



A Hard Look at Antifouling

Rubber gloves and a paper suit come in handy when working with solvent-based paints.

After 1 year, several affordable bottom paints are still going strong.

Proctical Sailor keeps a close watch on antifouling paints with good reason: Bottom jobs are among the most expensive regular maintenance projects that a sailboat owner must undertake. For the do-it-yourselfer, a bottom job doesn't just cost money, it costs time as well. No one wants to spend their hours scraping barnacles while the boatyard neighbors are painting and launching.

In the interest of saving you both time and money, *Practical Sailor* recently inspected six different sets of antifouling test paints that had been submerged for varying amounts of time in the waters of Florida and New England. Each set was painted with more than five-dozen different products. The time they were immersed ranged from one to three years.

This month's report covers the test paints' performances after one and two years of immersion as well as an update on our field testing. Look for an update on the three-year test paints later this year.

WHAT WE TESTED

This article covers two identical sets of 65 antifouling paints that *PS* began testing in June 2009. One set was submerged at the Sarasota Sailing Squadron in Sarasota, Fla.; the other was placed in a canal

in Tavernier, Fla., in the Florida Keys. (For the two-year report, including the panels tested in New England waters, see pages 16-17.) The Sarasota panels were inspected in January 2010 and June 2010, when the Tavernier panels also were inspected. The participating companies include Blue Water Paints, Flexdel, Interlux, Pettit, and Sea Hawk, and one newcomer, Copper Coat, an epoxy-copper blend that claims multi-year protection. An experimental stick-on antifouling, BoatKoat Laminate, also joined the fray.

The one-year test results are tabulated on pages 14 and 15 and are divided by paint category, hard and ablative. These two types of paint work differently, but for most boat owners, the key distinction is the maintenance regimens.

Hard paints resist scrubbing well and can usually be burnished smooth for racing. However, they leave behind resins and pigments that build up over time and eventually will need to be sanded off. Also, many hard paints lose their punch when they are stored out of the water for long periods.

Ablative paints wear away through use, so they don't build up thick layers. Basic workboat ablatives slough away with water friction to expose more biocide. Other, copolymer ablatives release

biocides at a controlled rate. Although some "hard" ablative paints resist light scrubbing and are suitable for trailering or racing, ablatives generally won't tolerate hard knocks like most hard paints.

Cuprous oxide (or copper thiocyanate in aluminum-friendly paints) is the primary biocide in most of the tested paints, but some also add algacides like Irgarol (NCN), and biocide boosters like zinc. The blends yield paints for specific needs: freshwater paints, aluminum paints, racing paints, water-based paints (easy for the do-it-yourselfer to apply), and eco-friendly paints. We've flagged the best performer in each of these subcategories with Recommended checkmarks in the Value Guide tables.

Whatever type of paint you buy, check the application guidelines to be sure it is compatible with the paint you have on your boat. If in doubt about prep work, ask the paint maker for guidance.

HOW WE TESTED

The paint samples were applied to 6-foot-by-2-foot fiberglass panels for testing. Testers follow the makers' instructions for preparation and application. For this test, there were 11 samples per test panel.

