

Scientific Name

Aleurites fordii

Common Name

Tung oil tree, tung nut

▶ **Family**

Euphorbiaceae

▶ **Plant Description**

Deciduous tree; leaves alternate, simple, long-stalked, heart-shaped; flowers pale pink to white, with 5-7 petals, in large clusters; fruits large, globular, with 3-7 seeds.

▶ **Origin**

China

▶ **Where Found**

Landscape as cultivated ornamental small tree.

TUNG OIL HISTORY: Pure Tung Oil is a finishing product that provides a tough, flexible and highly water-resistant coating. It is classed as a drying oil along with linseed, poppy seed, safflower seed, walnut, soybean, oiticica and a few other oils. Although it is relatively new to the Western world, tung oil also known as Chinawood oil has been known for centuries to the Chinese, and until this century, China was the main source for the oil. It comes from the seed of the tung trees, [Aleurites fordii](#) and *Aleurites Montana*, deciduous trees that are very susceptible to frost damage. This vulnerability has restricted the cultivation of the tung trees to China and South America. Tung oil (china wood oil) received wide application in China: in the building trades as a treatment for both stone and wooden structures; in marine trades as a preservative and water repellent on wooden boats. It is said to have been introduced to the West by Marco Polo. From the 13th to the 19th century, tung oil had only limited use in the West. More recently, tung oil has gained favour over linseed oil for wood finishing because it is faster drying and does not darken as much with age.

PURE TUNG OIL ADVANTAGES:

- Naturally polymerising finish
- Cures by oxidation not evaporation
- Does not form a glossy finish no matter the number of coats
- Form a flexible water proof finish
- Resists abrasion and acids
- Does not blister and peel (properly applied)
- Does not mould like linseed oil
- Long shelf life
- Does not darken with time like linseed oil
- Concentrated (thin one to one, doubles the coverage)
- Combined with "[Citrus Solvent](#)" makes an all natural finish
- FDA approved for food contact

PROPERTIES AND CHARACTERISTICS: Pure Tung Oil is water and alkali resistant offering a protective barrier. A Pure Tung Oil finish will not darken with age as other finishes will. It resists marring, penetrates well, remains elastic and unlikely to craze. Tung oil builds quickly, consolidates the wood surface and leaves a transparent matte finish. Pure Tung Oil finish will not mildew or bleed like linseed oil when dry which makes it an excellent candidate for outdoor finishes. It should be kept in an airtight container with minimum air space. Pure Tung Oil contains no thinners or driers and has a light nutty odour. A Pure Tung Oil finish mixed with Citrus Solvent is a all natural organic finish that is environmentally safe and food safe.

Tung oil is a varnish. Squeezed from tung nuts (*Aleurites fordii*), a renewable resource, it oxidizes on exposure to air and becomes a solid resin by polymerization. It has been used for at least a millennium in China in its raw state - it lasts a long time. Like shellac it seals wood well against humidity changes, is easy to apply with a brush, and repairs easily. It brings out the natural colour of wood better than shellac. But, it's more expensive, requires more coats, and is harder to put a fine polish on. The raw oil contains poisonous toxins, but these are apparently destroyed by the drying process - the finish is FDA-rated food-safe. 100% tung oil is slow drying and produces a matte finish. It isn't as hard as polymerised tung oil when it dries.

Polymerised tung oil isn't a synthetic its generally heated tung oil, but some manufactures claiming their product is pyre tung oil will use chemicals. Tung oil polymerizes naturally as it dries, but the heating process to polymerize tung oil takes care of the polymerizing in advance so the polymerized tung oil will dry faster and harder and is more viscous. Polymerised tung oil gives a gloss finish. In theory its similar to raw linseed oil and boiled linseed oil but they are completely different types of oils. In a nutshell (pardon the pun) 100% tung oil is good but slow drying and has a natural almost matte finish.

Polymerised tung oil dries much quicker, is harder and has a gloss finish. However the polymerising process requires a pressurised heat process and therefore genuine naturally polymerised tung oil is not that easy to find.

Chinawood oil is another name for tung oil. Chinawood Deck Oil is polymerised but beware of chemicals and toxic additives used instead of the natural heat process.