



## MINERAL FINISHING IN PASTE BASED ON POTASSIUM SILICATE

<b>EDILTECO</b>		
ECAP® STC - Silicate Colour  Mineral finishing in paste, based on potassium silicates		
PRODUCT	Ecap® STC is a mineral finishing in paste, based on potassium silicates in aqueous dispersion, ready to use and pigmentable. Conforming to the DIN 18363 standard, with regard to the purity of silicates, it is specific both for interventions on new or existing façades, and as a decorative layer for reinforced smoothing mortar or for Edil-Therm wall insulation system. Thanks to its formulation, it combines a very high permeability to water vapor, excellent water resistance and dirt-sensitivity. Available in several colors, it is particularly suitable for the restoration in historical centers, as it is possible to obtain particular aesthetic effects even with slight shading on the façade. The normal properties of silicate give an excellent natural protection against the attack of mold and algae (pH 11). Combined with coloring pastes, it ensures good durability, brilliance and fullness of colors. Available in 2 types of grain size.	
PACKAGING AND STORAGE	· Bucket of 25 kg · Store in the original and closed package. Use within 12 months.	
CONSUMPTION / YIELD	<b>1,5 mm</b> : approx. 2,6 kg/m² - <b>2,0 mm</b> : approx. 3,2 kg/m²	
FIELDS OF APPLICATION	Ecap® STC is indicated for the decoration of external surfaces, new or existing, on residential, industrial or commercial buildings. It is recommended to use the product on cured supports, i.e. after a maturation period of generally four weeks.  It can be applied on supports such as:  Thermal insulation systems.  Thermal plasters.  Lime or lime/cement-based plasters.  Reinforced smoothing mortar in façades restoration cycles.  Concrete.  Prefab concrete panels.  For application on different supports contact the Edilteco Technical Department.	
ADVANTAGES	<ul> <li>Highly breathable: the careful selection of raw materials, combined with the typical properties of silicate, give to the coating excellent vapor permeability values.</li> <li>Workability: the thixotropy of the coating combines an excellent smoothness of the coating with a good adhesion to the support, to minimize the detachment of material.</li> <li>Excellent adhesion power: the composition, based on pure silicates, gives excellent adhesion properties since it reacts chemically with the mineral support through a natural process called silicatization.</li> <li>Protection against mold and algae: the natural highly basic properties of silicate (pH 11) prevent the conditions for the formation of bacterial efflorescence (mold, algae etc.).</li> </ul>	
APPLICATION	Preparation of the support: In case of old surfaces it is necessary to remove any swollen part when they are detached or not sufficiently cohesive, taking care to restore them later by recreating the correct flatness. In case of new surfaces, it is recommended to pre-treat the support with Ecap® FS primer, in order to uniform and decrease absorption. On existing but "crumbling" surfaces, proceed with the application of a high penetration fixative to compact the surface. On uneven surfaces apply a base of Ecap® FS.  If the support shows mold or algae, pre-treat the affected surfaces with a suitable biocide. The support, ready for application, must be clean, flat, cohesive and free from any type of release agent.	











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## Preparation of the product:

CHARACTERISTIC

Physical aspect:

The product is ready to use and can be applied by hand or using specific equipment. It is recommended, in any case, to mix the product with a mixer drill, in order to soften the dough, and, in the case of a colored product in medium / strong colors, to homogenize the paste with the pigments.

## Application:

**APPLICATION** 

For the application by hand proceed with the preparation of the product using an INOX American trowel on the support. Work it by turning the product in a circular motion. The laying of the non-applied coating in a single processing cycle, in an uneven or discontinuous manner, could easily create chromatic changes or "non-colored" effects on the texture of the coating. Even the use of different types of spatulas, or working with different circular movements in the application, could compromise the homogeneity of the final yield of the finishing.

Make sure that the surfaces being laid are not exposed to direct sunlight, to wind, and that the installation is not carried out in the presence of mists or high levels of air humidity. In the case of direct exposure to sunlight, provide adequate protections to prevent the support from overheating. A correct protection also avoids possible chiaroscuro effects on the color of the coating. Ensure that the ambient and support temperature during application is between  $+5\,^{\circ}\text{C}$  and  $+35\,^{\circ}\text{C}$ .

VALUE

white paste

**STANDARD** 

REQUIREMENT

> 0,3 MPa

**REGULATION\*** 

Dilution:	ready to use	-	-
Drying time:	$^{\sim}$ 3 - 4 hours at +20 $^{\circ}\text{C}$ to the touch $^{\sim}$ 24 hours at +20 $^{\circ}\text{C}$ to complete drying	-	-
Application temperature:	from +5 $^{\circ}$ C to +35 $^{\circ}$ C at 70% R.H.	-	-
Binder:	potassium silicate	-	-
Specific weight:	1,90 kg/L	-	-
Filth-grip:	low	-	-
Brilliance:	opaque	-	-
VOC (Directive 2004/42/ CE) for the coating of external walls (Cat A/c):	< 30g/L of V0C	-	-
Coefficient of water vapour permeability $\mu$ :	V1	V1 (high) V5 (low)	UNI EN ISO 7783/2 - 2001
Water absorption:	W3	W1 (high) W3 (low)	UNI EN 1062/3-2001
Adhesion:	> 0,3 MPa	> 0,3 MPa	ISO 4624-2002

## TECHNICAL CHARACTERISTICS

WARNINGS

- · Do not apply on frozen or thawing supports.
- · In case of critical supports it is necessary to check them in advance. Contact *Edilteco Technical Department*.

> 0,3 MPa

 $0,70 \, \text{W/(m K)}$ 

Euroclass A2-s1,d0

- Store the primer buckets in a place protected from direct sunlight and at temperatures not lower than + 5 °C, in order not to compromise the quality of the material.
- · Always check the material before application, to make sure that the color matches the required one.
- · Any complaint relating to the color will not be accepted after application.
- · It is not possible to guarantee a drying without color differences (spots) caused by:
- the possible different atmospheric and physical conditions of the building;
- the correspondence of a scaffolding;
- the conditions of the support (such as structure, absorbency, etc.);
- the use of natural raw materials.

\* According to UNI EN 15824.

UNI EN 13687-3

UNI EN 1745

UNI EN 13501-1



Durability:

Fire reaction:

Thermal conductivity  $\lambda$ :









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WARNINGS	<ul> <li>Protect from direct sunlight and heavy rain for the first 48 - 72 hours. Actual temperature and air humidity can accelerate or slow down the drying process.</li> <li>Protect eyes and hands during application.</li> <li>Wash the tools with water after using the product.</li> <li>For information regarding the correct disposal, storage and handling of the product, consult the safety data sheet.</li> </ul>
SPECIFICATION FORM	Ready to use coating in paste form based on potassium silicates according to DIN 18363, with excellent vapor permeability and natural anti-mold / algae properties. Certified according to ETICS standards. Ideal as an aesthetic / functional decorative cycle on new / old façades or for decoration of historic buildings.

All the indications provided in this technical data sheet are purely approximate and not binding for legal purpose. The data listed has been gathered from laboratory tests and it hence follows that in practical applications on building sites the final characteristics of the products may be subject to substantial variations depending on the meteorological conditions and the installation. The user must always check suitability of the product for its specific use, undertaking all liability implicit in and deriving from use of the product, as well as comply with all methods and instructions for use generally referable to "workmanlike" execution. Edilteco S.p.A. reserves the right to change the contents of this mechanical data sheet on its final judgements. The spreading of this data sheet through any media, supersedes and cancels the validity of any other technical data sheet previously published.











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