

# Silimper<sup>®</sup> Nano

## Silane-Siloxane nano-molecular impregnation compound

### Description of the product

Water-repellent & waterproofing, water-based silane-siloxane nano-emulsion that exhibits high penetration ability and hydrophobic performance, suitable for exterior and interior building surfaces.

### Applications

**Silimper<sup>®</sup> Nano** is suitable for the impregnation of vertical or inclined mineral porous substrates, such as concrete, plasters and renderings, asbestos cement, brick, roof tiles, stone with continuous surface (i.e. without cracks), protecting from water absorption without changing the appearance of the surface.

### Properties/Advantages

- Shows high penetration and deep waterproofing, due to its nano-molecular structure, reducing the water uptake
- Displays early repellence towards water, reacting chemically and bonding with the substrate, thus providing durable hydrophobicity
- It prevents rain from impregnating into the surface and protects the substrate from cracking due to frost.
- It is resistant to alkalis and prevents from efflorescence
- Improves the heat insulating properties of the substrate, reducing the heat conductivity
- Reduces dirt pick-up and limits fungal growth, thus facilitating the cleaning of the surface, allowing it at the same time to breathe
- Does not form sticky silicone films
- Does not change the original appearance of the surface
- Solvent-free and VOC-free

### Technical Characteristics

Density (EN ISO 2811.01) 1.00 ± 0.01 kg/l

pH value (ISO 1148) 7.5 – 8.5

Consumption 100-200ml/m<sup>2</sup> (The consumption depends on the application method and the absorptivity of the substrate)

Drying time (25<sup>0</sup>C) 1-4 hours

Recoating time (25<sup>0</sup>C) < 2 hours

Full cure time (25<sup>0</sup>C) 24 hours

Water penetration value (RILEM Test Method 11.4) 0 ml/min (concrete surface)

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### Application conditions

Ambient Temperature	From +5 <sup>o</sup> C to +35 <sup>o</sup> C
Substrate Temperature	From +5 <sup>o</sup> C to +35 <sup>o</sup> C
Substrate Moisture Content	< 5%

### Instructions for use

**Surface preparation:** Clean the surface from dust, mildew, dirt or any poorly adhering material. Use mechanical means or water blasting to clean the substrate. Avoid the use of detergents or soap, as they affect the adhesion of the product to the surface.

**Application:** Silimper<sup>®</sup> Nano is ready for use. Apply one layer on a dry surface with a brush, roller, or spray gun, working from the lower to the higher part of the substrate.

### Special notes

- Attains its full repellence to water within a few hours after its application and when the surface has been saturated during the application. For very absorptive and porous surfaces apply a second coat.
- Silimper<sup>®</sup> Nano should not be applied under wet conditions, or if wet conditions are expected to prevail during the drying period. If the surface has been cleaned by water blasting, it is advisable to let it dry for 2 - 3 days and apply the product afterwards.
- Allow at least 4 weeks to pass between the casting new concrete and the product's application.
- Silimper<sup>®</sup> Nano is not resistant to acids.
- For very absorptive and porous surfaces apply a two coats.

Colour	Milky white
Packaging	20L, 3L and 1L
Cleaning of tools	Use water
Storage stability	Silimper <sup>®</sup> Nano is stable for 18 months when kept unopened in its original container, protected from frost and direct sunlight