

# Vacsol® Azure Wood Preservative

Lonza's global wood protection business supplies many wood protection products throughout the world including copper based, boron based, azole based and other preservatives in a range of carrier mediums. One of our products, Vacsol® Azure, an advanced LOSP

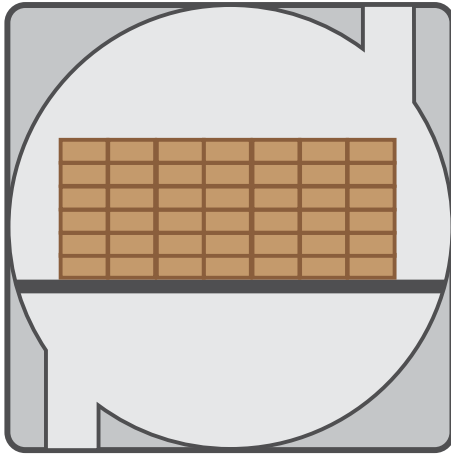
(Light Organic Solvent Preservative) wood treatment is supplied by Arch Wood Protection (NZ) Limited to customers in New Zealand for the protection of primed wood products such as siding and trim boards marketed in the USA. The preservative consists of three carbon

based active ingredients: fungicides tebuconazole and propiconazole, along with an insecticide / termiticide permethrin and water repellent agents (resin / wax) all dissolved in a common hydrocarbon solvent (white spirits). These active constituents are widely used around

## Durability: The Treatment Process

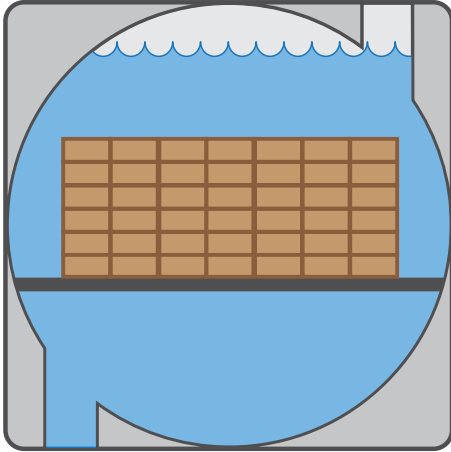
### Step 1:

A vacuum is applied to cylinder and air is removed from the wood's cells.



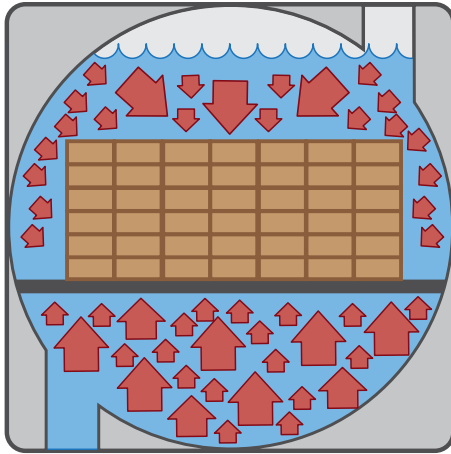
### Step 2:

The cylinder is filled with LOSP preservative solution.



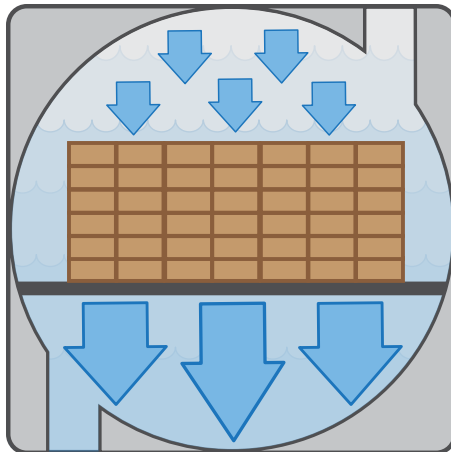
### Step 3:

Vacuum is released and atmospheric pressure forces the LOSP solution into the wood cells.



### Step 4:

The solution is drained and a second vacuum removes excess fluid. The wood is now ready for the next step in the processing.



the world in numerous formulations for protection of a wide range of produce, materials and wood based building products against mould, decay and insects in both residential and commercial settings. For wood products the treatment takes place in modern industrial facilities and the process itself is highly controlled, ensuring the products are consistent and ready for immediate use when they arrive in the market.