Prior to rating the paints, testers sluice the panels with a bucket of salt

AS VALUE GUIDE HARD PAINTS at 12 MONTHS

NAME	MAKER	PRICE / GAL.	SPECIAL USES, COMMENTS	BOOSTER	COPPER**	RATING KEYS/SRQ***
BoatKoaat Laminates	BKL	NA	Stick-on experimental coating	None	NA	Poor/Poor
Copper Pro 67 Hard ✓✓	Blue Water	\$125	High copper, dual biocide	None	67%	Fair/Good
Copper Pro SCX 67 Hard ✓✓	Blue Water	\$175	High copper, dual biocide	Irgarol	67%	Fair/Good
Copper Shield 45 Hard \$✓	Blue Water	\$90	Economical hard paint	None	45%	Good/Good
Copper Coat <i>new</i>	Copper Coat	Call for price	Long life copper/epoxy paint	None	Varies	Poor/Poor
EP2000 ✓	Epaint	\$250	Water-based, race paint, aluminum-safe, photoactive	Zinc	None	Fair/Excellent
ZO-HP ✓	Epaint	\$240	Dual biocide, racing, aluminum-safe	Zinc	None	Fair/Good
Fiberglass Bottomkote Classic	Interlux	\$140	Fast dry, abrasion resistant, racing	None	43%	Fair/Fair
Bottomkote Aqua	Interlux	\$130	Water-based, easy apply	None	47%	Fair/Fair
Trilux Prop and Drive	Interlux	\$25/pt.	Aluminum-safe aerosol	None	9%	Poor/Fair
Ultra ✓	Interlux	\$150	High copper hard pain, dual biocide	Irgarol	67%	Fair/Poor
VC 17m	Interlux	\$47/qt.	Freshwater, racing, fluoro-micro additive	None	20%	Poor/Poor
VC 17m Extra	Interlux	\$55/qt.	Freshwater, racing, dual biocide, fluoro-micro additive	Irgarol	20%	Poor/Poor
VC Offshore ✓✓	Interlux	\$245	Race paint	None	41%	Good/Fair
Trinidad ✓	Pettit	\$250	High-copper hard paint	None	76%	Fair/Fair
Trinidad SR ✓	Pettit	\$225	High copper, dual biocide	Irgarol	70%	Fair/Good
Unepoxy	Pettit	\$120	Standard hard single season	None	41%	Fair/Poor
West Marine Bottomshield ✓	Pettit	\$100	Copper composite technology	None	29%	Good/Fair
Vivid ✓	Pettit	\$200	Bright colors, white	Zinc	25%	Good/Good
Sharkskin ✓	Sea Hawk	\$140	Budget-priced hard paint	None	45%	Fair/Fair
Silver Bullet <i>new</i>	Sea Hawk	\$32/qt.	Thin-film freshwater racing, bright colors	Zinc	20%	Poor/Poor
Tropikote ✓	Sea Hawk	\$210	Multi-season, high copper	None	76%	Fair/Fair
Tropikote Biocide Plus ✓✓	Sea Hawk	\$240	High copper, dual biocide, multi-season	Irgarol	74%	Fair/Good

✓ Recommended \$ Budget Buy ✓ 24-month Finalist \$ Budget Buy
 *Rebranded Pettit paint. **Cuprous oxide; copper-thiocyanate in aluminum-safe paints. ***Florida Keys/Sarasota, Fla.

Tables above and on page 15 track antifouling performance. Checks indicate Recommended paints in one or more of five key categories—overall, aluminum-safe, water based, eco-friendly, and racing. Budget Buy paints offer good value. Paints that did well in the 24-month test (see page 17) have blue checkmarks. Prices are based on a Web search and do not include shipping.

water. Paints were rated Excellent (no growth), Good (light soft growth), Fair (moderate to heavy soft growth), and Poor (hard growth). Any paint rated Fair or better is continuing to meet its designed purpose.

A Recommended paint is one that performs best overall or rates best among its specialized peers (best aluminum-safe paint, best water-based paint, best racing paint, etc.). The Budget Buy paints are the least expensive among Recommended paints.

Any antifouling test is subject to a number of variables, and we recommend supplementing our data with local knowledge from independent sources.

FINDINGS

At the 12-month mark, most paints kept away hard growth, but the slime coverage varied significantly. On several panels, the slime would require a good scrubbing or pressure wash to remove, as opposed to the simple sponge-off needed at six months. Except for the panels painted with freshwater-only paints, most hard growth could be removed with a good pressure wash or would require minimal scraping prior to re-coating.

