

Finishing wood projects can be very intimidating and, too often, wonderfully conceived and built projects are put on a shelf, never to see their full potential. With so many types of products on the market (oil, shellac, lacquer, varnish, etc.), a major challenge is just figuring out what direction to head in. To simplify your process, we present two finishing products below that we believe are readily available, versatile, beginner friendly and beautiful.

WATCO DANISH OIL FINISH

Overview. Oil is very easy to apply as it is not sensitive to dust, handprints or over-application. Oil penetrates into the wood, fills its open pores and protects from within. It also provides a very rich enhancement to the color and grain of the wood, especially curly and figured wood. Oil finished projects have a very natural look and do not appear glassy like a conference room table. With each successive coat, the pores of the wood continue to fill with oil that will eventually dry. Ideally, enough coats will be applied until the dried oil in the pores reaches the surface of the wood for a fully "filled" finish. Oil is a great finishing product for projects like boxes and picture frames. Oil, however, cannot build up a durable, water resistant finish on top of the wood and therefore is not the ideal choice for projects like coffee tables and serving trays, which will regularly hold food and beverages.

Watco Danish Oil Finish is a very good product for oil finishing. It is sold at virtually every hardware store and is not very expensive. Watco's Danish Oil Finish formulation uses boiled linseed oil as a base but has several additives that increase the durability of the finish and speed up the drying process. The steps below can also be used for boiled linseed oil (which is definitely cheaper) but the dry-time for each coat should be extended by 3 to 5 times depending on humidity and temperature.

Before starting any oil finishing, there are two VERY important things to know:

- When oil finishes dry, they form a soft and rubbery film. You do NOT want to have a soft and rubbery film on your project. Oil finishes can never be left wet on the surface of a project, or you will be very unhappy with the finish when dry. The instructions below relating to buffing off wet oil before leaving a piece to dry are very important and must be followed.
- Oil finishes are extremely flammable and the rags, paper towels, etc. that you use can easily lead to spontaneous combustion. Make sure that everything you use that gets covered with oil is left unfolded to dry fully and not in a pile.

What You Will Need. There are several products you will need to complete all the steps of a proper Danish Oil finish.

- Can of Watco Danish Oil Finish - Natural Color
- Applicators - paper towels, cloth pieces or foam brushes
- Soft paper towels or old t-shirts for buffing
- 400 or 420 grit sandpaper (available for sale at PW)

- Ultra fine steel wool (0000 grade)
- White scour pad (optional, available for sale at PW)

Application. There are several steps that should be followed with each coat.

- When applying the oil, some will penetrate into the wood, while some will stay on top of the surface and will have to be removed.
- Apply a liberal amount of oil to the entire project - ALL facets including backs, bottoms, insides, etc. - with a paper towel, small piece of cloth or a foam brush. Wait 30 minutes to allow oil to penetrate. Some areas will appear fully absorbed while others seem wet on the surface. Reapply oil to the entire project again for additional absorption and wait 15 additional minutes.
- Buff all surfaces with paper towels or old t-shirts so that there is NO oil remaining on any surface. Any oil left on the surface will dry into an uneven rubbery surface coating. The importance of this step cannot be stressed enough.
- Allow sufficient time for project to dry. 24 hours is a good estimate for Watco Danish Oil but depending on temperature and humidity, additional time might be needed. Periodic buffing during this drying phase to remove any oil that seeps out over time will make the next coat easier but is not mission critical.
- Once dry, the project will feel rougher than before starting. Despite all the buffing you do, a very thin film of oil still will have dried on the surface and will be embedded with dust particles. This is NORMAL and not the sign of any mistakes. Nevertheless, this coating must be lightly sanded off before the next coat.
- Lightly sand your entire project with a very fine sandpaper like 400 or 420 grit. Your goal is to remove just the very top dried oil surface and not to remove an entire layer of wood, so be gentle and sand lightly only until you feel the surface feeling very smooth.
- Repeat all of the above steps as many times as you like until you are happy with the look, feel and luster of the project. Two or three coats will be sufficient for most amateur / hobbyist projects. Remember, each additional coat that is added until the grain and wood pores are fully filled will yield smoother and more lustrous results!
- After your final coat, bring the project up to a glassy smooth finish by buffing with ultra-fine abrasives. Buff the entire piece (or at a minimum those areas that will be visible and touched) with ultra fine steel wool (0000 grade). The results will be fantastic! If you have access to white scour pads (available at PW for sale), they are even finer and can be used for buffing after steel wool. Note that these final buffings will only be a waste of time if done before the very end and should not be done in between any two coats.
- While the oil from each coat is dry enough to be handled after approximately 24 hours, the oil takes several more days to fully cure. You may wish to consider giving the project a few additional days to cure before using it.

Disposal of Rags. As a reminder, never leave oily rags, paper towels, etc. piled up after use as they can very easily spontaneously combust! Always lay everything out flat and unfolded to dry. Once fully dry everything can be disposed of in the regular trash.

