

Stone hardener based on ethyl silicic acid ester (100% active ingredient)**Application**

- Impregnating product on the basis of ethyl silicic acid ester designed to harden powdery building materials without radically changing their characteristics
- All absorbent non-layered types of stone can be hardened such as:
 - o gravel-bound, clay-bound and limestone-bound sandstone (Balegem, Chauvigny, etc...)
 - o concrete and brick

Properties

- Consisting of ethyl orthosilicate (=tetraethylorthosilicate: TEOS).
- Ready-to-use.
- One component.
- Dissolved in a solvent.
- The ethyl orthosilicate reacts with the water present in the stone, so that amorphous quartz (silicium dioxide) is formed, which acts as a new binding agent.
- Penetrates deep into the stone.
- Highly effective.
- Does not alter the stone's appearance.
- Hardly affects water vapour permeability – if at all.

Directions**Preparation**

- The substrate must be porous, clean and dry.
- If cleaning is required, the cleaning technique can be chosen freely based on the origin of the dirt and the state of the surface of the materials that are to be cleaned.
- It is preferable to use a soft cleaning technique rather than the so-called “pre-strengthening”.
- It is advisable to determine scientifically whether the stone needs to be reinforced, before deciding upon the appropriate method, by means of a preliminary examination, such as a DRSM-Test (Drilling Resistance Measurement System). This testing method makes it possible to determine the extent, to which the stone has been affected and produce a hardness profile. It is recommended that you conduct this test before and after the treatment, in order to determine the achievable hardness, the extent to which this is desirable and how much stone hardener is likely to be required.

Work method

- **Artisil SVS 100** can be applied on a dry substrate by means of an airless gun, a low pressure pump or a brush.
- The application should start at the top going downwards in horizontal zigzag movements ensuring that the product is applied in 10 - 20 cm runs.
- Each treatment consists of several applications, wet on wet, with a gap of several minutes between each application.
- Several treatments may be necessary, with a gap of at least 24 hours between treatments.

- Two weeks after the final treatment, the stone can be reshaped or painted. It is important to check that the temporary hydrophobic behaviour of the stone hardener is no longer present before continuing to work.
- It is important to wait 24 hours before treating it with solvent-based water-repellent products. It is recommended that you wait 3 weeks before applying water-based preparations.

Important remarks

- The ideal temperature for applying **Artisil SVS 100** is situated between 10°C and 20°C.
- Avoid impregnation on surfaces heated by sun rays and when the air has a too high relative humidity.
- Protect windows and plants during the treatment.
- In the treatment of outside walls featuring at some areas non porous or slightly porous materials such as blue stone, enamel coated brick, etc ... these parts will have to be cleaned immediately with a cloth soaked in white spirit. This also applies for window casing and glass.
- A test surface should first be treated, in order to assess whether any colour nuances, which may appear in the treated surface, are acceptable and determine the exact amount required.
- Possible colour changes that are not acceptable can be avoided by irrigating the surface with a solvent of the white spirit or methyl ethyl ketone type immediately after applying **Artisil SVS 100**.

Technical characteristics

Colour	colourless to pale yellow
Specific weight	+/- 1,06 at 25°C
Ethyl orthosilicate content	100%
Solvent content	0%
Flash point	42°C
Smell	same as alcohol

Quantity to use

Highly dependent of the type of stone, the porosity and the degree of weathering. Must be determined by a preliminary test. Practically the quantity to use can vary between 0,5 ltr and 4 ltr/m².

Packaging

5 ltr, 25 ltr, 190 ltr

Safety information – Transport – Handling and storage - Waste

Consult the most recent and product-related safety information sheet from Rewah in compliance with the (EU) 453/2010 annex II/A guidelines. The information on the abovementioned safety information sheet has been drawn up with the greatest care and is based on the knowledge available at the date of issue. We accept no liability for damage or hindrance of any kind which could be caused by the use of the product concerned.

Transport and storage

Transport and store away from frost. Protect the product and its packaging against direct sunlight. Avoid storage at temperatures >30°C.

Storage life

1 year after manufacturing in the original closed packaging.

Considerations

The data included in this sheet, the application advices and other recommendations are based on extensive research and experience. They are however not binding also in relation to third party liability. They do not protect the customer against checking the products and directions for their suitability for the purpose. The characteristics and properties described are average values and analyses registered at 20°C, variances are tolerated. Our customer service will gladly answer your questions. The rewrite of this sheet replaces all previous sheets.