As we have noted in previous tests, some of the better paints at the 12-month mark were not among the cleanest paints at six months. Many of the paints control the release of biocides, and once the bio-

cide is depleted, potency can diminish quite rapidly. The 18-month mark is usually the point where the less potent paints drop out, so if you are looking for long-term protection, check the 24-month table on page 17. If you are inclined to buy water-based or copper-free paints, both of which have many excellent advantages, it is worth noting that very few of these paints make it to the winners' circle in our two-year tests.

BLUE WATER

About a year ago, Blue Water Paints added some new chemists to its fold, and the

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AS VALUE GUIDE ABLATIVE PAINTS at 12 MONTHS

NAME	MAKER	PRICE	SPECIAL USES, COMMENTS	BIO-BOOSTER	COPPER**	RATINGS KEYS/SRQ ***
Copper Pro SCX 67 Ablative ✓	Blue Water	\$180	High copper, for high-fouling seas	Irgarol	67%	Fair/Fair
Copper Shield 45 Ablative ✓ \$	Blue Water	\$90	High copper, antifouling	None	45%	Fair/Good
Aqua Shield 45 ✓ \$ new	Blue Water	\$90	High copper, water-based antifouling	None	45%	Good/Good
Copper Shield SCX 45 Ablative ✓	Blue Water	\$145	Biocide boosted high copper	Irgarol	45%	Fair/Fair
Kolor SCX ✓	Blue Water	\$170	Aluminum-safe, bright colors	Irgarol	45%	Good/Fair
SPC 99 ✓ new	Blue Water	\$225	Self-polishing copolymer	Zinc pyrithione	45%	Fair/Good
Shelter Island new	Blue Water	\$135	Copper free ablative	Zinc pyrithione	None	Fair/Fair
Ecominder	Epaint	\$185	Water-based	Zinc pyrithione	None	Fair/Poor
EP-21 ✓	Epaint	\$115	Freshwater, aluminum safe	None	None	Fair/Good
Alumi-Koat II	Flexdel	\$150	Water-based, aluminum safe	Zinc-based	3%	Poor/Poor
Aquagard Bottom Paint	Flexdel	\$100	Water-based, dual biocide	Zinc-based	26%	Fair/Fair
Fiberglass Bottomkote ACT	Interlux	\$110	High-strength, ablative slime fighter	Irgarol	30%	Fair/Fair
Micron 66 ✓ ✓	Interlux	\$230	Self-polishing copolymer, not for fresh water	Zinc pyrithione	36%	Fair/Good
Micron CSC ✓ ✓	Interlux	\$180	High-strength ablative	None	37%	Fair/Good
Micron Extra ✓	Interlux	\$205	High-strength, dual biocide, ablative	Irgarol	39%	Poor/Fair
Bottomkote	Interlux	\$75	Soft workboat paint	None	42%	Good/Poor
Bottomkote XXX	Interlux	\$165	Soft workboat paint	None	28%	Fair/Poor
Trilux 33	Interlux	\$205	Aluminum safe, bright colors	Zinc pyrithione	17%	Fair/Fair
Alumacoat SR	Pettit	\$180	Aluminum safe	Zinc omadine	None	Fair/Good
Horizons ✓	Pettit	\$140	Ablative multi-season	None	48%	Fair/Good
Hydrocoat (WM Pure Oceans)* ✓	Pettit	\$130	Water-based, trailerable	None	40%	Good/Poor
Ultima Fusion experimental	Pettit	NA	New multi-season copolymer	Zinc omadine	40%	Fair/Poor
Ultima SR 40 ✓	Pettit	\$180	Multi-season dual-biocide	Irgarol	40%	Fair/Good
Ultima SSA	Pettit	\$100	Single-season economy paint	None	38%	Fair/Fair
Vivid Eco experimental	Pettit	NA	Experimental ablative with Ecomea biocide	Ecomea, Zinc	None	Good/Poor
Vivid Free ✓	Pettit	\$160	Aluminum-safe, bright colors	Zinc omadine	None	Fair/Good
West Marine CPP*	Pettit	\$120	Uses composite copper technology	None	38%	Fair/Fair
West Marine PCA Gold* ✓	Pettit	\$140	Industry standard with biocide	Irgarol	40%	Good/Good
AF-33	Sea Hawk	\$90	Harder ablative, economical, trailerable	None	34%	Fair/Poor
Biocop TF ✓	Sea Hawk	\$260	Dual biocide	Zinc omadine	38%	Fair/Fair
Cukote ✓	Sea Hawk	\$190	High copper	None	48%	Poor/Poor
Cukote Biocide Plus ✓	Sea Hawk	\$250	High copper and biocide	Irgarol	48%	Poor/Fair
Islands 77 Plus new ✓	Sea Hawk	\$240	Caribbean only, high copper, 24-month paint	Zinc pyrithione	42%	Fair/Good
Inflatable new	Sea Hawk	\$58/pt.	Low VOC, flexible, durable, high copper	None	55%	Fair/Fair
Mission Bay ✓	Sea Hawk	\$170	No copper, aluminum-safe	Zinc omadine	None	Fair/Good
Mission Bay CSF	Sea Hawk	\$175	No copper, water-based, aluminum-safe	Zinc omadine	None	Fair/Poor
Monterey ✓	Sea Hawk	\$140	Water-based, high copper, semi-hard paint	None	55%	Fair/Fair
Smart Solution new	Sea Hawk	\$195	Metal-free, slick-film racing paint	None	None	Fair/Poor
Transhield new	Sea Hawk	\$31/pt.	Transducer paint	None	55%	Fair/Fair

