

DATA SHEET

Version: nº5

Edition: 22/07/2024

TECNADIS AQUAPORE Water-based hydrophobic product for porous facades

Product description

Hydrophobic product based on nanoparticles of very high-performance dispersed in water. **Transparent, non-visible, breathable, high-performance protector**, mainly designed to protect porous building materials (facades or other vertical surfaces) from the action of water. Non-flammable formula, non-hazardous to health.

Uses

The active compound that produces the water repellency are ceramic nanoparticles dispersed in water, therefore **TECNADIS AQUAPORE** is compatible with any porous building substrate.

Designed to be applied as a water repellent by means of surface treatment on all types of porous surfaces, with special application on natural stone (marble, slate, granite, limestone, sandstone). Also suitable for the protection of concrete and brick.

Used as a protector of facades both in rehabilitation and in new construction.

In the cleaning and maintenance sector it can also be used as anti-urine due to its great water repellent effect that reduces the accumulation of dirt and bad smells.

Due to its water-based composition, TECNADIS AQUAPORE is also suitable for indoor applications.



Features and advantages

- It reduces the absorption of water and delays the appearance of any external agent produced by humidity (algae, moss, mould, etc.).
- It does not form film, does not cross-link, allowing the complete breathability of the substrate.
- It does not modify the appearance, colour or structure of the treated substrate (in the case of non-homogeneous materials, with previous treatments, or with alterations/ degradations due to microorganisms, it is recommended to carry out a preliminary test before application to verify this).
- As a hydrophobic protector, it provides anti-carbonation properties in concrete and mortar treatments.
- High resistance and great durability on surfaces not subjected to strong mechanical action / continuous abrasion.
- High UV resistance.
- Unlike most conventional products, it allows for complete re-application without the need to remove previous product remains.
- The active compounds do not react with the treated surface, keeping the material unaltered.
- Thanks to its high repellency to water (large rebound of water from the surface) it keeps surfaces free of dust and dirt for longer.
- Suitable for concrete, brick, tile, wood, natural stone, etc., both indoor and outdoor applications.
- Non-flammable formula.



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Product information.

Composition and physicochemical properties.

• Colour: milky white.

Packaging: 1L, 5L and 25L (larger 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) <10% wt

Density: 0,998g/ml
 Viscosity: 2,19 cP
 Boiling point: 100°C
 Solvent: Water



Surface preparation

Before application, clean the surface and remove all traces of detergents and cleaners. The surface must be completely clean. Avoid the presence of fissures or cracks in the substrate. It is recommended, if possible, to repair them beforehand. Pay special attention also to materials with high porosity that may have transport pores or open pores of a considerable size as this may influence the final amount of product to be applied. For this purpose, it is recommended to carry out a preliminary test as described in the section "Yields and storage". In case of presence of microorganisms (moulds, algae, etc.) it is recommended to remove them thoroughly before the application of the product.

Application information

SHAKE THE CONTAINER BEFORE ITS USE.

■ The product is applied directly on the surface preferably by spraying (airless, turbines, backpacks or hand-held sprayers). The application of two cross coats is recommended to ensure total coverage of the surface, achieving greater effectiveness. Apply the second coat immediately after the first one. The optimal effect will be achieved after a complete drying time of 48 hours.

Graphic description:

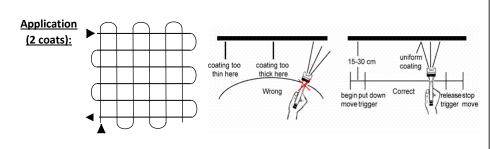


Figure 1

Figure 2

Working tools: After use, clean with plenty of water or with a compatible solvent.

Yields and storage

- Dilution: none
- Yield: Always apply the required amount of product, which will depend on the quality and porosity of the material. It is recommended to carry out a preliminary test before application in order to determine the proper yield in each case. The following is a reference table with generic yields, although there can always be exceptions, so it is advisable to test beforehand to ensure the necessary quantity:



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	TOTAL YIELDS (for guidance only)	
	MATERIAL	m²/L
	Marble and low porous limestone, terrazzo, polished concrete.	8
	Granite, non-polished concrete.	6-7
	Sandstone, porous limestone, facing bricks	5 4
	Monolayer mortar, rough concrete. Very porous limestone and sandstone.	3-3,5
	Complete drying time: 48 hours.	
	Operating temperature: between 5°C and 30°C. Storage temperature: between 5°C and 30°C; protect from direct sunlight; store in original container tightly closed.	
Observations	 The high water repellent effect it exhibits from its first moments (superhydrophobicity - contact angle of water droplets with the surface >150°) decreases on surfaces subjected to continuous friction, especially in humid conditions, although the water protection is still maintained. It is recommended to apply the product at temperatures between 5°C and 30°C. Carry out an initial test on painted surfaces to check compatibility. In case of future applications of water-based paints, reconstructions with different mortars or other products on the treated surface may be limited by the existing hydrophobic effect. As far as possible, its application is recommended after finished works, achieving optimal protection by not being affected by aggressive materials that may be used on site and/or extraordinary or complex circumstances that may occur. This product is not suitable for medical and pharmaceutical use. 	
Handling precautions	Product information necessary for safe use is not included in this document. Before handling the product, read the material safety data sheets and package labels for safe use and for information on physical and health hazards. Material safety data sheets are available and supplied by TECNAN.	
Limited warranty information	Please read it carefully: The information and recommendations in this document are given in good faith on the basis of TECNAN's experience and knowledge when stored, handled and applied correctly and under normal conditions within its useful life. However, because the conditions, types of materials to be treated and methods of use of our products are beyond our control, this information must be used correctly, verifying in preliminary tests that the product, the performance to be applied, the aesthetic finish and its purpose are suitable, even if other recommendations or advice have been received. TECNAN reserves the right to modify the properties of the product. TECNAN's only guarantee is that the product will comply with the sales specifications in force at the time of dispatch. Confirmation of payment and/or order implies acceptance of the product properties by the customer. TECNAN only guarantees the replacement of the product in the event of a manufacturing defect, and declines any other type of responsibility for the product, its application, as well as any additional damage it may cause. TECNAN specifically disclaims any other express or implied warranty of fitness for a particular purpose or merchantability. TECNAN declines responsibility for any damage caused accidentally or in case of incorrect use. Users must be familiar with the latest updated version of the Technical Data Sheet and for that TECNAN will provide a copy on request.	