

# The Confusion Over Wipe-On Finishes

BY HENDRIK VARJU

One type is easier to apply...

...the other offers more protection

## OIL/VARNISH BLEND

These popular oil finishes add a little bit of varnish to offer more protection than oil alone. Application is easy: Simply wipe on, then wipe off.

## WIPING VARNISH

Brushing varnish is thinned with mineral spirits to create a wiping varnish. This offers a thicker film than an oil/varnish blend, but it must be wiped on more carefully.

Wipe-on finishes are a favorite of many woodworkers, both amateur and professional, because of their easy application. However, there is great confusion over what exactly constitutes a wipe-on finish: You'll hear one woodworker talk of wiping varnish, another of an oil/varnish blend; then somebody throws around the term "Danish oil," and pretty soon you have no idea which finish is which.

These finishes are not identical. To make the right choice, you need to know what each finish is made from, the pros and cons, where to use each one, and how to apply it. Only then will you discover how practical these finishes really are.

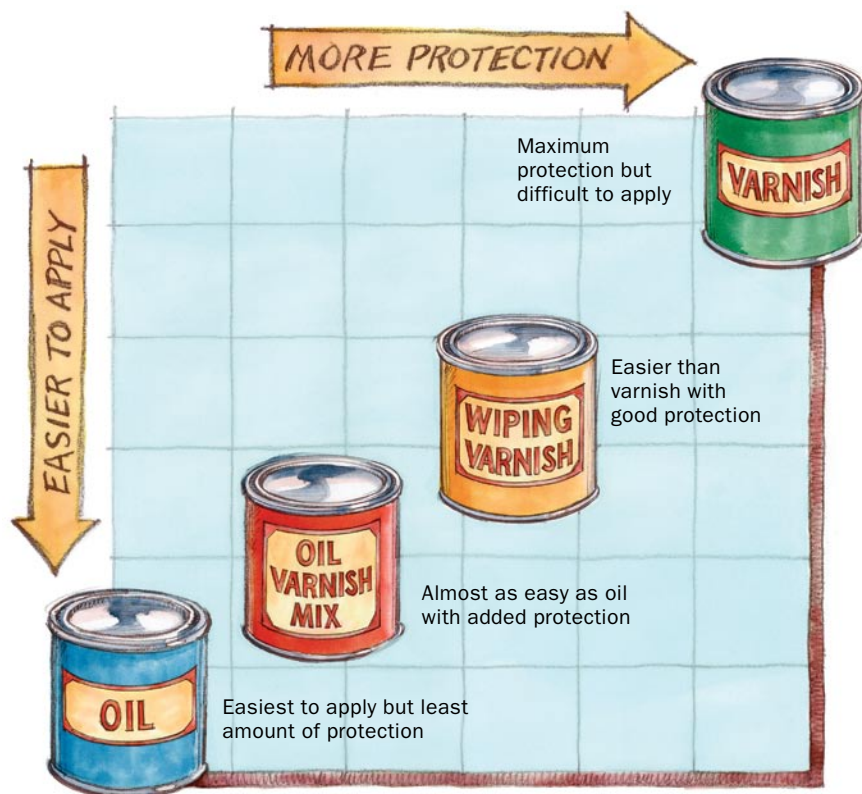
### Different ways to create a wipe-on finish

It may help to think of varnishes, oils, and their various offspring as occupying a kind of grid (see drawing, p. 52): In the top right-hand corner is varnish, which is hard to apply (brush marks, sags, runs, and a magnet for dust) but offers enormous protection. In the bottom left-hand corner is pure oil finish, which is easy to



# Choosing a wipe-on finish

When choosing among pure varnish, pure oil, wiping varnish, or an oil/varnish blend, you make a trade-off between ease of application and the amount of protection you are giving the wood.



## WHICH FINISH DO YOU HAVE?

If you can't tell whether your can of finish is an oil/varnish blend or a wiping varnish, observe how it dries. Place half a teaspoon of finish on a dished, impermeable surface and wait 24 hours. If the dried finish has a smooth surface, it's a wiping varnish. If the surface is wrinkled, it's an oil/varnish blend.



DRIED WIPING VARNISH

DRIED OIL/VARNISH BLEND



apply (wiped on with a cloth, surplus wiped away, no dust problem) but offers minimal protection.

