



TECHNICAL DATA SHEET

KEIM SOLDALIT®

1. PRODUCT DESCRIPTION

KEIM Soldalit is a highly specialised, silicate exterior paint system with a proven binder combination of silica sol and water glass. This binder combination not only allows the application of silicate coatings on mineral substrates but as well on a large variety of organic substrates, directly and without additional bridging coats. KEIM Soldalit is therefore the basis for a new generation of silicate paint, the sol-silicate paint, allowing a so far unknown variety of applications. It comprises weather-resistant fillers and pure inorganic pigments and combines all the advantages of the classical silicate emulsion paint with the variety of substrates of organic bound paint systems. KEIM Soldalit as well meets the requirements of DIN 18.363 sect. 2.4.1 (silicate emulsion paint).

2. FIELD OF APPLICATION

KEIM Soldalit 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 wood, 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. After a base and top coat within the Soldalit System a low-pigmented finish (colour wash effect) with the KEIM Lasur-System can be applied.

Not suitable for horizontal and inclined surfaces exposed to weathering

3. PRODUCT PROPERTIES

- Binder basis: combination of silica sol and water glass (= sol-silicate)
- Multi-purpose application
- UV- and acid-resistant, anti-static
- High weathering resistance
- Alkaline, therefore no pot preservatives
- Non-flammable (class A2-s1,d0 as per EN 13501-1, acc. to classification report)
- Lightfast pigmented
- Mineral matt
- Water vapour permeable, non-film-forming, microporous
- Highly water-repellent
- No solvents and plasticisers added
- Hinders algal and fungal growth thanks to ideal moisture balance.

Material characteristics:

- Specific weight: approx. 1.5 - 1.7 g/cm³
- Organic content: < 5%
- pH-value: approx. 11
- Colour fastness: A1
(Colour code acc. to BFS
Technical Information No. 26)

Classification to DIN EN 1062-1:

(Details see certificate FPL)

- Water vapour diffusion density: $V \geq 2000 \text{ g}/(\text{m}^2 \cdot \text{d})$
- Diffusion-equivalent air layer thickness: $s_d \leq 0.01 \text{ m}$
(Dry film thickness approx. 236 µm)
Class I
to DIN EN ISO 7783-2
- Water permeability rate (24 h): $w < 0.1 \text{ kg}/(\text{m}^2 \cdot \text{h}^{0.5})$
(Dry film thickness approx. 338 µm)
Class III (< 0.1)
to DIN EN 1062-3
- Gloss at 85°: 1.5
(Dry film thickness approx. 100 µm) **matt (< 10)**
to DIN EN ISO 2813

Full declaration according to the criteria of „natureplus®“: Silicate and calcitic fillers, sol-silicate mixture, water, titanium dioxide, polyacrylate, hydrophobing agent, thickener, stabilisers, wetting and defoaming agent.

Colour shades:

White and according to the KEIM Palette “exclusiv” and KEIM “Avantgarde” colour swatches. Full colours (monochrome shades) only available as 9001S - 9012S. LRV ≥ 30 on ETICS. Tinting only with the KEIM Soldalit-Monochrome shades.

Note:

The mixing and blending with products not part of the system is not admissible! This applies as well for KEIM products which are not part of the Soldalit-System.

4. APPLICATION INSTRUCTIONS

Substrate preparation:

The substrate must be sound, dry, non-chalking, clean, dust- and grease-free. Remove any loose and brittle parts of old coatings mechanically or by water jetting. Fill and texture-match any defects with a suitable repair material. Sinter layers of new renders have to be removed with KEIM



Ätzflüssigkeit as prescribed. Areas of new renders (repairs) should in general be pretreated with KEIM Ätzflüssigkeit according to the technical data sheet. Strongly absorbent areas should be primed with KEIM Soldalit-Fixativ.

For touched-up substrates and substrates with textural differences or hairline cracks use the higher filled KEIM Soldalit-Grob as base coat instead of KEIM Soldalit. Larger cracks or strong differences in texture may possibly necessitate a base coat with KEIM Contact-Plus instead of KEIM Soldalit-Grob.

Application:

KEIM Soldalit may be applied by brush, roller or airless spraying (nozzle size: 435; see technical data sheet "Airless technique" for further information). A minimum drying time of 12 hours between the base and the top coat is required.

Base coat:

Apply KEIM Soldalit 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 **undiluted**.

Recommendation:

In case of repairs after the main coating application the over-working with 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:

Two-coat system on smooth substrates:
approx. 0.45 kg/m² KEIM Soldalit.

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 maintain the air content in the bucket at the lowest possible level.

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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