



TANALISED®



VACSOL® AZURE H3

LOSP TREATED STRUCTURAL & ARCHITECTURAL TIMBER PRODUCTS

Answers to
frequently asked
questions



ARCH®

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LOSP TREATED STRUCTURAL & ARCHITECTURAL TIMBER

VACSOL® AZURE is the modern alternative in treated timber using light organic solvent borne preservatives (LOSP). This technology is ideal for the treatment of structural timber, re-manufactured and engineered wood products and architectural features (such as external joinery and profiles) where accurate gauging or profiling is required or where structural requirements necessitate a durable, 'dry-after-treatment' timber product. Typical application examples include exterior structures such as pergolas and balconies as well as laminated posts and beams, feature profiles, reveals and fascia. These all fall into exterior above ground situations or hazard level H3 as defined in AS1604 -Specification for preservative treatment, where timber must resist both fungal decay and termite attack.

In recent years the use of treated timber for exterior structural and feature applications has increased dramatically. This has been due to a number of factors including the declining availability or increased cost of many naturally durable timbers. Changes in building regulations have restricted the use low durability timbers such as oregon or untreated radiata pine for structural applications in weather exposed situations.

Increased awareness of these factors and demand for dry-after-treatment timber has prompted renewed interest in solvent borne treatment. Unlike traditional water borne treatments, VACSOL® AZURE treatment does not affect the moisture content of the timber and treatment is performed on the products in their final shape and form which contributes to superior dimensional stability. This vital attribute has also helped promote the modern revolution with finger-jointed, laminated, and engineered wood products for exterior applications.

Q. What is VACSOL® AZURE H3 treated timber?

A. It is structural or architectural timber and engineered wood products that have been impregnated with a Arch Wood Protection Tanalised® light organic solvent borne preservative to hazard level 3 treatment requirements in an approved industrial treatment plant in accordance with AS1604. The process drives the preservative deep into the cellular structure of the timber to provide protection against fungal decay, termites and other insects. Vacsol® Azure treated timber can be supplied either in clear, pale green or with a factory applied pre-primer coat.

Q. Why is it necessary to treat timber?

A. Present day timber supplies are increasingly being sourced from fast growing plantation softwoods such as radiata pine. These exotic pines have a number of advantages such as lightness, ease of use and uniformity. However they have little resistance to termites and fungal decay and resistance to these elements is important in exterior or weather exposed applications. Fortunately these softwoods are ideal for Vacsol® Azure treatment which confers to them a high degree of resistance to fungal decay and termites.

Q. Is VACSOL® AZURE suitable for all conditions and applications?

A. No, Vacsol Azure treatment is suitable for use in applications which can be described as "exterior or subject to moisture and above ground" or hazard level 3 as defined in AS1604 - Specification for preservative treatment. It is not suitable for ground contact applications (H4).

Q. What standards does it conform to?

A. Vacsol® Azure H3 treated timber conforms to AS1604 - Specification for preservative treatment under hazard level 3 as defined in the standard. It also conforms to the NSW Timber Marketing Act and the Queensland Timber Utilisation and Marketing Act in those states. Treated timber conforming to AS1604 hazard level 2 or above is considered to be a termite resistant building material according to the Building Code of Australia. It will also conform to the structural grading as marked or as advised by the supplier as the treatment does not affect timber strength.

Q. What preservatives are used in VACSOL® AZURE?

A. The actual preservative constituents are a synthetic pyrethroid insecticide such as permethrin and organic azole fungicides such as Tebuconazole and Propiconazole. Minimum preservative retention and penetration requirements and specifications for approved LOSP preservatives are set out in AS1604. Treatment conformance can be confirmed by laboratory analysis. Vacsol® Azure products may also contain water repellent agents that improve the timber's dimensional stability or pigments that modify the colour of the treated wood. All wood preservatives are approved by the Australian Pesticides and Veterinary Medicines Authority as well as state based regulators.

Q. Why use solvent for the treatment?

A. For certain wood commodities such as finger jointed, laminated or engineered products as well as mouldings and structural timber, treatment with a solvent based preservative may be the most cost effective and efficient means of producing the product. Vacsol® Azure is on the forefront of the modern revolution in engineered and re-manufactured wood products. This is because the solvent based treatment does not affect the moisture content, strength, dimensions or glue bonds and hence can be done on the timber products in the final shape and form. With the modern plantation pine resource, Vacsol® Azure dry treatment using solvent means that the finished treated wood products are more dimensionally stable and less stressed than with conventional re-dried wood treatment processes.

The solvent used is white spirits which is of low toxicity. White spirits and similar solvents are commonly used in household products such as dry cleaning fluid, paints and as propellant in pressure cans.

Q. How can VACSOL® AZURE H3 treated timber be identified?

A. Vacsol® Azure treated timber will have either a natural timber appearance (often with a green tint that is incorporated in the treatment), or with a factory applied coating of primer (typically light blue-grey or pink).

