



## KEIM Silex<sup>®</sup>-OH

### 1. Product description

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

### 2. Field of application

KEIM Silex<sup>®</sup>-OH can be used on any porous mineral substrate. KEIM Silex<sup>®</sup>-OH is particularly suitable for reconsolidating leached sandstone.

### 3. Product properties

Thanks to its excellent fluidity, KEIM Silex<sup>®</sup>-OH penetrates deep into the pores of building materials. Once the small solvent content has evaporated, the silicate reacts chemically with the moisture naturally present in the building material and atmospheric humidity to form silica gel and alcohol. This reaction is generally takes 3 weeks.

After this period, only the silica gel remains in the building material, the alcohol having evaporated. Deposition of the mineral gel effectively consolidates the previously crumbly building material without impairing water vapor permeability.

#### Material characteristic

Physical form: colorless liquid

Density: 0.94 g/cm<sup>2</sup>

Active component content: 75 wt. %

Gel deposition: 33 wt. %

### 4. Application instructions

#### Substrate

For treatment with KEIM Silex<sup>®</sup>-OH, 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<sup>®</sup>-OH using a brush or by flooding (do not spray) until visibly saturated. Any excess KEIM Silex<sup>®</sup>-OH 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<sup>®</sup>-OH 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 liters/m<sup>2</sup>, 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<sup>®</sup>-OH, specific waiting times must be complied with for subsequent finishing because the treated surface does not become readily water-wettable until the reaction has run to completion.

Minimum waiting time of 10 days for:

- Water-repellent treatment with KEIM Lotexan<sup>®</sup>-N and KEIM Silangrund
- Low-pigment finishes with KEIM Restauro<sup>®</sup>-Lasur
- Opaque finishes with KEIM Granital<sup>®</sup>

Minimum waiting time 3 weeks for:

- KEIM Restauro<sup>®</sup> stone repairs
- Opaque and low-pigment finishes with KEIM Purkristalat<sup>®</sup>, KEIM decorating paints and KEIM artists' paints
- Mineral renders

#### Cleaning of tools

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

### 5. Packaging

5 liter and 25 liter containers



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## 6. Storage

Shelf life is 12 months under cool, but frost-free conditions.

Protect from heat and direct sunlight. Always carefully seal opened containers. It is essential to avoid contact with moisture as gelation will otherwise occur.

## 7. Hazardous Substances Ordinance class

F Highly flammable.

Xi Irritant, contains tetraethyl silicate and butanone.

R11: Highly flammable.

R36/37: Irritating to eyes and respiratory system.

R52/53: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R66: Repeated exposure may cause skin dryness or cracking.

R67: Vapors may cause drowsiness and dizziness.

S7/9: Keep container tightly closed and in a well-ventilated place.

S16: Keep away from sources of ignition - No smoking.

S23: Do not breath vapor/aerosol.

S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S33: Take precautionary measures against static discharges.

S36: Wear suitable protective clothing.

## Classification according to Flammable Liquids Ordinance

A I

## 8. Transport hazard class

**Class:** 3

**Packaging group:** II

**UN No.:** 1993

## 9. Disposal

EC Waste Code no. 07 01 99

Any residues must be emptied out of containers before recycling.

## 10. Safety instructions

Provide appropriate protection for surfaces which are not to be treated (e.g. glass, ceramics, wood etc.). Any splashes on surrounding surfaces or traffic areas must be rinsed off immediately with water. Protect the eyes and skin from splashes. When using, do not eat, drink or smoke. 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 editions.

