



TECHNICAL DATA SHEET

KEIM UNIKRISTALAT®

1. PRODUCT DESCRIPTION

KEIM Unikristalat is a one-component, titanium dioxide and dispersion-free silicate paint in accordance with DIN EN 1062 for high-quality facade coatings. The formulation without titanium dioxide and with absolutely lightfast, inorganic pigments and mineral fillers emphasises the original character and plastic structure of the substrate and results in coatings with special colour depth and plasticity. KEIM Unikristalat is awarded with Cradle to Cradle Certified® Silver and C2C Certified Material Health Certificate™ Gold.

2. FIELD OF APPLICATION

KEIM Unikristalat can be painted on all mineral renders of mortar group PI to PIII (CS I - CS IV) as well as on all mineral old coats (e.g. silicate or dispersion silicate paint). Thanks to its dispersion-free formulation, KEIM Unikristalat is particularly suitable for renovating historical building fabric or in ecological housing construction. KEIM Unikristalat is excellently suited for the creation of mineral glazes.

Not suitable for:

horizontal and inclined surfaces exposed to weathering

3. PRODUCT PROPERTIES

- one-component
- silicifies insolubly with the substrate
- non-film forming
- sound in terms of building biology
- mineral matt
- Cradle to Cradle Certified®-Certificate Silver
- C2C Certified Material Health Certificate™ Gold
- inswellable
- antistatic, non-thermoplastic
- resistant against industrial emissions
- fire behaviour: A2-s1,d0
- dispersion-free
- no hydrophobing agents
- with minimal organic additives < 1%
- titanium dioxide-free
- no solvents added

MATERIAL CHARACTERISTICS:

- | | |
|---|-------------------------------------|
| - Density: | approx. 1.4 - 1.6 g/cm ³ |
| - Organic content: | < 1 % |
| - pH value: | approx. 11 |
| - Colour fastness (Fb-code pursuant to BFS Leaflet No. 26): | A1 |

CLASSIFICATION:

- | | |
|---|-----------------------------------|
| - Classification according to: | DIN EN 1062-1 |
| - Classification according to VOB: | according to DIN 18363 sec. 2.4.1 |
| - Water vapour diffusion current density (V-value): | ≥ 2000 g/(m ² · d) |

| | |
|--|----------------------------|
| – Diffusion-equivalent air layer thickness (sd-value): | ≤ 0,01 m |
| – Diffusion-equivalent air layer thickness class: | V1 |
| – Standard Diffusion equivalent air layer thickness DIN EN ISO 7783: | DIN EN ISO 7783 |
| – Water permeability: | > 1 kg/(m ² √h) |
| – Water permeability rate class: | W1 |
| – Standard Water permeability rate DIN EN 1062-3: | DIN EN 1062-3 |
| – Gloss level at 85°: | matt |
| – Standard Gloss level ISO 2813: | ISO 2813 |

COLOUR SHADES:

White and colour shades only with purely mineral, light-resistant pigments. On-site tinting exclusively with system related monochrome shades/full-tone colours

4. APPLICATION INSTRUCTIONS

SUBSTRATE PREPARATION:

The substrate must be dry, sound, free from chalking, clean and dust-free. Loose parts of existing coatings must be removed mechanically or by high-pressure water jetting. Defective areas must be filled and texture-matched using a suitable repair material. Any sintered layers on new renders must be removed with KEIM Fluat-10 according to instructions. New render areas (repairs) are generally to be pretreated with KEIM Fluat-10 according to the specifications in the Technical Data Sheet. Algae, fungi or lichens must be removed professionally, thoroughly and without residues. After cleaning and drying of the surface, KEIM Algicid-Plus is used for disinfection. After a reaction time of at least 24 hours, the treated disinfected surface can be refinished. Strongly absorbing surfaces have to be primed with KEIM Fixativ. Please, refer to the Technical Data Sheet regarding application and dilution.

APPLICATION CONDITIONS:

Ambient and substrate temperature ≥ 5 °C during application and drying. Do not apply in direct sunlight or on sun-heated substrates. Protect surfaces from direct sun, wind and rain during and after application.

PREPARATION OF MATERIAL:

Stir up KEIM Unikristalat thoroughly before application.

CONSUMPTION:

approx. 0,55 kg/m² for two coatings.

These material consumption values are guide values for smooth substrates. Exact consumption values must be determined by means of test areas.

APPLICATION:

KEIM Unikristalat can be painted, rolled or sprayed (nozzle: ≥ 435).

Primer coat: KEIM Unikristalat depending on the absorbency of the substrate diluted with up to max. 20 % with KEIM Fixativ (25 kg paint plus max. 5 l thinner).

Note: Depending on the required slurry or texture effect, 50% or 100% KEIM Kristall-Felsit and / or KEIM Kristall-Felsit-Fein can be added to the Unikristalat primer coat and possibly another 50% to the intermediate coat.

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

Note: In case of subsequent glaze, the final coat is diluted with 30% with KEIM Fixativ.

Glaze: For the application of KEIM Unikristalat as a glaze, mix KEIM Fixativ 1:1 with water. With this dilution mixture, KEIM Unikristalat is diluted according to the desired transparency and applied to the final coat in a glazing manner.

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CLEANING OF TOOLS:

Clean immediately with water.

5. PACKAGING

| Container content | Unit of measure | Quantity on pallet | Type of container |
|-------------------|-----------------|--------------------|-------------------|
| 25 | kg | 24 | bucket |
| 5 | kg | 70 | bucket |
| 2.5 | kg | 80 | bucket |

6. STORAGE

| max. storage time | Storage conditions |
|-------------------|--|
| 12 months | cool frost-free keep container tightly sealed. |

7. DISPOSAL

For disposal information refer to section 13 of the safety data sheet.

Waste code: 08 01 12

8. SAFETY INSTRUCTIONS

Please, refer to the Material Safety Data Sheet. EU limit value for this product (Cat. A/c): 40 g/l.

This product contains: 1 - 5 g/l VOC.

9. GENERAL INFORMATION

Cover surfaces not to be treated, especially glass, ceramics and natural stone. Any splashes on surrounding surfaces or traffic areas must be rinsed off immediately with plenty of water.

Mixing with products not part of the system or other foreign additives is not permitted.

10. CERTIFICATES & QUALITY SEALS



The stated values and properties are the result of extensive development work and practical experience. Our recommendations for application, whether given verbally or in writing, are intended to provide assistance in the selection of our products and do not establish a contractual relationship. In particular, they do not release the purchaser and processor from the obligation to convince themselves of the suitability of our products for the intended application with due care, which is general practice in trade and crafts. The general rules of construction technology must be observed. We reserve the right to make modifications to improve the product or its application. This edition supersedes all earlier editions.