The colour tints are not intended to be colour fast for the long term in the end use situation and will fade with exposure to the sun. The pre-primed coatings used are not intended for long term weather exposure and will require painting. Check with your supplier if unsure.

Most importantly, all treated timber should carry a treatment brand on each piece and it is a legal requirement in Queensland and New South Wales. Insist that your supplier provides branded timber. A treatment certificate can be provided on request.

Q. What is the cost of VACSOL® AZURE treated timber?

A. In general, Vacsol® Azure timber should be competitive with alternative dry-after-treatment timber or select high natural durability timber.

Q. What is the availability, what sizes are offered?

A. Most structural softwood sizes should be available as well as certain engineered wood products, plywood and a wide range of finger jointed profiles and feature products. Pre-Primed and natural timbers should be available. This should be checked with the supplier ahead of time.

Q. Is it guaranteed, how long will it last?

A. The treatment is expected to provide protection well in excess of 20 years providing that the product meets specification and the timber is installed and maintained correctly in the right hazard application (exterior above ground situations).

In addition to all statutory consumer protection rights under the Trade Practices Act, Arch Wood Protection provide a Tanalised® structural guarantee against fungal decay and termite attack.

Q. Is VACSOL® AZURE treatment safe?

A. Yes, Vacsol® Azure treated timber is safe to handle and use given a few simple precautions, most of which are applicable to normal timber.

It must also be considered that individuals have a wide range of sensitivity when exposed to many natural and man made materials. In rare cases the preservative, the wood itself or other additives may cause irritation to some individuals particularly in the form of sawdust or if the timber is not dry.

If any irritation or undesirable effects occur, cease handling the material and review your work procedure and personal protection measures (ie: gloves, dust extraction). If irritation persists consult your doctor or an occupational health adviser.

Q. What are the safe handling procedures?

A. The safe handling procedures fall into two categories, those for handling the timber once the treatment has dried and those for handling the timber fresh after the treatment process.

For normal situations when working with the dry timber the following is recommended:

- ◆ Keep work area clean and keep airborne wood dust below recommended maximum exposure levels. Use mechanical air extraction if necessary. Brush wood dust off the skin.
- ◆ Use appropriate personal protection such as dust mask, safety glasses, ear muffs and gloves when using power tools on the timber.
- ◆ Cotton or light gloves are recommended for general handling.
- ◆ Wash hands after use.

Users are generally advised where possible to avoid handling the product if still wet after the treatment. However if this is unavoidable the following additional procedures are recommended.

- ◆ Ensure good ventilation to minimise any solvent vapours in the work area.
- ◆ Avoid direct skin contact. Use solvent resistant gloves when handling the timber.
- ◆ For workers who handle the freshly treated timber in such a way that contact with the torso and legs is likely (ie: opening up packs, racking out boards, carrying boards), an impervious work apron is recommended.
- ◆ Wash hands and arms after handling and before meal breaks.

A material safety data sheet (MSDS) and Guidelines for handling Vacsol® Azure treated timber are available for further information.

Q. What about the smell, is it permanent or will it disappear?

A. The odour of the treatment fades substantially as the solvent evaporates. The evaporation period depends on a number of factors but should be only a matter of a few days after treatment once the timber is separated from a pack and left in an open ventilated area. The odour of the treatment may also be noticed when cutting or using power tools on the timber. By the time the treated timber is installed in the end use situation there should be virtually no perceptible odour.

Q. How should I store VACSOL® AZURE treated timber?

A. Like all dry, dimensioned timber, Vacsol® Azure treated timber should, as far as possible, be protected from rain and weather prior to construction to prevent unsightly surface mould or other aesthetic blemishes. Storage areas should have good ventilation to minimise any odour or solvent vapours.

Q. Does VACSOL® AZURE treatment affect timber strength?

A. No. A study by the Queensland Department of Primary Industries Forest Service has shown that pressure treatment of slash pine using light organic solvent preservative has no negative effect on the stiffness and strength of the wood.

Q. Does the treatment increase the flammability of the wood?

A. No. An assessment by NSW State Forests found that once most of the treatment solvent has evaporated, the treated timber is not any more fire susceptible than normal timber and has the same allowable uses under the Building Code of Australia with regard to fire rating.

Q. What installation and maintenance practices should I use?

A. Use good building practices in conformance with the Building Code of Australia, safety codes and local requirements. Use corrosion resistant fasteners that are suitable for the intended application and in line with the manufacturers instructions. All H3 treated timber components must be well clear of the ground.

Where a piece of timber is cut to length, rebated or drilled it is essential that the newly exposed surfaces are re-sealed with a suitable in-can timber preservative such as Tanalised® Ecoseal or Tanalised® Enseal. Vacsol® Azure treated timber should not be rip sawn, re-thickened or heavily planed as these actions may reduce the protection afforded by the treatment.

It is strongly recommended that Vacsol® Azure treated timber is painted or stained for all exterior, weather exposed applications.

Refer to the painting section on the next page, the Tanalised® structural guarantee or your timber and paint supplier for further information.

