

## KEIM Optil® Silica-sol interior paint



### 1. Product description

KEIM Optil is a ready-to-use silica-sol interior paint manufactured in accordance with DIN EN 13 300 (also complies with DIN 18 363, 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 color intensity and appearance in prestigious architecture and/or difficult lighting conditions. Surfaces with salt efflorescence, enamels, untreated wood and plastic wall coverings are not suitable.

### 3. Product properties

- Intense and lightfast color shades
- Optimized for application in areas with glancing light
- Abrasion-resistant in white and color shades
- Outstanding hiding power
- Economic consumption
- Highly vapor permeable
- Non-flammable (corresponding to DIN 4102-A2, certified)
- Hinders mould growth (certified resistance to fungi)
- Low stress
- Low environmental impact
- LEED - yes

#### Material characteristics

- Org. content: < 5%
- Specific weight: approx. 1.57 g/cm<sup>3</sup>

- pH-value: approx. 11
- VOC's (white or tinted) ASTM D6886: < 1 g/l
- Diffusion-equivalent air layer thickness:  $s_d < 0.01$  m (Corresponds to water vapor diffusion rate):  $V > 2100$  g/m<sup>2</sup>d
- Vapor permeability 75 - 85 perms

#### Classification according to DIN EN 13300

- Gloss at 85° (to ISO 2813): dull matt
- Maximum grain size (to EN 21524): fine
- Contrast ratio (hiding power) (to ISO 6504-3) (at a yield of 6.5 m<sup>2</sup>/l = 70 sq ft per 0.26 gal): 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 and 9020 turquoise.

#### Color shade

White and KEIM's „Palette Exclusiv“ range. Additionally available in 16 monochrome shades, in gold and silver and in the shades of KEIM's „Avantgarde“ color 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.

Optil can only be factory tinted.

#### 4. Application instructions

##### **Substrate preparation and application**

The substrate must be sound, solid, dry, clean and free of dust, grease, oils, salts and other substances that would prevent bonding.

Substrate and air temperature during application and drying > 5 °C (41 °F).

Optimization of surface homogeneity of subsequent paint coats, in particular under difficult light conditions or dusting surface, 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 in.). The KEIM Optil roller is particularly recommended for roller application. The product should, in principle, only be diluted with water.

##### Base coat:

KEIM Optil undiluted or thinned with clean water up to 10% maximum (12oz of water/gallon of Optil).

##### Top coat:

KEIM Optil undiluted.

Filling and textured coats may be provided with KEIM Optil-Grob in the same color shade.

##### **Drying times**

A drying time of at least 12 hours must be respected between coats.

##### **Consumption**

Approximately 325 - 375 sq.ft./gallon on a smooth surface.

The stated consumption figures are for guidance. Exact values can only be determined by painting test areas on the structure to be coated.

##### **Cleaning of tools**

Clean with water immediately after use.

#### 5. Packaging

1 gallon, 2 gallon and 4 gallon containers.

#### 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.

