Finish Line

Keep your finish fresh

Your shop probably has a shelf cluttered with cans, jars, and bottles of finish left over from previous projects. Some of the containers aren't labeled, so the contents are a mystery; others are so old that the lids and tops are either glued on tight or won't seal at all. These leftovers represent a waste of material and space, because the fact is you shouldn't let the vast majority of old finishes anywhere near your next project.

Although there are ways to preserve finishes for a time and to determine whether leftovers are still viable, minimizing waste starts at the time of purchase. You should make a habit of buying the smallest amount of finish you need for the job at hand. That way, you won't have to store a lot of material for a long time. In fact, it may be a false economy to buy a gallon of finish once instead of smaller containers on different occasions.

All finishes have a shelf life

It might be better if woodworkers treated finishes as they do food: You don't expect that slab of cheese in the fridge to be edi-



ble a year from now. Would you risk your health eating a dubious piece of steak rather than buying more? Of course not. Yet woodworkers happily keep cans of varnish for years and think nothing of finishing their latest masterpiece with old shellac rather than mixing a new batch.

Even when stored unopened in ideal conditions, finishes deteriorate. In the case of varnish, the metallic driers gradually lose their effectiveness. The deterioration is faster with semigloss and satin varnishes as the flattening agents react with the driers. If satin varnish from a fresh can dries in two to three hours, varnish from a two-yearold can probably will take an hour or two longer; varnish that's beyond three years old probably never will cure fully.

In his article about shellac (Finish Line, *FWW* #134, pp. 129-130), Chris A. Minick



To reduce the amount of oxygen in the can of finish, transfer the contents of a half-empty can into smaller containers (left). Another option is to fill the empty space in the can with Bloxygen, an inert gas that prevents oxygen from coming in contact with the finish (below).



Finish Line (continued)



False economies of scale. Buying a gallon of finish may be cheaper than buying four quarts, but not if you have to dispose of half the contents in the gallon container because you kept it too long.

explains how shellac starts to deteriorate as soon as the flakes are dissolved in alcohol. Chemical changes make the shellac increasingly less water resistant and unable to form a hard finish. For this reason, I follow Minick's advice and make all of my shellac from dry flakes. I toss any leftover liquid shellac after six months.

Precatalyzed lacquers last about a year, so buy them from a source with high turnover and write the purchase date on the lid.

Ways to preserve finishes

Although the aging of finishes is inevitable, there are ways to slow it down. Keeping oxygen away from the finish is key. Make sure you have a tight seal on the container, which requires a clean rim and lid. If you are working right from the can, don't drag the brush across the rim; instead, tap it on the inside edge of the can. Ideally, you should not work directly from the can. Rather, pour the amount of finish you need into a smaller container. Doing so helps reduce the chance of introducing contaminants into the clean finish in the can.

Air trapped in a can causes some finishes to skim over and some cans to rust. If you are left with a can of finish that is more air than liquid, you could transfer the finish to smaller containers to preserve its useful life. But be careful what kind of container you choose. While coffee cans are good for storing dirty solvents, I would not recommend them for holding any type of finish. Coffee cans may react with the finish, or rust, contaminating the liquid. This is especially true for water-based products.

Glass jars are good storage containers, but make sure the lids create a tight seal and aren't prone to rusting. Jars that once contained acidic products such as pickles generally have well-protected lids.

I work extensively with water-based products and have found that the onequart and one-pint plastic containers available at any grocery-store salad bar or deli are prefect for storing these finishes.

When transferring finishes to different containers, be sure to apply a clearly written label that will not fade or fall off. The label should include what is in the container, the recipe if it is a mix, and the date you filled the container.

If the original can still has a good seal, there are two other ways to reduce or eliminate air from the container. You can raise the level of finish by adding solid objects such as glass marbles. A less messy way is to spray an inert gas such as Bloxy-



gen into the can, creating a barrier that protects the finish from oxygen.

Determining whether the finish is bad

There are telltale signs that a finish is no longer usable. In some cases, the consistency will have changed. The solids may have settled to the bottom of the can, and no amount of stirring will mix them properly. When a water-based finish has been frozen, the material becomes thick or even congeals.

Shellac and varnish present a different problem because there are no readily visible signs that they have outlived their useful life. The best way to test these products is to put a few drops on a hard, impermeable surface, such as metal or glass. If the drops solidify completely over the next several hours, the shellac or varnish is still good. However, if the drops remain soft, gooey, or sticky after 24 hours, the finish is too old to use.

With any finish product, there's one rule to follow: When in doubt, throw it out. It simply doesn't make sense to risk ruining a project in which you have invested time and money, simply to avoid spending \$20 on a new can of finish.

Just remember to dispose of the material in accordance with local environmental regulations (see *FWW* #160, pp. 133-134). \Box

TESTING SHELLAC

Shellac that has been around for a while should be tested before use. Place a drop of it on a piece of glass. If the shellac is still sticky to the touch after 24 hours, throw it away. This test also works with varnishes.