Between these two extremes are wiping varnishes and oil/varnish mixes. In making these finishes, manufacturers wanted to combine the good points of varnish and oil and avoid the negatives.

Wiping varnish is made by thinning varnish with mineral spirits. It dries faster, attracting less dust, but because each coat is thinner, it offers less protection than a coat of undiluted varnish.

An oil/varnish blend is made by combining linseed or tung oil with varnish. This product gives more protection than oil alone, but less than a wiping varnish. Because it allows you more time to manipulate the finish, it is even easier to apply than wiping varnish.

## How to recognize each product

One of the main reasons for the confusion between wiping varnishes and oil/varnish blends is the way manufacturers name their finishes. What is Danish oil? What is salad-bowl finish? Why is Minwax Tung Oil Finish an oil/varnish blend and Formby's Tung Oil Finish a wiping varnish?

There are two ways to make certain of what you're using. The directions on the can may provide the first clue: If the can says to apply the finish with a cloth and let it dry, but doesn't mention wiping off the excess, then you have a wiping varnish. If it tells you to wipe off the excess a short time after applying it, then you have an oil/varnish blend. You also can compare how a puddle of the finish dries (see photos, left).

## Blend your own

To make a wiping varnish, thin regular brushing varnish, either alkyd or polyurethane, with equal parts low-odor mineral spirits. For an oil/varnish blend, combine two parts boiled linseed oil or tung oil with one part brushing varnish. If you are using tung oil, add Japan drier to speed up drying time. Or, combine three parts Danish oil (a relatively thin oil/varnish blend) with one part varnish. You can reduce the amount of varnish if you find the finish too sticky, or increase it for a faster build.

## Picking the best option

So when is one finish better than the other? Here's some advice. For a piece of fine furniture that won't be heavily used, you can't beat an oil/varnish blend.

This finish isn't technically a film finish or a penetrating finish; it's a hybrid that you might call "semi-film forming." It keeps the wood looking natural, but is only moderately resistant to water, heat, and chemicals, and it offers very limited protection from wear and scratches. If you need a protective finish, say, for a kitchen table, no off-the-shelf finish works as well as varnish. Thinning it to a wipe-on consistency makes it really easy to apply.



## Oil/varnish blend: widely available

Oil/varnish mixes are popular because they are easy to apply, so almost every hardware store will stock one or two brands. Three or four coats build very little film, giving the wood a low-luster finish that is easy to repair but offers only a little protection.

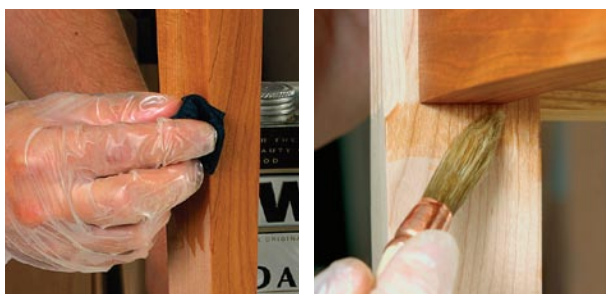


### ADD PROTECTION



If your commercial oil/varnish blend is too thin, mix in some brushing varnish in a 3:1 ratio to add protection.

### APPLICATION: WIPE ON, WIPE OFF



**Goes on easily.** Apply an oil/varnish blend liberally and allow it to soak into the wood. You can use a small paintbrush to get finish into tight spots. Because of the long open time, you have plenty of time to remove any sags and runs. Once the finish soaks in, use a clean cloth to wipe off any surplus; otherwise, you will end up with a thick, sticky mess.

Varnish forms a cross-linking film: It interlocks on a molecular level, making it resistant to water, heat, scratches, chemicals, and so on. By wiping it on, you can still obtain a protective film for high-wear areas; it will just take you longer than brushing on thicker coats. Use a polyurethane varnish for even more protection.

Feel free to combine both finishes on one project to put additional protection where you need it most. For example, you can finish the base of a table with an oil/varnish blend but the top with a wiping varnish.

### Oil/varnish blend: Be sure to wipe off excess

Apply the blend generously and wipe it around with a cloth, a cheap brush, or a roller. Particularly with the first coat, you can apply more finish after 10 minutes or so if the wood has absorbed the first lot. Because an oil/varnish blend has a long open time, it is very





## Wiping varnish: more protection

You may need to visit a paint or woodworking store to find a commercial wiping varnish, but you can make your own. You have less working time than with an oil/varnish blend, but each coat adds more protection until eventually it reaches the same level as brushed varnish.

