



MELZI edilizia e restauro

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RESTORATION: Consolidating agents

(Solvent)

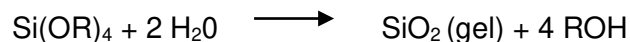
MONOPOL C 03

Technical data sheet

DESCRIPTION AND FIELDS OF APPLICATION

Single-component, water-repellent consolidating protective product based on ethyl esters of silicic acid with neutral catalyst (siloxane organ), for the restoration of disaggregated absorbent materials containing silicate groups, such as sandstone, tuff, trachyte, bricks, etc.

The consolidation process occurs following the reaction of ethyl silicate with atmospheric moisture, with the formation of silica gel, which constitutes the binding substance, and the development of alcohol, according to the reaction:



MAIN CHARACTERISTICS

Ensures excellent penetration into the substrate through its capillaries. It produces a mineral binder with no film-forming effects, stable to UV rays and to the aggression of corrosive atmospheric agents. It allows good permeability to any moisture that may be present in the consolidated product and does not normally alter its colour.

PRELIMINARY TESTS

Before use, it is necessary to carry out preliminary tests on samples of the substrate to be treated in order to establish the quantity of product required for saturation, depending on absorption and the state of deterioration. The application of a quantity of product inferior to that which can be absorbed does not permit the complete manifestation of the consolidating action.

Generally, treated stone materials do not show any chromatic alterations. However, in some materials, ethyl esters may initially cause a strengthening of colour, which in particular cases (tuff), fades after some time. The purpose of the tests is also to verify the possible occurrence of such alterations.

APPLICATION DATA

The product is supplied ready to use. For an optimal absorption the product must be at a temperature between 10-25°C, be clean and dry. The surface to be consolidated must not be exposed to direct sunlight during application.

The product is applied "wet on wet", until the absorption of the support is saturated. Any excess can be removed, before hardening by hydrolysis, by means of pads soaked in alcohol or mineral solvents (white spirit).

Small surfaces or moving parts can be treated with paper pulp pads soaked in the product, or by immersion. Large surfaces can be treated by spraying at low pressure (0.5 bar).

Usually one application cycle is sufficient. However, for particularly absorbent materials it may be necessary to repeat the treatment 2-3 weeks after the previous one.



The product completes its consolidating action after approx. 4 weeks in normal conditions with relative humidity of 40-60%. It is very important to protect the treated surfaces from rain for the first 3-4 days after application

YIELD

The yield varies considerably depending on the absorption of the substrate. Generally 0.5 L/m² is consumed for compact substrates, up to several litres for very porous structures. To determine this, it is important to carry out preliminary tests on representative parts of the material to be treated.

Failure to saturate the porosity of the substrate may result in ineffective consolidation.

TECHNICAL DATA

Ethyl ester content	70%.
Dry residue (BBA)	25,4%.
Density	0,95 kg/L
Stability in original packaging	6 months

VERSION 18/12 Product for professional use.
The user must evaluate if the product is suitable for the use as type and modality of use, on which the final performance depends.
This sheet replaces and cancels the previous ones.