

BEECK FIXATIVE

Primer and binder as a constituent of the BEECK PURE CRYSTALLINE FINISH system and as a thinner for all BEECK silicate paints. Free of organic ingredients.



Ranges of Application:

Perfectly harmonized mixture of potash waterglasses without organic content acc. to VOB/DIN 18 363 / 2.4.1. BEECK FIXATIVE may be used as binder, thinner and primer for silicate paints. Suitable for lime and cement plasters and for porous natural stones and brick. Also appropriate for solidifying crumbly, sanding mineral building materials, see Surface and Pretreatment. Recommended from a physical, ecological and economical building point of view for both historical buildings and contemporary, healthy living.

Processing:

► For use as a primer for absorbent mineral surfaces, thin BEECK FIXATIVE with 2 parts water. Apply by brush to saturation levelling out any excess primer.

When highly diluted with 5 parts water, economical solution for solidifying crumbly mineral plasters through finely dosed binder supply.

► For use as a binder for BEECK PURE CRYSTALLINE FINISH:

Add 25 kg BEECK POWDERED PIGMENTS to 30 kg BEECK FIXATIVE and carefully mix. Allow to sit for at least 2 hours or overnight. Then apply base coat to prefixed surfaces, adding another approx. 2 to 3 kg BEECK FIXATIVE. Top coat undiluted, no sooner than 12 hours later.

► For use as a glaze binder within the BEECK PURE CRYSTALLINE FINISH system:

Thin 1 kg BEECK FIXATIVE with 1 l water and add about 200 to 500 g BEECK POWDERED PIGMENTS depending on required color intensity. Processing as for aquarelle colors: lap-free and sparingly using a soft oval or mineral paint brush. 2 to 4 coats depending on desired glaze effect. Make samples first.

For more information refer to Technical Application Guide BEECK Silicate Glazing Technique.

► For use as a thinner for one-component BEECK SILICATE PAINTS, e.g. BEECKOSIL, except BEECKOTON (use FIXATIVE 2000). Material requirements depend on surface and application technique, see Technical Information Sheet.

Technical Features:

Unlike organic binders such as acrylic dispersions or silicone resin emulsions, BEECK FIXATIVE does not set physically by „bonding“, but exclusively through silicification – the chemical reaction between mineral surface, fillers and potash waterglass. No surface film is being formed. Instead, a silicified, microporous unity of surface and coating is created. The result is an optimum service life even on severely weathered facades as well as ideal building physics properties.

Water absorption and water-vapor diffusion characteristics¹⁾:

W_{24} -value: > 1 kg/(m²h^{1/2})

s_d -value (H₂O): < 0.01 m

¹⁾ valid for prefixation with BEECK FIXATIVE

Physical/Technical Characteristics:

Density: 1.16 g/cm³

pH value: 11 (undiluted)

Dynam. viscosity: < 500 mPas

DIN 4102: non-flammable / A1

BEECK FIXATIVE has a natural bactericidal and fungicidal effect due to its alkaline character. Therefore BEECK silicate paints can do without preservatives and are less susceptible to mildew and algae. Considering general rules for building physics, toxic and environmentally questionable biocides can thus be omitted.

Color tone: Clear-transparent.

Drying:

Under normal conditions, safe to coat after about 12 hours. Protect fresh coatings from rain, e.g. by using scaffold tarpaulin.

Yield:

For prefixating moderately absorbent, smooth surfaces: approx. 0.04 kg BEECK FIXATIVE per m².

Available Sizes:

5 kg, 10 kg and 30 kg.

Cleaning:

Clean appliances, tools and clothes with water immediately after use.

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Storage:

BEECK FIXATIVE lasts at least 12 months when stored cool and free of frost. Reseal prepared BEECK PURE CRYSTALLINE FINISH airtight and use up within 20 days.

Composition:

Pure potash waterglass solution according to VOB DIN 18 363 / 2.4.1. Entirely free of organic ingredients such as artificial resin, biocides or solvents. Recovery of potash waterglass from water, quartz sand and potash.

Surface and Pretreatment:

General Requirements:

The surface must be clean, dry, solid, coatable and free of efflorescing salts. Check new plasters for sufficient dryness and stability. Touch up open spaces and flaws to match style and structure. Minimum temperature: +5°C air and surface during processing and drying. Do not use on heated surfaces.

Suitable surfaces:

► Lime plaster (Plc), Lime based cement plaster (PII), Cement plaster (PIII); without water-repellent treatment: Use BEECK ETCHING FLUID to remove sinterskin from new plasters and to clean old plasters. Thin BEECK ETCHING FLUID with 3 to 5 parts water, apply by brush and rinse off after a few minutes using plenty of water.

Prefixate normally to weakly absorbent plasters with BEECK FIXATIVE thinned with 2 parts water.

Solidify superficially crumbly or sanding, but coatable plasters by applying a mixture of 1 part BEECK FIXATIVE and 5 parts water several times to saturation without intermediate drying.

► Natural stone should not be etched, but cleaned using a neutral cleanser. Check for coatability, absorbency and efflorescences. Prefixate with BEECK FIXATIVE thinned with 2 parts water.

► Lime sandstone, Brick:

Carefully clean with high-pressure water jet or with a brush. Touch up crumbly stones and joints. Prefixate using BEECK FIXATIVE thinned with 2 parts water.

► Chalking silicate and lime coatings:

After high-pressure water jet cleaning or brushing, solidify with BEECK FIXATIVE thinned with 2 parts water.

Deficient surfaces require a special treatment.

Unsuitable are surfaces that are instable, clay based, strongly water-repellent or that have been treated to form film. The base e.g. of historical buildings exposed to salt should be renovated using a renovation plaster system acc. to WTA¹⁾ guidelines. Further treatment with BEECK PURE CRYSTALLINE FINISH, adding BEECK QUARTZ FILLER.

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

► Exposed concrete, Fibrocement:

Possible remainders of mold oil in the pores. Therefore, use BEECK MBA FIXATIVE (see Technical Information Sheet). Fibrocement boards tend to produce efflorescences and stains because of a varying absorbency, therefore prime with BEECK SILANE PRIMER.

Safety Instructions and Disposal:

► Hazard Class: not subject to identification requirements under Toxic Chemicals Ordinance/EC Directive. BEECK FIXATIVE is alkaline. Protect skin and eyes from contact. Carefully cover all surfaces not to be treated, especially glass, ceramic and anodized surfaces. In case of accidental contact, immediately rinse with plenty of water. Keep out of the reach of unauthorized persons.

Disposal of product remainders according to legal regulations. Disposal of empty containers through resource collection points.

► Waste Code: Product and Product Remainers (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.