

Naturals:

Linseed Oil, Danish Oil, Varnish Oil:

Tried and True (Amazon, Rockler, Lee Valley)

T&T: Original is Danish Oil about (my estimate) 55% Linseed Oil 45% Beeswax

T&T: Danish Oil is plain Linseed Oil

T&T: Varnish is about (my estimate) 85% Linseed Oil, 15% Pine Sap Resin. NO TURPENTINE.

Beeswax:

Any pure beeswax. You can get blocks on e-bay.

Rhose Point for a thinner wax (beeswax+ olive oil)

Liberon Waxes (Beeswax + Carnauba + Dyes, DONT SMELL HIGH VOC)

Tung Oil:

Hopes Pure Tung Oil

Shellac:

Zinsser for premixed (CUT WITH 50% alcohol for first two coats)

Liberon for dry flakes

Amber and Garnet are the only two natural colors, the rest are mixes. Clear is a highly filtered product good for top coats.

Eastern Lacquer

(not personally used, but highly recommended) - Mejiro Co. start with Seshime Urushi

Western Lacquer

<http://mariannewebb.com/archives/281> For historical recreation

<https://aplanelife.us/blogs/f/japanning-103-traditional-japanning-the-black-hole-of-finishes> For Japanning

traditional western lacquer NOT available in modern stores.

Ammonia:

Anywhere you can get 30%, usually industrial supply stores

13% can work, but not as well.

Lye:

Any PURE Lye. (NO WAX)

Borax:

Any PURE Borax (NO pesticides)

Potassium Dichromate:

Must have DRY crystals, not premixed water solutions for high school chemistry.

Pottery supply stores are your best source.

Seller <https://www.ebay.com/str/paulbrownstudioartsandsupplies> has a supply, not listed for sale, but can be messaged.

Turpentine:

Any PURE Gum Spirit.

Best source: DIYChemicals Turpentine Pure Gum Spirits – Pine Resin Oil Solvent on Amazon.

Synthetics:

Aniline Dyes:

Lee Valley Dyes

W. D. Lockwood Dyes (Tools for woodworking)

J.E. Moser's

Trans Tint

Stains:

woodwrightfinish.com - Ohio Stains

General Finishes oil, water, gel

Sealers:

Total boat

Epifanes

General Finishes Arm R Seal

For a traditional finish, 8-10 coats linseed oil, allowing 2-3 days drying time between coats is recommended.

0. Prior to any application your wood should be planned to your final dimensions. If you want to sand, you can sand to 150-220 grit on most hardwoods. Softwoods are happy up to the 400 range. You can also use a card scraper post planing or post sanding get a smoother finish. If you're using a hardwood laminate (birch plywood) or a laminated surface wood (oak veneer on ply) you can still oil the wood. The purpose of oiling is to drive moisture from your wood while keeping it supple. Plywood's bane is moisture, so it will love the oil. The glues will absorb the oil, which is fine. If you're applying a stain go through that process and allow a week or more of drying time between the last stain application and the first oil application. If its properly dry, the oil will not care if you used an oil, water, or gel-based stain (though there will be some resistance to absorption from the Gel Stains thanks to its urethane content). You can apply linseed oil to your work BEFORE assembly and still glue up just fine. However, Danish oil may resist glue, and Vanishing should only be done AFTER assembly.

ON any and ALL pieces I recommend doing a full oiling process on a sample from the material you are actually working with, in conditions you will be working in. This avoids unfortunate accidents and discoveries.

1. Apply a coat thick enough to cover the wood surface, but not thick enough to run or pool. Use a cotton rag (old t-shirt is good). You want this oil to be absorbed into the wood, and this takes time,

depending on the cut of the wood, its existing moisture content, the temperature of the room you're working in, and the humidity. I pour a little on and spread it, and then a little more and spread it, and repeat til the surface is covered. Getting your edges is also advisable. End grain will suck up a LOT of oil, and this is good. Once the oil is on, leave it. Check back on it in an hour, in all likelihood, some part of your wood will have absorbed more oil faster than other parts. Spread around the remainder so that all the wood is covered, or drip a little more on. Wipe all of it off BEFORE it gets tacky. This might take you a time or two to figure out. If it gets tacky, all is not lost, let it dry and sand with 0000 steel wool. LOTS of sanding. Wipe clean with mineral spirits. Then re-apply a first coat.

Linseed Oil is expensive now, I recommend wiping the excess into a separate storage bottle and keeping it for further applications. OR take any leather you have that needs oiling and soak it in the excess (in a separate container, NOT on your wood. The two can stain each other).

2. The day after application, buff with a cotton rag in circles, then in long smooth motions with the wood grain. It's common for some moisture or oil to seep back to the surface after some time passes, and may or may not be visible, this is what you're removing.

After 2-3 days it should be dry enough to do another coat. While not 100% needed, I do recommend a light scrub (2-3 low pressure passes) with 0000 steel wool before applying the next coat. After rubbing with steel wool, use a dry (separate from the previous) cotton cloth, and brush/rub with the grain. Your goal here is to remove any particulates and any steel that might have stayed behind. Do NOT clean with mineral spirits unless it has been a week or more since the application of the last coat.

