



# TUNG OIL SEAL

## FOR SEALING AND FINISHING SANDED TIMBER FLOORS

**With rapid drying technology, dries in an amazing 10 hours**

### What is Tung Oil?

Tung oil is produced by crushing and extracting the oil from the dried nuts of the Chinese Tung tree. The benefits of Tung oil were discovered by the Chinese who used it to waterproof, protect, and enhance the appearance of timber ships and furniture as early as the 14th century.

In our opinion pure Tung oil based timber sealer is the preferred method of adding richness and warm colours to older timber floors. Tung oil does not hide natural imperfections and age old marks. It enhances the "patina" of the timber.

Most Tung oil sealers on the Australian market are modified with natural or synthetic resins or varnish. These are said to "improve" the product. It is our opinion that this is not necessarily correct. "Modified" Tung oil seals may cause raised grain even delamination on some timbers and are not as flexible nor do they feed the wood as does the natural product. Research Products Tung Oil Seal does not yellow or darken with age.

### Research Products Tung Oil Seal

This is a totally new redevelopment of Tung Oil that is simple and is non toxic. It is made from pure, natural tung oil without modifying resins. The only modification to the formulation is to thin the oil to enhance and maximise penetration and workability. A crosslinker is included to shorten the drying and curing time to an unbelievable 10 hours (normally 3 ½ days).

The results, when applied, are superb, with a tough, flexible, water and alcohol resistant coating that penetrates deep into the timbers cellular structure to enhance grain appearance, richness and natural glow of the particular flooring being treated.

### Versatile Tung Oil Seal - with 5 systems to choose from.

Tung Oil Seal is extremely versatile as it can be maintained and treated in five distinct and easy ways. They are:-

- I. **Tung oil only**
- II. **Tung oil plus solvent wax finish (Safestep)**
- III. **Tung oil & floor polish (water based) Dazzler**
- IV. **Tung oil & Daylight Express (water based timber seal)**
- V. **The Ultimate System (Tung Oil, Daylight Express and Dazzler)**

#### System I - Tung Oil Only

Total tung oil system is where tung oil is used as the main sealant with up to three coats applied to new floors as well as the recoating medium when the floor becomes worn and dry looking

Because Tung Oil Seal is so elastic and has great penetration power, occasional recoating will restore the natural beauty of the timber. The preparation of a light damp mop with SUPASTAR water based cleaner is usually the only preparation required. Regular dry buffing keeps the low to medium gloss looking good and removes light scuffing.

If the floor is marked, a simple cut back with a wine coloured smoothing pad for heavily worn traffic lanes or scratched floors, a light cut back with a 220 grit sand screen is all that is required prior to recoating with one or two coats of Tung Oil Seal. What could be simpler!

### **System II - Tung Oil and SAFESTEP wax finish**

Because natural Tung Oil is not a grain filling finish, on open hardwoods you have a grain that shows, rather than a perfectly smooth and even result. (These are called pores.) Whilst you might achieve a non grain appearance on non-pored softwoods such as King William pine, Cypress & Baltic species you will need to use a wax finish on most other timbers to achieve a high gloss and ultra smooth finish. The use of traditional wax over Tung oil has been in use over the last 200 years and we have been selling Safestep wax for the last 20 years.

Finishing with a wax gives other advantages:-

- \* Wax finishing offers a much higher gloss than Tung Oil that can be buffed easily with a polishing machine to remove scuffs and scratches.
- \* Waxes penetrate along with the Tung Oil to provide a replacement to lost lignin or moisture that dries out of the timber. It feeds the timber to act as a preservative and grain filler (pore filler).
- \* Waxes create a more slip resistant surface than Tung Oil on its own and don't have that dried out appearance if recoated infrequently.
- \* Waxes build upon the warm appearance gained by the use of Tung Oil Seals.
- \* Waxes create a patina that enhances appearance and in the case of solvent or spirit based waxes prevent the grain from being raised when damp mopping is used to clean the surface. Solvent damp mopping (dry cleaning) is the best and easiest method of surface of restoration or deep cleaning. This would only be required every five years, so it proves the low cost of maintenance of the wax system. (Refer to Safestep data sheet)

### **System III - Tung oil seal and water based polish**

This is one of the simplest methods of keeping a timber floor looking good at low maintenance cost. Just treat it like you would a supermarket floor. It provides a more scratch, mark and spill resistant finish to the SAFESTEP wax finish. Contract cleaners like this system.

