

SILICATE

CALSILIT F

Silicate paint with an addition of hydrophobising substances



MAIN ADVANTAGES

- Mineral nature
- Resistance to adverse weather conditions
- Exceptional vapour permeability
- Increased resistance to soiling
- Effective damp-proofing
- Very high coverage
- Natural resistance to algae and fungal growth

AREAS OF APPLICATION

A high-quality topcoat paint based on potassium water glass intended for applying paint coatings outside buildings, including in **KABE THERM EPS**-based EWI system and in **KABE THERM MW** EWI-system based on mineral wool. The product is intended for use only on mineral substrates (such as: concrete, traditional lime, cement-lime and cement renders, as well as thin-coat mineral, silicate renders). It is especially recommended for primary painting of mineral substrates and for use at damp places on contemporary and historical buildings. It creates a fully mineral, vapour permeable coating, allowing for free evaporation of moisture from walls and, at the same time, due to the application of hydrophobising substances, it efficiently protects the façade against precipitation.

A substrate should be primed with **CALSILIT GF** before applying the paint. **Note:** Due to the product specificity, it is not recommended to use it on gypsum substrates (i.e., stucco).

TECHNICAL DATA

Base binder: potassium water glass;

Pigments: resistant to UV radiation and atmospheric conditions inorganic coloured pigments;

The content of volatile organic compounds VOC: cat. A/c. The product contains less than 40 g/l/VOC;

Density: approx. 1.53 g/cm³;

Colours: white and colours from KABE colour chart and selected colours from the NCS colour chart (possible to obtain using inorganic pigments);

Gloss level: matt;

Thinner: water;

Average coverage: approx. 0.33 l/m² (with double painting on a smooth substrate);

Temperature of application (air and substrate): from +8°C to +25°C;

Relative air humidity: ≤ 75%;

Relative diffusion resistance of the layer with a thickness of

150 µm: $S_d = 0.02$ m (standard requirement: $S_d \leq 2.0$ m);

Surface absorption coefficient: $w = 0.07$ kg/m² · h^{0.5}

(standard requirement: $w \leq 0.5$ kg/m² · h^{0.5}).

Packaging: Disposable plastic packaging containing 5 and 10 litres of product.

Storage: Product should be stored in sealed packaging, in a cool room, but protected from frost.

Opened packaging should be tightly closed and used as quickly as possible.

Shelf life: 12 months from the date of production printed on the packaging, with originally sealed packaging.

HOW TO USE

SUBSTRATE PREPARATION: Substrate should be mineral, sound/stable (without scratches and cracks), degreased, clean and dry, and free of biological contamination and chemical efflorescence. In case of algae/fungi growth, the substrate should be cleaned mechanically and then washed with water and disinfected with **ALGIZID**. Any loose layers, not bound to the substrate (e.g., loose render or flaked coatings), should be removed. Old and/or dirty substrates should be washed and degreased with water and **CLEANFORCE** cleaning agent. For particularly uneven substrates, first use levelling compounds, and then smooth out the surface with **KOMBI FINISZ** levelling and smoothing compound. Small unevenness can be smoothed right away with **KOMBI FINISZ** levelling and smoothing compound. An absorbent substrate should be primed with an adequate product before applying base coats and/or levelling compounds. If the paint is applied on new mineral substrates (e.g., concrete, lime render, cement-lime render) – a minimum 2-week curing period is required. Before using the paint in the **KABE THERM SM** and **KABE THERM SM RENO**, as well as **KABE THERM MW** EWI systems, all layers should be applied in accordance with the requirements for external thermal insulation composite system (ETICS). The silicate paint can be applied to thin-coat mineral render only after min. 7 days of curing (at +20°C and 65% RH). **Note:** Directly before applying the paint, the surfaces made of materials susceptible to alkalis (i.e. wood, metal, glass or clinker brick) should be protected against splashing.

PRIMING: A substrate should be primed with **CALSILIT GF** before applying the paint. The curing period of the product applied to the substrate before applying the paint is about 24 hours.

PAINT PREPARATION: The packaging contains a ready-to-use product. If necessary, to dilute the paint, add a small amount of **CALSILIT GF** or water (by adding to the first painting max. 10% of volume and to the second one max. 5%). Quantity of added water or product may vary depending on the substrate type, drying conditions and application method.

APPLICATION: The paint should be applied on the substrate in two layers with a brush, roller or by spraying (including also "airless" method). The second paint layer should be applied only after the first one dries and sets completely, i.e. after min. 24 hours. It is recommended to use a special paint roller for façade paints made of woven polyamide with a bristle length of min. 18 mm. Use mechanical spraying only in windless weather. **Note:** The product is alkaline, therefore, it is necessary to protect eyes and skin. Safety clothing must be worn while carrying out any work. In case of contact with eyes, immediately rinse them thoroughly with plenty of water. If irritation develops, seek medical assistance.

Spraying parameters for an Airless sprayer:

Manufacturer	Device	Nozzle	Pressure [bar]	Filter [mesh]	Thinning [%]	Coverage [l/min]
WAGNER	ProSpray 3.21	0552-519	200	60	10-20	1.25
TITAN	Titan 450e	661-519	200	60	10	1.25
GRACO	UltraMax II 795	PAA621	200	60	5	3.6

DRYING: Typical setting time for one layer of paint applied onto a substrate is approx. 3 hours (at air temperature +20°C, 55% RH). Complete setting (hardening) of paint coating takes place after min. 24 hours. **Note:** At low temperatures and high air humidity, the paint drying time will be longer. Protect the fresh paint coating against precipitation and condensation until it sets completely.

USEFUL HINTS: In order to avoid colour differences, it is necessary to create a surface constituting a separate architectural whole in one work cycle with material from the same production batch. Paint application and setting should take place on dry days at temperatures between +8°C and +25°C. Tools should be cleaned with water immediately after finishing work. Application during direct exposure to sunlight, in strong winds or high air humidity is not recommended. In order to protect the completely unset paint coating against severe weather conditions, it is recommended to use appropriate protective meshes on scaffolds. **Note:** Low or high temperature, as well as high air humidity, may have a negative impact on the shade of the paint coat. Both too high and too low temperature during paint application and drying may lead to insufficient setting of the binder. As a result, further contact with water may cause washing out of the unset potassium water glass, which may lead to the formation of durable damp patches or discolouration.

ADDITIONAL OPTIONS: If paint is applied on substrates with cracks with a width of up to 0.3 mm (e.g., small shrinking cracks of the render coat), it is recommended to use paint reinforced with microfibrils for the first painting (an option available on request).