

FICHA TECNICA

Version: nº2 Edition: 30/05/2017

AQUASHIELD FORTE

Reinforced water repellent based on nanoparticles for facades made of porous materials

Product description	Reinforced hydrophobic / water repellent based on nanoparticles of very high performance. Transparent, non-visible, breathable, high performance protector , mainly designed for the protection of porous and low porosity materials against the action of water in facades and other vertical surfaces, especially for areas of high rainfall with serious absorption problems through these constructive substrates.
Applications	The active compound that produces water repellency is ceramic nanoparticles dispersed in an organic media (isopropanol), therefore AQUASHIELD FORTE is compatible with any porous constructive substrate. Designed to be applied as a water repellent surface treatment on all types of porous surfaces with special application on facing bricks, mortars, monolayers, concrete, prefabricated, natural stone and mixed surfaces where different materials and porosities are combined. Used as a facade protector in both refurbishment and new construction. In the cleaning and maintenance sector it is also used as an anti-urine due to its great repellent effect that prevents the accumulation of dirt and bad smells $\widetilde{PREFABRICATED} \qquad \widetilde{PREFABRICATED} \qquad PREFABRI$
Features and advantages	 Avoid the accumulation and penetration of water on the treated surfaces. It does not form film, does not cross-link, allowing the complete breathability of the substrate. Completely transparent, respecting the natural color of the original substrate. Good resistance and durability when the surfaces are not exposed to continuous mechanical abrasion. Guaranteed durability of 10 years. Total UV resistance. Totally re-applicable. The active compounds do not react with the surface, maintaining the substrate unaltered. Thanks to its high water repellency (large rebound of water on the surface) it keeps surfaces free of dust and dirt for longer.
Product information. Composition and phisico-chemical properties.	 Color: Colorless, translucent liquid. Formats: 1L, 5L and 25L (higher volumes on request) Storage: 12 months from the date of manufacture in the original sealed containers at temperatures between 5°C and 30°C. Volatile Organic Content (VOC) >80% wt Density: 0,79 g/ml Viscosity: 5 cP Boiling point: 82,5°C Flash point: 11,85°C Solvent: Isopropanol

TECNOLOGIA NAVARRA DE NANOPRODUCTOS S.L. (TECNAN) • Área industrial Perguita, 1 • 31210 Los Arcos (Navarra-SPAIN) Tel: +34 948640318 • <u>www.tecnan-nanomat.es</u> • <u>tecnan@tecnan-nanomat.es</u>



FICHA TECNICA

Version: nº2 Edition: 30/05/2017

AQUASHIELD FORTE

Reinforced water repellent based on nanoparticles for facades made of porous materials

Surface preparation	Before application, thoroughly clean the surfaces and remove all tra and cleaners. The Surface must be completely clean. Avoid the presence of fissures or cracks in the substrate. It is recomm prior removal thereof.	-
How to use	 SHAKE THE CONTAINER BEFORE USE. The liquid is directly applied on the surface using, as far as possil air gun (airless standard low pressure). In case of not having a also applied using a roller or brush. It is not necessary the completely dried, the product can be applied over the surface recommended to apply it in two perpendicular coats to ensure a the surface and thus, achieving the better effectiveness of the the of the product properties. You can apply the second coat immediate. 	sprayer, it can be nat the surface is slightly wet. it is a total coverage of creatment and use nediately after the
	Application (2 coats):	0 cm uniform coating
	Application tools: After use, clean them with any type of general s with the working tools (alcohol, acetone, universal solvent).	olvent compatible
Yields and storage	 Dilution: none Yield: Estimation based on the material porosity. 	
	APPROXIMATED TOTAL YIELDS	
	MATERIALS	m²/litre
	Marble and low porous limestone, terrazzo, polished concrete. Granite, non-polished concrete.	<u> </u>
	Sandstones, porous limestones, facing bricks.	5
	mortar, coarse concrete.	4
	Extremely porous limestones and sandstones.	3-3,5
	 Complete drying time: 24 hours (within a few hours it can already protective effect). Operating temperature: between 5°C and 30°C. Storage temperature: between 5 y 30 °C; protected from direct su original container tightly closed. 	

 TECNOLOGIA NAVARRA DE NANOPRODUCTOS S.L. (TECNAN) • Área industrial Perguita, 1 • 31210 Los Arcos (Navarra-SPAIN)

 Tel: +34 948640318 • www.tecnan-nanomat.es
 • tecnan@tecnan-nanomat.es



FICHA TECNICA

Version: nº2 Edition: 30/05/2017

AQUASHIELD FORTE

Reinforced water repellent based on nanoparticles for facades made of porous materials

Observations	 The high water repellent effect showed from the first time (superhydrophobicity – contact angle of the water drops with the surface > 150°) decrease in those surfaces exposed to a continuous abrasion, especially in wet conditions, although it is still maintained the protection against water. It is recommended to apply at temperatures between 5°C and 30°C (optimum range). Perform an initial test on those painted surfaces to avoid the appearance of discoloration caused by the solvent of the product (isopropanol). Possible future applications of water-based paints, reconstructions with different mortars or other products on the treated surfaces may be limited by the hydrophobic effect. This product is not suitable for medical or pharmaceutical uses.
Handling precautions	The product safety information necessary for its safe use is not included in this document. Before using this product, read the material safety data sheets and the container labels for safe use and for information on physical hazards and health. The material safety data sheets are available and are supplied by TECNAN S.L. The application of the product must be carried out in a well-ventilated place. It contains a volatile solvent (Isopropanol).
Limited warranty information	Please read carefully: The information contained herein is offered in good faith and is believed to be accurate. However, because conditions and methods of use of our products are beyond our control, this information should be used properly, verifying in preliminary tests that the product is suitable for its intended use. Suggestions of use shall not be taken as inducements to infringe any particular patent. The only guarantee of TECNAN S.L. is that the product will meet the sales specifications in effect at the time of shipment. Your exclusive remedy for breach of this warranty is limited to the refund of the purchase price or replacement of any product that is not warranted. TECNAN S.L. specifically disclaims any express or implied warranty of fitness for a particular purpose or marketing. TECNAN S.L. disclaims responsibility for any damage caused accidentally.