### MAKE YOUR OWN



You can thin oil-based brushing varnish with mineral spirits in a 1:1 ratio to create a finish thin enough to wipe on with a cloth.



### APPLICATION: WIPE AND LET DRY

**Use overlapping passes.** Apply wiping varnish in a thin layer, but don't keep going back over the same area or you'll pull the finish as it starts to dry.



sanding with 600-grit paper helps make the surface smoother just before the final coat.

The modest final thickness, even after numerous coats, isn't suitable for rubbing out. The final coat already has an attractive hand-rubbed look and rarely needs to be rubbed to an even sheen. But a coat of paste wax gives the surface a smooth feel.

### Wiping varnish: Sand lightly between thin coats

You can use a lint-free cotton cloth or an untextured paper towel to apply wiping varnish, but you have only a few minutes to manipulate the finish. Apply a thin coat, then let it dry at least eight hours and possibly overnight, depending on the temperature and humidity. Any attempt to wipe off the excess after the finish has begun to tack up will result in a mess of disturbed, half-dried finish.

One of the downsides of varnish is that the long open time allows dust to settle into the finish. Even wiping varnish can have this problem, particularly if you put on a good amount with an overwet cloth. Fine sanding between coats will remove dust nibs and give the next coat some mechanical bonding power (particularly if more than 24 hours has passed since the last coat was applied). I use 600-grit wet-or-dry paper, lubricated with mineral spirits.

For the final coat, I use a rubbing pad, similar to one used in French polishing, to apply a superthin coat that dries very quickly. Take two pieces of lint-

forgiving. It's easy to remove sags and runs, and if you miss a spot, you can still apply more an hour later and it will never show a mark.

After the finish soaks in, but before it becomes tacky, you must wipe off the excess with a cloth, going with the grain. If you forget to remove the surplus finish, it will stay sticky for many days, and eventually it will dry with a wrinkled surface. Let each coat dry for 24 hours or until it no longer feels oily.

One of the real bonuses of an oil/varnish blend is that it isn't thick enough to catch much dust, so it's a great finish in the average workshop. Although there are no real dust nibs to deal with, a tiny bit of fine





**TIP**

**Shortcut to a thicker coat.** You can brush on full-strength varnish if you want to build a protective finish quicker. Sand between coats, and then finish off with thin coats of wiping varnish, applied with a cloth.

free cotton cloth about 10 in. square. Fold up one piece, place it in the center of the other piece, and then gather the sides of the second piece around the first piece, making sure the round end is wrinkle-free. Secure the ends with an elastic band.

Unlike French polishing, you can only cover the surface once, with slightly overlapping, straight strokes. Dip the finishing pad into a small amount of wiping varnish every few strokes to maintain a wet edge while putting down a superthin film. In fact, this finish film is so thin that the surface dries within minutes, barely giving dust a chance to settle into it.

Remember that varnish can look like a plastic film if applied too thickly, particularly on open-pored woods like walnut and mahogany. You can leave the pores crisp and defined under a thin film of three or four coats, or use grain filler first and then build up a thicker, more durable finish. After at least six to eight coats, wiping varnish can be rubbed out to a satin, semigloss, or glossy sheen using materials such as steel wool, pumice and rottenstone, or automotive polishing compound.

Remember the spontaneous combustion risk with all oil finishes. Make sure to unwrap the finishing pad when you're done, leaving it flat or hanging it outside to dry. □

*Hendrik Varju is a fine furniture designer/craftsman who operates Passion for Wood near Acton, Ont., Canada.*



**Remove the dust nibs.** Wiping varnish, especially if applied thickly, will dry slowly enough to allow dust and other debris to stick to it. Before the final coat, sand the surface with 600-grit paper lubricated with mineral spirits.



**Pad on the final coat.** To apply a final thin coat of varnish, create a rubbing pad by wrapping a folded piece of cotton cloth inside another piece and securing the ends with an elastic band. Pad on the very thin coat of wiping varnish in long strokes, landing on the middle of the surface and lifting off at either end.



**Edge treatment.** The pad also can be used to apply a thin final coat to the edge with one long stroke.