

**TECPINT SOL SILICATO TERMIC**

Thermal Silicate Mineral Paint for Interior and Exterior Use

DESCRIPTION:

TECPINT SOL SILICATO TERMIC is a highly specialised mineral paint for façades and interiors, formulated with a unique binder blend of silica sol and potassium silicate. This innovative combination allows application not only on mineral substrates but also directly onto a wide range of organic surfaces—including acrylic or plastic-based paints—without the need for additional primers or bonding agents. The product incorporates weather-resistant fillers and inorganic pigments, merging all the benefits of traditional silicate dispersion paints with the versatility of organic resin-bound coatings. Enhanced with glass and ceramic nanospheres, it delivers effective thermal insulation. Compliant with DIN 18.363.

PERFORMANCE:

Suitable for both renovation and new applications on stable, dispersion- or silicone-bound paints and renders, as well as mineral substrates. Not recommended for wooden surfaces, loosely adhering coatings, saponifiable old paints (e.g. certain oil-based paints), non-wettable substrates (such as enamels), or aerated concrete panels. Once the primer and topcoat have been applied, decorative glazes may be added. Not suitable for horizontal or inclined surfaces directly exposed to weathering. Thanks to its insulating microsphere technology, the coating helps reduce energy consumption by lowering heating and cooling demands.

KEY FEATURES:

Binder system: silica sol and potassium silicate blend
 Universal application
 Excellent weather resistance
 UV- and acid-resistant, anti-static
 Fire-retardant (Class A2-s1, d0 per EN 13501-1, test-certified)
 Lightfast pigments
 Matte mineral finish
 Breathable, film-free, microporous structure
 Highly water-repellent
 No added solvents
 No added plasticisers
 Naturally inhibits mould and algae growth through optimal moisture management
 Thermal insulating (thermal conductivity: insulating microbubbles 0.055 W/m·K)

TECHNICAL DATA:

Pigment lightfastness: A1
 Organic content: < 5 %
 pH: 11
 Specific gravity: 1.5 – 1.7 g/cm³
 According to DIN EN 1062-1
 Water vapour diffusion resistance: Sd 0.01 m (dry film thickness approx. 237 µm) – Class I (per DIN EN ISO 7783-2)
 Water vapour permeability: V ≥ 2000 g/(m²·day)
 Gloss level at 85°: 1.5 (dry film thickness approx. 100 µm), matte (< 1) per DIN EN ISO 2813
 Liquid water permeability (24 h): W < 0.1 kg/(m²·h^{0.5}) (dry film thickness approx. 340 µm) – Class III (< 0.1) per DIN EN ISO 1062-3

APPLICATION INSTRUCTIONS:

Ensure the substrate is sound, dry, clean and free from dust. On highly absorbent surfaces or those previously coated with poorly adhering paints, pre-treat with TECPINT SILICATE CONSOLIDATOR. Protect adjacent areas from splashes. TECPINT SOL SILICATO TERMIC can be applied by brush, roller or airless spray (nozzle 1.5–2 mm, pressure 75 bar). Stir thoroughly in the original container before use to ensure homogeneity and optimal texture. Apply two coats: the first diluted with 5 % water, the second undiluted. For enhanced thermal performance, a third coat is recommended. Allow a minimum drying time of 10 hours between coats. Apply evenly, avoiding thick layers. Wear safety goggles. Ambient and substrate temperature must be above +5 °C. Do not apply in direct sunlight or on sun-heated surfaces. Protect treated areas during and after application from direct sun, wind and rain—especially in summer. On unpainted plaster or plasterboard, first apply our primer TECPINT PRIMER.

Coverage (for two coats): 3.5 m²/litre; for three coats: 2.5 m²/litre. Surface texture may affect consumption.

Our technical support team is happy to provide further details contained in this datasheet and to advise on the most suitable systems, processes and products for your specific substrates, environments and requirements. This technical sheet is intended solely to inform and guide based on our expertise and experience; we cannot accept liability for consequences arising from product use, as application conditions and circumstances fall outside our control.