



TECHNICAL DATA SHEET

KEIM SOLDALIT[®] - COOLIT

1. PRODUCT DESCRIPTION

KEIM Soldalit-Coolit is an innovative facade coating, engineered to reduce solar heating when the façade is painted with dark colour shades.

KEIM Soldalit-Coolit is the latest generation of a sol-silicate paint suited for coating mineral substrates as well as sound, organic old coatings.

KEIM Soldalit-Coolit meets the requirements of DIN 18.363, 2.4.1 „silicate emulsion paint“ and provides with the proven combination of silica sol and waterglass a wide, universal application field together with a safe and easy handling.

2. FIELD OF APPLICATION

KEIM Soldalit-Coolit is well suited for the renovation and coating of sound dispersion- and silicone resin-based coatings and renders as well as for mineral substrates. Exceptions are plasto-elastic coatings, saponifiable old paints (e.g. certain oil-based paints), non-wettable substrates (e.g. lacquers and varnishes) as well as ALC building elements.

Not suitable for horizontal and inclined surfaces exposed to weathering.

3. PRODUCT PROPERTIES

- Reflects near infrared radiation of the sunlight
- Reduces the solar heating of façade surfaces
- Increases the resistance against cracking in the substrate
- Binder basis: combination of silica sol and water glass (= sol-silicate)
- Multi-purpose application
- UV- and acid-resistant, anti-static
- Highly weather-resistant
- Alkaline, therefore no pot preservatives
- Incombustible
- Lightfast pigmented
- Mineral matt
- Permeable, non-film-forming, micro-porous
- Highly water-repellent
- No solvents and plasticisers added

Material characteristics

- Specific weight: approx. 1.5 - 1.7 g/cm³
- Organic content: < 5%
- pH-value: approx. 11

- Colour stability: A1

(Colour code acc. to BFS Technical Information No. 26)

According to Din EN 1062-1:

- Water vapour diffusion density: $V \geq 2000 \text{ g}/(\text{m}^2 \cdot \text{d})$
- Diffusion-equivalent air layer thickness: $s_d \leq 0.01 \text{ m}$
Class I
(to DIN EN ISO 7783-2)
- Water permeability rate (24 h): $w < 0.1 \text{ kg}/(\text{m}^2 \cdot \text{h}^{0.5})$
(to DIN EN 1062-3)
- Gloss at 85°: 1.5
matt (<10)
(to DIN EN ISO 2813)

Colour shades:

With a few exceptions according to the KEIM Palette Exclusiv and KEIM Avantgarde colour swatches. Monochrome shades S9009 and S9012 are **not** available. (S9008 is available, based on the KEIM Palette Exclusiv). TSR value of all colour shades is > 30.

KEIM Coolit Technology is particularly suited on ETIC systems coated with colour shades that have a LRV < 20. LRV < 5 is not possible on ETICS.

KEIM Soldalit-Coolit can be used without restriction for all KEIM ETIC systems according to Technical Approval No. Z-33.43-185, Z-33.4.1-45 and Z-33.44-188.

For renders with a smooth texture it is recommended to order tinted material.

The use on existing ETICS or unknown systems or other highly insulating constructions is permissible if it can be assumed that the structure is considered as thermally safe with a TSR value of the coating > 25.

4. APPLICATION INSTRUCTIONS

Substrate preparation:

The substrate must be sound, dry, non-chalking, clean and dust-free. Remove any loose parts of old coatings mechanically or by water jetting. Fill and texture-match any defects with a suitable repair material. Remove sinter. Strongly absorbent areas should be primed with KEIM Soldalit-Fixativ.

New render places (repairs) have to be always pretreated with KEIM Ätzflüssigkeit (lime remover) acc. to technical data sheet.



For repaired substrates and substrates with textural differences or hairline cracks use KEIM Contact-Plus as filling coat.

Application:

KEIM Soldalit may be applied by brush, roller or airless sprayer (nozzle size: 0,79 mm/0.031 inch. See further information on TDS Airless Technique).

A minimum drying time of 12 hours between the base and the top coat is required.

Base coat:

Apply KEIM Soldalit-Coolit normally undiluted or dilute by up to approx. 5%, or for highly absorbent substrates, by up to max. 10% (max. 2.5 l per 25 kg paint) with KEIM Soldalit-Fixativ.

Top coat:

Apply KEIM Soldalit-Coolit undiluted.

Recommendation:

In case of subsequent touch-ups or repairs the use of undiluted material with a roller offers the best results.

Application conditions:

Ambient and substrate temperature $> +5^{\circ}\text{C}$. Do not apply in direct sunlight or onto sun-heated surfaces. Protect coated surfaces from direct sunlight, wind and rain during and after application.

Consumption:

For two coats on smooth substrates:
approx. 0.45 kg/m² KEIM Soldalit-Coolit.

This consumption value is a guide value. Exact values can only be determined by painting trial areas on the structure to be coated.

Cleaning of tools:

Clean immediately after use with water.

5. PACKAGING

5 kg and 25 kg containers

6. STORAGE

Shelf life approx. 12 months, if kept cool, but frost-free in tightly closed containers.

Note:

Remnants of material from opened containers are to be filled in smaller buckets in order to keep the air content in the bucket as low as possible.

7. DISPOSAL

EC Waste Code No. 08 01 12

Any residues must be emptied out of containers before recycling.

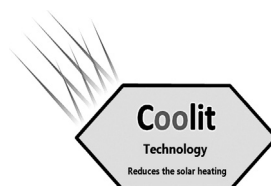
8. SAFETY INSTRUCTIONS

Giscode: BSW10

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.

Please refer to EC Safety Data Sheet.

9. 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 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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