

## SurfaPore C

### Water Repellent for cement, mortar, grout, artificial or natural stone

#### Product Description

**SurfaPore C** is a water based, liquid formulation that provides water repellency and protection of a wide range of building surfaces. As its viscosity is similar to that of water, it deeply penetrates into capillaries that no elastomer or polymer can reach. **SurfaPore C** formulation compared to conventional formulations do not create a “plastic film” on the applied surface. It creates a water repelling protection by deeply penetrating into the pores of the substrates, instead of sealing them. In case moisture is trapped or a water leakage takes place behind a **SurfaPore C** modified surface, water can evaporate through the open pores to the environment relieving negative capillary pressure. In this manner swelling and cracking of material are prevented. Hence, **SurfaPore C** modified surfaces are not affected by abrasion, deterioration or mechanical wear, are more resistant to the “hard” part of solar light (UV radiation), which does not induce the “yellowing” effect, and exhibit prolonged durability. SurfaPore C bears the CE quality marking scheme.

#### Recommended Use

Water repellent for surfaces such as cement, mortar, grout, porous or natural stone. Ideal for wall & basements, rooftop water repellent, render & stucco protection, mould growth prevention, efflorescence prevention, tile grout sealing and rising damp protection.

#### Key Benefits

- ☆ Effective composition based on Nanotechnology
- ☆ High breathability
- ☆ Non film forming – Invisible
- ☆ Long-lasting & UV-resistant
- ☆ Easy application on surface or mixed in mortar
- ☆ Water-based
- ☆ Environmentally friendly
- ☆ Cost-effective

#### Technical Specifications

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<b>Form/Type</b>	▶ Water emulsion
<b>Colour</b>	▶ Milky white
<b>Density</b>	▶ $1.00 \pm 0.03 \text{ g/cm}^3$
<b>Application temperature</b>	▶ From +5°C to +35°C
<b>pH</b>	▶ $6.0 \pm 0.5$
<b>VOC (Volatile Organic Compounds)</b>	▶ Maximum: 0.1 g/L
<b>Boiling &amp; Flash point</b>	▶ >100°C
<b>Auto ignition point</b>	▶ >100°C
<b>Viscosity</b>	▶ 2mPa·s
<b>Slight odour</b>	

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**SurfaPore C is not considered an oxidant**

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## International Standards Testing

<b>Drying test for hydrophobic impregnation (EN 13579:2002):</b>	The effect of hydrophobic impregnation is measured with drying rate coefficient. Class I.
<b>Water absorption and resistance to alkalis (EN 13580:2002):</b>	The effect of hydrophobic impregnation is measured with water absorption resistance and the resistance to alkalis, AR=7% and AR <sub>alk</sub> =1.2%.
<b>Mass loss after freeze-thaw salt stress (EN 13581:2002):</b>	The SurfaPore C treated sample does not exhibit mass loss after 20 cycles.
<b>Water absorption under low pressure (RILEM Test Method 11.4):</b>	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 zero absorption, while the untreated absorbed 19 cm <sup>3</sup> .
<b>Water absorption coefficient due to capillary action (EN 1015-18:2003):</b>	Water absorption coefficient due to capillary action is inversely proportional to waterproofness and was measured C <sub>m</sub> =0.08 kg/(m <sup>2</sup> ·min <sup>1/2</sup> ) for SurfaPore C and C <sub>m</sub> =0.33 kg/(m <sup>2</sup> ·min <sup>1/2</sup> ) for reference.
<b>Water Vapor Transmission of materials (ASTM E96):</b>	Water Vapor transmission loss was determined as the rate of water vapors pass through a 2cm thick cement sample. Vapor Permeability Loss: 3.82% (surface application) and 20.12% (mixing).
<b>Corrosion protection test (EN 15183:2006):</b>	SurfaPore C doesn't affect the behavior of reinforcing rebars in treated concrete.

## Approvals and Certificates

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<b>NanoPhos SA</b> PO Box 519, Science & Technology Park of Lavrio, Lavrio 19500, Attica, Greece <b>14</b> <b>0038/CPR/PIR1407445/1</b>
<b>SurfaPore C</b> <b>Surface protection systems for concrete</b> <b>Hydrophobic impregnation</b> <b>EN 1504-2</b>  <b>Depth of penetration:</b> Class II > 10mm <b>Water absorption and resistance to alkali:</b> <ul style="list-style-type: none"> <li>▪ Absorption ratio &lt;7,5% compared with the untreated specimen</li> <li>▪ Absorption ratio &lt;10% after immersion in alkali solution</li> </ul> <b>Dangerous substances:</b> No substances of high concern according to regulation 1907/2006 REACH are contained in the product <b>Drying rate:</b> Class I > 30%

## Surface Preparation

All surfaces should be clean, dry and free from dust, oil, grease and other foreign matters or contamination.

## Application

Apply **SurfaPore C** by using a brush, roller or spray gun. No dilution is required. On very absorptive surfaces re-apply within 3 hours.

In any case test results on a small area before full scale application. Maximum water repellency is achieved 24 hours post application.

## Consumption

Estimated consumption rate 8-10 m<sup>2</sup>/L, strongly dependent on the properties of the surface applied.

## Health and Safety

Read label before use. Safety Data Sheet are available through NanoPhos' website [www.NanoPhos.com](http://www.NanoPhos.com) or upon request by contacting NanoPhos through email: [info@NanoPhos.com](mailto:info@NanoPhos.com) or by telephone: (+30) 2292069312.

## Available Packaging

- 1L Plastic Container
- 4L Plastic Container
- 30L Plastic Container
- 1000L IBCs

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**Notes & Precautions:** Adverse weather conditions during or after the product application may affect the properties of the coating. Storage of closed containers, in controlled dry and enclosed space, away from sources of ignition and temperatures from 5°C to 35°C, for up to 24 months. The Technical Data should be read in conjunction with the Safety Data Sheets. The present edition of this technical datasheet automatically cancels any previous one concerning the same product. For more information please contact NanoPhos: [info@NanoPhos.com](mailto:info@NanoPhos.com)