



arteMURI® SIL4 INTO SILIKATPUTZ K

Silicate mineral thick plaster.



ETA 13/0001 ETA 07/0145



Product description and fields of application

SIL4 INTO is a paste finish with full plaster effect, available in various grain sizes, in compliance with DIN 18363 point 2.4.6., based on hydrophobized potassium silicate, inorganic pigments resistant to light and UV rays and controlled and selected mineral charges. It has excellent characteristics of resistance to atmospheric agents, low dirt retention and excellent adhesion to the support, without generating phenomena of flaking and detachment. The product contains water-soluble potassium silicate that, after being applied to the substrate, reacts with the carbon dioxide in the air and with the calcium salts present in the plaster layer, giving rise to calcium silicate, a mineral salt that has characteristics of high consolidation and adhesion. In addition, potassium silicate gives the product a high permeability to water vapor, while siloxane additives allow the finish to have a low water absorption. The product is easy to apply due to its excellent workability in spreading and finishing.

All these features make SIL4 INTO suitable for application both indoors and outdoors, on premixed and traditional hydraulic lime-bonded mineral base-coat plasters, thermal insulation systems such as thermo-plaster and coatings. In particular, the product is a special thick coating for the protection and decoration of historical facades, new buildings and on renovation plasters where a high water vapor diffusion is required.

SIL4 INTO can be tinted with the arteMURI tinting system.

Product ETA certified for thermal insulation systems only for grain size 1.5-2.0-3.0.

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Advantages

plastering effect with various grain sizes
excellent breathability
good water repellency

Specifications

External wall surfaces, such as lime and cement-based mineral plasters, ready-mixed and traditional, skimming coats, insulating coat systems, can be finished with the full-effect mineral plaster SIL4 INTO by Fornaci Calce Grigolin, a product based on potassium silicate in water dispersion, lightfast inorganic coloring pigments and mineral fillers with selected grain size. The consumption when finished varies from a minimum of 1.6 kg/m² to a maximum of 4.0 kg/m², depending on the thickness and grain size used.

Consumption and packaging

SIL4 INTO is supplied in 25 kg packages.

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Conservation Standards

Protect from frost. Store at temperatures between +5°C and +30°C in the original sealed containers. Under these conditions the shelf life of the stored product is at least one year.

Substrate preparation

New substrates and/or any repairs (patches) must be cured by at least 4 weeks, clean and dry. Old substrates must be consistent, free of salt efflorescence and loose parts, thoroughly cleaned according to the nature and intensity of the dirt deposited on the surfaces to be treated. To level and fill imperfections such as holes, cracks or crevices, first intervene with a suitable product or repair mortar. Clean up any mold or algae and then sanitize the surface with SEI OK restorer.

On surfaces already painted with mineral paints, make sure of the condition of the film: brush and/or scrape the detaching film, completely remove high layers of non-adherent paints.

On surfaces already painted with well adhering synthetic paints, it is possible to intervene with the universal primer PRIMER UNI-KO GM, bearing in mind, however, that the permeability to steam will be determined by the underlying layer of synthetic paint.

Due to the chemical reaction described above, silicate products CANNOT be applied on gypsum, plasterboard, wood and metal substrates.

Substrate treatment

New plasters: always apply one coat of PRIMER UNI-KO GM.

Plasters with mineral paints (lime or silicates): always apply one coat of PRIMER UNI-KO GM.

Plasters with adhering synthetic paints (acrylic, siloxane): apply one coat of PRIMER UNI-KO GM.

Cement/concrete/fibrocement: do not apply silicate finishes.

In all cases, depending on the conditions of the substrate, first treat with F4 SIL.

The reported data refers to Quality Control tests in standard environmental conditions. Practical applications in the construction sites may detect significantly changed data, depending on operating conditions, so the information on the Card is only indicative because the user must always check its suitability for intended use of the product by taking responsibility for the use. Fornaci Calce Grigolin S.p.A. reserves the right to make technical changes of any kind without prior notice.

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Product preparation

SIL4 INTO COMPACT is ready to use. If necessary, dilute with a little water until the desired consistency is obtained by slowly mixing the product in its container with a mechanical stirrer.

