



TECHNICAL DATA SHEET

KEIM OPTIL®

1. PRODUCT DESCRIPTION

KEIM Optil is a ready-to-use sol-silicate paint for interior use in accordance with DIN EN 13 300 (also meets the requirements of DIN 18363 section 2.4.1, dispersion silicate paint). KEIM Optil is awarded with Cradle to Cradle Certified® Silver and C2C Certified Material Health Certificate™ Gold.

2. FIELD OF APPLICATION

KEIM Optil is suitable for all common interior wall and ceiling surfaces. Particularly suitable KEIM Optil for demanding interior designs with special requirements in terms of colour intensity and appearance in representative architecture and / or difficult lighting conditions.

Not suitable for:
wood substrates; lacquered surfaces; substrates with salt efflorescences

3. PRODUCT PROPERTIES

- economical in consumption
- excellent covering power
- low environmental impact
- low stress
- intense and lightfast colour shades
- with MacroFill-Technology for maximum light scattering
- resistant to glancing light
- ultra matt surface
- Cradle to Cradle Certified®-Certificate Silver
- C2C Certified Material Health Certificate™ Gold
- highly permeable
- scrub-resistant
- mould-resistant (resistant against fungal infestation, according to test certificate)
- fire behaviour: non-flammable (Class A2-s1,d0 as per EN 13501-1 acc. to classification report)
- no preservatives added

MATERIAL CHARACTERISTICS:

- Density: approx. 1.3 - 1.5 g/cm³
- Organic content: < 5 %
- pH value: approx. 11

CLASSIFICATION:

- Classification according to: DIN EN 13300
- Classification according to VOB: Silicate emulsion paint according to DIN 18363 sec. 2.4.1
- Water vapour diffusion current density (V-value): > 2000 g/(m² · d)
- Diffusion-equivalent air layer thickness (sd-value): < 0,01 m
- Wet abrasion resistance: Class 2
- Test standard Wet Abrasion Resistance: EN ISO 11998

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- Contrast ratio (covering power):	Class 1
- Ergiebigkeit zum Kontrastverhältnis (Deckvermögen):	6 m ² /l
- Test standard Hiding power:	ISO 6504-3
- Gloss level at 85°:	dull matt
- Test standard Gloss level:	ISO 2813
- Maximum particle size:	fine
- Test standard Maximum particle size:	EN 1524

COLOUR SHADES:

White and colour shades only with purely mineral, light-resistant pigments. monochrome shades 9001O to 9021O available. Note: The Optil-monochrome shade 9019 vermilion can only be produced with an organic pigment. The pigment type used has excellent lightfastness. Gold and silver without MacroFill technology. Tinting only with KEIM Optil-monochrome shades. For KEIM Optil we generally recommend factory tinting.

COMPOSITION:

Full declaration in compliance with the "natureplus®" award guideline:

Silicate and calcite fillers, silica sol, water, titanium dioxide, polyacrylate, water repellent, thickener, wetting agent, defoamer, stabiliser. Origin of mineral fillers: Germany and/or Austria.

4. APPLICATION INSTRUCTIONS

SUBSTRATE PREPARATION:

The substrate must be sound, solid, dry, clean and free from dust and grease. No pretreatment is required for gypsum fillers. Optimisation of the surface homogeneity of the subsequent coats, especially under difficult lighting conditions, can be achieved by pre-treatment with KEIM Soliprim. In case of glancing light conditions, ensure adequate substrate preparation, suitable tools and increased care during application.

APPLICATION CONDITIONS:

Ambient and substrate temperature during application and drying must be ≥ 5 °C.

PREPARATION OF MATERIAL:

Stir up KEIM Optil thoroughly before application.

APPLICATION:

KEIM Optil can be painted, rolled or airless sprayed (nozzle ≥ 423).

Primer coat: Apply KEIM Optil undiluted or diluted with max. 10 % of Water. Slurry primer coats are possible with KEIM Optil-Grob in the same shade.

Final coat: Apply KEIM Optil undiluted.

DRYING TIME:

Can be overcoated after 12 hours at the earliest (at 23 °C and 50% RH). At higher relative humidity, layer thicknesses and/or lower temperatures, drying is delayed accordingly.

CONSUMPTION:

approx. 0,125 l/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.

CLEANING OF TOOLS:

Clean immediately with water.

5. PACKAGING

Container content	Unit of measure	Quantity on pallet	Type of container
12.5	l	32	bucket
5	l	70	bucket

6. STORAGE

max. storage time	Storage conditions
12 months	cool frost-free keep container tightly sealed. protected from heat and direct sun.

7. DISPOSAL

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

EC WASTE CODE:

Waste code: 08 01 12

8. SAFETY INSTRUCTIONS

Please, refer to the Material Safety Data Sheet.

The paint is formulated without the addition of preservatives. Medium and intensive colour shades may contain traces of pot preservatives.

9. GENERAL INFORMATION

Deviating wet abrasion resistance for the following shades:

Class 2 for white and the monochrome shades 9001 nickel-titanium yellow, 9002 ochre, 9003 oxide red, 9004 umbra, 9005 chrome green, 9006 ultramarine blue, 9007 oxide brown, 9008 black, 9009 cobalt blue, 9010 oxide red dark, 9012 cobalt green, 9019 vermilion, 9021 oxide black.

Class 3 for the monochrome shades 9011 oxide orange, 9018 bismuth yellow, 9020 turquoise.

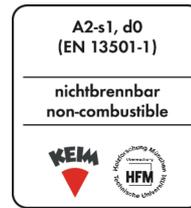
The classification of non-combustibility class A2-s1, d0 does not apply to Optil monochrome shade 9019, shade Avantgarde 249 and their gradations.

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

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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.



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