

Project:

Cool, Weather Resistant Paint for Exterior Masonry and Walls with Antibacterial properties

Product:

SurfaPaint Exterior

Benefits:

- Conserves energy
- Reflects >94% of heat (Infra-Red) radiation
- Elastomeric formulation for crack bridging
- Does not yellow
- Dirt Resistant
- UV and Alkali resistant
- Extended lifetime
- Low VOC, water based paint
- Easy surface application
- Excellent opacity and coverage
- Prevents mould growth
- Eliminates bacteria

Applications:

Exterior surfaces, such as walls, masonry, concrete, plaster board and wherever water based, acrylic paints are applied.

Color:

White (P base) or

Transparent (TR base)

Can be used as a tinting base for light shades (RAL or NCS system)

Available in Matt to Semi-Gloss Sheen

Packaging:

10L Plastic (HDPE) Pails

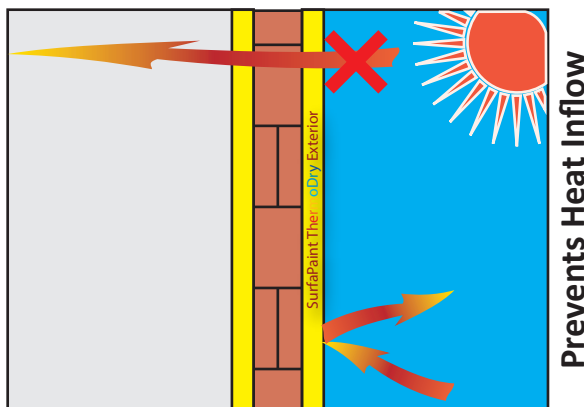
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SurfaPaint Exterior

Water Based, 100% Acrylic, Cool Paint for Exterior Masonry Surfaces

SurfaPaint Exterior is a special, chemically engineered formulation to deliver outstanding performance and protect against weathering. Utilizing advanced elastomeric acrylic binders provides better adhesion and resistance to blistering. Elastomeric acrylic resins provide a flexible, durable, matt to satin finish that minimizes cracking and peeling. High colour retention, even in the most demanding weathering and UV conditions. It offers extended dirt and mould resistance, together with bactericidal properties. SurfaPaint Exterior is also presenting cool properties, especially in light shades, due to the nanoparticles that reflect heat or InfraRed (IR) radiation. In this way, it acts as a heat mirror to enhance the energy efficiency of the surfaces applied. Available in matt to satin finish.



SurfaPaint® logos are registered trademarks of:
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NanoPhos
Pioneering
Nanotechnology 

SurfaPaint Exterior Description

SurfaPaint Exterior combines a unique external acrylic paint with cool properties, based in a proprietary technology of thermal radiation reflecting nanoparticles. This paint composition delivers all the benefits of a high quality paint: Excellent opacity and coverage, strong adhesion, coating flexibility, elastomeric behaviour for crack bridging, UV and alkali resistance. SurfaPaint Exterior provides significant increase in reflectance of thermal radiation (infrared) and decreased water absorption of the final coating. Therefore, the application of SurfaPaint ThermoDry Exterior can prevent the development of Urban Heat Islands (UHIs), by reflecting more than 94% of the incident heat radiation away from a building's structure. It is an ideal solution for enhancing conventional heat insulation, just by painting the external surfaces. Thus, the energy efficiency of buildings is increased and tangible savings are achieved. Available in white colour for optimum thermal insulation properties. It can be used as a tinting base for light shades. SurfaPaint Exterior also delivers antibacterial and bactericidal properties by incorporating special ingredients that prevent accumulation and growth of microorganisms.

International Standard Testing

Density (ISO 2811-1): 1.25±0.05 g/cm³

pH (ISO 19396-1): 8.8±0.5

Reflectance (ASTM E 903-96): total 90,98% (250-2200 nm), infrared 94,19% (700nm - 2200 nm).

Thermal Conductivity (EN ISO 12667:2004): 0,5 W/(mK).

Emittance (ASTM E408-71): 0,91

Antibacterial Performance (EN ISO 22196:2011): % Reduction >99,98% in both *E. Coli* and *Staphylococcus Aureus*.

Scrub resistance (ISO 11998:2006): Class 1

Applicability: SurfaPaint Exterior can be applied directly on exterior wall surfaces (masonry, concrete, plaster, drywalls), and wherever water based, acrylic paints are applied. New substrates from cement or masonry should have cured for more than 3-4 weeks before primer application. For better results apply **SurfaMix P** as a primer. Adverse conditions during or immediately after application may affect the coating's properties. **Preparation:** Ensure all surfaces are clean and dry prior to application. Remove any dust and dirt. **Application note:** Stir well before application. Do not dilute for bridging gaps and hairline cracks of up to 0,5 mm. For cracks bigger than 1mm, fill the gap with a suitable putty. If thinning is required add up to 10% water by volume. Application temperature should be between 8 - 35°C. Apply 2-3 even coats using a good quality brush, roller or by spraying with a tip of a diameter 1,4mm or more. Do not over-brush. Ensure corners and edges are adequately covered. Additional coats should be applied 4-6 hours after the previous application. **Spreading Rate:** 10-12 m²/L. **Drying Time:** Typically 1 hour depending upon coat thickness. Low temperatures and high humidity will lengthen drying times. **Cleaning of tools:** All tools and equipment should be cleaned immediately after use with water. **Storage:** Store in a cool, dry, well-ventilated area away from heat and direct sunlight. Carefully reseal partly used containers. Protect from frost. To avoid risk of spillage, always store and transport in a secure and upright position. The shelf life of the product in airtight containers is 24 months post production date. Dispose of empty container responsibly and according to local legislation. **Safety:** Safety Data Sheet available upon request. **VOC (Volatile Organic Compounds):** Maximum EU VOC content limit value (Directive 2004/42/CE) of the product in a ready to use condition (category A/c "Exterior walls of mineral substrate", Type WB): 40 g/L (2010). **Maximum VOC content of this product is 15 g/L.**



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 nano-world 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 Australia, Albania, Bulgaria, China, Cyprus, Denmark, Egypt, France, Guatemala, India, Italy, Japan, Kingdom of Bahrain, Malaysia, Malta, Mexico, New Zealand, Norway, Pakistan, Portugal, Qatar, Republic of Moldova, Romania, Singapore, Spain, Sudan, Thailand, Turkey, United Arab Emirates (UAE), United Kingdom (UK), Vietnam



NanoPhos SA has been approved by Lloyd's Register Quality Assurance to follow the EN ISO 9001:2015 Quality, the EN ISO 14001:2015 Environmental and the OHSAS 18001:2007 Occupational Health and Safety Management Systems for development, production and sales of building, marine, industrial nanotechnology products, paints and chemical products for cleaning and protection of surfaces.

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