

NanoSil Paint

Paint for professional use based on potassium silicate for external use complying with the standard DIN 18363 with photo catalytic action. Specific for the decoration of new/ existing façades in buildings exposed to strong environmental pollution, protecting them from harmful substances and gases. Free from solvents and preservatives, it has excellent anti-moulds and algae-resistant properties.



NanoSil Paint is a potassium silicates based paint for external use complying to the standard **DIN 18363** and supplemented with an innovative nanometre pigment that gives the paint photo catalytic properties. The next generation additives present in **NanoSil Paint** allow the oxidation of polluting particles making them inert substances, thus preventing the surface formation of efflorescences and/or dark spots. The excellent adhesive power and excellent whiteness makes it ideal in the decoration of existing or new façades thanks to its natural self-cleaning properties. It combines a great permeability to steam with excellent anti-moulds and algae-resistant properties and despite being a solvent free aqueous base paint. **NanoSil Paint** is particularly suitable also for the external painting of underpasses and tunnels. It can be stained only in light shades.



MAIN FIELDS OF USE

NanoSil Paint is indicated for the decoration of indoor/outdoor, new or existing bases, on residential, industrial or commercial buildings. It is advisable to use the product on cured bases, i.e. after a curing time of at least four weeks. It can be applied on bases such as:

- Cement base civil finishing
- Façades already painted, after careful inspection and cleaning of the base
- Tunnels, underpasses
- Cement
- Concrete

For applications on different substrates, please contact our technical department.

CHARACTERISTICS

- Photo catalytic and self-cleaning: the addition of special nanometre pigments gives **NanoSil Paint** specific photo catalytic properties that allow the oxidation of polluting substances deposited on the surface.
- Antibacterial Action: thanks to the action of the photo catalytic oxidation-reduction and decomposition of the micro-organisms, **NanoSil Paint** is an excellent anti-moulds and algae-resistant.
- Ideal in restoring façades: specific for renovations and aesthetic restoration of existing façades, combines a high adhesive power to an excellent whiteness.
- Mineral product: paint formulated with potassium silicates in aqueous dispersion and solvents free, **NanoSil Paint** combines multiple application properties to a totally mineral matrix allowing greater comfort during the application phase and minimizing the risks to health.
- Breathable: formulated with mineral binders, **NanoSil Paint** creates a non-filming micro porous layer, therefore breathable.

APPLICATION METHOD

Preparation of substrate

Mechanically remove any flaking areas or parts which are starting to detach. For small areas, use suitable products for repair and to restore smoothness. Clean the surfaces to remove any traces of dust or detergents, oily substances, mineral greases, etc.

Before painting, it is always necessary to apply before:

- **NanoSil Primer** - fixative in aqueous solution with photo catalytic action

Preparation of the product

IT IS possible to dilute **NanoSil Paint** with clean water in the following ways:

- Application with brush or roller: 10%-15% water

After dilution, IT IS advisable to mix the paint for a few minutes using a mixer whisk to make the mixture smooth.

Application

NanoSil Paint must be applied manually by roller or brush in two or more cross-over layers in order to achieve perfect coverage and the desired finish. For multiple applications, apply successive layers about 3 hours apart.

Particularly absorbent substrates or unfavourable climatic conditions (areas subjected to strong air currents, high temperatures, etc.) can lower the open paint time to just a few minutes, therefore, you must constantly check that a surface film does not form and if it dries out too quickly. **NanoSil Paint**, in ideal conditions, cures sufficiently for successive applications after approximately 3 hours (+20 °C and R.H. 70%) and full curing 24 hours after the last coat.

Do not apply **NanoSil Paint** on substrates that have a film of water on the surface, are wet or exposed to extreme conditions, such as walls exposed to strong sunlight or frost.

Make sure that the ambient temperature and that of the substrate during application is between +5 °C and +35 °C.

PRODUCT INFORMATION

Appearance	Liquid - White
Yield	0.300 – 0.350 kg/m ²
Dilution	10% - 15%
Drying time	3-4 hours at +20 °C to touch approx. 24 hours at +20 °C fully dry
Application temperature	between +5 °C and +35 °C and 70% R.H.
Storage	12 months if stored in the original, unopened container
Packaging	20 kg polypropylene bucket
Binding agent	Potassium silicate
Specific gravity	1.40 kg/L
Dirt pick-up	Low
Brightness	Ultra-matt
VOC (Directive 2004/42/EC) for external wall coating (Cat A/c):	< 30g/L of VOC



WARNINGS

- Not suitable for frozen or thawing substrates.
- In the event of difficult substrates or ones differing from those listed, perform a suitability test beforehand and contact our technical department.
- Store the containers in places out of direct sunlight and at temperatures not below +5 °C to avoid compromising the quality of the material.
- Always check the material before applying it to make sure that the colour matches the one requested.
- Any claims about the colour shade will not be accepted after application.
- It is not possible to guarantee drying with colour differences (stains) due to:
 - the different atmospheric and physical conditions in which the building is located;
 - scaffolding;
 - the conditions of the substrate (such as structure, absorption aspect, etc.);
 - the use of natural raw materials.
- Protect from direct sunlight and heavy rainfall for the first 48-72 hours. The effective temperature and degree of humidity may speed up or slow down the drying process.
- Protect eyes and hands during application.
- After using the product, wash the tools with water.

SAFETY

Please consult the safety data sheet for information about product disposal, storage and usage.

NOTES

This data sheet replaces and voids all previous versions.

The indications and specifications given in this document are based on our current technical and scientific knowledge. They should, however, be considered as purely indicative because we have no control over the conditions in which the product will be used. The purchaser must, therefore, check that the product is suitable for his specific requirements. Our sales and technical network guarantees rapid consultancy services and is at your disposal for any clarifications and questions you may have about the use and application of **Licata SpA** products.

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