✓ Recommended ✓ 24-month Finalist \$ Budget Buy

*Rebranded Pettit paint. **Cuprous oxide; copper-thiocyanate in aluminum-safe paints. ***Florida Keys/Sarasota, Fla.

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company's latest paints (reformulated in 2009) continue to do well. Two Blue Water paints were among the few to earn a Good in both locations: the water-based Aqua Shield 45 Ablative and the economy hard paint Copper Shield 45.

Three other ablative paints scored Good in one of the two locations: the budget priced Copper Shield 45 Ablative, the aluminum-safe Kolor SCX, and the new self-polishing copolymer SPC 99. Blue Water's two Copper Pro Hard paints also earned a recommendation. Blue Water Paints can be ordered directly from the company website, but they are also available at boatyards and through distributor Donovan Marine (www.donovanmarine.com) under the MarPro label.

EPAIN

A specialist in copper-free paints, Epaint was one of the big winners at the six-month mark, with three of its four paints coming out virtually clean of any growth in Sarasota. The paints continued to perform well at 12 months, although they fared better at the Sarasota site than in the Keys. Two hard paints, the popular racing paint ZO-HP and the water-based EP2000, remained very clean. The EP2000 is not compatible with other bottom paints, something to consider before changing brands. Also, because Epaints are photoactive, multiple coats near the waterline are essential to prolonging performance. The company's water-based ablative paint Ecominder succumbed to some heavy growth in Sarasota, but surprisingly, its single-season freshwater paint EP-21 looked very clean.

FLEXDEL

Flexdel's aluminum friendly, low-copper Alumi-Koat II did not fare well in our test. It was one of the few paints that scored Poor in both locations after 12 months. The company's well-tested Aquagard is still holding hard growth at bay after 12 months. This water-based paint performed well in a head-to-head field test against Pettit's Hydrocoat (March 2009). Although these water-based paints often hold up beyond the two-year mark in our panel tests, the Aquagard-Hydrocoat field test showed that barnacle growth can set in as early as 15 months on some of these paints.

INTERLUX

Interlux strongly promotes its Micron-series paints: Micron Extra, Micron CSC and Micron 66. These are top-tier,

22 Paints Fend off Barnacles at 2-year Mark

In the days when antifouling agent tributyl tin (now banned worldwide) was still readily available, cruising sailors could get three solid years out of their bottom paint. In those three years, they would have to clean the bottom with a sponge or brush, but as long as their boats were moving and they didn't linger too long in sunny, nutrient-rich estuaries, they'd usually be barnacle free.

