

Project:

Protects porous surfaces, marbles and granites from oil, water and stains

Product:

SurfaPore M

Key Benefits:

- Very Effective & Nano Based
- High Breathability
- Non Film Forming, Invisible
- Long Lasting & UV Resistant
- Easy to apply
- Water based
- Environmentally friendly
- Cost Effective

Applications:

- Oil & water protection of porous surfaces (marbles and granites)
- Prevents staining

Packaging:

1L, 4L, 30L Containers,
1000L IBCs

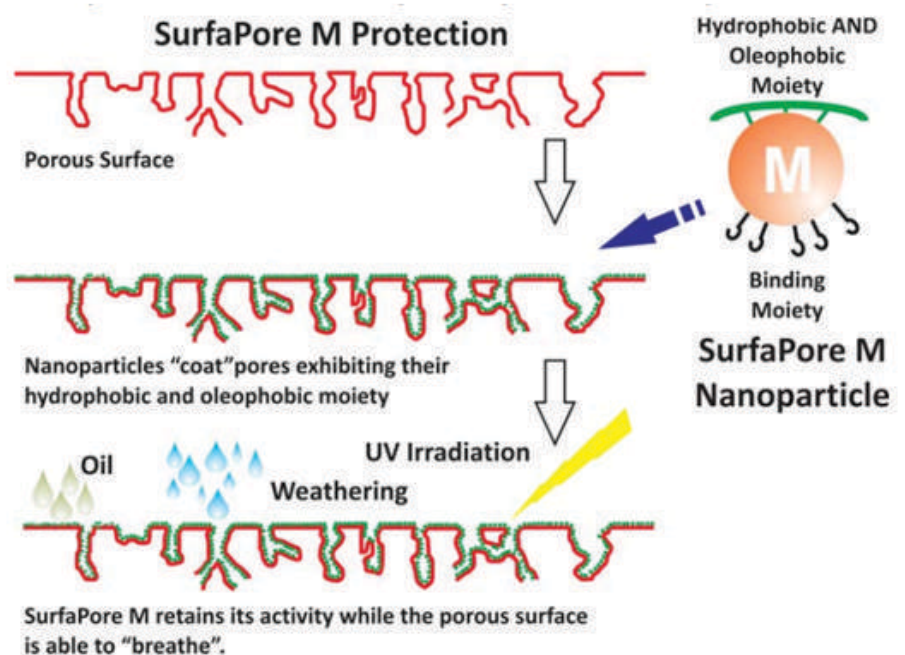
www.NanoPhos.com



SurfaPore® M

Active Nanotechnology for protecting marbles, granites & stones against stains and oil.

Stains can destroy your valuable stone, marble and granite surfaces. SurfaPore M not only protects these surfaces from stains, but also makes them oil and water repellent. SurfaPore M coats the pores of your valuable surfaces, without changing their appearance and enables them to actively repel oil based stains. Therefore, a dual effect is achieved: Passive protection by dressing the surface of pores and active oil repellency. An effective protection shield!



SurfaPore® is a registered trademark of
NanoPhos SA,
PO Box 519,
Science & Technology Park of Lavrio
Lavrio 19500, Greece
T: +302292069312 F: +302292069303
E: info@NanoPhos.com