Vacsol™ Azure treated wood is no more corrosive than untreated wood.

Vacsol™ Azure, is specifically formulated for the treatment of timber to AS 1604.1 and NZS 3640 to H3 level (external above ground) providing long term protection against fungal decay and attack from borers and termites. Vacsol™ Azure treated wood products are suitable for AWPAC UC3A applications in the USA. Although not supplied in the USA at this time, Vacsol™ Azure preservative is registered with the EPA (EPA ref. no. 75101-1). To gain EPA registration the preservative supplier must submit toxicity and environmental impact data which supports the proposed use.

Light Organic Solvent Preservatives have been used in Europe, Australia, New Zealand, Asia and the US for over 50 years and have a proven track record as effective wood treatments. The most recent versions such as Vacsol™ Azure from Lonza incorporating azoles as active ingredients, are extensively used in New Zealand, Australia, Asia,

South America, South Africa and elsewhere for the protection of siding boards, joinery & millwork, structural timber and engineered wood products for above ground use only.

## How are Vacsol® Azure treated board products produced?

The treatment process is done under carefully controlled conditions in a special enclosed vacuum/pressure impregnation plant to ensure thorough penetration of preservative and treatment of the wood products. The process is designed to ensure required penetration and loading of the active constituents, with the use of a minimum amount of solvent. Immediately after treatment the wood products contain approximately 5% by weight of the preservative solution.

The next stage of the production process is to allow the solvent to evaporate out of the boards in a carefully controlled conditioning stage before further processing such as painting and packaging. During this stage the solvent levels in the wood are reduced to less than 1.7% by weight.

In order to impart weather resistance and convenience for the user, the product is pre-coated with two applications of premium wood primer. The primer coatings are cured under controlled conditions prior to final packaging. The final result of this production process is a durable and weather resistant premium building product that is easy and ready to use.

## *Working with primed LOSP treated board products*

When first purchased, a slight residual odor of white spirits can sometimes still be detected. This does not pose any significant risk<sup>1</sup> and will dissipate rapidly once the pack is opened and the product is exposed to fresh air.

Vacsol™ Azure treated wood products can be used indoors with confidence. The slight residual odor might be noticeable at first in enclosed spaces, however once installed, painted and finished in interior installation there is low odor. Vacsol™ Azure treated wood products manufactured outside of the US are not subject to SCAQMD or other similar regulations.

As when working with all lumber and wood based materials, always use a filter mask when machining or cutting wood products to avoid the inhalation of fine air borne wood dust. Protect the eyes while machining or any operation where flying particles may be ejected. Wash hands after work and before meal or toilet breaks.

For full installation and maintenance procedures consult the product manufacturer's instruction manual and warranty coverage.

## *Summary of Vacsol® Azure LOSP treated board products*

Vacsol™ Azure LOSP treated wood products make durable and easy to use premium building boards which will provide decades of outstanding service on your home, free of decay and termite attack

# Benefits

- No water added so no swelling / no grain raising
- Full sapwood penetration and treated after milling for superior protection
- Termite and Rot resistant (even formosan termites)
- Light weight final product easy to install and ready for final painting
- Made with a renewable plantation wood resource
- Non-water soluble active constituents and water repellent agents means minimal leaching of active ingredients over time.
- No more corrosive to nails and fixings than untreated wood
- 30 year limited manufacturer's warranty
- Permitted under California South Coast Air Quality Management District



A typical modern computer controlled LOSP treatment plant as used in New Zealand.

Reference:  
1. White Spirits, Environmental Health Criteria 187, 1996. World Health Organization, Geneva. 1996. Vacsol is a trademark of Arch Timber Protection Ltd used by Arch Wood Protection (NZ) Ltd. and its customers under license.

# Lonza

Lonza Wood Protection

## *New Zealand*

Arch Wood Protection (NZ) Ltd.  
265 James Fletcher Drive  
Otahuhu, Auckland  
New Zealand

[LonzaWoodHelpNZ@Lonza.com](mailto:LonzaWoodHelpNZ@Lonza.com)

## *United States*

Lonza Wood Protection  
5660 New Northside Dr.  
Suite 1100  
Atlanta, GA 30328  
United States

[www.WolmanizedWood.com](http://www.WolmanizedWood.com)