



1. Product description

KEIM Unikristalat is a one-component, dispersion-free silicate coating as per DIN EN 1062 for high-class facade coatings.

2. Field of application

KEIM Unikristalat can be applied onto all mineral renders of mortar group PI up to PIII (CS I – CS IV) and principally on all existing mineral coatings (e.g. pure silicate and silicate emulsion paints).

Thanks to the dispersion-free formula, KEIM Unikristalat is particularly suited for restoring historic structures or in the field of ecological housing.

3. Product properties

KEIM Unikristalat is a highly UV- and weather-resistant pure silicate exterior paint with a particular waterglass as binder. KEIM Unikristalat has only absolutely lightfast, inorganic colour pigments. KEIM Unikristalat combines the typically mineral matt surface appearance with luminous colour brilliance

- Purely silicate-bound exterior paint
- Dispersion-free
- One-component
- Minimal organic content: <1%
- No hydrophobing agent
- Unsolvable bonding with the substrate due to fine silicification
- Suitable for all mineral substrates
- Non-film forming
- Mineral matt
- Absolutely lightfast, inorganic pigments
- UV-resistant in all components
- Non flammable (class A2 according to DIN 4102/ class A2-s1-d0 according to EN 13501-1, compliant with test certificate)
- Anti-static, non-thermoplastic
- Resistant to industrial pollution and acid rain
- High resistance to weathering
- Non-swelling
- Environmentally friendly – no solvents added
- Ecologically safe building material, good eco-balance

Material characteristics

- Specific weight: approx. 1.5 g/cm³
- pH-value: approx. 11
- Colour fastness: A1
(Fb-Code acc. to BFS information No. 26)

According to DIN EN 1062-1

- Water vapour diffusion rate: $V \geq 2000 \text{ g}/(\text{m}^2 \cdot \text{d})$
- Diffusion-equivalent air layer thickness: $s_d \leq 0.01 \text{ m}$
Class I
as per DIN EN 7783-2
- Water permeability rate (24 h): $w > 1 \text{ kg}/(\text{m}^2 \cdot \text{h}^{0.5})$
Class I (> 0.5)
as per DIN EN ISO 1062-3

Colour shade

White and according to KEIM Palette Exclusiv.

4. Application instructions

Substrate preparation

The substrate has to be sound, dry, wettable, absorbent, clean, free from dust and grease. Loose parts, dirt, oily substances, moss and algae have to be removed.

Highly absorbing or sanding substrates should be pretreated with KEIM Fixativ, 1:1 or 1:2 diluted with water.

Sinter layers of new render have to be removed with KEIM Ätzflüssigkeit (=lime remover, see technical data sheet). New render places (repairs) have to be always pretreated with KEIM Ätzflüssigkeit as prescribed on the Technical Data Sheet.

Application

KEIM Unikristalat can be applied by brush, roller or spraying.

Base coat: Depending on the absorbency of the substrate, KEIM Unikristalat diluted with up to max. 20% KEIM Fixativ (25 kg paint plus max. 5 l dilution).

Top coat: KEIM Unikristalat diluted with 10% up to max. 20% KEIM Fixativ

Depending on the required filling or structural effect, 50% or 100% KEIM Kristall-Felsit can be added to the Unikristalat base coat and maybe another 50% to the intermediate coat.

Application conditions

Air and surface temperature: > 5°C. Do not apply under direct sun or onto sun-heated substrates. Protect surfaces during and after application from direct sun, wind and rain.



Drying time

A drying time of at least 12 hours between the individual coatings is required.

Post-treatment

For facade areas exposed to heavy rain loads, like e.g. towers or "weather sides" that are constructively low-protected, it is strongly recommended to apply a colourless water repellent with KEIM Lotexan or KEIM Ecotec after the top coating.

- Application of KEIM Lotexan, at the earliest 8 days after the top coating, two-times wet-in-wet over the entire surface .
- Application of KEIM Ecotec, at the earliest 3 days after the top coating, over the entire surface.

Consumption

Two coats on a smooth substrate

approx. 0.55 kg KEIM Unikristalat per m²

approx. 0.05 l KEIM Fixativ per m²

The consumption value given is a guide value depending on application method and substrate condition. Exact values may only be given by a trial application on site.

Cleaning of tools

Clean immediately after use with plenty of water. During work pauses the tools should be kept in the product or in water.

Third-party additives

To preserve the specific characteristics of KEIM Unikristalat do not add any other substances.

5. Packaging

5 kg and 25 kg container

6. Storage

Shelf life is approx. 12 months if stored tightly closed under cool, but frost-free conditions. Protect from heat and direct sun.

7. Hazardous substances ordinance class

n/a

8. Transport hazard class

n/a

9. Disposal

EC Waste Code No. 08 01 11

Any residues must be emptied out of containers before recycling.

10. Safety instructions

Provide appropriate protection for surfaces which are not to be coated (e.g. glass, natural stone, ceramics, wood etc.). Any splashes on surrounding surfaces or traffic areas must be rinsed off immediately with plenty of water. Protect the eyes and skin from splashes. Keep out of reach of children.

Product Code: M-SK 01

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