

KEIM Silex®-OH-100 (Consolidant)



1. Product description

Colorless and solvent-free, silicate based consolidant based on silicic acid ester (OH = without water repellent).

2. Field of application

KEIM Silex-OH-100 can be used on any porous mineral substrate. KEIM Silex-OH-100 is particularly suitable for reconsolidating leached sandstone and limestone.

3. Product properties

Thanks to its excellent fluidity, KEIM Silex-OH-100 penetrates deep into the pores of building materials. The silicate reacts chemically with the moisture naturally present in the building material and atmospheric humidity to form silica gel and alcohol. This reaction generally takes 4 weeks. After this period, only the silica gel remains in the building material, the alcohol has evaporated. Deposition of the mineral gel effectively consolidates the previously crumbly building material without impairing water vapor permeability.

Material characteristics

- Physical form: Colorless liquid
- Density: 0.99 g/cm³
- Active component content: 100 wt.%
- Gel deposition: 40 wt.%

4. Application instructions

Substrate

For treatment with KEIM Silex-OH-100, the surface of the building material must be open-pored, dust-

free and dry. Hard superficial crusts of natural stone should, if possible, be removed.

Application

The surfaces to be treated are soaked repeatedly at approx. 10 minute intervals with KEIM Silex-OH-100 using a brush or by flooding (do not spray) until visibly saturated. Any excess of KEIM Silex-OH-100 remaining on the surface should be blotted off as crusting or blushing will otherwise occur. Crusting may also occur if insufficient consolidant is applied, i.e. if the consolidant does not reach through the unsound zone to the healthy core.

Consumption

The quantity of KEIM Silex-OH-100 required for consolidation is highly dependent on pore volume and the depth of the unsound zone of the building material, ranging from 0.5 to 5 l per m² (0.1 to 1.3 gal per 10.8 sq ft), or more in extreme cases.

If consumption is to be determined, a trial treatment must be performed on a representative, delimited sample area of the object to be consolidated, the consolidant being applied wet-on-wet until it ceases to be absorbed.

Subsequent finishing

Due to the relatively long reaction time of KEIM Silex-OH-100, specific waiting times must be complied before applying subsequent finishes. The treated surface must be protected against water until the reaction has run to completion.

Minimum waiting time of 10 days for:

- Water repellent treatment with KEIM Lotexan-N and KEIM Silan 100
- Low-pigment finishes with KEIM Restaurolasur



- Opaque finishes with KEIM Granital or another KEIM coating system.

Minimum waiting time 3 weeks for:

- KEIM Restauro stone repairs
- Opaque and low-pigment finishes with KEIM Purkristalat, KEIM Decor Paints and KEIM Artist Paints
- Mineral renders

Cleaning of tools

In a bucket of water with a few drops of detergent. Rewash under running water.

5. Packaging

5 l and 25 l (1.3 and 6.6 gal) containers

6. Storage

Shelf life is 12 months under cool, frost-free and dry conditions. Protect from heat and direct sunlight. Always carefully seal opened containers. It is essential to avoid contact with moisture.

7. Hazardous substances ordinance class

- Xn Harmful,
contains tetraethyl silicate
- R 10: Flammable
- R 20: Harmful by inhalation.
- R 36/37: Irritating to eyes and respiratory system.
- S 23: Do not inhale vapor / aerosol.
- S 24/25: Avoid contact with skin and eyes.
- S 26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S 35: This material and its container must be disposed of in a safe way.

S 46: If swallowed, seek medical advice immediately and show this container or label.

Classification according to flammable liquids ordinance: A II

8. Transport hazard class

Class: 3
Packaging group: III
UN-No.: 1292

9. Disposal

EC Waste Code No. 07 01 99
Any residues must be emptied out before recycling.

10. Safety instructions

Provide appropriate protection for surfaces which are not to be treated (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. Do not eat, drink or smoke during application. Keep out of reach of children.

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 e

