

Product Information: Tecnadis AQUAPORE Nanotechnological water-based hydrophobing product for porous materials

DESCRIPTION

- Water-based product, low content in volatile organic compounds. No flammable and no health hazardous.
- Hydrophobizing, nanoparticle-based product with water-repellent properties for porous and low porous materials.
- Avoids water accumulation over treated surfaces, forming droplets that drag with ease.
- Limits the absorption of moisture/water by the material, keeping its natural porosity.
- Protects the surface against water and dirt accumulation, facilitates stains removal and lime accumulation.

ADVANTAJES

- It has a high contact angle, thus the water repellency is higher.
- Unlike traditional products, allows reapplication without removing previous product remains, avoiding costly cleaning processes (brushing, sandblasting, etc.).
- It does not change the appearance, colour neither the structure of the treated substrate.
- The active compounds do not react with the surface treated avoiding possible degradations of the same.
- The product nano-structure has not weaknesses that could be attacked by UV radiation and, therefore, the product resistance to weathering is greater than traditional products.
- In contrast to traditional water repellents, this product is not a film former, allowing the natural course of the processes of the substrate through their pores, such as breathability.
- Suitable for surface treatment of concrete, brick, natural stone, tile, wood, etc., both in exterior and interior applications.

COMPOSITION

- The product is based on a nanoparticle dispersion treated with active agents and other ingredients necessities for the final formulation (<25% volatile organic compounds).

APPLICATIONS

- All surfaces, components and objects built with porous materials that may be exposed to the action of water.
- Interior and exterior, preferably vertical or tilted, surfaces of concrete, brick, tiles, porous ceramics, natural stone, etc.
- Designed to be applied as water repellent by superficial application. Specially recommended for outdoor surfaces (beams, facades, bridges, walls, etc.).

PHYSICO-CHEMICAL PROPERTIES

- | | |
|----------------------------------|-------------|
| • Colour | translucent |
| • Active ingredients | < 3% |
| • Volatile Organic Content (VOC) | <25% |
| • Density | ~1 g/ml |
| • Viscosity | <2.39 cP |
| • Boiling Point | 100°C |
| • Solvent | water |

HOW TO USE

- Before the application, the surfaces must be thoroughly cleaned. Remove completely detergent and cleaner remains.
 - The surface must be completely clean and dry before the application.
 - Shake well before use.
 - Avoid the presence of cracks or fissures on the substrate, it is recommended to remove them before the product application.
 - The product is directly applied on the surface. If possible using pulverizers or air sprayers (airless standard of low pressure). In case of no having pulverizer, the product could be also applied using a roller or a brush, although the result could not be optimal. It is recommended to make two applications in order to obtain a higher effectiveness and use of the properties of the product. The optimum effect is reached after a full drying time of 48 hours.
- Dilution: none
 - Performance/quantity (approximate) based on the porosity of the material:

MATERIAL	PER APPLICATION (ml/m ²)	TOTAL (ml/m ²)	TOTAL (m ² /litre)
Marbles y Limestone of low porosity, Terrazzo, Polished concrete	62-75	125-150	6,7 - 8
Granite, Face brick, Unpolished concrete, Tiles	100-125	200-250	4 - 5
Sandstone, Coarse concrete, Limestone of high porosity	150-200	300-400	2,5 – 3,3

- Drying: 48 hours
- Operating temperature: between 5 and 30°C
- Storage temperature: between 5 and 30°C; protect from direct sunlight, store in original container

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.

USAGE LIFE AND STORAGE

When stored in original sealed containers at temperatures between 5°C and 30°C, the product has a shelf life of 12 months from the date of manufacture. Avoid exposure to direct sunlight and away from heat and flames and avoid freezing. The material contained may settle slowly, so it is recommended an adequate agitation before use.

LIMITATIONS

The high repellency to water present from the first moments (superhydrophobicity – contact angle of water droplets with the surface >150°C) decreases on surfaces subject to friction continued, especially in wet conditions, although it still maintains the properties water repellency.

Perform a preliminary test on painted surfaces to avoid the possible discoloration due to the product solvent.

This product is not suitable for medical or pharmaceutical uses.

Limited warranty information.-Please read carefully

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