



## TECHNICAL DATA SHEET

# KEIM BIOSIL®

## 1. PRODUCT DESCRIPTION

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KEIM Biosil is a ready-to-use silicate paint for interior use according to DIN EN 13 300 (also fulfils the requirements of DIN 18363 para. 2.4.1 silicate emulsion paint). KEIM Biosil is awarded with Cradle to Cradle Certified® Silver and C2C Certified Material Health Certificate™ Gold.

## 2. FIELD OF APPLICATION

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KEIM Biosil is suitable for all common interior wall and ceiling surfaces, e.g. in offices, living rooms, bedrooms, kitchens, bathrooms and basements. It is particularly suitable for sensitive areas such as hospitals, nursery schools or schools and also for rooms where food is stored. Highly absorbent or sanding substrates are pre-treated with KEIM Soliprim. In the case of white coats on gypsum plasterboard surfaces or surfaces with gypsum stain filler, a primer coat of KEIM GW-Primer is beneficial. KEIM GW-Primer should not be used on pure gypsum plasters (P IV a,b and P Va). In this case, coatings with KEIM Ecosil-ME or KEIM Optil are recommended.

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

## 3. PRODUCT PROPERTIES

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- good covering power
- low stress
- low environmental impact
- Cradle to Cradle Certified®-Certificate Silver
- C2C Certified Material Health Certificate™ Gold
- suitable for food products
- permeable
- anti-fungal and anti-algae thanks to natural alkalinity
- scrub-resistant
- fire behaviour: non-flammable (Class A2-s1,d0 as per EN 13501-1 acc. to classification report)
- no solvents added
- no plasticisers added
- no preservatives added

### MATERIAL CHARACTERISTICS:

- Density: approx. 1.4 - 1.6 g/cm<sup>3</sup>
- Organic content: < 5 %
- pH value: approx. 11

### CLASSIFICATION:

- Classification according to: 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/(m<sup>2</sup> · d)
- Diffusion-equivalent air layer thickness (sd-value): < 0,01 m
- Wet abrasion resistance: Class 2

– Test standard Wet Abrasion Resistance EN ISO 11998:	EN ISO 11998
– Contrast ratio (covering power):	Class 1
– Yield of contrast ratio (covering capacity):	7 m <sup>2</sup> /L
– Standard Hiding power ISO 6504-3:	ISO 6504-3
– Gloss level at 85°:	dull matt
– Standard Gloss level ISO 2813:	ISO 2813
– Maximum particle size:	fine
– Standard Maximum particle size EN 1524:	EN 1524

### COLOUR SHADES:

White, colour shades only with pure mineral lightfast pigments. KEIM Biosil can be tinted with KEIM PPF-Technology® according to all common colour collections. Please always check the colour for correctness before application. Only use colour shades from one tinting batch within a surface. On-site tinting exclusively with KEIM colour concentrates.

### COMPOSITION

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

Silicate and calcite fillers, potassium silicate, water, titanium dioxide, polyacrylate, water repellents, thickeners, stabilisers, wetting agents, defoamers. Origin of mineral fillers: Germany and/or Austria.

## 4. APPLICATION INSTRUCTIONS

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### SUBSTRATE PREPARATION:

The substrate must be sound, solid, dry, clean and free from dust and grease. On clay plasters, pretreatment with KEIM Spezial-Fixativ, diluted 1:1 with water, is recommended. The base coat is to be diluted with 10 % water, top coat undiluted. 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  $\geq 5$  °C.

### PREPARATION OF MATERIAL:

Stir up KEIM Biosil thoroughly before application.

### CONSUMPTION:

approx. 0,11 L/m<sup>2</sup> for a single coating.

These material consumption values are guide values for smooth substrates. Exact consumption values must be determined by means of test areas.

### APPLICATION:

KEIM Biosil can be brushed, rolled or sprayed (nozzle  $\geq 423$  ). (Recommendation for smooth substrates, e.g. plasterboard: short-floor roller).

Base coat: Apply KEIM Biosil undiluted or diluted with 10 % of water.

Top coat: Apply KEIM Biosil undiluted.

### DRYING TIME:

Can be overcoated after 6 hours at the earliest (at 23°C and 50% RH). At higher relative humidity, layer thicknesses and/or lower temperatures, drying is delayed accordingly.

### CLEANING OF TOOLS:

Clean immediately with water.

**5. PACKAGING**

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Container content	Unit of measure	Quantity on pallet	Type of container
12.5	L	32	bucket
5	L	70	bucket
2.5	L	80	bucket

**6. STORAGE**

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

**7. DISPOSAL**

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

Waste code: 08 01 12

**8. SAFETY INSTRUCTIONS**

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Please, refer to the Material Safety Data Sheet. EU limit value for this product (Cat. A/a): 30 g/l.

This product contains: 0 - 1 g/l VOC.

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

GISCODE: BSW 10

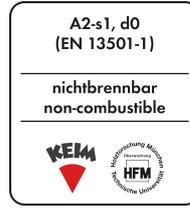
**9. GENERAL INFORMATION**

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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



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.