

Nanotechnology Treatment Protects Wood in Australia

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Nanotec Pty Ltd based in Sydney, Australia announced today the start of the marketing of its wood protection product “Nanoseal Wood”.

Nanoseal Wood is a water based, ultra hydrophobic, colloidal solution with self assembling properties to form the functional surface structure.

The repellent effect is done by a combination of molecular structural surface changes and added on hydrophobic properties.

According to Nanotec’s CEO Harald Stulajter, Nanoseal Wood has the potential to change the entire wood treatment industry.” This is an absolute unique surface treatment which protects the wood by not only controlling the moist and water content but also protecting the surface from UV radiation. “

Water is one of wood’s worst enemies. Whether in the form of vapour or liquid, water can cause shrinking and swelling, which can lead to dimensional changes of the wood and degradation of the finish. Water causes decay or rot of the wood and early failure of paint, and it accelerates the weathering of wood exposed outdoors.

This is where Nanoseal Wood shows its real potential. The super high contact angle of up to 120 degrees makes water simply roll off instead of penetrating the wood substrate. The Nanoparticles self assemble into an only 25 nm thick monolayer structure which gives additional UV protection.

Nanoseal Wood enables wood to resist decay and discoloration by wood-

decay fungi, which need moisture to live.

After one year extensive testing the product outperformed every other protective surface sealer or oil based penetrating chemical preservatives.

In the Australian harsh weather conditions, Nanoseal Wood is a product which can handle this environment.

From the environmental aspect, Nanoseal Wood is also outstanding.

There are no VOC (Volatile Organic Compound), no solvent, no oil, and no pesticide built-in. Nanotec Pty Ltd believes that a lot of insects, marine borers or termites can keep away from the wood by keeping it dry and in good condition.

Nanotec Pty Ltd is looking for innovative partner companies in the wood industries to bring this new product to the next level.

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