Technical Data Sheet

KEIM Optil®

Sol-silicate interior paint with MacroFill-technology





1. Product description

KEIM Optil is a ready-to-use sol-silicate interior paint manufactured in accordance with DIN EN 13 300 (also complies with DIN 18363 sect. 2.4.1 silicate emulsion paint).

2. Field of application

KEIM Optil is suitable for all conventional interior wall and ceiling surfaces. KEIM Optil is particularly suitable for demanding interior designs with specific requirements for colour intensity and appearance in prestigious architecture and/or difficult lighting conditions. Surfaces with salt efflorescences, varnishings and wood are not suitable.

3. Product properties

- With MacroFill-technology for maximum light scattering
- Intense and lightfast colour shades
- Ultra matt surface
- Optimised for application in areas with glancing light
- Abrasion-resistant in white and colour shades
- Outstanding hiding power
- Economic consumption
- Highly vapour permeable
- Non-flammable (according to DIN 4102-A2)
- Hinders mould growth (certified resistance to fungi)
- Low stress
- Low environmental impact
- Natureplus certificate

Material characteristics

• Org. content: < 5%

• Specific weight: approx. 1.42 g/cm³

• pH-value: approx. 11

• Diffusion-equivalent

air-layer thickness: $s_d < 0.01 \text{ m}$ (Corresponds to water vapour

diffusion density:) $V > 2000 \text{ g/m}^2\text{d}$

Classification according to DIN EN 13300

• Gloss at 85°

(to ISO 2813): dull matt (0.5%)

• Maximum grain size

(to EN 21524): fine

 Contrast ratio (hiding power) (to ISO 6504-3)

(at a yield of

 $6 \text{ m}^2/\text{I}$: class 1

 Wet abrasion resistance (to EN ISO 11998):

class 2

(corresponds to "abrasion-resistant" to DIN 53778)

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

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

Colour shades

White and KEIM's "Palette Exclusiv" range. Additionally available in 16 monochrome shades, in gold, silver and brilliant white and in the shades of KEIM's "Avantgarde" colour swatch.

Note: The Optil monochrome shade 9019 cinnabar red can only be produced with an organic pigment. The grade of pigment used has very good light fastness.

Gold, silver and brilliant white without MacroFilltechnology. Tint only with KEIM Optil monochrome shades. Optil should in principle be factory tinted.

4. Application instructions

Substrate preparation and application

The substrate must be sound, solid, dry, clean and free of dust and grease. Substrate and air temperature during application and drying > 5°C.

No pretreatment is necessary for gypsum based fillers.

Optimisation of surface homogeneity of subsequent paint coats, in particular under difficult light conditions, can be achieved by a pretreatment with KEIM Soliprim.

In the case of glancing light conditions, the substrate must be appropriately prepared, suitable tools must be used and greater care must be taken with application.

KEIM Optil may be applied by brush, roller or airless spraying (nozzle size: 0.64 mm/ 0.025 inch; see technical data sheet "Airless technique" for further information). The KEIM Optil roller is particularly recommended for roller application. The product should, in principle, only be diluted with water.



Priming coat:

Dilute 10 I of KEIM Optil with at most 1 I of clean water.

Finishing coat:

KEIM Optil undiluted.

Filling priming coats may be provided with KEIM Optil-Grob in the same colour shade.

Drying times:

A drying time of at least 12 hours must be left between

Consumption:

Two coats on a smooth substrate: approx. 250 ml of KEIM Optil per m²

Cleaning of tools:

Clean with water immediately after use.

5. Packaging

5 I and 15 I buckets, monochrome shades also in 1 | buckets.

6. Storage

12 months in sealed container under cool, frost-free conditions. Protect from heat and direct sunlight.

7. Hazardous substances ordinance class

n/a

8. Transport hazard class

n/a

9. Disposal

EC Waste Code No. 08 01 12. 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 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

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 those purchasing and applying our products from the duty of establishing for themselves, with due care, the suitability of our products for the intended application. Standard building industry practices must be complied with. We retain the right to make modifications to improve the products or their application. This edition supersedes all earlier editions.

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