Not so today. If you are getting two good years out of your sailboat bottom paint, without the need to sponge, scrub, or scrape, you are doing well.

The facing Value Guide shows the best performing antifouling paints of two sets of 72 paints that have been continuously submerged for 24 months. The testing protocol differed slightly from the one used for our 12-month panels. (See "How We Tested," on page 13.) While the paints on the 12-month test panels were immersed in two locations in Florida, these panel sets were tested at opposite sides of the Mason-Dixon line. One set of 72 paints was dunked in Connecticut on Long Island Sound, the other in the Florida Keys. The Connecticut panels were rated at the six-, 12- and 24-month intervals. The Florida panels were rated at the six-, 12-, 18-, and 24-month intervals. The best-rated paints were chosen based on their cumulative ratings at the end of 24 months.

To make the 24-month list, a paint must rate Good at 18 months or longer, have no Poor ratings, and at least one other Good during the rating period, or it must have the best cumulative rating score in its category (water based, aluminum friendly, etc.).

Interestingly, a higher percentage of hard paints from the

original field made the 24-month. Many of these hard paints carry more than 50 percent copper by weight, enabling them to provide lasting protection for full-time sailors.

Generally, hard paints don't like to be out of the water, so they aren't a good choice for sailors who plan to be out of the water for more than 30 days and relaunch without re-coating. On a newly painted boat, however—or one that has been in the water for less than 30 days—you can reactivate many of these paints with a light sand, or scuffing with a 3M Scotchbrite pad shortly before launching. If you intend to be out of the water for a long period after painting, check with the paint manufacturer on what special measures you might need to take.

Interlux and Sea Hawk each had seven contenders in this field. Interlux scored with its three Micron-series abrasives, its two high-copper Ultra paints, and its popular racing paint VC Offshore. Sea Hawk landed two of the least expensive paints, water-based Monterey, which we previously field tested (March 2008), and its Sharkskin (\$100), a paint that landed in the 24-month winners' circle in 2008. Another return winner from Sea Hawk was its Biocop TF, which we are currently field testing along with Micron 66 on a boat in Chesapeake Bay.

Pettit had two abrasives, Ultima SR60 and the water-based abrasive Hydrocoat (also sold as West Marine Pure Oceans), along with its two hard Trinidad paints, perennial contenders in our long-term test. Blue Water also had two paints in each category; all of them, interestingly, were the paints boosted with Irgarol biocide. No low-copper paint made it to the two-year mark, although several made it to 18 months (March 2010), with Epaint ZO and Pettit Alumacoat being the cleanest.

MAINTENANCE

expensive copolymer paints that control the release of biocide over time. The self-polishing Micron 66, in particular, has done very well in long-term testing, although this paint is not recommended for fresh water. Micron Extra and Micron CSC have proven effective in field testing, but results have been mixed in our panel tests; both are among our top rated 24-month paints, but in this one-year group, the Micron Extra sample in the Keys was already allowing hard growth.

Two low-priced ablatives yielded interesting results: Fiberglass Bottomkote ACT (now sold as just ACT) was still fairly clean, and the soft workboat paint Bottomkote was doing well in the Keys, but had lost its potency in Sarasota.

In the hard paint category, water-based Bottomkote Aqua and VC

Offshore scored well in their respective categories. Ultra, a paint that has done well in the past, failed to prevent barnacles at the six-month mark.

PETTIT/WEST MARINE

Pettit's Trinidad and Trinidad SR hard paints have a long record of success in warmer climates, but some of Pettit's other hard paints also showed good results at the 12-month mark. Vivid, which comes in white and a rainbow of colors, is still doing well in both locations. The economical West Marine Bottomshield, which uses Pettit's new copper composite technology, looked very clean in the Keys and was still fighting barnacles in Sarasota.



All but a few paints proved very effective at combatting hard growth for six months.

