

# TECNADIS PRS

Nanotechnology-based <u>water and oil repellent</u> with high performance for both <u>vertical</u> and <u>horizontal</u> surfaces of porous materials



# TECNADIS PRS PERFORMANCE

Hydrophobic and anti-stain solution with abrasion resistance designed for both vertical and horizontal surfaces of porous materials.

### **CHARACTERISTICS**

PROTECTION AND EASY CLEANING: Protection against water, oil, humidity, spills, etc. It also facilitates the cleaning of graffitis.

**INERT AND DOES NOT FORM ANY FILM:** Does not react chemically, leaving the substrate unchanged, allowing, in addition, the total breathability of the material

LONG LIFETIME: Guaranteed durability higher than 10 years against all type of external environmental conditions.

**EXCELLENT ABRASION RESISTANCE:** maintains functionality after applying different abrasions (footstep, rolling...).

**OPTIMUM RESISTANCE TO UV:** It is not affected by solar radiation since it does not lose its properties and does not modify its aspect.

EASY APPLICATION: Quick, using conventional systems and without needing of additional curing. Ultrafast drying.

TOTALLY RE-APPLICABLE: No need to remove previous treatments.

# **IDEAL SOLUTION FOR ANY KIND OF SURFACE!**









Concrete/mortar

Natural stone

Wood



SUITABLE for: Marble, slate, granite, limestone, sandstone, WPC (Wood composite), alabaster, plaster, hydraulic mosaic, wood, concrete, brick, terrazzo, etc.

#### **TECNADIS PRS PERFORMANCE AGAINST ITS MAIN COMPETITORS**

Results obtained in laboratory tests in relation to main competitors

- WATER REPELLENCY: TECNADIS PRS PERFORMANCE has a higher contact angle in comparison with any of its competitors, which results in a higher water repellency (better hydrophobic effect-very spherical drops). In addition, its best advantage is that the surface does not get wet.



It can be clearly seen how the material surface gets wet with products such as Sikaguard 917W and Filafob, while with the <u>TECNADIS PRS PERFORMANCE</u> is not wet at <u>all</u>.

- <u>PERMEABILITY</u>: In contrast to traditional water/ oil repellent products based on siloxanes, *TECNADIS PRS PERFORMANCE* does not form any continuous film, allowing the breatheability of the treated substrate. Tests developed by external laboratories show a decrease on water vapour permeability lower than 10%.
- **TOTAL RESISTANCE TO UV**: The **nano-structure** of the product <u>does not have any</u> <u>weakness</u> to UV, a fact which is not true for the competitors products based on siloxanes and which form film, since its organic structure is much easily breakable by this type of radiation. Tests carried out by external laboratories show a variation in the permeability lower than 3% after its exposure to UV, while its hydrophobic as well as oleophobic effects and abrasion resistance remain unchanged.
- <u>REAPLICABILITY</u>: Some products of the competence do not allow re-applying. The TECNADIS PRS PERFORMANCE works perfectly after being re-applied. In relation to other products, all of them leave water and oil stains once the liquids are removed from the Stone re-applied.

#### **TECNADIS PRS PERFORMANCE AGAINST ITS MAIN COMPETITORS**

Results obtained in laboratory tests in relation to main competitors

- **OIL REPELLENCY**: *TECNADIS PRS PERFORMANCE* has a <u>contact angle to oil higher</u> than its competitors, which results in a higher repellency to oil. In addition, in contrast to its competitors, *TECNADIS PRS PERFORMANCE* is the only product which <u>doesn't leave stains</u> on the surface after removing the oil with a cloth.



The oil stains are clearly seen on the surfaces of products such as Capstone ST 200 and Protect Guard MG, while <u>TECNADIS PRS PERFORMANCE has no stains</u>.

- **ABRASION RESISTANCE**: In contrast to its competitors, *TECNADIS PRS PERFOR-MANCE* is the only product which has a high resistance to abrasion maintaining both the hydrophobic and oleophobic effect after several abrasion cycles with a scourer.



# **TECNADIS PRS PERFORMANCE AGAINST ITS MAIN COMPETITORS**

#### Summary of the results obtained in laboratory tests in relation to itsmain competitors.

PRODUCT (Company)	HYDROPHOBIICITY	OLEOPHOBICITY	ml/m² (aprox.)	€/m² (0-15€)
TECNADIS PRS PERFORMANCE (TECNAN)	156,49 Water does not penetra- te into substrate	127,6º Oil does not leave stain	<b>100</b> 80-250	
Sikaguard 917W (Sika)	142,3º Water penetrates into substrate	110,1º Oil leaves trace	<b>100</b> 75-150	
Capstone ST200 (Dupont)	144,8º Water penetrates into substrate	123,8º Oil leaves stain	100 -	
Protect Guard MG (Guard Industry)	120,4º Water penetrates into substrate	115º Oil leaves stain	<b>60</b> 40-80	
Filafob (FILA)	80,5º Water penetrates into substrate	112º Oil leaves stain	<b>100</b> 100-200	
Ultra Ever dry (Ultra Tech Inc)	141,8º Water does not penetra- te into substrate	94,9º Oil leaves stain	<b>230</b> 230-270	

In **bold**, used yield ; In *italics*, range of yields oaccording to data sheet.

\* Tests carried out in the laboratories of TECNAN (Subject to variations depending on the application procedure and selected substrate ).



Avoid microorganisms



Roofs



Avoid humidity, vegetation



Terraces



Avoid deterioration



Facades



Avoid stained



Indoor floors



Facilitates graffiti cleaning



**Outdoor floors** 

## Some examples of the application of TECNADIS PRS PERFORMANCE



Botín Center Tunnel Santander Bank (Santander)



Residential urbanization (Santander)



lla (Sevilla)



Lighthouse of the Matxitxako



(Badalona)



Grand Palladium White Island Resort & Spa Hotel (Ibiza)



Alabaster building of La Rioja Government (La Rioja)



**HISPANIA Res**taurant (London)

#### TECNADIS SOLUTIONS - OTHER READY TO USE NANOPRODUCTS

#### **AQUASHIELD Ultimate**

Water repellent product for facades of porous materials.



#### FACTORY

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#### AQUASHIELD FORTE



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