## **Project:**

Transparent, water-based wood impregnation varnish with excellent protection from water and staining.

### **Product:**

SurfaPaint Wood Stain

# **Key Benefits:**

- Excellent waterproofing and stain resistance staining formulation.
- Deep, uniform colour staining
- Enhances the appearance of natural wood grains
- Highly flexible no cracking.
- Excellent weathering resistance
- Rub and scratch resistance.
- Excellent adhesion on natural wood
- 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
- Decorative deep colour staining
- Weathering protection of Wood

## **Colours:**

TR Transparent

C01 Cherry

O02 Oak

WM03 Medium Walnut

W04 Walnut

CH05 Chestnut

M06 Mahogany

G07 Green

B08 Blue

W09 White

## Packaging:

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



# **SurfaPaint Wood Stain**

## **Water-based Impregnation Stain Varnish**

SurfaPaint Wood Stain is a high quality, water-based, clear or coloured impregnation stain varnish that protects any interior and, especially, exterior wooden surface from weathering and water or oily stains. Easy to apply and recommended both for DIY and industrial applications. Ideal when decorative application should be combined with wood protection from staining.

SurfaPaint Wood Stain creates a deep penetrating, thin and 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 Stain is a wood impregnation formulation that enhances the appearance of natural wood grains. It prolongs the life-time of your wooden surfaces. It is recommended for new or untreated wood surfaces. Available as a clear coating or in eight natural shades. Other color shades are available on demand. SurfaPaint Wood Stain does not contain biocides or wood preservatives.

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# **Technical Description**

What it takes to make an exceptional Wood Stain?

**The resin:** SurfaPaint Wood Stain is based on hybrid acrylic dispersion that can penetrate deep inside the pores of the wood. Thus, a protective, durable, *shielding* coating is created, providing excellent oil- and waterproofing. The acrylic core is responsible for high flexibility without cracking. SurfaPaint Wood Stain is a breathable system and gives a smooth, soft feeling on the wood surface.

**The pigments:** Pigments are not just additives to colour the stain. SurfaPaint Wood Varnish that are mostly inorganic and enhance the durability of the wood against light decay. Additionally, the nature of the pigments assures vivid stains and long-lasting durability.

For excellent results against weathering and UV protection, it is highly recommended that SurfaPaint Wood Varnish is applied 72h after the application of SurfaPaint Wood Stain.



Application of clear SurfaPaint Wood Stain on the surface of pine wood. Water repellancy is clear.

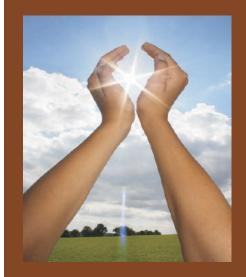
## **Testing & Performance**

Water absorption (pine wood): 1.0% w/w after 2h immersion in water, 0.06% 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): 1000h 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/e "Interior/exterior trim varnishes and woodstains", Type WB): 130 g/L (2010). Maximum VOC content of this product is 3,1 g/L.

Application: Surfaces must be clean, dry and rubbed down with a suitable abrasive paper (in case of unpainted surface). Use methylated spirits to remove oil excess, especially from tropical wood (e.g. teak wood). SurfaPaint Wood Stain is ready to use. Brush thinly and evenly working varnish well into the grain. Maintain a wet edge when painting. Thick coats wrinkle when dry. Avoid bubbles. Stir well before use. Apply 2 coats for good protection and 3 coatings for excellent protection. 3 coatings application may increase the colour depth. Do not over-brush. Additional coats should be applied 3-4 hours after the previous application. Lightly sand between coats if necessary with fine sandpaper. Do not apply SurfaPaint Wood Stain if another woodstain or varnish system has been already applied and not adequately removed. 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, wellventilated 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: Avoid breathing dust / fume / gas / mist / vapours / spray. Use only outdoors or in a well-ventilated area. IF SWAL-LOWED: Immediately call a POISON CENTER or doctor/physician. Keep out of reach of children. Contains CMIT/MIT. May cause allergic reaction.



### 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, Romania, Cyprus, 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.