

## BEECK QUARTZ PAINT

Silicification-active, extremely water vapor permeable interior silicate paint acc. to VOB DIN 18 363 / 2.4.1 with luster effect typical for lime. Ideal for mineral surfaces of historical buildings.



### Ranges of Application:

Ready-to-use waterglass paint for mineral surfaces indoors, especially for coatable lime and lime based cement plasters as well as porous natural stone. Extremely silicification-active and well diffusible. Of an absolutely mineral nature, non-film forming. Provides an agreeable room climate. Ideal for both historical and modern architecture with moderately frequented up to high-traffic rooms. Available in more than 300 non-fading mineral colors.

### Processing:

Carefully stir up before use.

For the base coat, mix BEECK QUARTZ PAINT with 5 to max. 10% BEECK FIXATIVE. Apply the top coat thinned with 3 to 5% BEECK FIXATIVE no sooner than 12 hours later. Application crosswise, sparingly, evenly and lap-free using a brush or lambskin roller. As a true mineral system, BEECK QUARTZ PAINT is to be applied in extremely thin layers. Treat adjacent surfaces all at once. Avoid dry seams.

A third layer is recommended for contrasting or grained surfaces. For application with spray gun, sieve before use and make sure to apply sparingly. If necessary, distribute and level out with a brush. Apply to prepared surfaces only, e.g. etched and prefixed lime plaster, see Surface and Pretreatment.

Minimum temperature: +5°C air and surface during processing and drying.

### Technical Features:

Unlike organically bound wall paints such as synthetic dispersions, BEECK QUARTZ PAINT does not set physically by „bonding“, but exclusively through silicification – the chemical reaction between mineral surface, filler and potash waterglass. No surface film is being produced, but instead a silicified, microporous unity of surface and coating is created. Proof: the BEECK stripping test ! The result is an optimum service life even in high traffic rooms and ideal building physics properties.

### Water absorption and water-vapor diffusion characteristics:

$W_{24}$ -value: > 1.0 kg/(m<sup>2</sup>h<sup>1/2</sup>)

$s_d$ -value (H<sub>2</sub>O): < 0.02 m

### Physical/Technical Characteristics:

Density: 1.5 g/cm<sup>3</sup>

pH value: 11

Dynam. viscosity: 3,300 mPas

DIN 4102: non-flammable / A2

Being not only used very sparingly but also characterized by an excellent durability and service life, BEECK QUARTZ PAINT is a most economical product.

Wear-resistant acc. to DIN 53 778. Naturally biocidal through alkalinity.

Non-flammable acc. to DIN 4102 / A2.

### Color tones:

Available in more than 300 absolutely non-fading mineral colors acc. to BEECK COLORSIL and BEECK ANTIQUE Color Charts. Color categories: I-IV.

Base colors: white, white antique

Can be toned using BEECK FULL COLOR SILICATE PAINTS.

### Drying:

Safe to handle after about 3 hours, safe to recoat no sooner than after 12 hours.

### Yield:

On smooth, normally absorbent surfaces: approx. 0.12 to 0.14 l BEECK QUARTZ PAINT and approx. 0.02 kg BEECK FIXATIVE per coat and m<sup>2</sup>.

**Available Sizes:** 12.5 l.

### Cleaning:

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

### Storage:

Lasts at least 12 months when stored cool and free of frost.

### Composition:

One-component silicate system according to VOB DIN 18 363/2.4.1. Binder: potash waterglass, recovered from water, quartz sand and potash. Silicification-active fillers, exclusively pigmented with non-fading, alkali-resistant mineral pigments. Free of solvents, preservatives and biocides. Low organic content of approx. 3.5% artificial resin.

## BEECK QUARTZ PAINT

### Surface and Pretreatment:

#### General Requirements:

The surface must be clean, dry, solid, coatable and free of efflorescing substances. For use on porous, absorbent to water-repellent mineral surfaces. Check new plasters for dryness and stability. Carefully touch up open spaces and flaws to match style and structure. Apply full-surface coating of BEECK QUARTZ FILLER to surfaces with filler marks or hair cracks.

BEECK QUARTZ PAINT is also ideal for historical rooms with a high humidity of the air and massive, non-insulated exterior walls. Thus, condensing water in rarely or insufficiently heated rooms or buildings (e.g. churches) is taken up by the non-water repellent BEECK QUARTZ PAINT and the absorbent mineral surface instead of running down the walls carrying along soot and dirt particles. The absorbency of coating and surface buffer extreme humidity changes and favor a steady room climate. Through prevention of condensate formation the risk of microorganism infestation is reduced to a minimum. In addition, naturally biocidal through alkalinity.

#### Suitable surfaces:

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

Check fresh plaster for sinterskin (glass-like glossy, waterproof surface). If necessary, sand to make the plaster absorbent or apply BEECK ETCHING FLUID thinned with 3-5 parts water by brush. Rinse off after a few minutes using plenty of water. Fixate absorbent plasters using BEECK FIXATIVE thinned with 2 parts water. Flow coat superficially crumbly or sanding, but coatable plasters by applying a mixture of 1 part BEECK FIXATIVE and 5 parts water several times to saturation.

► Natural stone, Brick, Lime sandstone:

Carefully clean and check for coatability, absorbency and efflorescences (such as salt marks). Touch up crumbly stones and joints. Prefixate or flow coat weakly efflorescing surfaces with BEECK INSULATING PRIMER thinned with 2 parts water to saturation. If required, prime with BEECK QUARTZ FILLER.

Always make samples on critical surfaces !

► Gypsum stucco, Gypsum plaster (PIV), Gypsum based lime plaster (PIVc), Gypsum and Fibrous plaster boards:

Pretreat smooth and relatively dense surfaces with BEECK GYPSUM PRIMER, granular gypsum plasters with BEECK INSULATING PRIMER, thinned with 1 part water (or also with BEECK GYPSUM PRIMER).

Reinforce cross joints of light building boards beforehand and level out.

► Silicate and lime coatings:

Brush and solidify with BEECK FIXATIVE thinned with 2 parts water.

Completely wash off non-washable distempers and tempera paints. Strip down to the pores or blast old artificial resin based coatings. Further treatment with e.g. BEECK QUARTZ FILLER.

Deficient surfaces require a special treatment. Unsuitable for direct coating are surfaces that are gypsum or clay based, tend to efflorescences or have been treated to form film. Inferior parts of historical buildings exposed to salt should be renovated using a renovation plaster system acc. to WTA<sup>1)</sup> guidelines.

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

#### Auxiliary products:

BEECK ETCHING FLUID for removal of sinterskin from new plasters.

BEECK QUARTZ FILLER P fiber-reinforced powdered slurry additive for filled base and intermediate coats.

Mix 1 container (12.5 l) BEECK QUARTZ PAINT with 4 kg BEECK QUARTZ FILLER P and thin with 2 to 4 kg BEECK FIXATIVE. Apply by mineral paint brush.

BEECK QUARTZ FILLER silicate based, fiber-reinforced slurry base coat for covering hair cracks and minor structural deficiencies. Non-film forming and extremely long-lasting. Apply once or twice by brush.

### Safety Instructions and Disposal:

► Hazard Class: not subject to identification requirements under Toxic Chemicals Ordinance/EC Directive.

BEECK QUARTZ PAINT 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 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.