

Silimper[®] Nano

**Silane-siloxane, water-based nano-molecular
water-repellent impregnation compound**



Description

Silane-siloxane, one-component, water-based nano-molecular impregnation compound, with high penetrating ability and hydrophobic performance, ideal for applications on exterior and interior constructions surfaces as a water-repellent

Fields of application

Vertical (or inclined) mineral porous surfaces, such as concrete, cement mortars, plaster, bricks, roof tiles, joint grout, natural stone with continuous surface (i.e. without cracks)

Properties - Advantages

- Exhibits high penetration due to its nano-molecular structure, protecting from humidity and minimizing the water uptake
- Does not alter the appearance of the surface – no skin formation or yellowing
- Prevents rain from impregnating the surface and protects it from cracking due to frost
- Displays early repellence towards water, reacting chemically with the substrate
- Facilitates the cleaning of the surface by limiting dirt pick-up & fungal growth
- Presents high resistance to alkalis and prevents efflorescence
- Water vapour permeable, allowing the structure to “breathe”
- Does not contain solvents or toxic substances



Appearance (cured)

Transparent

Packing

20L, 3L and 1L

Certificates – Test reports

- CE certification acc. to EN 1504-2
Certificate of Conformity No. 1922-CPR-0386
- Test report by the external independent quality control laboratory Geoterra (No. 2020/190_26)
- Complies with the V.O.C. content requirements acc. to the E.U. Directive 2004/42/CE



Technical characteristics

Density (EN ISO 2811-1)	1,00kg/L (±0,05)
pH	7,5-8,5
Depth of penetration (EN 14630)	<10mm (Class I)
Hydrophobic performance - Drying rate coefficient (EN 13579)	>30% (Class I)
Water absorption & Resistance to alkalis (EN 13580)	<7,5% (water absorption) <10% (after immersion in alkaline solution)
Water penetration value (RILEM Test method 11.4, concrete surface)	0ml/min
Consumption: 100-200ml/m² in one layer (depending on the application method and the absorptivity of the substrate)	

Application conditions

Substrate moisture content	<4%
Relative air humidity (RH)	<80%
Application temperature (ambient - substrate)	+5°C min. / +35°C max.

Curing details

Drying time (+25°C, RH 50%)	1-2 hours
Dry to recoat (+25°C, RH 50%)	<2 hours
Full hardening (+25°C, RH 50%)	24 hours
<i>* Low temperatures and high humidity during application and/or curing prolong the above times, while high temperatures reduce them</i>	

Instructions for use

Substrate preparation

The surfaces must be stable and continuous (without cracks), clean, dry, protected from rising moisture and free of dust, oil, grease, mould and loose materials. Cleaning must be done by mechanical means or by water jetting. It is not recommended to use detergents, as they may affect the material's performance.


Application

Silimper® Nano is ready to use. After thorough stirring, **Silimper® Nano** is applied onto the dry surface in one layer, by roller, brush or spray, until full impregnation. The application is done starting from the highest parts of the surface and ending at the lowest parts. On highly absorbent substrates, it is recommended to apply an additional layer within 2 hours after applying the previous one. The application surface must remain dry for at least 24 hours after the application.

Special notes

- **Silimper® Nano** should not be applied under wet conditions, or if wet conditions or rainy weather are expected to prevail during the curing period of the product
- If the substrate has been cleaned by water jetting, **Silimper® Nano** should be applied after the surface has dried completely (it is recommended to wait for a period of 2-3 days)
- In case of new concrete, **Silimper® Nano** must be applied after at least 4 weeks have passed since its laying
- **Silimper® Nano** is not resistant to acids
- It should not be applied on surfaces that are subjected to hydrostatic pressures

Appearance	Milky white liquid
Appearance (cured)	Transparent
Packing	20L, 3L and 1L in plastic pails
Cleaning of tools – Stains removal	By water immediately after application. In case of hardened stains, by mechanical means
Volatile organic compounds (V.O.C.)	V.O.C. limit acc. to the E.U. Directive 2004/42/CE for this product of category AhWB: 30g/l (Limit 1.1.2010) - V.O.C. content of the ready-to-use product <30g/l
UFI code	G9D0-M0Y5-P00W-EW3A
Versions	Silimper® Nano LM , water & oil repellent, water-based fluorinated nano-molecular impregnation compound Neotex® Silimper , siloxane-based water repellent of high penetrating ability
Storage stability	18 months, stored in its original sealed packing, protected from frost, humidity and exposure to sunlight

 1922	
NEOTEX S.A V. Moira str., P.O. Box 2315 19600 Industrial Area Mandra, Athens, Greece 20	
1922-CPR-0386 DoP No.: 4950-39 EN 1504-2 Silimper® Nano Surface protection products Hydrophobic impregnation	
Depth of penetration	Class I
Water absorption and resistance to alkali	<7,5% (water absorption)
	<10% (after immersion in alkaline solution)
Drying rate coefficient	Class I
Dangerous substances	Complies with 5.3

The information supplied in this datasheet, concerning the uses and the applications of the product, is based on the experience and knowledge of NEOTEX® SA. It is offered as a service to designers and contractors to help them find potential solutions. However, as a supplier, NEOTEX® SA does not control the actual use of the product and therefore cannot be held responsible for the results of its use. As a result of continual technical evolution, it is up to our clients to check with our technical department that this present data sheet has not been modified by a more recent edition.

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