

Description:

Hydrophobic and water-repellent for glass substrates.

Product:

SurfaPore G

Key Benefits:

- Invisible film forming
- The surface remains transparent
- Easy application
- Chemical adhesion into glass substrates

Applications:

- Glass substrates
- Hydrophobicity and water-repellency
- Prevention of salt stains

Packaging:

0.5L, 1L containers



SurfaPore® G

Hydrophobic and water-repellent for glass substrates

SurfaPore G is a revolutionary, easy-to apply formulation applicable for glass substrates. Transforms glass surfaces from hydrophilic to hydrophobic and water-repellent. Therefore, water droplets cannot “stick” on glass surfaces and salt stains are prevented. Ideal for bathroom and glass facades.

SurfaPore G Description

SurfaPore G is an alcohol based, liquid formulation, developed and produced by NanoPhos SA that provides water repellency and hydrophobicity of glass surfaces. Can be applied easily without alteration of the glass substrates by means of appearance and transparency. SurfaPore G creates a thin layer with good adhesion and water-repellent and hydrophobic properties. The strong adhesion into the glass substrates is due the presence of suitable coupling agents.



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Testing

The wetting ability of smooth glass surfaces was evaluated with contact angle measurements. The contact angle is the angle where a liquid-vapor interface meets a solid surface. A contact angle less than 90° is a characteristic for hydrophilic surfaces, whereas contact angle more than 90° characterizes the hydrophobic surfaces.

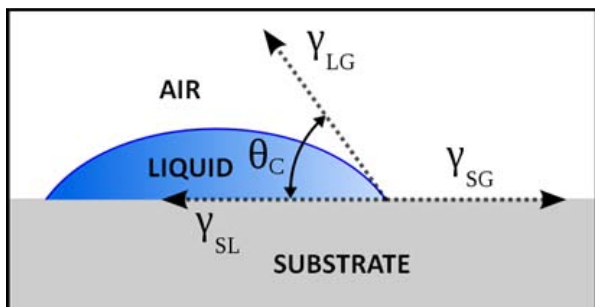
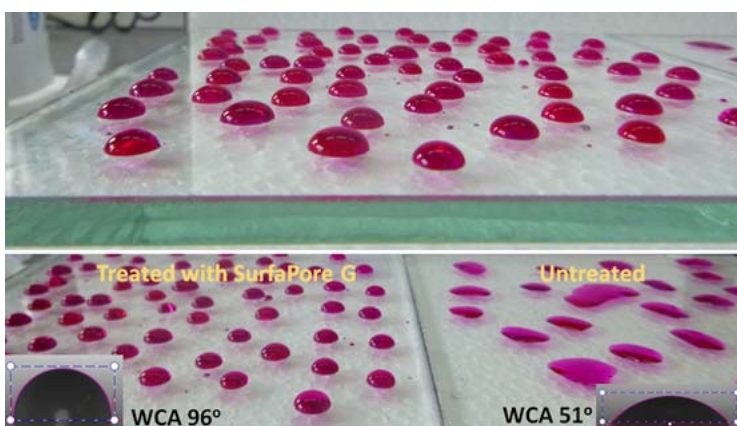


Figure: Droplet of a liquid deposited on a solid substrate.



Photos of untreated glass and treated glass with SurfaPore G. The transformation of a hydrophilic to a hydrophobic glass substrate is obvious. The water droplets contain dye for illustration reasons.

Glass substrates after SurfaPore G application transform from hydrophilic to hydrophobic. The water contact angle of glass is 51° . After the application the water contact angle of the treated glass increases to 96° .

Application Note

Surface Application: The application surface must be clean, degreased and dry. Shake before application. Apply by using a clean and dry cloth. Maximum effectiveness is achieved 24 hours post application. Slight cleaning of the surface with a cloth after application is recommended for further homogenization of the film.

Physical Properties: Alcohol solution, colorless, $\text{pH} = 7.75 \pm 0.5$, $d = 0.80 \text{ g/cm}^3$.

Consumption: Estimated consumption rate $10\text{--}14 \text{ m}^2/\text{L}$.

Storage: Should be protected from freezing and temperatures above 40°C . Store in a cool, dry, well-ventilated area, away from heat, ignition sources and direct sunlight.

Production date: See packaging.

Expiration date: 18 months after production date in the original closed container. **Safety Data Sheet (SDS) available upon request.**



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 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, Norway, Sweden, Denmark, Portugal, Spain, France, Italy, Greece, Cyprus, Egypt, Sudan, Saudi Arabia, Bahrain, UAE, Qatar, Oman, Iran, India, New Zealand, China, Japan, Mexico, Guatemala, Thailand, Malaysia and Singapore.



NanoPhos SA has been approved by Lloyd's Register Quality Assurance to follow the EN ISO 9001:2000 Quality Management System and the environmental management system EN ISO 14001:2004 for the development, production and sales of chemical products for cleaning and protection of surfaces and nanotechnology products. Furthermore, it is certified for occupational health and safety management systems with OHSAS 18001:2007.

