

Practical Sailor tested *Bio-Solv acetone alternative during the bottom-paint job on a 21-foot powerboat and liked it.*



## Bio-Solv Green Acetone

*Forget the fumes, this solvent is user-friendly.*

**A** bottom-paint job is unpleasant from start to finish, and wiping down the hull with acetone plays a role in that unpleasantness. So when a Cinnaminson, N.J., company sent us an acetone alternative called Bio-Solv, we were more than keen to test it.

### NEW SOLVENT SOLUTION

Bio-Solv is a non-toxic, non-flammable cleaner that works better and is safer than acetone, lacquer thinner, or Xylene, according to Anthony Severino of MAS Epoxies, which began selling Bio-Solv last year. The company buys it from a proprietary manufacturer.

“It’s slightly more expensive than acetone but well worth it,” said Severino. “It lasts longer because it evaporates slower than acetone.”

The biodegradable acetone replacement, which the company calls “green acetone,” carries the U.S. Environmental Protection Agency’s Design for the Environment (DfE) logo. In order to display the DfE logo, the product underwent extensive screening by the EPA and other firms to ensure that none of the ingredients in Bio-Solv are unsafe for humans or the environment.

Nontoxic, biodegradable products like Bio-Solv are quickly becoming the solvents of choice at many boatyards and boatbuilding facilities who are under the gun to comply with ramped-up environmental regulations.

Spilled acetone or wastewater containing it can pose a significant risk to ecosystems and wildlife. Acetone dissipates slowly in soil, and because of its high solubility in water, it is a significant groundwater contaminant. Acetone also can cause oxygen depletion in aquatic systems as it is sometimes consumed by micro-organisms.

For the yard workers who handle solvents daily—and even for those of us who have to use the stuff occasionally—switching to a less harsh, zero-carcinogen product like Bio-Solv means less exposure to harmful chemicals.

As new environmental laws are implemented and consumer demand for safer products grows, we expect to see more products like Bio-Solv hitting store shelves.

### THE TEST

PS used Bio-Solv instead of acetone to clean the bottom of a 21-foot power-

boat before and after sanding the hull, in preparation for applying antifouling to it. Testers donned some protective clothing—gloves and goggles—but did not need a respirator. Bio-Solv doesn’t exactly smell good, but its fumes are much more tolerable than acetone, testers found.

Testers noted that Bio-Solv did not irritate the skin, even when it came in direct contact with it. Acetone burns and reddens the skin and causes it to itch.

Several months after the test boat’s bottom was wiped down with Bio-Solv, painted, and launched, testers found no evidence of peeling paint or other signs that the Bio-Solv might have caused adhesion issues.

Bio-Solv can also be used to clean tools. Vanguard Sailboats recently converted from acetone to Bio-Solv for tool cleaning and line flushing at its boatbuilding plant in Rhode Island, explained plant manager Joel Hanneman. “We’ve been using it for four or five months, successfully.”

The product is safer and easier to use than petroleum-based products, mainly because is not flammable, Hanneman said. However, when it comes to performance, acetone still takes the top prize, he added. Acetone “cleans tooling like nothing else, but the overall benefits of Bio-Solv outweigh those of acetone.”

Bio-Solv is available at West Marine ([www.westmarine.com](http://www.westmarine.com)) in sizes from a pint (\$9) to a 55-gallon drum (\$2,800).

**Bottom line:** PS recommends Bio-Solv. We think it lives up to its claim of being an effective, safe, environmentally-friendly alternative to acetone. ▲

### CONTACT

**MAS EPOXIES**, 888/627-3769  
[www.greenacetone.com](http://www.greenacetone.com)



## Columbia Mocs for Him . . .

*Light and comfortable, Columbia Sea Rays stand up to every claim but one.*

**A**s we noted in our last look at men's athletic-style boating shoes (June 2007), the marine footwear market is changing quickly. This hasn't necessarily been good for the consumer, as a lot of poorly executed "copycat" shoes are turning up at boat shows.