According to Pettit, the copper composite technology delivers the same performance with less copper, allowing for a more economical price. Pettit's experimental Vivid Eco, with the new biocide

AS		VALUE GUIDE		BEST ANTIFOULING PAINTS at 24 MONTHS			
TYPE	NAME	MFR.	PRICE/GALLON*	SPECIALTY/COMMENTS	BIO-BOOSTER	COPPER**	RATINGS CT/FL
ABLATIVE	Copper Pro SCX 67 Ablative ✓	Blue Water	\$180	High fouling areas	Irgarol	67%	Fair/Good
	Copper Shield SCX 45 Ablative ✓	Blue Water	\$145	Biocide boosted high copper	Irgarol	45%	Fair/Good
	Micron 66 ✓	Interlux	\$230	Self polishing, multi-season	Zinc pyrithione	36%	Fair/Good
	Micron CSC ✓	Interlux	\$180	Self polishing, multi-season	None	37%	Fair/Good
	Micron Extra ✓	Interlux	\$205	Self polishing, multi-season	Irgarol	39%	Fair/Good
	Hydrocoat (WM Pure Oceans) ✓	Pettit	\$130	Water-based, trailerable ablativ	None	40%	Fair/Good
	Ultima SR 60 ✓	Pettit	\$240	Biocide boosted multi-season ablativ	Irgarol	60%	Fair/Good
	Biocop TF ✓	Sea Hawk	\$260	Dual biocide	Zinc Omadine	38%	Fair/Fair
	Cukote ✓	Sea Hawk	\$190	High copper, ablativ	None	48%	Fair/Good
	Cukote Biocide Plus ✓	Sea Hawk	\$250	High copper with biocide	Irgarol	48%	Fair/Good
	Monterey	Sea Hawk	\$140	Water-based, high copper, semi-hard paint	None	55%	Fair/Fair
HARD	Copper Pro SCX 67 Hard ✓	Blue Water	\$175	Hard, high copper with biocide	Irgarol	67%	Fair/Good
	Copper Shield SCX 45 Hard ✓	Blue Water	\$100	Hard, high copper with biocide	Irgarol	45%	Fair/Good
	VC Offshore ✓	Interlux	\$245	Race paint	None	41%	Fair/Fair
	Fiberglass Bottomkote with Irgarol ✓	Interlux	\$140	Dual biocide, fast dry, racing	Irgarol	43%	Fair/Fair
	Ultra-Kote ✓	Interlux	\$190	High copper hard paint	None	67%	Fair/Fair
	Ultra ✓	Interlux	\$150	High copper, dual biocide	Irgarol	67%	Fair/Fair
	Trinidad ✓	Pettit	\$250	High copper hard paint	None	76%	Fair/Good
	Trinidad SR ✓	Pettit	\$225	High copper hard paint with biocide	Irgarol	70%	Fair/Good
	Sharkskin \$	Sea Hawk	\$140	Budget-priced hard paint	None	45%	Fair/Fair
	Tropikote ✓	Sea Hawk	\$210	Multi-season, high copper	None	76%	Fair/Good
	Tropikote Biocide Plus ✓	Sea Hawk	\$240	High copper, dual biocide, multi-season	Irgarol	74%	Fair/Good

✓ Recommended \$ Budget Buy

* Prices based on online search. Shipping excluded.



Skimmer, a Cape Dory 25, sports a two-tone paint job as part of our field testing in Sarasota, Fla.

Econea, is still awaiting Environmental Protection Agency approval. The paint is no longer effective in Sarasota, but doing well in the Keys.

Trinidad SR's biocide boosters seemed to have given the paint an edge over regular Trinidad this year. Good-old Unepoxy, which had been a budget standby in past tests, bit the dust in Sarasota but is surviving in the Keys. In the abrasives, the West Marine CPP (Pettit Ultima SSA) and the West Marine PCA Gold (Pettit Ultima SR40) are doing well in both locations.