3. Apply the next coat of oil, and repeat the previous processes. Each coat will take a little longer to soak in, and will soak less/absorb less each time. The amount of oil that you add to the wood surface should be decreasing every time, or every other time. Repeat these steps 8-10 times, minimum. In traditional carpentry, a cheap workman was considered one who applied 8 coats. The average carpenter would do 10-12. The high-end carpenters averaged around 14-16 coats. Do as many coats as you want. Plan on wiping down your piece with oil once or twice a year for the first decade after you've completed your piece. (This touch up coat can be 75% - 90% mineral spirits, though more mineral spirits usually means you need to do more coats, you need thinner coats the more of a sealed surface you have).

I personally recommend that you do 8 coats on your surfaces and sides. After that has dried, flip over and do the other surface for another 8 coats, including the sides again (because they're so thirsty). When those 8 are on and dried, flip back over and do your additional coats on the original side. Your underside does not need the higher oiling your surface will. But It won't hurt it either, so if you want to keep it consistent, you should definitely oil it too, but it's not required. I will say historically, furniture that has lasted centuries, tends to be the ones with the higher oiling content at the start, and where all sides were oiled equally. The more coats of oil applied in the beginning will NOT change the frequency or the need for more coats in the future. It WILL give it stronger protection against moisture and desiccation, and after a decade or two, a much better color.

4. At this point you can finish/seal your wood. If you're sealing your wood (lacquer and all synthetics) you need to seal ALL sides. You SHOULD seal all sides with at least one coat if you're using shellac, but you frequently see just the surface. If you're finishing (varnish, or oils of any kind) you do not need to apply to unseen surfaces, but I do it to keep it consistent and you never know where wear and tear might occur.

4a. If you're varnishing, you can apply it straight on using the same techniques above. 2-3 coats is traditional. Add an extra 1-2 days between coats.

4b. Before you varnish you can apply a thick coat of Danish Oil (Linseed Oil + beeswax). 2-3 coats were common, using the same process as above. Add an extra 1-2 days between coats. Once done, Varnish. The tried and true original is a finishing grade Danish Oil, and can be used right out of the can.

4c. Brush on the sealer of your choice. 3 Coats Shellac would be common. Two Coats urethane would be appropriate. I do not recommend poly as it hides too much of the oil nature behind plastic.

5. Once you've finished your piece, wipe on several coats of wax (see above for choices)

OPTIONAL PROCESS A:

Using the same processed and steps as above, you can replace Linseed Oil with Danish Oil. However, you will have to make your own Danish Oil at various ratios. The Tried and True Original is a thick finishing grade, Danish Oil. It needs to be thinner to serve as a base coat. Assuming a minimum of 10 coats, your first two coats should be 90% Oil to 10% Wax. the next two coats should be 80/20, the next three 60/40, and the last three 50/50. Tried and True original is somewhere around 55% Oil to 45% wax (best guess). All coats AFTER coat 10 should be 50/50 oil to wax, so straight out of the T&T original can is fine for most people.

You can make your own Danish oil by adding pure beeswax to Linseed oil, but for first timers I recommend you dilute the Tried and True Danish Oil and store the mixtures in Mason jars. I use 32oz narrow mouth jars, but you may want to start with 8oz until you know how much you're gonna need. I've done the math for you below, for larger jars just times the amount below by how many times it divides into your larger jar (example: for a 32oz jar, multiple all the figures below by 4):

Linseed Oil/Can of T&T original = 0% added oil for a 55% oil to 45% wax (will work for 50/50 ratio)

25/75 = 53% oil to 47% wax

37/63 = 65% oil to 35% wax (will work for 60/40 ratio) (assuming 8oz mason jar, 3oz oil to 5oz T&T original)

50/50 = 77% oil to 23% wax

63/37 = 83% oil to 17% wax (will work for 80/20 ratio) (assuming 8oz mason jar, 5oz oil to 3oz T&T original)

75/25 = 89% oil to 11% wax (will work for 90/10 ratio) (assuming 8oz mason jar, 6oz oil to 2oz T&T original)

STIR ALL MIXES REALLY WELL. Let sit for a day. THEN STIR REALLY WELL AGAIN. Fill the jars to the surface. The more oxygen in the jar with the oil/wax, the faster the oil will dry out (bad). Add an extra day for drying between coats.

OPTIONAL PROCESS B:

For external furniture or internal high moisture usage (cutting board, countertop, etc) a 100% Tung oil or 50% Tung oil/50% Linseed Oil can be used. Apply using the same processes and steps above. If using 100% Tung, you must brush on, not wipe/rub. For most pieces, four coats is fine. Soft woods may stop absorbing after 3 coats. Hardwoods may have to be cut 50/50 Tung/linseed after coat 3. IF you want a 100% Tung for the look, 4 coats are about where you have to stop. If the protection is what you're after, I recommend starting with a 50/50 Tung/linseed and doing 8 coats. For external furniture I cannot recommend enough Epifanes Wood Finish. The Matte is fantastic looking. This mixture is Tung Oil and Urethane, so you will get even more protection, UV protection, and a hard seal. If you want gloss, Epifanes Clear Varnish is what you're looking for.

For internal use, particularly around food preparation areas I find the oil is fine on its own. If you want further protection, Beeswax is fine and easy to re-apply as needed.