

## SurfaPore H

### Water, oil and dirt protection of textiles

#### Product Description

**SurfaPore H** is a water-based, liquid formulation which acts as a surface modification agent on oxidic, carboxy- and hydroxyfunctional substrates such as natural fibers like cotton and leather. **SurfaPore H** forms a thin layer by chemically bonding to the substrate system while subsequent horizontal crosslinking takes place forming 2- and 3-dimensional networks. Thus the created coating is chemically and mechanically stable preventing water and oil from penetrating. Modified surfaces underlie minimal change to the original natural appearance.

#### Recommended Use

Ideal for textiles such as cotton and leather. It protects and waterproofs furniture, carpets, curtains and surfaces covered with textiles, assuring that water and dirt are effectively repelled by chemical forces.

#### Key Benefits

- ☆ Hydrophobicity
- ☆ Oleophobicity
- ☆ Dirt-protection
- ☆ Easy to clean treatment
- ☆ Easy surface application
- ☆ Water-based
- ☆ Non surface appearance modification
- ☆ Long-lasting
- ☆ User and environmentally friendly
- ☆ Cost-effective

#### Technical Specifications

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<b>Form/Type</b>	▶ Water suspension
<b>Colour</b>	▶ Yellowish
<b>Application temperature</b>	▶ From +5°C to +35°C
<b>Density</b>	▶ 1.0 0.05 g/cm <sup>3</sup>
<b>pH</b>	▶ 5.0 ± 0.5

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## International Standards Testing

<b>Contact angle measurement:</b>	<p>Water -and oil- proofing can be quantified with contact angle measurement between liquid and substrate. The contact angle is measured between a 5 <math>\mu</math>L liquid droplet and the sample's surface (at 0 min and 5 min time after the drop had touched the surface) by using an optical tensiometer. The measurement results for treated with SurfaPore H and untreated surfaces are presented below:</p> <ul style="list-style-type: none"> <li>▪ <b>Water droplet - Papyrus</b> <ul style="list-style-type: none"> <li>i. <i>Untreated:</i> Contact angle<sub>0min</sub> = 28.67°</li> <li>ii. <i>Treated:</i> Contact angle<sub>0min</sub> = 171.10° Contact angle<sub>5min</sub> = 165.28°</li> </ul> </li> <li>▪ <b>Water droplet - Fabric</b> <ul style="list-style-type: none"> <li>i. <i>Untreated:</i> Absorbed at 0 min</li> <li>ii. <i>Treated:</i> Contact angle<sub>0min</sub> = 160.51° Contact angle<sub>5min</sub> = 152.40°</li> </ul> </li> <li>▪ <b>Oil droplet - Papyrus</b> <ul style="list-style-type: none"> <li>i. <i>Untreated:</i> Absorbed at 0 min</li> <li>ii. <i>Treated:</i> Contact angle<sub>0min</sub> = 171.10° Contact angle<sub>5min</sub> = 165.28°</li> </ul> </li> <li>▪ <b>Oil droplet - Fabric</b> <ul style="list-style-type: none"> <li>i. <i>Untreated:</i> Absorbed at 0 min</li> <li>ii. <i>Treated:</i> Contact angle<sub>0min</sub> = 136.78° Contact angle<sub>5min</sub> = 124.94°</li> </ul> </li> </ul>
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## Surface Preparation

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

## Application

Before application, mix the product thoroughly to homogenize. Apply by using spray, brush or roller. Textiles such as cotton can be dipped for 0.5 to ten minutes. The application on leather can be done by polishing SurfaPore H on to the material. Before full scale application test results in a small area. No dilution is required. On very absorptive surfaces re-apply within 1 hour. Maximum protection is achieved 24 hours post application.

### Consumption

Estimated consumption rate 8-15 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

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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)