Application

Spread the product on the surface with a metal trowel taking care to distribute it evenly. Before the product begins to dry on the surface, finish with circular movements using the spatula or plastic mole, until the desired result is obtained. In case of application on large surfaces, remember to work with an adequate number of people, always proceeding wet on wet to avoid shading in the areas of recovery.

Collect the material necessary for the execution of the work all from the same batch. If different batches of product are used, it is advisable to mix them together in order to avoid slight differences in shade. Absolutely avoid the application of different batches on the same surface and finish the wall with a single batch, then resume painting on the wall at the edge with the next batch. Wash tools and equipment with water immediately after use.

Important Warnings

DUE TO THE MINERAL NATURE OF THE PRODUCT, THE APPLICATION OF DARK COLOURS, ALTHOUGH FEASIBLE, IS STRONGLY DISCOURAGED DUE TO THE PROBLEMS IT MAY SUFFER (IN PARTICULAR STAINING AND NON-HOMOGENEITY).

If the product is used as a finish for a thermal insulation system, avoid using dark colors with a luminosity index $Y < 25$ (check the arteMURI color chart).

Do not apply with ambient and/or substrate temperature lower than +5°C or higher than +35°C and with relative humidity higher than 75%. Otherwise the silicification reaction is inhibited, with possible detachment of the material and/or formation of stains (in case of colored products).

Avoid application in presence of superficial condensation, under direct sunlight or strong wind. The adhesion of the product to the substrate is not guaranteed when the application takes place on surfaces that have salt efflorescence or are subject to humidity, therefore it is necessary to restore the masonry beforehand.

Special Warnings

Respect the climatic conditions of application indicated above and protect surfaces from rain and humidity for at least 48-96 hours (depending on climatic conditions), to reduce the risk of washouts. This allows for complete drying of the product and regular silicification. If, during this interval, there are rainy events or events with high humidity (mists and/or superficial condensation, especially in autumn), translucent drippings (so-called "slugs") may form. This phenomenon does not affect the quality of the product and can be eliminated by washing with water or waiting for the next rainfall.

MASK AND PROTECT THE AREAS THAT ARE NOT TO BE PAINTED, AS SILICATE CAN ATTACK GLASS, METALS, CERAMICS, ENAMELS, PAINTS, MARBLE AND GRANITE.

Safety instructions

The product does not require hazard labeling under current regulations. Use the products according to current hygiene and safety regulations. After use, do not dispose of containers in the environment. Let the residues dry well and treat them as special waste. For further information please refer to the safety data sheet.

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TECHNICAL DATA	PERFORMANCE
Binder type	Potassium silicate modified with compatible binders
Appearance	in dense granular/pigmented paste
Specific weight(UNI EN ISO 2811-1) 25°C±2	1900 g/l ± 50 g/l
Brookfield viscosity (ASTM D2196) 25°C±2	70.000 ÷ 80.000 cP depending on the granulometry
Water vapor permeability and classification (UNI EN ISO 7783-2)	V = 225 g/m ² 24h Class I (high permeability)
Equivalent air layer thickness (UNI EN ISO 7783-2)	Sd = 0,08 m
Vapor permeability μ	ca. 50
Liquid water permeability and classification (UNI EN 1062-3)	w24 = 0,24 kg/m ² h ^{0,5} Class II (medium permeability)
Suitable for facade protection as it complies with the KÜNZLE theory (DIN 18550) where w24 < 0,5 kg/m ² h ^{0,5} and Sd<2 m	Sd · w24 = 0,022 kg/m h ^{0,5}
VOC content (DIR. 2004/42/CE)	Paint for exterior walls of mineral substrate. EU limits for subcategory c, type BA 40 g/l (2010) This product contains maximum 40 g/l of VOC.
Application	Steel and plastic lint
Overpainting	16-48 hours
Reaction to fire (EN 13501-1)	A2-s1, d0

GRANULOMETRY	LAYERS	CONSUMPTION	RETURN
1,2 mm	one layer	2,2-2,5 kg/m ²	0,40-0,45 m ² /kg
1,5 mm	one layer	2,8-3,2 kg/m ²	0,30-0,35 m ² /kg
2,0 mm	one layer	3,0-3,5 kg/m ²	0,28-0,33 m ² /kg
3,0 mm	one layer	3,6-4,0 kg/m ²	0,25-0,28 m ² /kg

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