts mechanically, prepare façade with BEECK Fungicide according to factory specifications.
- Determine which gentle cleaning method is suitable for the substance by carrying out prior test. Clean substrate by means of a dry method wherever possible; drenching the building fabric results in renewed salt transport. Use cleaning agents containing wetting agents sparingly; rewash with clean water.



BEECK Silane Primer

- After wet cleaning, dry building materials for sufficiently long time until they reach their moisture balance. Only use BEECK Silane Primer on dry substrates.
- Trying out on a test area of representative original substrates on site in the specific property is indispensable to test the effectiveness and to determine the application rate. The target application rate must be documented and checked during use.

2.2. Brief information on the standard system

- Clean substrate and saturate by flow coating with BEECK Silane Primer according to factory specifications.
- Ensure qualified use, substrate suitability and careful preparatory treatment. Try out beforehand on test area under on site conditions. Further treatment with one-pack BEECK silicate systems, e.g. BEECK Quartz Filler or Beekosil, after ca. 4 - 6 hours, respectively when solvents have evaporated. Brush coatings intensively because of a water repellent effect on surface of impregnates building materials has occurred.

2.3. Substrate and preparatory treatment

- **Lime render (PI/CSII), lime-cement render (PII), cement render (PIII):**
Remove any sintering skin with BEECK Etching Fluid according to the factory specifications. Apply renovation render to damp, salt contaminated areas of the façade.
- **Natural stone, brick, calcium silicate masonry, aerated concrete, fibrated cement:**
Use BEECK Silane Primer on efflorescent substrates, e.g. on ferrous sandstones, weathered brick façades or on fibrated cement. Try out on a test area beforehand. Check building fabric for efflorescence, moisture damage and absorbency. Make good defective joints and bricks, do not use on glazed bricks and clinker. Where possible, flow coat all sides of fibrated cement in area of façades, further treat with BEECK Bonding Coat Fine / Coarse. Try out on a test area. Flow coat exterior aerated concrete with BEECK Silane Primer until saturated, use BEECK MBA-Fixative, thinned 1:1 with water in interior areas.
- **Old mineral coatings:**
Brush off. Blast clean or strip film-forming synthetic resin and emulsion coatings pore-deep.
- **Unsuitable substrates** are horizontal or sloping surfaces exposed to the weather as well as building materials with high water table pressure, rising or hygroscopic damp. Solvent-swellable substrates such as synthetic resin renders, emulsion coatings and composite materials, e.g. external thermal insulation composite systems (ETICS) are also unsuitable.
- **Defective substrates** require a differentiated approach; try out on a test area.

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. Use only in well ventilated outdoor areas, never use indoors, in basements, shafts or manholes.
- Flow coat self-contained areas uniformly and all over, wet-on-wet until they are saturated. 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.
- Application temperature: +3°C to +25°C
- Protect freshly impregnated façades from rain.
- Drying time: depending on weather conditions, further treatment with one-pack BEECK silicate systems, e.g. BEECK Quartz Filler or Beekosil, after ca. 4 - 6 hours.

2.4.2. Application

- Apply BEECK Silane Primer unthinned and using flow coat method until saturated.
- Electric pumps and compression sprayers with low pressure and solvent-resistant hose are suitable and efficient; also remove nozzle if applicable. Saturating application can also be achieved by using solvent-resistant brushes on small areas and sectionalised façades.
- Thickly flow coat the material against the wall without atomisation. Watch out for drifting splashes caused by the wind. Enclose the façade if necessary.
- At an interval of approx. 20 minutes, saturate the surface twice wet-on-wet so that no more Silane Primer is absorbed by the building material.
- Determine application rate on sample area beforehand and check during use, e.g. coverage per container.
- Spread dripping, running-off material with a brush. When flow coating, keep a safe distance from the wall, avoid product running onto adjacent areas or into the ground.



BEECK Silane Primer

- Avoid contact with joint sealants, plastics, lacquer, bituminous sheeting, etc. Cover or mask off areas carefully, rub off Silane Primer immediately with a dry cloth.

3. Application Rate and Container Sizes

The application rate, i.e. the quantity required is approx. 0.3 L – 0.8 L BEECK Silane Primer per m², depending on the porosity of the building material. Determine specific application rate values on site beforehand by trying out on a sample area. Check the target application rate during use.

Container sizes: 5 L / 10 L

4. Cleaning

Thoroughly clean equipment, tools and soiled clothing with solvent (e.g. BEECK Lacquer Thinner or white spirit), immediately after use.

5. Storage

Stored cool in its original container, BEECK Silane Primer can be kept for at least 18 months. Never transfer into containers that are not solvent resistant.

6. Hazard notes, safety instructions and disposal

Comply with the EC Safety Data Sheet. Safety data sheet available on request. The product is classified and labelled in accordance with the EC directives or respective national laws.

Hazardous components which must be listed on the label: Hydrocarben, C11-C14, isoalkanes, cyclic < 2% aromatics

Signal word: Danger

Pictograms: GHS02-GHS08

Hazard statements: Flammable liquid and vapour. May be fatal if swallowed and enters airways.

Precautionary statements: Keep out of reach of children. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Wear protective gloves/protective clothing/eye protection/face protection. IF SWALLOWED: Immediately call a POISON CENTER/doctor. Do NOT induce vomiting. Disposal in accordance with the official regulations. Repeated exposure may cause skin dryness or cracking. On contact with water or humidity formation of: methanol. Product only for commercial use.

Waste disposal number: 080111

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.