Last year was the first time *PS* had the opportunity to take a hard look at any boat shoe from Columbia Sportswear, an Oregon-based apparel company that over the last 10 years has expanded into the boating market. Testers put a pair of the company's PFG Sea Ray Boating Shoes through our battery of shoe tests (nonskid grip, water absorption, odor resistance, etc.) and then wore them around for six months. The ability to multi-task is one of the appeals of the moccasin style of boat shoe.

Advertised for "barefoot boating" and made in Vietnam, the Sea Rays incorporate features we expect in good mocs—padded leather uppers, rust-resistant eyelets, stitched-on soles—as well as several bonuses. Some of the more interesting extras were breathable mesh heels, six mid-sole drain holes, a very comfortable contoured closed-cell foam liner that is stitched into the shoe, and the added shock absorption of the thick "Techlite" sole. The shoe weighs 60 percent less than the similar all-leather shoes from L.L. Bean and are more comfortable, in our opinion.

In the sole-grip test on wet and dry teak and nonskid fiberglass surfaces, the soles, featuring a gum-rubber razor siping on the outer edge, matched the Helly Hansen Hydrator, the fourth best

in our 2007 athletic-style shoe test.

Our only major gripe: Although the shoes did very well in the test for fighting mildew and odor (one week wet in a plastic garbage bag), they are by no means impervious to odor over the long haul. A bath and some baking soda set things right.

At about \$80, these shoes are at the high end of the spectrum, but about the same as brand name shoes of this caliber. Watch for sales, and you can probably shave 20 to 30 percent off the price—a good bargain, in our view. ▲

### CONTACT

**COLUMBIA**, 800/622-6953,  
www.columbia.com

## Camet Wahine Shorts for Her

*Search for padded women's shorts turns up quality gear.*

**A**fter a frustrating and fruitless day of shopping locally for gear appropriate for a 30-something woman to wear on the race course, *PS* editors set out on a mission to find a pair of padded sailing shorts that: fit properly (unlike most women's board shorts, which seem styled for a 13-year-old); did not look like they'd been borrowed from a man's locker; and were fast-drying, comfortable, and functional (even when hopping around a racer-cruiser or hiking on a dinghy). We found few options, and most of those were made by Camet International, a California-based sailing apparel manufacturer.

As with most sailing apparel, the majority of padded shorts marketed to women sailors are simply a men's design in a smaller size. But Camet's women's sailing shorts are tailored to women's bodies and come in several styles, so any size or age woman will find one that suits her tastes and shape.

*PS* tested the Camet Wahine shorts. These lightweight, nylon shorts have a low-rise, flat front, and a Velcro-adjustable waist. Testers found them to fit true to size, but when wet, they tended to stretch a wee bit; we suggest wearing them belted.

Testers were impressed with the quick-dry nylon fabric: It is UV-resistant (SPF 40) and is actually water-repellent, shaking off seaspray like a duck. In tests, the shorts went from soaking wet to bone dry in less than 30 minutes, without sun or wind to speed the drying process.

Another feature testers liked was the shorts' reinforced seat/

pad pockets. The Cordura reinforcement is highly abrasion resistant, and the optional quarter-inch foam pads do the trick for those stints on the rail without being too bulky. (Word to the wise: Keep the pad pockets closed at all times; should you go overboard, they do fill with water and the drain holes take a bit to completely empty.)

Testers would prefer a cargo pocket in addition to the Wahine's two front pockets. Camet's Martinique shorts come with one (as well as a longer inseam, 8.5 inches vs. the Wahine's 8). And for those who prefer a higher rise, the Antigua shorts have flat front and cargo pockets.

**Bottom line:** Mission accomplished. The Wahine's \$75 price tag (plus \$12 for the pads) mean we won't be buying one in each color; however, their quality construction ensures that we'll be wearing them for many seasons and their flattering fit means we'll look like women doing it. ▲



**CONTACT: CAMET**, 619/224-6737, www.camet.com