Similar Products. There are several other products on the market that are formulated similarly to Watco Danish Oil Finish and will yield very similar results. These products include: Deft Danish Oil, Behlen Danish Oil, Maloof Finish, Behr Scandinavian Tung Oil Finish, Minwax Tung Oil Finish, Minwax Antique Oil Finish and Velvit Oil.

MINWAX WIPE-ON POLYURETHANE

Overview. Polyurethane is a specific type of varnish finish. Generically, varnish finishes are comprised of plastic particles suspended in a thinner. Once applied to the surface of a project and exposed to air, the thinner immediately begins to evaporate leaving behind the plastic to solidify as a hard film on top of the wood. This dried varnish finish is very hard, durable and water resistant. Because of this durability and water protection, varnish is ideal for projects like coffee tables. The major challenges, however, are that varnish finishes are very difficult to apply and repair. Varnish is very sensitive to dust, finger prints and uneven application. Additionally, a varnish finish, once scratched, can be very difficult to repair, especially compared to how easy it is to fix a damaged oil finish.

Varnish finishes are usually applied with a brush (very difficult) or sprayed on (extremely difficult). However, several wiping varnishes are on the market to allow for easier, wipe-on application. The wiping varnishes are standard polyurethane mixed with an extra dose of thinner to allow for very easy spreading and flow of the solution. Each layer of wiping varnish dries very thin and is more forgiving than thicker layers of varnish. Because each layer is so thin, it may take several or even many coats to reach a thickness of film coat on your project that meets your desired level of protection.

Minwax Wipe-On Polyurethane is a very good product for wiping varnish finishing. It is sold at virtually every hardware store and is not very expensive.

Before starting any varnish finishing it is very important to know that varnish finishes are extremely flammable and the rags, paper towels, etc. that you use can easily lead to spontaneous combustion. Make sure that everything you use that gets covered with oil is left unfolded to dry fully and not in a pile.

What You Will Need. There are several products you will need to complete all the steps of a proper Wipe-On Poly finish.

- Can of Minwax Wipe-On Poly - Satin for less shine, Gloss for high shine
- Can of Mineral Spirits (thinner) for cleaning of project and thinning of varnish (if old)
- Applicators - paper towels, cloth pieces or foam brushes
- 220 or 240 grit sandpaper (available for sale at PW)
- Ultra fine steel wool (0000 grade)
- White scour pad (optional, available for sale at PW)

Application. There are several steps that should be followed with each coat.

- Before starting with a varnish finish, consider starting with one coat of Danish Oil to pop the color and grain of the wood. Follow the steps in our Watco Danish Oil Finish section and make sure to leave several days for the oil to cure before moving to a varnish finish.
- Set a plan for your finishing. The finish will setup quickly and you may not be able to coat all surfaces in one application. Consider dividing your projects into several sections that will be finished in different steps. Surfaces laying flat (horizontal) are easier to finish than vertical surfaces and it make take several rotations and flips of your piece to be able to attach each surface in a horizontal setting.
- Whether your project is oiled or not, make sure that your project is dust free before applying varnish. Use mineral spirits and a rag to wipe all surfaces clean. Allow time for the mineral spirits to evaporate and for the project to dry.
- Wipe on with thin coat of poly and create the most even coat that you can. Do not play with the finish or swirl around for too long. From the instant you started the thinner has been evaporating, and after a short period of time, you will start smearing sticky, drying finish around. Do NOT buff the finish off.
- Let project sit until dry. Allow approximately 24 hours for early coats and expect that future coats will dry more quickly.
- Once dry, lightly sand the surface with 220 or 240 grit sandpaper to create a smooth and uniform surface. Do NOT be tempted to create an ultra-smooth surface in between coats with ultra-fine sandpaper or steel wool. It is important to create a scratch pattern in upper most coat that will allow the next coat to fill into and bind to. A very thin wiping varnish coat will have a difficult time binding to a glass-smooth lower coat.
- Clean off all sanding dust with mineral spirits and repeat the application process as many times as desired.
- Do not use 220 sand paper after your final coat as you no longer need to make that deep of a pattern of scratches for a future coat.
- After your final coat, bring the project up to a glassy smooth finish by buffing with ultra-fine abrasives. Buff the entire piece (or at a minimum those areas that will be visible and touched) with ultra fine steel wool (0000 grade). If you have access to white scour pads (available at PW for sale), they are even finer and can be used for buffing after steel wool.
- While the varnish from each coat is dry enough to be handled after approximately 24 hours, the varnish takes several more days to fully cure. You may wish to consider giving the project a few additional days to cure before using it.

Disposal of Rags. As a reminder, never leave oily or varnish soaked rags, paper towels, etc. piled up after use as they can very easily spontaneously combust! Always lay everything out flat and unfolded to dry. Once fully dry, everything can be disposed of in the regular trash.

Similar Products. There are several other products on the market that are formulated similarly to Minwax Wipe-On Poly and will yield very similar results. These products include: Formby's Tung Oil Finish, Zar Wipe-on Tung Oil, Val-Oil, Hope's Tung Oil Varnish, Gillespie Tung Oil, Waterlox, General Finishes' Sealacell, General Finishes' Arm R Seal and Jasco Tung Oil.