

## LicataSil

Mineral coating made with potassium silicate paste, ready for use, conforming to standard DIN 18363; high breathability and good water-repellency, it is an ideal decoration during styling/functional restoration work on façades. Low dirt pickup and offering natural mould-proof (PH 11) and anti-algae properties, it is certified in accordance with ETICS standards, and it is suitable for use in *licatatherm* external solid insulation systems.



**LicataSil** is a mineral coating made with water-dispersed potassium silicate paste, ready for use and which can be pigmented. It conforms to standard **DIN 18363** in regard to the pureness of silicates, and it is specifically designed for work on new or existing façades as well as the decorative phase of reinforced skim coating or in *licatatherm* external solid insulation systems. Owing to its formula, **LicataSil** combines superior permeability to water vapour with good water-repellency and low dirt pickup. Available in multiple colours, it proves particularly suitable for restoration work in historic city centres, since it can be used to achieve special styling effects also with slight shadings on the façade. The normal properties of silicate lend **LicataSil** an outstanding natural protection against algal and mould growth (PH 11). Combined with colouring pastes, it guarantees good durability, gloss and full colours. Available in 4 particle sizes.



### MAIN AREAS OF APPLICATION

**LicataSil** is recommended for decorating external surfaces, whether new or existing, on residential industrial or commercial buildings. IT is advisable to use the product on seasoned substrates, in other words generally after a curing time of four weeks. IT is applicable to substrates such as:

- *licatatherm* thermal insulation systems
- Thermal renders
- Lime/cement based renders or skim coatings
- Reinforced skim coating in façade restoration work
- Concrete
- Prefabricated concrete panels

For application on other types of substrates, please contact our engineering department.

### CHARACTERISTICS

- Extra high breathability: the careful choice of raw materials, teamed with the typical property of silicate, lend this coating excellent permeability to water vapour values.
- Workability: the thixotropy of the coating combines excellent spreadability of the coating with good adhesion to the substrate to minimise any material peeling during processing.
- Outstanding adhesion strength: the pure silicate based composition lends **LicataSil** outstanding adhesion properties since it reacts chemically with the mineral substrate via a natural process called silicatisation
- Protection against algal and mould growth: the natural highly alkaline properties of silicate (PH 11) prevent the conditions for the formation of bacterial growth such as moulds, algae, etc.



## APPLICATION METHOD

### Preparing the substrate

If the surface is old, you will need to remove any blistering parts, in the process of peeling or not sufficiently firm, making sure you restore them subsequently to recreate proper flatness. If the surface is new, we recommend you pre-treat the substrate with a coat of **Primer Ocram**, in order to even out and reduce absorption, while on existing surfaces presenting a "chalking" effect, apply **Nano Primer** or **Acril Primer Plus** to make the surface more compact. On uneven surfaces, apply a coat of **Primer Ocram**. If the substrate presents mould or algal growth, pre-treat the surfaces affected with suitable biocide such as **Sanus**. The substrate ready for application must be clean, flat, firm and free of any release agents.

### Preparing the product

The product is ready for use and it can be applied by hand or using dedicated equipment. IT is in any case advisable to mix the product using a paint mixer whisk in order to soften the paste, and, in the case of coloured products in medium/strong shades, to even out the paste with the pigments.

### Application

For application by hand, apply the product onto the substrate using a normal stainless steel trowel and mix it using the plastic trowel, crushing and stirring the product in a circular motion. Coating laying that is not applied in a single processing cycle, in an uneven or discontinuous manner could easily create chromatic alterations or "voids" in the coating pattern.

The use of different types of trowels, or mixing with different circular trowel movements during application could compromise the homogeneity of the final appearance of the finish.

Make sure the surfaces being laid are not exposed to direct sun rays, to wind, and that laying is not carried out in the presence of mist or fog or high degrees of humidity in the air. In the event of direct exposure to sun rays, plan for suitable shielding that will prevent the substrate from overheating. Proper shielding will also make it possible to avoid possible chiaroscuro effects on the colour of the coating.

Make sure the temperature of the room and of the substrate during application falls between +5 °C and +35 °C.

## PRODUCT INFORMATION

Appearance	Paste - White
Particle size and yield	well rounded 1.0 mm - approx. 1.7 kg/m <sup>2</sup> well rounded 1.2 mm - approx. 2.0 kg/m <sup>2</sup> well rounded 1.5 mm - approx. 2.6 kg/m <sup>2</sup> well rounded 2.0 mm - approx. 3.2 kg/m <sup>2</sup> angular 2.0 mm - approx. 3.0 kg/m <sup>2</sup>
Dilution	Ready to use
Drying time	approx. 3-4 hours at +20 °C to touch approx. 24 hours at +20 °C completely
Application temperature	between +5 °C and +35 °C and 70% R.H.
Storage	12 months, if kept in the original sealed bucket
Packaging	25 kg polypropylene bucket
Binder	Potassium silicate
Specific weight	1,90 kg/L
Dirt pickup	Low
Gloss	Matt
VOC (Directive 2004/42/EC) for external wall coating (Cat A/c):	< 30g/L VOC

**PERFORMANCE LEVELS according**

Characteristic	Test Method	Normative requirement	Performance
Permeability to water vapour	UNI EN ISO 7783/2 - 2001	V1 (high) V5 (low)	V1
Water absorption	UNI EN 1062/3-2001	W1 (high) W3 (low)	W3
Adhesion	ISO 4624:2002	> 0.3 MPa	> 0.3 MPa
Durability	UNI EN 13687-3	> 0.3 MPa	> 0.3 MPa
Thermal conductivity	UNI EN 1745		$\lambda=0,70$ W/(m K)
Reaction to fire	UNI EN 13501-1		Euroclass A2 S1 d0

**WARNINGS**

- We advise against application on frozen or thawing substrates.
- In the case of critical substrates or those other than those specified, it is a good idea to check them for suitability beforehand and contact our engineering department.
- Store the coating cans in a place sheltered from direct exposure to sunlight and at temperatures not below +5 °C to avoid compromising the quality of the material.
- Always check the material prior to application, to make sure the colour tone matches the one required.
- Any complaints concerning the colour tone will not be accepted after application.
- It is impossible to guarantee drying without differences in colour (spots) considering:
  - the differences in atmospheric and physical conditions in which a building may be;
  - the presence of scaffolding;
  - the conditions of the substrates (such as structure, absorbency, etc.);
  - the use of natural raw materials.
- Protect against direct sun rays and heavy rain for the first 48-72 hours. The actual temperature and the degree of air humidity may speed up or slow down the drying process.
- Protect your eyes and hands during application.
- Wash the tools with water after use.

**SAFETY**

As regards the information concerning proper product disposal, storage and handling, please consult the relevant Safety Data Sheet.

**NOTES**

This technical data sheet replaces and cancels all previous versions.

The indications and performance levels provided in this document are based on our current technical-scientific knowledge and in any case should be considered as purely indicative since the conditions of use are in no way under our control. The purchaser must therefore check the suitability of the product for his or her specific needs, assuming all responsibility deriving from its use. Our technical-sales network guarantees a speedy response and is at your disposal for any clarifications or queries regarding the use and processing of **licata SpA** products.

**Data Sheet ref.: 110/17.1**