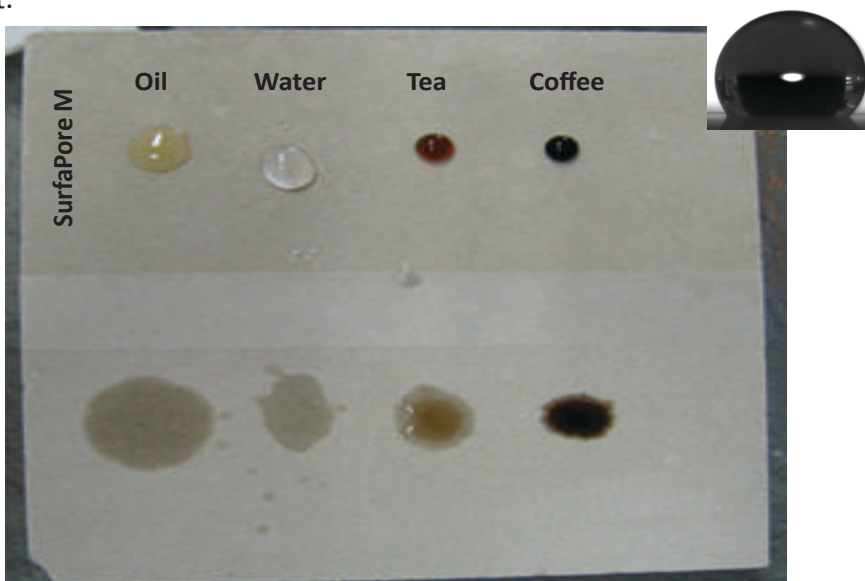
NanoPhos
Pioneering
Nanotechnology

SurfaPore M Description

SurfaPore M is a water based formulation, specifically designed to harness the power of nanotechnology, in order to achieve both oil and water repellency on the surfaces applied. SurfaPore M action mechanism is simple in concept but effective in practice: The core nano-sized particles, suitably engineered to fit the pores of the surface applied, penetrate and “flood” pores that can accumulate water, oil or dirt. SurfaPore M anchors on to the surface applied, resulting in the coating being permanent and effective. After coating, water, oil or dirt fails to penetrate into the porosity of the substrate. Therefore, an important, value-adding objective has been achieved: Permanent pore protection provides stain proofing and easy cleaning properties. The application of SurfaPore M does not induce any visual change on the surface applied and does not block its breathability. SurfaPore M blocks the absorbance of UV radiation without affecting the surface. Therefore, superior protection of the substrate is achieved without discolourations (yellowish essence) or loss of effectiveness.

International Standards Testing

Water absorption under low pressure (RILEM Test Method 11.4): The test procedure determines the water absorption rate of a concrete surface. Loss of water is inversely proportional of waterproofness. After 24 hours with water contact treated sample exhibited 0,8 cm³ absorption, while the untreated absorbed 1,2 cm³. **Water Vapor Transmission of Materials (ASTM E 96):** Water vapor permeability was determined as the rate of water vapors passes through a 1cm thick porous stone sample. Vapor Permeability Loss: 2,12% (surface application). **Food stains resistance:** SurfaPore M porous modified surface is not susceptible to food stains and the results are exhibited in the figure below. **Contact angle measurement:** treated marble demonstrates 127° with water droplet.



VOC (Volatile Organic Compounds): Maximum VOC content of this product is 1g/L.

Application Note

Surface Application: The application surface should be dry and clean. Apply SurfaPore M with brush, roller or spray gun. No dilution is required. For extra protection of very sensitive surfaces reapply, within 3 hours after the first application.

Dipping Application: Dipping application is highly recommended on absorptive and flooring surfaces to reduce ion mobility and efflorescence from all sides. Dipping should not exceed 2 min and thorough drying should take place before installation.

Consumption: Estimated consumption rate 8-10 m²/L, strongly dependant on the absorption properties of the application surface.

Physical Properties

Yellowish odourless solution with pH = 4.5±0.5, Density: 1.00 ±0.05 g·cm⁻³, Viscosity: 2 mPa·s

Boiling & Flash Point: >100°C

SurfaPore M is not considered an oxidant.

Safety & Storage

The product is not classified as hazardous pursuant to the provisions set forth in EC Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). Avoid breathing dust / fume / gas / mist / vapours / spray. Use only outdoors or in a well-ventilated area. Avoid from freezing. Expiration Date: Two years after the production date.



What is Nanotechnology?

Nanotechnology refers to the scientific field, which deals with very small structures, usually sized below 100 nm. One nanometer (nm) is one billionth of a meter (10⁻⁹ m) - it is so small that if earth were one meter in diameter, then one nanometer would have been the size of an apple! Nanosized materials reveal unique properties when compared to ordinary, bulk materials or even molecules.

NanoPhos at a glance...

At NanoPhos, we take advantage of the unique properties of nanotechnology and invent clever materials that solve every day problems. By harnessing nanotechnology, we seek to create a more comfortable, safe and trouble-free living environment. We transfer innovations out of our lab into the hands of consumers. Our vision is clear: “Tune the nanoworld to serve the macroworld” – in simple terms we make nanoparticles solve common problems. NanoPhos was recognized in January of 2008 by Bill Gates as one of the most innovative companies NanoPhos has been selected as a National Champion representing Greece in the 2016/17 European Business Awards for Innovation. NanoPhos is actively expanding its distribution network. Currently, the company is present in the UK, Scandinavia, Portugal, Spain, France, Germany, Italy, Greece, Cyprus, Romania, Egypt, Sudan, Saudi Arabia, Bahrain, UAE, Qatar, Oman, Iran, India, New Zealand, China, Japan, Mexico, Guatemala, Malaysia, Indonesia and Singapore.



NanoPhos SA has been approved by Lloyd's Register Quality Assurance to follow the EN ISO 9001:2000 Quality, the EN ISO 14001:2004 Environmental and the OHSAS 18001:2007 Occupational Health and Safety Management Systems for the development, production and sales of nanotechnology marine coatings and chemical products for cleaning and protection of surfaces and nanotechnology products.