Project:
Stain protection and Water-proofing for marble, granite and porcelain tiles

Industry:
Building & Construction
Marble & Granite Processing

Product:
SurfaPore T

Key Benefits:
- Most Effective & NanoBased
- Long Lasting & UV Resistant
- Does not change natural appearance
- Easily Applicable
- Water based
- Environmentally friendly
- Cost Effective

Applications:
- Waterproofing and stain protection for sensitive or polished surfaces
- Seals pores without creating a film
- Seals Porcelain Tiles and other “Non-Absorptive” Surfaces

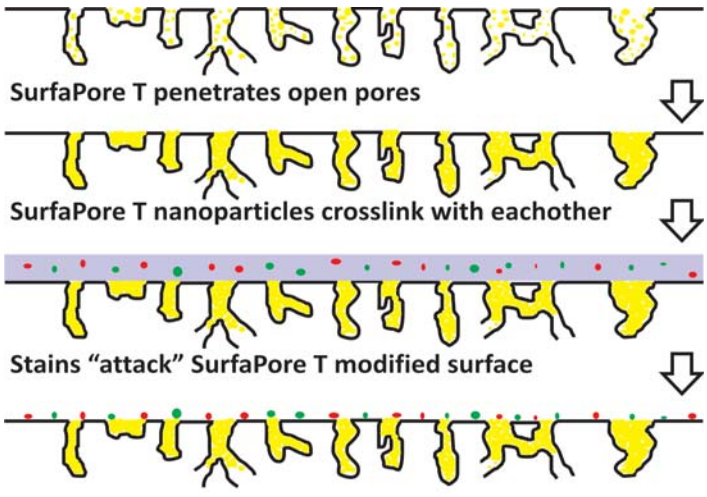
Packaging:
1L, 4L, 30L Containers,
1000L IBCs

www.NanoPhos.com

SurfaPore® T

Nanotechnology for protecting marble, granite and porcelain surfaces from staining

Staining of porcelain, marble and granite tiles can be disastrous for these valuable surfaces. Microscopic analysis of these surfaces reveals multiple interconnected pores that readily collect stains resulting in loss of shine and natural appearance. Cleaning them requires significant effort and some stains may be impossible to remove. SurfaPore T can be easily applied on your existing or new surfaces to preserve their appearance. It creates an impermeable and invisible shield by blocking even the finest pores of these surfaces.



Stains DO NOT PENETRATE SurfaPore T modified surface and are easily removed

HOME CARE™

12-H, Opp. Traffic Kotwali
Daryaganj Delhi 110002
INDIA
Tel 91-11-23282718, 23251975
91-9650847575
91-9810172216
Fax 91-11-23251975
Email: sales@aapkaHomeCare.com
www.aapkaHomeCare.com

SurfaPore T Description

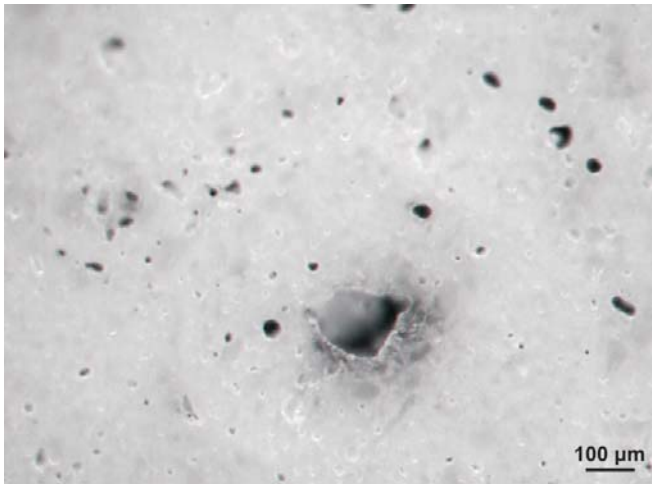
SurfaPore T is a water based, nanoparticles emulsion. Its action mechanism is simple in conception, but effective in practice: Suitably engineered nano-sized particles, that fit the pores of a polished surface, penetrate and "flood" the pores that can accumulate dirt. These nanoparticles have the ability to self polymerize and create an impermeable grid of inert material. At the same time, SurfaPore T particles have already anchored on the walls of pores and the coating modification becomes permanent and effective. After modification, dirt particles fail to penetrate into the microporosity of the surface (marble, granite or polished tile). Therefore, an important, value-adding objective has been achieved: Permanent pore impregnation providing stain proofing and easy cleaning.

Apart from stain proofing, the molecular design of SurfaPore T nanoparticles induces an additional useful property: The hydrophobic moiety, attached on top of the core nanosized particles is responsible for the creation of a continuous hydrophobic layer that protects each tile.

NanoPhos introduces a new approach that enhances the distinctive advantages of polished tile surfaces. Instead of covering tile surfaces with polymerizing film forming components, SurfaPore T coats and fills the pores, capillaries and "wells" of the unglazed surface, providing a long lasting solution against stains. Instead of covering your favourite surface with a plastic membrane, use SurfaPore T nano-solution to impregnate pores, while retaining abrasion strength and natural appearance.

International Standards Testing

Stain Resistance EN 10545-14: The results indicate that SurfaPore T surfaces such as white marble, black granite or unglazed porcelain tiles (gres porcelanato) are not susceptible to staining and exhibit Class 5 Stain Resistance.



Polarized microscopy image depicting surface imperfections responsible for stains accumulation.

Application Note

The application surface should be dry and clean. Apply SurfaPore T by brush, roller or spraying. No dilution is required. After 15 minutes and before SurfaPore T dries completely, remove any excess and polish, by using a wet cloth. On sensitive surfaces, reapply within 3 hours. Test results on a small area before full scale application. Maximum effectiveness is achieved 24 hours after application.

Consumption: Estimated consumption rate 14-20 m^2/L, strongly dependant on the properties of the surface applied.

Physical Properties

Clear Yellow, Water Emulsion with slight odour and pH = 9,88.
Boiling & Flash Point: >100°C
Auto Ignition Point: >100°C
Density: 1,05 $g.cm^{-3}$ Viscosity: 15,72 cP
SurfaPore T is not considered an oxidant.

Safety & Storage

SurfaPore T contains no dangerous ingredients and it is water based. VOC Content: 53g/L (EU limit (2010): 140g/L). Not hazardous according to Council Directive 1999/45/EC and its subsequent amendments. Request, read and comprehend the MSDS. Avoid 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! Nano-sized 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 and also received the 1st prize for innovation at the prestigious 100% Detail Show in London. NanoPhos is a rapidly growing company that is actively expanding its distribution network. Currently, the company is present in the UK, Ireland, Norway, Sweden, Finland, Denmark, Portugal, Greece, Cyprus, Poland, Saudi Arabia and Australia.

www.NanoPhos.com

NanoPhos SA has been approved by Lloyd's Register Quality Assurance to follow the EN ISO 9001:2000 Quality Management System for the development, production and sales of chemical products for cleaning and protection of surfaces and nanotechnology products.

ver 0509