TECHNICAL DATA SHEET

KEIM SILAN-100

1. PRODUCT DESCRIPTION

Solvent-free silane-based hydrophobic coating in accordance with ZTV-ING OS-A or OS-1 to DIN V 18026 and to DIN EN 1504-2/1.1, 2.1, 8.1.
Active substance content: 100%.

2. FIELD OF APPLICATION

KEIM Silan-100 is used to waterproof mineral building materials, especially concrete. KEIM Silan-100 can be used especially when exposed to freeze-thaw salts and to protect the reinforcement against chloride corrosion caused by salt transport as well as a primer before painting with KEIM Concretal-W or Concretal-Lasur or KEIM Concretal-C as additional water protection in case of increased weather exposure.
KEIM Silan-100 is applied on concrete in accordance with OS-A of ZTV-ING or OS 1 of Rili-SIB (Guidelines for the Protection and Repair of Concrete Structures, German Committee for Reinforced Concrete) as the sole water repellent.
KEIM Silan-100 is used as a primer according to OS-B and OS-C of ZTV-ING or OS 2 and OS 4 of Rili-SIB together with KEIM Concretal-C.
KEIM Silan-100 can be used with subsequent coats of the KEIM Concretal system as surface protection in accordance with repair principle W (water protection) of Rili-SIB.

3. PRODUCT PROPERTIES

– without the addition of solvents

MATERIAL CHARACTERISTICS:

– Density	approx. 0.9 g/cm³ - 1.0 g/cm³
– Flash point	> 40 °C
– Active ingredient	alkylalkoxysilane
– Active ingredient content	100 %

CLASSIFICATION:

– Penetration depth	Class II: ≥ 10 mm
– Drying rate (value)	> 30 %
– Drying rate (class)	Class 1
– Water absorption and alkali resistance	absorption coefficient < 7.5 % compared to untreated sample < 10% in alkaline solution
– Mass loss after freeze-thaw cycles	mass loss after 20 cycles later than for non-impregnated sample

COLOUR SHADES:
colourless

COMPOSITION
Solvent-free alkylalkoxysilane

4. APPLICATION INSTRUCTIONS

SUBSTRATE PREPARATION:
The substrate must be clean, dry and absorbent; if necessary, it must be cleaned beforehand.

Non-suitable substrates:
non-wettable substrates; substrates with salt efflorescences

APPLICATION CONDITIONS:
From ≥ 5 °C to ≤ 25 °C substrate and 30 °C air temperature . Avoid direct sunlight and strong winds. Ensure good ventilation when used indoors.

CONSUMPTION:
approx. 0,17 - 0,20 L/m² for two coatings.
The information on material consumption is a guide for smooth substrates. Exact consumption figures must be determined by carrying out test areas.

PROCESSING:
KEIM Silan-100 is ready for use and is applied by saturated flooding with a low-pressure sprayer or by saturated soaking with a brush. The process can be repeated after approx. 4 hours to 1 day to further increase the effect, e.g. in case of extremely heavy weather or de-icing salt exposure. KEIM Silan-100 reacts with the moisture of the concrete and forms a water-repellent zone under the influence of the alkalinity. KEIM Silan-100 can be painted over after approx. 4 hours to 1 day with coats of the Concretal system or used as a stand-alone water repellent. Water absorption is reduced to approx. W24 = 0.06 kg/m2h0.5. Interfacial tension visible on the surface of the building material is only formed on alkaline substrates. Water vapour diffusion is not impaired. Equipment and tools must be clean and dry. Contact with water before application must be avoided at all costs. Non-absorbent surfaces must not be treated with KEIM Silan-100.

CLEANING OF TOOLS:
Clean immediately with turpentine substitute.

5. PACKAGING

Container content	Unit of measure	Quantity on pallet	Type of container
5	L	78	jerry can

6. STORAGE

Maximum storage time	Storage conditions
12 months	keep container tightly sealed. cool dry

7. DISPOSAL

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

Waste code: 08 01 11 *

8. SAFETY INSTRUCTIONS

Refer to the safety data sheet.

9. GENERAL INFORMATION

Protect surfaces not to be treated (e.g. glass, natural stone, ceramics, wood, bitumen, etc.) by taking appropriate measures. Splashes on surrounding surfaces or traffic areas must be washed off immediately with an organic solvent. Protect eyes and skin from splashes. When working in enclosed spaces, keep the container tightly closed. Keep away from sources of ignition – do not smoke.
Mixing with products from other systems or other external additives is not permitted.

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.

KEIM MINERAL PAINTS LTD
Santok Building / Deer Park Way, Donnington Wood / Telford / Shropshire TF2 7NA
Tel. +44 1952 231 250
www.keim.com / sales@keimpaints.co.uk