## **Project:**

Satin, transparent, water-based wood varnish with excellent anti-staining and UV protection.

## **Product:**

SurfaPaint Wood Varnish

## **Key Benefits:**

• Excellent waterproofing and stain resistance varnish formulation.

• Prevents visual degradation and discoloration of wood by solar light and UV irradiation.

- Excellent weathering resistance
- Rub and scratch resistance.

• Excellent adhesion on natural or stained wood

- Satin finish
- Prevents hot water whitening
- Water based and Low-Odour
- Contains no harmful biocides

## **Applications:**

- Absorptive and sensitive natural wooden surfaces
- Interior or Exterior

• Doors, Windows, Frames, Claddings, Fences/Posts, Roof Shingles, Garden Furniture/Sheds, Pergolas, Deckings & Docks

- Colour or Stain stabilization
- Weathering protection of Wood

## **Colours:**

Transparent only

## Packaging:

375mL, 750mL plastic pails, 20L metal canisters

## www.NanoPhos.com



# SurfaPaint Wood Varnish UV Blocker

## Transparent, Glossy Wood Varnish for Stain and UV protection

SurfaPaint Wood Varnish is a high quality, water-based, clear top coating that protects any interior and, especially, exterior wooden surface from weathering and water and oily stains. Easy to apply and recommended both for DIY and industrial applications.

SurfaPaint Wood Varnish creates a thin transparent protective film with excellent properties, in terms of adherence, durability and scratch resistance. It is ideal for uses such as doors, windows, frames, claddings, fences, pergolas and any stained or natural wooden surface. SurfaPaint Wood Varnish gives a satin finish that enhances the appearance of natural wood. Wood grains are slightly intensified. Its core ingredients protect from and absorb the UV radiation. Eventually, the wooden surface is shaded by the harmful effects of high energy light and its discolouration is prevented.

Higly recommended as an overcoat to SurfaPaint Wood Stain to provide a great coloured wood finish.

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### **Technical Description**

What it takes to make an exceptional Wood Varnish?

**The resin:** SurfaPaint Wood Varnish consists of a modified PolyUrethane (PU) resin that combines elasticity and hardness. PU core systems are the least susceptible to light induced fatigue. Therefore, SurfaPaint Wood varnish lasts longer to protect sensitive wooden surfaces. PU modification can absorb wood stresses and follows natural expansion without cracking. SurfaPaint Wood Varnish is not prominent to yellowing as conventional systems may do. It is a breathable system.

**The special additives:** SurfaPaint Wood Varnish was designed for extreme exposure to adverse weathering and high levels of UV radiation. It contains active ingredients that act like natural antioxidants: They prevents UV energy break-down the binder system and, at the same time, prevent exposure of the sensitive wooden substrate to the UV deteriorating action. Protection against UV is irrelevant to film thickness. The active ingredients also assure prolonged thermal stability.

### **Testing & Performance**

Water absorption (pine wood): 1.5% w/w after 2h immersion in water, 0.08% w/w after 1min spraying

Tangential swelling: none after 2h immersion in water

Adhesion cross-cut test (EN ISO 2409:2013): classification: 5B, 0% removed Weathering test (EN ISO 11507:2007): 2000h under UV-A radiation exposure 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/d "Interior/exterior trim and cladding paints for wood and metal", Type WB): 130 g/L (2010). Maximum VOC content of this product is 8,3 g/L.

Application: Surfaces must be clean, dry and rubbed down with a suitable abrasive paper (in case of unpainted surface). Stir well before use. SurfaPaint Wood Varnish is ready to use. Apply 2 coats for good protection and 3 coatings for excellent protection. 3 coatings application may increase the sheen finish to glossy. Do not over-brush. Additional coats should be applied 3-4 hours after the previous application. If SurfaPaint Wood Stain or another paint system has been previously applied, do not apply SurfaPaint Wood varnish before 72h from previous application. There is no manufacturer's liability for applying this product onto non compatible paint systems. Consumption rate: 10-12 m<sup>2</sup>/L, depending on surface absorption. Cleaning: All tools and equipment should be cleaned immediately after use with water and soap. Storage: Store in a cool, dry, well-ventilated area away from heat and direct sunlight. Carefully reseal partly used containers. Protect from frost. The shelf life of the product in the original, airtight containers is 18 months after production date. Dispose empty containers responsibly and according to local legislation. Safety: Contains: CMIT/MIT, A-3-(2H-Benzotriazol-2-yl)-5-Tert-Butyl-4-Hydroxyphenyl)-Propionyl-ω-3-(3-(2H-Benzotriazol-2-yl) -5-tert-butyl-4-Hydroxyphenyl)Propionyloxypoly(oxyethylene), A-3-(2H-Benzotriazol-2-yl)-5-Tert-Butyl-4-Hydroxyphenyl)-Propionyl- $\omega$ -hydroxypoly (oxyethylene). May produce an allergic reaction. Avoid breathing dust / fume / gas / mist / vapours / spray. Use only outdoors or in a well-ventilated area. Keep out of reach of children. Safety Data Sheet available on request.

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### 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<sup>-9</sup> 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 NanoPhos is actively expanding its distribution network. Currently, the company is present in the UK, Scandinavia, Portugal, Spain, France, Germany, Italy, Greece, Cyprus, Romania, Egypt, Sudan, Saudi Arabia, Bahrain, UAE, Qatar, Oman, Iran, India, New Zealand, China, Japan, Mexico, Guatemala, Malaysia, Indonesia and Singapore.



NanoPhos SA has been approved by Lloyd's Register Quality Assurance to follow the EN ISO 9001:2000 Quality, the EN ISO 14001:2004 Environmental and the OHSAS 18001:2007 Occupational Health and Safety Management Systems for the development, production and sales of nanotechnology marine coatings and chemical products for cleaning and protection of surfaces and nanotechnology products.