Q. Can I use VACSOL® AZURE H3 treated timber for interior construction?

A. Yes, but in most cases it is unnecessary to use H3 treatment for H2 situations (interior and dry) as there should not be a fungal decay hazard. Use of H3 treated timber may be advisable in some situations such as in tropical regions and for bottom plates around wet areas where moisture may promote fungal decay.

Q. Is the treatment corrosive to bolts, nails and plates?

A. No. However galvanised steel or other corrosion resistant fasteners (including aluminium) are recommended for all weather exposed applications.

Q. Does the treatment affect painting?

A. It is strongly recommended that Vacsol® Azure treated timber should be painted for all exterior, weather exposed applications to prevent surface deterioration and mould. Once the treatment is dry, Vacsol® Azure treated timber can be painted like normal untreated timber. However the presence of the solvent and water repellent agents may affect the adhesion of some paints. Of most importance is allowing for adequate drying of the solvent. Generally it is recommended to wait for 7 days after installation of the timber before painting. Pre-primed timber may be suitable for immediate painting providing that the primer is dry and in good condition. Note that the factory applied primer coating is not intended to provide long term weathering protection and may deteriorate over time with prolonged exposure. Check with your supplier if the pre-primed timber offered uses a light, holding primer only (which may need to be sanded back prior to painting) or a full architectural primer that is fit for direct application of top coats.

Refer to the Arch Wood Protection 'Guidelines for Painting Treated Timber' for full details and recommendations as well as advice on related issues. For further information on painting practices, refer to the Australian Paint Manufacturers Federation HB73.1-2005 the 'Handbook of Australian Painting' and more specifically AS 2311- The painting of buildings. Always follow the paint manufacturer's instructions for application and maintenance of the coating system.

Q. Does the treatment affect gluing?

A. The presence of water repellent agents in the treatment may affect the bond strength of some glues. This may be alleviated by light sanding of the area to be glued. If in doubt glue test pieces beforehand to evaluate the bond strength. The glue manufacturer's instructions should always be followed. Joinery and component manufacturers who frequently require gluing are recommended to glue prior to treatment.

Q. Can I use VACSOL® AZURE CLEAR timber with other types of timbers?

A. Vacsol® Azure treated timber can be used with other timbers (treated or untreated). However the following should be considered.

- ◆ Do not mix dry-after-treatment timber with wet or unseasoned timber in the construction as this may cause gaps and cracks to form as the timber dries.
- ◆ Any other timber used with Vacsol® Azure treated timber should also be of suitable durability and strength for the application.
- ◆ Ensure that any fasteners, paints, glues or other materials used are also compatible with the other timbers.

Q. Is the product environmentally safe?

A. Numerous studies have found that timber sourced from well managed resources has a low net environmental impact, much lower than most man made materials including steel, aluminium, plastics and many masonry products.

The use of the chemicals for preservation has an additional environmental impact but this is offset by the greatly enhanced durability and lifetime that the preservation process confers to the timber. Essentially, fast growing plantation softwood is converted into the equivalent or greater durability of naturally durable, slow growing indigenous timbers. The preservatives used are insoluble in water and are resistant to leaching from the timber.

In summary, use of Vacsol® Azure treated timber is environmentally responsible.

Q. How do I dispose of waste and off-cuts?

A. Off-cuts and saw dust from Vacsol® Azure treated timber are not a hazardous waste. For normal domestic and trade users, dispose of waste through normal waste collection and disposal services. Industrial users generating large amounts of treated timber waste may require special approval for disposal.

Treated timber off-cuts should not be burnt for domestic heating or cooking. Treated off-cuts and saw dust should not be used for mulching or animal bedding.

Q. Where can I find out more?

A. Contact us at Arch Wood Protection (www.tanalised.com), or contact the CSIRO, your state forestry or timber advisory service, a building information or advisory centre, the Timber Preservers Association of Australia or your timber supplier. You can also contact the Australian Pesticides and Veterinary Medicines Authority and Worksafe Australia for guidance on wood preservatives and other pesticides.

VACSOL® AZURE H3 LOSP TREATED STRUCTURAL & ARCHITECTURAL TIMBER PRODUCTS

SUMMARY OF BENEFITS

- ◆ Durable 'dry-after-treatment' structural and architectural timber products for outdoor applications. Protected against decay and termites.
- ◆ Available in common structural sizes, plywood, certain engineered wood products and a wide range of feature profiles (confirm availability with the supplier).
- ◆ Available with factory applied primer finish for easy painting, or with natural timber finish for staining or painting.
- ◆ Dimensionally stable, easy to use, true to size and grading specifications.
- ◆ Non-corrosive to nails and fixing plates.
- ◆ Conforms to Australian Standard and BCA requirements.
- ◆ Built in durability, backed up by the Tanalised® Structural Guarantee.

® Tanalised and Vacsol are a registered trade name of Arch Wood Protection.

Vacsol® Azure treated H3 structural and architectural timber products are manufactured by many independent producers throughout Australia and New Zealand.

Available from:

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