

Six Coatings Face Bench Tests

Durability and elasticity are our principal comparative factors in this test, but testers also considered ease of application, coating adhesion to substrate, its resistance to abrasion, and its price.

With the exception of the Polymarine products, *Practical Sailor* applied each paint per manufacturer's instructions to patches of Hypalon and PVC inflatable material. Polymarine's Flexithane was applied to a Hypalon test patch, and its Superflex to a PVC patch because these products are specifically made for those substrates only. Each test patch was assigned a number to ensure blind ratings.

The 10- by 14-inch PVC panels were cut from an 18-year-old, 9-foot Achilles Redline Hypalon dinghy that had been damaged beyond repair. Unable to locate a weathered PVC dinghy to cut up—and not wanting to destroy the 2-year-old test dinghies from the last RIB roundup (November 2009)—testers acquired sheets of new PVC from a local inflatable repair shop.

All of the paint manufacturers emphasize that the surface area of the inflatable must be cleaned and prepped properly before applying any primer or paint. All also suggest two coats.

For this test, we roughed up half of each panel with 80-grit sandpaper prior to application to see whether this prep scuffing would help the paint to adhere better. The patches then were cleaned with Nautical Ease, *PS's* Budget Buy in our March 2008 test of inflatable boat cleaners. (For more on that test, see "Dinghy Cleaners" on page 18.)

The testers applied the paints with foam brushes; bristle brushes have a tendency to leave brush marks in the thick, fast-drying paints. We caution anyone working with these products to read all of the instructions carefully. Work outdoors and upwind, and wear safety gear. It's best to work in temperatures above 70 degrees and in low humidity to ensure proper curing.



To gauge each coating's abrasion resistance, testers dragged a weighted 320-grit sanding block across each panel three times.

.....

PS testers rated each panel's initial appearance and the appearance after 30 days of drying and curing. They were subjected to folding, bending, and hand stretching after the cure time, but none of the panels showed any signs of cracking.

To determine the paints' abrasion resistance, testers dragged a 320-grit sanding block across each panel three times. Atop the block was a two-pound weight, and it was dragged using a string so that each drag had a uniform amount of pressure on it. Paints that showed very little or no scuffing earned the best ratings, and those that showed considerable scuffing were rated Poor.

To determine how well the paints adhered to the substrate, testers cut thin crosshatches in the coating with a knife. Tape was placed over the cuts and pulled. We used a pass/fail rating for this test. If any of the coating stuck the tape, the paint was given a "fail."

None of the samples showed any visible signs of cracking after 30 days or after bending and folding. We will again check appearance and conduct the fold-test to gauge flexibility, cracking, and weathering after the mounted test patches have been out in the Florida sun and sprayed periodically with salt water for six months.