

Tip #42

***Finishing Touches* — PART 2 — Applying a Oil Finish**

Oil finishes are among the easiest to apply and most difficult to botch. And, since they produce a soft, natural-looking appearance that emphasizes the grain of the wood, they're also among the most beautiful.

Oils are penetrating finishes, soaking deep into the wood and protecting it from within. They can all be applied with the same tool -- a soft rag, wrapped around a piece of sponge. The sponge is saturated with the finish before the rag is wrapped around it. As you work, you can control the flow of the oil onto the surface by squeezing the sponge.

However, although all oils are applied with the same tool, the actual method of application varies since there are many different types of oil finishes. Some of these are 100% natural, some are synthetic and others are a blend of both. Many serve a variety of different purposes, while others are manufactures specifically for application to only a few types of wood or projects. The application method will depend on what you build, the wood you build it with and most importantly, your choice of oils.

Linseed Oil

The most ancient of all oil finishes is hand-rubbed Linseed Oil. Its application may take a lot of elbow grease, but the end results are well worth the effort. Linseed Oil slowly darkens with age to create a warm, rich glow. This is especially attractive on curly maple and other highly figured or burlled woods. Over the years, the burls and figuring will become even more prominent.

To apply, mix two parts of boiled Linseed Oil with one part of turpentine and heat the mixture in boiling water with a double boiler for 10 to 15 minutes. This heating process will thin the oil and allow it to penetrate the wood more easily.

WARNING: Do this with extreme caution over an electric heating element...NOT over a gas-fired burner or open flame as these materials are highly flammable.

Rub the oil over the entire surface and continue rubbing until you achieve an even color. Now comes the work. Go back and rub small areas of the project for 10 more minutes at a time, reheating the oil if it cools, then wipe off any excess with a clean cloth.

After 24 hours, repeat this process and keep repeating it every month, six months or year, until you achieve the depth and quality of finish you seek.

Danish Oil

Danish Oil is a much more recent invention that eliminates much of the work that was once required to apply an oil finish. Made from a blend of super-penetrating oils and resins, its application requires no pre-heating. It's ideal for a fast, general purpose finish and will finish your project in a single application, saving you lots of time and rubbing.

Prior to application, the surface of your project should be sanded down with very fine (220-grit) or finer garnet sandpaper. Then, wipe the Danish Oil on liberally, flooding the surface. Keep the

surface wet with oil for 15-30 minutes while the oil penetrates. While the surface is still wet, scuff sand it with extra-fine (240-grit or finer) wet/dry silicon carbide paper, keeping the paper wet with oil as you do so.

Remove the surplus oil by wiping across the grain with a clean cloth...then again, with the grain. This will force a sawdust-and-oil mixture into the pores of the wood, acting as a filler and creating a super-smooth, ultra-soft surface. Allow the surface to dry overnight, then wipe again with a lightly oiled rag and buff it out.

Tung Oil

Tung Oil is a natural oil that comes from the nut of the Tung tree. It is perhaps the most versatile of all oil finishes. Like all penetrating finishes, it soaks into the wood readily, but successive coats will build up to a varnish-like sheen and depth. The resulting finish is extremely durable and will resist both water and alcohol. Its ability to preserve wood is legendary. In fact, it's said that Tung Oil was used to seal The Great Wall of China against decay.

Apply Tung Oil liberally and allow it to soak into the wood's surface for a few minutes, then wipe off the excess with an oil-dampened rag. Rub the project lightly with 4/0 steel wool to ensure a smooth finish. Allow to dry for one hour between coats, longer if it's humid. Two coats will adequately protect a project, but three will be longer-lasting.

Tung Oil may also be mixed with varnish to achieve a deeper sheen. Your first coat should be four parts of Tung Oil to one part of varnish. The second and third coats should be mixed half-and-half. Allow 2-4 hours of drying time between coats of these blends.

Teak Oil

A number of naturally oily hardwoods such as teak, rosewood, cocobolo, padauk and ebony will bleed off an oil finish and never seem to dry. One way to get around this problem is to wash the project with an inexpensive paint thinner before applying the oil. The thinner will remove some of the resins near the surface, making it easier for the oil finish to penetrate the wood and dry. Be aware, however, that this technique could discolor your wood. For that reason, we recommend that you test it out on a piece of scrap wood (the same species, of course) before risking your project.

If you'd rather not mess with paint thinners, try Teak Oil. This finish contains special drying agents that help the oil to penetrate and harden on a resinous wood without discoloring. Applied in much the same manner as Danish Oil, it should be wet-sanded into the wood's surface to ensure the smoothest finish. Let it dry for 24 hours between coats. If you want, you can use Teak Oil as a primer and sealer for other finishes.

To determine whether or not you should use Teak Oil on a particular wood, pay attention to the way the wood feels and how it sands. If it feels waxy and the sandpaper loads-up easily, you would probably benefit from the Teak Oil. To be certain, test the Teak Oil against other finishes on scrap pieces.

Non-Toxic Oil Finishes

None of the finishes mentioned thus far will resist a constant soaking exposure to water (with the possible exception of Tung Oil) and all of them are toxic. Danish Oil will harden to a non-toxic

finish, but only after 30 days or so. If you're finishing eating utensils or children's toys, use either Mineral Oil or a commercial Salad Bowl Finish.

Mineral Oil is applied much as Danish Oil. If a project will be used to hold liquids (such as a wooden bowl), fill the bowl with oil and let it soak for 15-30 minutes, then allow the project to dry for at least 48 hours before using it. It's important to note that Mineral Oil finishes also require periodic upkeep by rubbing them down with salt every once in a while. They're also not completely waterproof, and juices from meats and vegetables will soak into the wood. The periodic salt rub-downs will keep the project from going rancid. Commercial Salad Bowl Finishes provide superior protection against moisture and going rancid with far less upkeep. Applied much like Tung Oil, they can be used as both a penetrating finish -- and a building finish with the application of multiple coats. Another example of an acceptable non-toxic finish is called Preserve. NOTE: Even non-toxic finishes are toxic when in a liquid state and should be allowed to dry completely for at least 72 hours prior to use.

Caring For An Oil Finish

One of the major advantages of an oil finish is that it's so easy to care for. If the finish should become scratched or marred, simply sand the blemish out and apply more oil.

It is important to note that oil finishes have a tendency to dry out and should be periodically replenished. Every 6-12 months, rub the project down with a rag dampened with Lemon Oil. Lemon Oil restores the finish, but will not build up or change its appearance.

Liquid Carnauba Wax will also replenish an oil finish and will also fill tiny scratches, restoring the project's lustre. It will work particularly well with Danish Oil, giving it a deeper sheen.