Several Sarasota barnacles settled on the panel painted with the experimental paint Ultima Fusion, but the Keys panel was still barnacle free. Pettit's aluminum-friendly Vivid Free and Alumacoat SR paints (identical blends) remain among the better performing low-copper paints.

SEA HAWK

Sea Hawk's Mission Bay, a no-copper paint designed to comply with the stricter environmental standards of California, is still doing well at 12 months. Also faring well is the company's new paint tailored for tropical cruisers, Islands 77 Plus. This biocide-boosted abrasive paint has 7 percent less copper than its previous formula. The new blend appears to be at least as effective, if not more effective.

Sea Hawk's affordable "semi-hard," water-based abrasive Monterey is still free of barnacles, as are its specialty paints for inflatable boats and transducers. The company's cleanest panel was Tropikote Biocide Plus, a high copper, dual biocide that offers multi-season protection. Its thin-film freshwater paint, Silver Bullet, failed, as did the only other such paints in this comparison, Interlux VC-17 and VC-17m.

ALTERNATIVE COATINGS

Our two alternative products, the three-part Copper Coat and the stick-on from

BoatKoat Laminates, have been a disappointment. The Copper Coat, which blends actual copper granules into a two-part epoxy base, survived at six months, but at the 12-month mark, hard growth was apparent. The product is promoted as a 10-year coating, but it does require regular cleaning to expose fresh copper, and this could explain its sub-par performance in our test. Testers cleaned and lightly sanded the panel and returned it to the water. The experimental BoatKoat stick-on had failed at six months, but the maker has given us a newer more potent formula to test; stay tuned for those results.

CONCLUSION

This season's report reinforces what we've stated before: Most modern paints designed for salt water are effective against hard growth for 12 months, but some are clearly better slime fighters. Another key point to keep in mind is that copper content is not always a reliable indicator of a paint's effectiveness. Self-polishing paints, in particular, are very effective at fighting barnacles with lower copper contents.

"New" does not necessarily mean "good." Several of the new and experimental paints *PS* has tested in recent years have not lived up to expectations. Paint prices are holding fairly steady at

the moment, and you can still find a paint that provides at least 12 months of protection for around \$120 per gallon.

If you are looking for an economical single-season abrasive that is easy to apply, consider the water-based Blue Water Aqua Shield 45 or Sea Hawk Monterey. West Marine's PCA Gold (Pettit Ultima SR-40) or Pettit Horizons are slightly more expensive solvent-based paints that will also serve well. To move up a tier in price and protection, opt for Micron 66 or Micron CSC. Aluminum-boat owners will do well with Pettit's Alumacoat SR (same blend as Vivid Free) or Sea Hawk Mission Bay.

If you prefer a hard paint, Blue Water's Copper Shield 45 and West Marine Bottomshield are the most economical options. Blue Water Copper Pro SCX67 Hard and Pettit Vivid offer the next step up in protection and price, while either the EP2000 or Z0-HP will appeal to aluminum-boat owners, eco-fans, and racing sailors in search of a smooth bottom. If a multiseason paint that is loaded with copper is your cup of tea, then Sea Hawk's Tropikote Biocide Plus and Pettit's Trinidad SR are clear choices. Interlux's VC Offshore maintains its spot as another top pick for racers.

Anyone planning to keep their boat in the water for more than 12 months or hoping to get two summers of sailing out of their paint should also consider the 24-month report. ▲

CONTACTS

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800/628-8422,
www.bluewatermarinepaint.com

BOATKOAT LAMINATES

352/243-1460

COPPERCOAT USA

321/514-9197 ext. 31
www.coppercoatusa.com

EPAINT CO.

800/258-5998, www.epaint.net

FLEXDEL CORP.

888/353-9335
www.aquagard-boatpaint.com

INTERLUX YACHT FINISHES

800/468-7589,
www.yachtpaint.com

KOP-COAT (PETTIT)

800/221-4466,
www.pettitpaint.com

SEA HAWK

800/528-0997,
www.seahawkpaints.com

WEST MARINE

800/262-8464,
www.westmarine.com