

KEIM Ecosil®-ME with MiNOx®-Effect – photocatalytic effect



1. Product description

KEIM Ecosil-ME is a heavy duty, multipurpose interior silicate paint to DIN EN 13 300 (it also meets the requirements of DIN 18 363, 2.4.1, silicate emulsion paint) with the property to reduce pollutants and neutralize odors.

2. Field of application

KEIM Ecosil-ME is particularly suitable for interior walls and ceilings in heavily used areas such as public buildings, hospitals, labs, schools, offices, hotels, restaurants and food storage areas.

Suitable substrates include but are not limited to most mineral surfaces, cement and lime plasters, concrete, bricks, plasterboard, glass fiber fabric, MGO board, GFRG, and sound existing acrylic based coatings. Highly absorbent or dusting substrates are pretreated with KEIM Soliprim. KEIM Grundierweiss may advantageously be applied as a first coat in order to equalize differing levels of absorbency and color. When applying colored finishes onto plasterboard surfaces and substrates spot-filled with plaster, an undiluted first coat of KEIM Grundierweiss is absolutely essential (as an alternative coating structure for colored finishes on plasterboard and substrates spot-filled with plaster: consider using KEIM Dolomit Spachtel for spot fills or full coat plaster). KEIM Grundierweiss should not be used on pure gypsum plaster renders (P IVa, b and P Va). KEIM Ecosil-ME is not suitable for surfaces with salt efflorescence, on wood and enamels without proper surface preparation.

3. Product properties

- can be exposed to extreme mechanical loads, highly scrub-resistant
- photocatalytic effect (test report): converts noxious gases, odors, and other organics into

uncritical substances like carbon dioxide and water

- resistant to disinfectants and cleaning agents
- suitable for allergy sufferers (test certificate)
- no solvents
- zero plasticizer content
- safe for foodstuff applications (test certificate)
- easy to touch up
- elevated hiding power
- non-flammable (similar to building material class DIN 4102-A2, according to test certificate)
- resistant to fungal and mold growth,
- LEED - yes

Material characteristics

- org. content: < 5%
- specific weight: approx. 1.55 g/cm³
- VOC content (white or tinted) ASTM D6886: < 1g/l
- Vapor permeability 75 - 85 perms
- Flame spread, according to ASTM E84-05: 0
- Smoke, according to ASTM E84-05: 0
- diffusion-equivalent air-layer thickness: $s_d < 0.01$ m (FPL report) (to DIN EN ISO 7783-2)

Classification acc. 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 6.5 m²/l): class 1
- wet abrasion resistance (to EN ISO 11998): class 1 acc. to certificate

Color shade

White and KEIM's Palette Exclusive range. Not available in full tone colors. Contact a KEIM representative about the color range for Ecosil-ME. Ecosil-ME can only be factory tinted. Custom color matching upon request.



4. Application instructions

Application temperature

Ambient and substrate temperature must not fall below 41 °F (+5 °C).

Substrate preparation

Highly absorbent or dusting substrates should be pretreated with KEIM Soliprim. The mineral substrate must be sound, dry, clean and free of dust, grease, oils, salts and other substances that would prevent bonding. With some colors pure gypsum plasters can cause ghosting due to water soluble gypsum salts and may require sealing the surface before painting.

Application Two-coat system:

KEIM Ecosil-ME may be applied by brush, roller or spraying (nozzle size: 0.64 mm / 0.025 in.). Depending on how drying is progressing, an interval of at least 6 hours should generally be observed between the base and top coat.

Base coat: Dilute KEIM Ecosil-ME with up to 10% KEIM Spezial-Dilution.

Top coat: KEIM Ecosil-ME undiluted.

Consumption

Approximately 300 - 350 Sq.Ft. per gallon plus up to 10% KEIM Spezial-Dilution in first coat. 12.8 fl. oz. of KEIM Spezial-Dilution per gallon of KEIM Ecosil-ME = 10%.

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

Approx. 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

Cover areas which are not to be coated, especially glass, ceramics and natural stone. Any splashes on surrounding surfaces or traffic areas must be rinsed off immediately with plenty of water. Protect the eyes and skin from splashes of paint. Do not eat or drink during application. 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.

