



In a comparative field test, PS applied Vermont Natural Coatings PolyWhey and Interlux Cetol Natural to the teak aboard one of our test boats.

A Wood Finish That's Whey Easy

Take a tour of any marine store's maintenance aisle, and you're likely to spot a dozen or more products that claim to be "eco-friendly," but how often do you come across one that can count "sustainable" in its green-marketing arsenal?

Vermont Natural Coatings (VNC) not only manufactures products that meet environmental regulations and consumer demand for eco-conscious options, but the company uses recycled materials in the finish formula. VNC's PolyWhey line of interior and exterior wood finishes uses whey protein, a by-product of cheese-making, as a binder, making it more naturally sustainable than petroleum-based polyurethane finishes.

Impressed by the company's creative use of dairy industry "trash," *Practical Sailor* testers decided to apply PolyWhey to the teak aboard one of our test boats. The head-to-head field test pits the VNC PolyWhey Exterior against Interlux Sikken's Cetol Natural (without gloss overcoat), which has similar application, aesthetic, and durability characteristics.

Vermont Natural Coatings is the innovation of founder-president Andrew Meyer, who actually grew up on an organic dairy farm in Vermont. VNC's PolyWhey, which has been on the market for only a few years, was the result of the company's collaboration with scientists from the University of Vermont as they sought new uses for whey proteins. Whey is what's left

over after cow's milk curdles; it's made up of whey protein and casein protein. Whey protein is not your typical wood finish ingredient, so testers were more than curious (read: skeptical) about its durability in the marine environment.

HOW WE'RE TESTING

In the early fall, testers applied the VNC Exterior Wood Finish (in Caspian Clear) to the teak in the cockpit of a Cape Dory 25. Following maker instructions for preparation and application, we put three coats on the coaming and companionway trim. We applied the PolyWhey, which can be brushed or sprayed on, using foam brushes. Per the directions, testers did not sand between coats or thin the product.

Testers then applied three coats of the Cetol Natural to the boat's toerail. The two products were applied to compare application and durability. A toerail typically sees more action than a boat's coamings—although the cockpit on a CD25 is a very wet place in stiff winds, and the coamings get constant abuse from crew backs and knees—so we'll also be comparing the PolyWhey to the Cetol finish on the boat's tiller and hatch trim, which was applied about six months prior.

WHAT WE FOUND

PolyWhey comes in clear or three semi-transparent shades. We opted for the natural look of the Caspian Clear, which

most closely matched the look of the Cetol Natural. Testers were somewhat surprised when we opened the can and peered into what looked like a cup of milk since we were expecting a clear product. While the color was a little off-putting during application, it dried completely transparent with a very low gloss.

Like most water-based varnish alternatives, PolyWhey boasts great coverage and quick drying. It emits no toxic fumes and has about one-fourth of the VOCs (volatile organic compounds) oil-based polyurethanes have, according to VNC.

Based on our experience, PolyWhey lives up to all of its application claims. It did not have the nostril-singing chemical smell some finishes have; it dried in about 40 minutes, although suggested re-coat time is one hour; and a little bit goes a very long way—1 quart will cover 50 to 100 square feet.

Other application bonuses: The soap-and-water cleanup made the process even easier, and we didn't have to worry about drips marring adjacent surfaces; we just wiped them up with a rag. If you're not used to applying low-viscosity finishes, test them out on a wood scrap first. It takes a few minutes' practice to get used to their watery nature and to learn to avoid puddling or dripping.

CONCLUSION

The PolyWhey Caspian Clear gets two thumbs up for ease of application: It went on fast, clean, and easy. The matte finish looked great, letting the teak's natural grain shine. Best of all—in our opinion—the application can be done in a half-day (depending on the area being finished), and the coating is fully cured in two days. What set the PolyWhey apart is that by applying it, we knew we were taking a step—albeit a teeny one—toward supporting eco-friendly and sustainable boating practices.

Stay tuned for updates on how PolyWhey stacks up against the perennial-favorite varnish alternative, Cetol. VNC touts PolyWhey as a waterproof, element-repelling finish that protects against mildew and UV. We'll see whether it meets its maker's durability promises as successfully as it did the application claims.