

Waterborne Finishes: Myth vs Reality

Having made the transition to waterborne finishes over two decades ago (yes, I really am that old!), and using them as my “go to” finish ever since, I thought it may be interesting to clarify what I believe are the most glaring myths and half-truths about waterborne finishes being kicked around the web.

Myth # 1: *Waterborne Finishing Materials can be Sprayed Safely without Wearing a Mask*

Absolutely false. Think about it for a minute; if a finish can create a waterproof barrier, what do you think happens if it were inhaled into the smallest membranes of your lungs where it then dries? You could suffocate. Or develop asthma-like diseases or cancer. Not very pleasant outcomes, right?! Fortunately, though, waterborne finishes also have significantly less VOCs (volatile organic compounds) and HAPS (Hazardous Air Pollutants) than their solvent-based counterparts... but that still doesn't mean you should forego the protection a mask could afford. Follow [this link](#) for info on masks.

Myth # 2: *Waterborne Finishes aren't as Good as Solvent-based Finishes*

Again, false. That all major car and flooring manufacturers have switched over to waterborne finishes should tell you just how effective they are. They are more elastic than their solvent-based counterparts – and that's very important if you're a woodworker. They dry faster, allowing you to finish most projects in a day. They're almost as durable as solvent-based finishes, but the difference is negligible in most cases. And if durability is highly important to you, additives such as [this one](#) are available. Oh, and did I mention that they're non-flammable? That's certainly something of interest to insurance companies!

Myth # 3: *Waterborne Finishes are Finicky and Difficult to Apply*

Completely false. Modern waterborne finishes are as easy to apply as solvent-based finishes. But that wasn't the case when I first got into the finishing game 20 years ago. Over the years, finishing companies invested the necessary research and development into bring their waterborne finishes to the point where they are as good, and in many cases (safety being one of them) far better, than solvent-based finishes. True, there are a few basic rules you need to follow: straining your finish; respecting temperature and humidity ranges shown [here](#); paying more attention to properly cleaning your equipment right after use; and, applying the manufacturer's recommended amount of finish on each coat. The good news is that such rules are easy to learn and follow.

Myth #4: All Waterborne Finishes Need to be Thinned to Spray

Wrong again! Without resorting to any thinning whatsoever and using an HVLP (High Volume Low Pressure) 3-stage turbine system I've applied all the following waterborne products: sanding sealer, lacquer, polyurethane, conversion varnish, alkyd varnish, stain and dye. In other words, most of the usual finishes used for furniture and musical instruments. Higher viscosity (read: thicker) finishes such as latex paint or pigmented lacquer often require some thinning, but not enough to affect the finish quality. In all cases, best results can be achieved by mating the recommended air cap to the product being sprayed, as shown [here](#).

Myth #5: Waterborne Finishes Can't be Applied over Solvent-based Finishes

Not true. As long as the finish has been drying for at least 18 hours and wiped by a clean, lint-free cloth dampened with a solution of water and denatured alcohol mixed 1:1, you shouldn't encounter problems. Although I've never run into difficulties in my many years of using waterborne finishes over oil-based stain or solvent-based topcoats (polyurethane, lacquer, varnish, etc.), I'd always recommend testing first in a small, inconspicuous area (such as the underside of a table or chair).



About Marty Schlosser

Marty Schlosser is an avid woodworker who designs, crafts and finishes one-of-a-kind furniture. During his career as a professional custom furniture maker and now as a retiree, he willingly shares his love of the craft with others through many articles he authored for Canadian Woodworking and Home Improvement magazine (<https://www.canadianwoodworking.com/search/node/marty%20schlosser?page=1>) and the Lee Valley newsletter (<http://www.leevalley.com/US/newsletters/Woodworking/6/1/article1-3.htm>). He has taught many students on a vast array of woodworking topics but has a particular interest in spraying waterborne finishes.

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