



TECHNICAL DATA SHEET

KEIM SOLDALIT®-COOLIT

1. PRODUCT DESCRIPTION

KEIM Soldalit-Coolit is an innovative sol-silicate paint of the latest generation used to reduce solar heating of dark colour shades. KEIM Soldalit-Coolit fulfils the requirements of DIN 18363 para. 2.4.1 "Dispersion silicate paints" and offers a wide universal application spectrum and simple and safe handling in application due to the proven combination of silica sol and water glass. KEIM Soldalit-Coolit is awarded with Cradle to Cradle Certified® Silver and C2C Certified Material Health Certificate™ Gold.

2. FIELD OF APPLICATION

KEIM Soldalit-Coolit is suitable for renovation and new coating of load-bearing, dispersion- and silicone resin-bound paints and plasters as well as for mineral substrates.

KEIM Coolit-technology is particularly recommended on concrete substrates to reduce solar heating and on ETICS for colour shades that have a LRV < 30/20.

Not suitable for:

horizontal and inclined surfaces exposed to weathering; wood substrates; plasto-elastic coatings; saponifiable existing substrates; non-wettable substrates

3. PRODUCT PROPERTIES

- universally applicable
- reflects near-infrared parts of the sunlight
- reduces the solar heating of facade surfaces
- Cradle to Cradle Certified®-Certificate Silver
- C2C Certified Material Health Certificate™ Gold
- QNG-konform
- permeable
- highly water-repellent
- microporous
- antistatic, non-thermoplastic
- highly weather-resistant
- absolutely lightfast
- anti-fungal and anti-algae thanks to ideal moisture balance
- acid-proof
- fire behaviour: non-flammable (Class A2-s1,d0 as per EN 13501-1 acc. to classification report)
- no solvents added
- no plasticisers added

MATERIAL CHARACTERISTICS:

- | | |
|---|-------------------------------------|
| - Density: | approx. 1.5 - 1.7 g/cm ³ |
| - Organic content: | < 5 % |
| - pH value: | approx. 11 |
| - Colour fastness (Fb-code pursuant to BFS Leaflet No. 26): | A1 |

CLASSIFICATION:

- | | |
|--------------------------------|---------------|
| - Classification according to: | DIN EN 1062-1 |
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– Classification according to VOB:	Silicate emulsion paint according to DIN 18363 sec. 2.4.1
– Water vapour diffusion current density (V-value):	$\geq 2000 \text{ g}/(\text{m}^2 \cdot \text{d})$
– Diffusion-equivalent air layer thickness (sd-value):	$\leq 0,01 \text{ m}$
– Diffusion-equivalent air layer thickness class:	V1
– Standard Diffusion equivalent air layer thickness:	DIN EN ISO 7783
– Water permeability:	$\leq 0,1 \text{ kg}/(\text{m}^2 \cdot \sqrt{\text{h}})$
– Water permeability rate class:	W3
– Standard Water permeability rate:	DIN EN 1062-3
– Gloss level at 85°:	matt
– Standard Gloss level:	ISO 2813

COLOUR SHADES:

With a few exceptions, colours available according to KEIM Palette Exclusive and KEIM Avantgarde. Monochrome shades S9009 and S9012 are not available. S9008 can be supplied in accordance with KEIM Palette Exclusive. TSR value of all shades ≥ 30 . LRV < 5 is technically not feasible.

4. APPLICATION INSTRUCTIONS

SUBSTRATE PREPARATION:

The substrate must be dry, sound, free from chalking, clean and dust-free. Loose parts of existing coatings must be removed mechanically or by high-pressure water jetting. Defective areas must be filled and texture-matched using a suitable repair material. Any sintered layers on new renders must be removed with KEIM Fluat-10 according to instructions. New render areas (repairs) are generally to be pretreated with KEIM Fluat-10 according to the specifications in the Technical Data Sheet. Highly absorbent surfaces are to be primed with KEIM Soldalit-Fixativ. For repaired substrates as well as for substrates with structural differences or hairline cracks, the base coat should be performed with the higher filled KEIM Soldalit-Grob instead of KEIM Soldalit-Coolit. In case of larger cracks or strong structural differences, a primer coat with KEIM Contact-Plus may be necessary instead of KEIM Soldalit-Grob.

APPLICATION CONDITIONS:

Ambient and substrate temperature $\geq 5 \text{ °C}$ during application and drying. Do not apply in direct sunlight or on sun-heated substrates. Protect surfaces from direct sun, wind and rain during and after application.

PREPARATION OF MATERIAL:

Stir up KEIM Soldalit-Coolit thoroughly before application.

CONSUMPTION:

approx. $0,45 \text{ kg}/\text{m}^2$ for two coatings.

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

APPLICATION:

KEIM Soldalit-Coolit can be painted, rolled or airless sprayed (nozzle: ≥ 435).

Primer coat: Apply KEIM Soldalit-Coolit in the normal case undiluted or depending on the absorbency of the substrate, diluted up to $\leq 5 \%$ with KEIM Soldalit-Fixativ.

Final coat: Apply KEIM Soldalit-Coolit undiluted.

COATING SYSTEM:

In the case of dark colour designs, we recommend the top coat render to be tinted to match the final coat.

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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.

CLEANING OF TOOLS:

Clean immediately with water.

5. PACKAGING

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

6. STORAGE

max. storage time	Storage conditions
12 months	cool frost-free keep container tightly sealed.

Material residues from opened containers should be refilled into smaller containers to keep the air space in the bucket as low as possible.

7. DISPOSAL

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

Waste code: 08 01 12

8. SAFETY INSTRUCTIONS

Please, refer to the Material Safety Data Sheet. EU limit value for this product (Cat. A/c): 40 g/l.

This product contains: 0 - 2 g/l VOC.

GISCODE: BSW 40

9. GENERAL INFORMATION

KEIM Soldalit-Coolit can be used on all system-related renders of KEIM ETICS systems in accordance with the general building authority approval.

Use on existing ETICS or systems of unknown origin or other highly thermally insulating constructions is permitted; if the construction is considered thermally safe with a TSR value of the coating of ≥ 25 (see information sheet "Total Solar Reflectance and Light Reflectance Value/Totale solare Reflexion und Hellbezugswert", published by VDPM, April 2021).

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.