Tung Oil seal in this case, as normal, becomes the penetrating seal with tough water based finishes like DAZZLER or FILMSTAR being used as the topcoat and restorable finish. Even ultra high speed burnishing equipment can be used to build a wet look gloss or alternately standard speed polishing machinery can be used.

It's a simple method, used generally in commercial sites rather than domestic applications.

Maintenance is simple. Just damp mop with SUPASTAR neutral cleaners or Citrus Resources' ORANGE SQUIRT.

### **System IV - Tung Oil and water based sealer Daylight Express. The Ultimate System.**

This is possibly the best combination of old and new technology in harmony, with the best results of all the four systems.

Using Tung Oil Seal first, to deeply penetrate the timber and enhance the natural grain colours (one coat) followed by usually three coats of DAYLIGHT EXPRESS, creates the ultra clear and glossy water based wear layer that will hardly need any maintenance for the life of the floor.

This last method provides the industry with the combination of unique colour clarity plus unquestionable superiority in wear resistance, gloss and long term appearance that DAYLIGHT EXPRESS water based technology brings to the floor.

The system is particularly successful in older styled homes or establishments where the antique look of Tung Oil Seal can be combined with a much lower level of maintenance required by DAYLIGHT EXPRESS. Daylight Express is odour free, non toxic and super fast drying and combine with Tung Oil Seal to give the best possible results..

You will still be able to finish the total sand seal and finish in one day. Using the Tung Oil Seal as the first coat that dries in approximately 3 ½ hours. Daylight Express can be recoated in approximately 40 minutes.

### **System V - The Ultimate System**

For gloss, durability and ease of repair -

- 2 coats of Tung Oil penetrating sealer
- 2 coats of Daylight Express
- 2 coats of Dazzler

By applying Dazzler as a sacrificial coating over the Daylight Express, the following advantages are gained:

- 1) Easy to maintain and/or repair.
- 2) Easy to strip and reseal without to sand floor.
- 3) Increased durability.
- 4) Increased gloss level.

### **Surface adhesion**

Tung oil, because of its deep penetration into the timber, creates a far stronger bond to further coats of water based finishes. These will last longer and have greater resistance to scratching and marking. Many floor sanding professionals use it as a manner of course.

### **Application of Tung Oil**

It is best to use a lambswool applicator dipped into a flat tray with the excess squeezed out. On certain timbers (no pore timbers like the pinus family) it is sometimes an advantage to add turpentine or white spirit to aid penetration and to assist drying. No more than 5% is required.

Normal application is 2 coats unless System I is being used (Tung Oil only) three coats are usually required on porous hard woods.

As mentioned previously because our Tung Oil Seal is not modified there is minimal grain raised. All that will be required is a padding back with a Wine coloured smoothing pad prior to the final coat or a light sand with a 220 sand screen disk after the first coat.

**Coverage** - 1<sup>st</sup> coat: Approximately 12 to 15 sq metres per 1 litre.  
2<sup>nd</sup> & 3<sup>rd</sup> coat: Approximately 20 sq metres per 1 litre.

DRYING TIME: Normally first coat: 10 hours depending on weather condition.

Second coat: up to six hours

Third coat: up to six hours

Traffic: Do not expose Tung Oil Seal to heavy traffic for 24 hours after application unless top coating system 2,3 & 4. This is then reduced to 12 hours.

**Note: Individual product sheets are available on all products listed. We suggest that once you have decided on what system is best for your application, read fact sheet on products before application.**

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