



KSE 510

Solvent-free stone strengthener on a silicic acid ester base with high gel deposition rate for strengthening heavily deteriorated mineral building materials

Availability		
Quantity per pallet	84	24
Packaging unit	5 l	30 l
Type of container	Tin canister	Tin canister
Container code	05	30
Art. no.		
0625	■	■

Application rate



Between 0.3 l/m² and several l/m² depending on the type and condition of the substrate and the specific application

Apply to a large enough trial area to determine the precise amount required.

Range of use



- Strengthening heavily weathered and loosened surfaces
- Stones and mineral building materials that are reasonably solid in their original condition
- Obtaining especially uniform strength profiles when used in combination with KSE 100 and/or KSE 300 E

Property profile

- Gel deposition rate: approx. 45%
- Solvent-free
- Non-hydrophobizing
- High penetration depth

Characteristic data of the product

■ On delivery

Density (20 °C)	1.02 g/cm ³
Active ingredient content	approx. 99% by mass
Colour	clear to slightly cloudy, may have a slight yellow tinge
Odour	typical
Catalyst system	neutral

■ Following application

By-products caused by the reaction	Ethanol (escapes)
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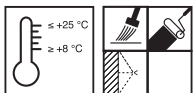
The values stated represent typical characteristic data of the product and are not to be understood as binding product specifications.

- Additional information**
- **Control of gel deposition rates and penetration depths**
 - **Method for determining strength profiles**
 - **Guidelines for KSE module system**

- Possible system products**
- **KSE 100 (0719)**
 - **KSE 300 E (0714)**
 - **V KSE (0657)**

- Preparation**
- **Substrate requirements**
The substrate must be clean, dust-free and dry.
 - **Substrate preparation**
Any construction defects such as cracks, cracked joints, defective connections, rising damp and hygroscopic moisture must be remedied in advance.
Perform any necessary cleaning gently, e.g. by spraying with cold or warm water or by steam-cleaning; use the rotec Soft Whirl Jet 25 l (5235) or Remmers cleaning products (e.g. Traffic Film Remover (0671), Clean FP (0666), Clean AC (0672), Combi WR (0675)) on tough stains.
To avoid material loss of the substrate, an initial strengthening with KSE 100 or an other suitable strengthener can be carried out before any cleaning measure.

Directions



- **Conditions for use**
Temperature of the material, air and substrate: from min. +8 °C to max. +25 °C

Apply the primer abundantly by flow coating without pressure (avoid misting), so that a 30 - 50 cm long liquid film flows down the surface.
Apply on one section at a time, moving from top to bottom, and immediately go over with a large brush.
Repeat the application several (at least two) times (wet on damp) until no further material is absorbed by the substrate.
On surfaces where a spraying application is not possible, apply by brush or roller making sure the tools are always well saturated.

- Tips on use**
- Take appropriate measures to protect adjacent building elements and materials that should not come into contact with the product.
Remove any excess impregnation agent within 1 hour using V 101 thinner.
Protect freshly treated surfaces from driving rain, wind, sunlight and condensation.

- Notes**
- Deviations from applicable regulations must be agreed separately.
The relevant test certificates must be observed when planning and carrying out work.
The level of absorption is crucial for the impregnation agent to work at its best. This depends on the respective pore volume and moisture content of the building material. Carry out a quantitative analysis of aggressive salts if there are any salts present that could damage building materials.
High concentrations of harmful salts can cause major structural damage that impregnation cannot prevent.
Residue (e.g. surfactants, wax) from previous cleaning measures can have adverse effects on the treatment and must therefore be completely removed.
Application of restoration mortars, hydrophobizing primers and paints:
After application, the active ingredient "silicic acid ester" leads to a temporary water-repelling effect that disappears during the course of gel formation (reaction time: at least



28 days). Remmers Restoration Mortar, Funcosil impregnation agents and paints can be applied only after the gel formation is completed. If strengthened surfaces still show a water-repelling effect after more than 4 weeks reaction time, this can be suppressed by wetting the surface with alcohol or de-tensioned water.

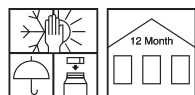
Tools / Cleaning



Solvent-resistant, low-pressure conveying and spraying equipment, liquid pumps, paintbrush, surface brush and lamb's wool roller

Tools must be clean and dry.
After use and before prolonged interruptions of work clean tools with Thinner V 101.
Ensure that any residue from cleaning is disposed of correctly.

Storage / Shelf life



If stored unopened in its original container in a cool, dry place and protected against frost, the product will keep for at least 12 months.
Use the contents of open containers as quickly as possible.
After every use, close containers so that they are air-tight, since silica gel reacts with moisture (in the air).

Safety data / Regulations

For further information on the safety aspects of transporting, storing and handling the product and on disposal and environmental matters, please see the current Safety Data Sheet.

Personal protective equipment

Respiratory protection with at least an A/P2 combination filter must be worn during spraying, together with safety goggles. Wear suitable protective gloves and clothing.

Disposal

Dispose of contents/container in accordance with local/regional/national/international regulations.

Please note that the data and information given above have been calculated as guidelines in the laboratory and from real-life experience and are therefore not binding as a basic principle.

This information is therefore of a general nature only and describes our products and how they are used and worked with. In this respect, it must be borne in mind that the varied and diverse nature of the

prevailing working conditions, materials used and construction sites encountered means that not every individual case can be covered. In this respect, we therefore recommend either conducting tests or liaising with us in the event of any doubt. Unless we have provided express written assurance of the products' specific suitability or characteristics in respect of a contractually stipulated intended use, any technical application-related advice or instruction will never

be binding, even though it is provided to the best of our knowledge. In all other respects, our general terms and conditions of sale and delivery shall apply.

When a new version of this Technical Data Sheet is published, it shall replace the previous version.