

BEECK SILANE PRIMER

Water-repellent, silane-based primer for strongly absorbent mineral facades.



Ranges of Application:

BEECK SILANE PRIMER is a solvent containing primer based on organosilicon ingredients of a particularly high penetration depth. For use outdoors on any alkaline mineral building material characterized by a high absorbency, e.g. lime and cement plasters, lime sandstone and concrete. Especially for reducing the capillary water transport in the zone close to the surface of salt-laden substrates whilst avoiding further water intake. Not suitable in case of ascending humidity, e.g. in salt-laden bases of buildings, when used without any further action such as horizontal sealing, renovation plaster.

Recommended for chemically indifferent surfaces (e.g. natural stone or brick): BEECK SILANE PRIMER N.

Processing:

Apply BEECK SILANE PRIMER to saturation by flow coating once or twice. Appropriate tools: mechanical or electrical low-pressure pumps with solvent-resistant hose. If necessary, remove nozzle. For smaller surfaces a solvent-resistant garden pump or pressure sprayer might be used as well.

Saturating application by brush only to small sections, e.g. individual fields of a framework facade.

Check yield (reference values see below) during processing.

Carefully cover surfaces not to be treated and protect from splashes using plastic cover sheets and adhesive tape. Avoid paint flow to adjacent surfaces.

Processing temperature: +3°C to +25°C air and surface. Do not use on heated or wet surfaces.

Further treatment with one-component BEECK SILICATE PAINTS, e.g. BEECK QUARTZ FILLER or BEECKOSIL, no sooner than after 12 hours.

Technical Features:

BEECK SILANE PRIMER covers the building material's pores. Thus, porous mineral building materials are made water-repellent from within. Avoiding capillary water transport keeps building damaging salts (e.g. chloride, nitrate) and discoloring substances (e.g. cement bound wood fiber board) from being activated in the zone close to the surface while allowing a silicification even of slightly salty surfaces when using BEECK SILICATE SYSTEMS. Only to be used if any further transport of liquid water is eliminated through appropriate action.

Water-vapor diffusion, i.e. the exchange of gaseous water vapor between the building material and the atmosphere, remains unaffected.

Water absorption and water-vapor diffusion characteristics:

W_{24} -value: 0.05 kg/(m²h^{1/2})

s_d -value: 0.1 m

$W \cdot s_d$ -value: < 0.005 kg/(mh^{1/2})

Physical/Technical Characteristics:

Density: 0.77-0.80 g/cm³

Dynam. viscosity: < 50 mPas

BEECK SILANE PRIMER has no solidifying effect, is free of binders and does not form film or clog pores. Highly alkali-resistant. Excellent penetration properties and hydrophobing from deep within when applied to saturation.

Color tone: Clear-transparent.

Drying:

Under normal conditions recoatable after 12 hours.

Protect fresh coatings from rain, e.g. using scaffold tarpaulin.

Yield:

Depending on the absorbency of the surface: approx. 0.3 to 1.0 l per m²; make samples on the surface to be treated to obtain exact values.

Reference values for average yield (Ø): see Surface and Pretreatment.

Available Sizes:

5 l, 10 l and 28 l.

Cleaning:

Clean appliances, tools and clothes with turpentine substitute or alcohol immediately after use.

Storage:

Lasts at least 18 months when stored cool in the airtight sealed original container.

Composition:

Low-molecular organosilicon ingredients (alkylalkoxy-silanes) dissolved in white spirit with a low content of aromatic solvents. On request, also available dissolved in pure plant alcohol, recovered from fermented plant biomass (especially sugar beet). Pure plant alcohol is CO₂ indifferent and ecologically compatible. Observe explosion protection requirements when processing, see Safety Instructions.

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Surface and Pretreatment:

General Requirements:

The surface must be clean, dry, solid, coatable and free of ascending or retained humidity. Unsuitable for horizontal or only slightly tilted surfaces. In general, BEECK SILANE PRIMER may be used with low concentrations of efflorescing, water-soluble salts. Type and extent and especially source of salinization must be determined beforehand using representative samples. The making of samples is indispensable for salt-laden or efflorescing surfaces !

Carefully dry brush crumbly spots, efflorescences and incrustations and remove salt-laden garbage. Make samples to find the best method for a sensitive cleaning depending on surface and degree of pollution. Wet cleaning will promote the salt transport inside the building material. An effective reconstruction of salt-laden building materials is usually only possible through comprehensive action, e.g. horizontal insulation, drainage and the use of a renovation plaster system acc. to WTA¹⁾ guidelines.

¹⁾ WTA Scientific-Technical Association for Building Maintenance and Monument Preservation, non-profit organization.

Suitable surfaces:

► Lime plaster (Plc), Lime based cement plaster (PII), Cement plaster (PIII):

Use on coatable, porous plasters with a low salt content only. If necessary, remove sinterskin with BEECK ETCHING FLUID.

Ø-yield of BEECK SILANE PRIMER:
approx. 0.4-0.6 l/m². Minimum penetration: 4-5 mm.

► Concrete, Fibrocement, Wood based cement:

Carefully remove pollution using high-pressure water jet with hot water and BEECK CONCRETE AND STONE CLEANSER.

Ø-yield of BEECK SILANE PRIMER:
approx. 0.25-0.5 l/m². Minimum penetration: 1.5-2 mm.

► Aerated concrete:

Carefully clean. Touch up defective joints and stones. Sand any protruding parts to level out.

Ø-yield of BEECK SILANE PRIMER:
approx. 0.8-1.0 l/m². Minimum penetration: 6-8 mm.

► Lime sandstone:

Carefully clean. Touch up defective joints and frost-damaged stones.

Ø-yield of BEECK SILANE PRIMER:
approx. 0.4-0.5 l/m². Minimum penetration: 3-4 mm.

Deficient surfaces require a special preparation. Unsuitable are gypsum or clay based, non-porous or solvent-swellaible surfaces. In case of doubts, make samples.

► Natural stone, Brick:

Chemically more or less indifferent materials. Therefore, treatment with BEECK SILANE PRIMER N is more effective.

For indoors, use solvent-free BEECK INSULATING PRIMER thinned with 2 parts water. Make samples.

Safety Instructions and Disposal:

► SILANE PRIMER dissolved in plant alcohol:
Hazard Class: flammable (VbF B)!

► SILANE PRIMER dissolved in white spirit:
Hazard Class: harmful (Xn), environmentally dangerous (N) and flammable (VbF A II)!

When applying, keep away from any ignition source, refrain from smoking and ensure proper ventilation. Use respiratory protection: gas mask and breathing equipment with filter A. If necessary, use explosion-proof equipment.

Always observe the professional associations' regulations for the prevention of accidents when handling building preservatives and solvents. Also refer to the corresponding EU Safety Data Sheets.

Carefully cover all surfaces not to be treated, especially lacquers, coatings, glass, ceramic and metal. In case of unintended contact, immediately remove using a solvent. Keep out of the reach of unauthorized persons. Disposal of product remainders according to legal regulations.

► Waste Code: Product and Product Remainders (European Waste Code): 080199 (Coatings).

It is our objective to provide, through this technical information, advice based on our skills and practical experience. Any instructions given are non-binding and do not release the user from his or her liability to check for product suitability and application methods him/herself with regard to the surface used. Technical modifications may result from product development. Upon publication of a revised or new version, these instructions will automatically lose their validity. The details contained in the EU Safety Data Sheets in their current form dictate liability for classification in terms of the Hazardous Substances Regulation, disposal etc.