TECHNICAL DATA SHEET

KEIM UNIKRISTALAT®

1. PRODUCT DESCRIPTION

KEIM Unikristalat is a single-component, titanium dioxide and dispersion-free silicate paint in accordance with DIN EN 1062 for high-quality façade 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 has been awarded Cradle to Cradle Certified® Full Scope Silver, Material Health Gold and Circularity Silver in accordance with Version 5.0.

2. FIELD OF APPLICATION

KEIM Unikristalat can be applied over all mineral plasters in mortar groups PI to PIII (CS I – CS IV) as well as over all existing mineral coatings (e.g. silicate or dispersion silicate paint). Thanks to its dispersion-free formulation, KEIM Unikristalat is particularly suitable for the renovation of historic buildings. KEIM Unikristalat is ideal for creating mineral glazes.

3. PRODUCT PROPERTIES

- Cradle to Cradle Certified® Full Scope Silver (Version 5.0)
- Cradle to Cradle Certified® Material Health Gold (Version 5.0)
- Cradle to Cradle Certified® Circularity Silver (Version 5.0)
- silicifies insolubly with the substrate
- non-film forming
- mineral matt
- QNG compliant
- one-component
- fire behaviour: A2-s1,d0
- inswellable
- antistatic, non-thermoplastic
- resistant against industrial emissions
- dispersion-free
- no hydrophobing agents
- organic additives < 1%
- titanium dioxide-free
- no solvents added

MATERIAL CHARACTERISTICS:

– Density	Approx. 1.4 g/cm³ - 1.6 g/cm³
– 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 flux density (V-value)	≥ 2000 g/(m² · 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
– Water permeability	> 1 kg/(m²√h)
– Water permeability rate class	W1
– Standard Water permeability rate	DIN EN 1062-3
– Gloss level	G3 – matt (measuring angle 85°)
– Standard Gloss level	ISO 2813

COLOUR SHADES:
White and colour shades are produced exclusively with purely mineral, lightfast 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 leaving any residue. Once the surface has been cleaned and dried, KEIM Algicid-Plus is used for disinfection. After a contact time of at least 24 hours, the treated, disinfected surface can be reworked. Strongly absorbing surfaces have to be primed with KEIM Fixativ. Please, refer to the Technical Data Sheet regarding application and dilution.

Non-suitable substrates:
substrates with salt efflorescences; horizontal and inclined surfaces exposed to weathering; wood substrates; plasto-elastic coatings; saponifiable existing substrates; non-wettable substrates; organic substrates

APPLICATION CONDITIONS:
Ensure the ambient and substrate temperatures are ≥ 5 °C during application and drying. Do not apply in direct sunlight or onto substrates heated by the sun. Protect surfaces from direct sunlight, wind and rain during and after application.

MATERIAL PREPARATION:
KEIM Unikristalat must be stirred thoroughly before application.

CONSUMPTION:
approx. 0,55 kg/m² for two coatings.
The information on material consumption is a guide for smooth substrates. Exact consumption figures must be determined by carrying out test areas.

PROCESSING:
KEIM Unikristalat can be applied with a brush, roller or spray (nozzle: ≥ 435).

Primer coat: KEIM Unikristalat diluted with KEIM Fixativ (25 kg paint plus max. 5 l thinner) depending on the absorbency of the substrate, from 10% to a maximum of 20%.
Note: Depending on the desired slurry or textured effect, 50% or 100% KEIM Kristall-Felsit and/or KEIM Kristall-Felsit-Fein can be added to the Unikristalat primer coat and, if necessary, a further 50% to the intermediate coat.

Final coat: KEIM Unikristalat diluted with 10% to max. 20% KEIM Fixativ.
Note: If a glaze is to be applied afterwards, the final coat is diluted with 30% KEIM Fixativ.

Glaze: To use KEIM Unikristalat as a glaze, KEIM Fixativ is mixed 1:1 with water. This dilution mixture is used to dilute KEIM Unikristalat to the desired transparency and applied as a glaze to the final coat.

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

Maximum 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

Refer to the safety data sheet. This product contains: 1 - 5 g/l VOC

GIS code: BSW 40

9. GENERAL INFORMATION

Cover surfaces not to be treated, particularly glass, ceramics and natural stone. Splashes on surrounding surfaces or traffic areas must be immediately diluted with plenty of water and removed.
Mixing with products from other systems or other external 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.

KEIMFARBEN GMBH
Keimstraße 16 / 86420 Diedorf / Tel. +49 821 4802-0
Frederik-Ipsen-Straße 6 / 15926 Luckau / Tel. +49 35456 676-0
www.keim.com / info@keimfarben.de