



Products,
technologies and
services for the restoration
of monuments

From Project to Jobsite



Certified Quality System since **FEBRUARY 1993**

SILAKTIV® AR-10/S

STRUCTURAL CONSOLIDATION OF STONE

Description The product's active ingredient is based on esterified silicic acids. They are designed to penetrate the porosity of the materials that need consolidation and internally form of a grid of active poly-silicates, and so increase physical-mechanical properties and recuperate structural strengths also when there is a certain degree of deterioration and loss of cohesion.

- Advantages**
- High penetrating powers even when the porosity is only created by capillary system of a few microns in diameter.
 - The product is compatible with diverse supports (best results however are obtained when applied on brickwork containing porous sand and rich in mineral silicates that are compatible with the active ingredients of the products).
 - The product does not give variations in colours or aesthetics. It only leads to a variation in gloss depending on the superficial porosity of the treated structure.

Field of application Consolidation of degraded brickwork with a certain communicating porosity.

Use It is always recommended to make a thorough analysis of the support that needs consolidation before the application (porosity of the brickwork, presence of contaminations, moisture content, etc.). So the best system for cleaning and impregnation can be established to obtain the best aesthetical results afterwards.

However a good consolidation is only done in a long period of time of impregnation (24 - 48 hours) as for example continuous flow methods, application by continuous brushing, filling and plugging (to prevent evaporation to the outside to obtain a good impermeability). The impregnation should be done "wet in wet" until complete saturation of all the holes and cavities followed by a removal of the excess of liquid (remove excess to prevent the formation of sediments or crusts on the surface itself).

The cavities of the brickwork have to be as free as possible of water and moisture. It is recommended to protect the support to be treated against water so that it is fairly dry. It is indispensable that part of the liquid will penetrate part of the support that is still in a good condition. Exceptional results are obtained after several successive impregnations. An indication of partial impregnation is the formation of hardened crusts when the internal part is still fragile. A period of 4 weeks is needed to obtain a complete consolidation. This period needs to be taken in consideration during the planning of the restoration.

To obtain a good and durable hydro-repellent protection of the surface we recommend to apply afterwards on the treated surface the hydro-repellent siloxane **WP 55**.

Packaging Cans of 5 and 25 lt.

Date of edition: 01/2006
Date of revision: 10/2006

Nr. rev.: 1

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Shelf life 6 months in the original packaging, kept in a dry protected area at a temperature between 5°C and 35°C.

Technical properties (typical values)

- Density 900 ± 10 g/l
- Viscosity < 4 mPa.s
- Dry residue 25% - 33%
- Solvent Mineral aliphatic resin
- Consumption from 0,8 till 4 lt./m²

Depending on the characteristics of the stone and brickwork, and the climatic-environmental conditions, also product modification can be made with different viscosity, penetration properties and reaction times. Our Lab is at your disposal to assist and develop products 'ad hoc'.

Safety indications Read carefully the instructions on the packaging or read the Material Safety Datasheet related to the product before applying.

The above information is based on our best experiences and lab results and on results of the application of the product in various fields. Tecnochem Italiana is not responsible for negative performances due to not proper use of the product or for defects due to elements not connected with the quality of the product included wrong storage. Technical characteristic in this technical data sheet are up-to-dated periodically. Revision date of this technical data sheet is indicated below. Changes of this data sheet can be found in our web-site www.tecnochem.it where you can find the same technical data sheet updated in real time.

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