Liquid Wax Test Launch

Practical Sailor evaluates 25 bottled products for initial gloss and *water-beading before mounting the test panels for long-term observation.*

n the February 2009 issue of *Practical Sailor*, we reviewed paste waxes, those harder compounds normally sold in cans or tubs. In our perennial quest for a glossy boat exterior, we have expanded our tests to include a long list of waxes and polishes now sold in bottles.

In choosing which product is best for your boat, first decide what result you are looking for. A bright showroom shine or long-term protection? What is your location, and how is the boat used? A formula high in carnauba wax may be best for a short-term brilliant shine, but one with a hard polymer or

glass-like coat and UV inhibitors may have the best long-term protection.

Even brand new boats need to have the gelcoat sealed and protected from the elements. Start with a good marine sealant and polish, preferably one of the new synthetic polymer-based types. (If oxidation has already started, you will need a rubbing compound, but all this will be covered in a future article.)

In this issue, we are addressing liquid waxes and sealants to use for the final step in obtaining the ultimate hard, glossy finish after the rubbing compound, fillers and polishes have been applied.

WHAT WE TESTED

With an ever-growing number of products on the market, Practical Sailor settled

on 26 liquid products from 21 manufacturers that were advertised or recommended as boat and car waxes, polishes, or finish applications. We left out some that rated poorly in previous tests.

We intended to test only finish waxes, but several are multi-purpose polishes with cleaning agents. All claim to provide a high gloss or the surface ability to reflect light.

We looked for products that were easy to apply and create that sought-after mirror finish on the sides and decks of our sailboats.

In general, as with the paste waxes, these liquid products are meant to be applied after the compounding and buffing steps, if needed. These are for the finishing step and are for surfaces that are in good shape.

Some waxes do contain UV-protection agents, but the amount of UV protection that a microscopically thin layer of wax can provide is limited. The primary goal of a wax is to protect the top layers of gelcoat that already contain UVprotection agents. PS tested UVA and UVB absorption among a handful of waxes claiming UV protection and no product, even when applied in a thick film, absorbed a significant percentage of these rays.

In many ways they all look, feel, and smell the same. Their differences may be in the labeling and what market application the manufacturers are seeking.

The Value Guide on page 26 shows a wide range of prices for these products. Car waxes and polishes are available through a variety of automotive and hardware retailers and tend to be less expensive. Some products are sold through marine dealers and distributors such as West Marine, and the newer specialty products are mostly sold direct and online.

HOW WE TESTED

The products were marked, tested, and listed in random order.

Two white fiberglass hatch covers were washed, dried, and prepared by machine buffing with 3M Perfect-It rubbing compound and 3M Finesse-It II Restorer to remove dirt and scratches. A grid was laid out on the covers with masking tape. One coat of each wax or coating was applied to an area about 6 by 8 inches, following maker instructions, and then buffed off by hand.

Testers observed and rated each finish in the sunlight, then sprayed them with a mist of water and rated the relative beading. In a dark room, testers held a multi-bulb LED flashlight over each polished square. The degree of clarity of the reflected LEDs in each determined the finish's degree of gloss; testers rated them accordingly.

For this test, there were no significant differences in the ease of application from one product to the next. All were easy to apply and easy to buff off, so we left that factor out of the Value Guide on page 26.

Post application, testers mounted the hatch





MOTHERS



Nu

Finish

Practical Sailor tested

more than two dozen

Most are designed as

liquid boat wax-polishes

from 20 manufacturers.

last-step products in the

wax-polish-buff routine.

PRO

MAINTENANCE

Two fiberglass hatch covers served as the liquid-wax test platform. Testers applied each wax to a sectioned-off portion and sprayed them with fresh water to evaluate beading action.

covers face-up in an unobstructed spot on the roof of our workshop in Sarasota, Fla., basking in the hot sun, wind, and summer rains. We'll check in on the hatches regularly and will publish updates on the products' long-term performances.

WHAT WE FOUND

Star brite Premium Marine Polish No. 85716: This Star brite polish boasts PTFE (Polytetraflouroethylene), the company's registered formula it claims produces an extremely slick, UV-protected, non-stick and durable finish. Not a cleaner, Premium Marine Polish can be applied over old wax and polish. The thick, white liquid produced a nice shine and was best on the water-beading test.

Star brite Marine Polish, No. 80116: This is a thick, blue liquid multipurpose cleaner/polish. It is designed to remove light chalking from gelcoat and aluminum and to restore luster. It contains kerosene, has a very strong kerosene smell, and did well on the water-beading test.

Cajun Shine All: The kit comes with two polishing cloths made of a unique ultra-microfiber. The instructions are very specific that these cloths must be used, one to apply and one to buff. Cajun is a very thin water-based, eco-friendly product with no petroleum distillates. It is designed as a one-step cleaner and detailer and rated average for shine.

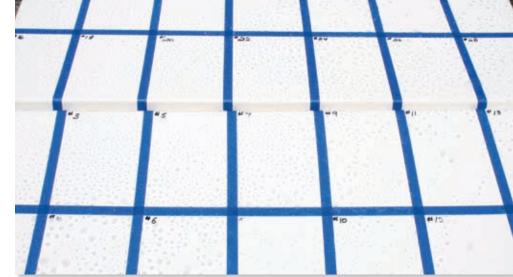
Collinite No. 870: Shake the Special Heavy-duty Fleetwax well as the white liquid can separate over time. This has a definite cleaning action, is easily applied, and leaves a hard protective wax coating and a good shine.

Collinite No. 845: The Insulator Wax formula is now also sold as Collinite No. 925 Fiberglass Boat Wax. This thick goo has a good reputation, produced a great shine, and rated highly in the initial water-beading test. Historically, it's been a top-rated product.

3M Scotchgard No. 09061: Marine Liquid Wax is a thick white liquid. Initial results showed it to be a Fair performer.

Mothers No. 91556: Marine Synthetic Wax, a very thick white liquid, seemed to lay on in a thick coating. It produced an average shine.

Re-Structure Professional Marine Polish. A thick tan goo, this is one of the newer, non-wax,



nanotechnology polishes designed to seal the pores in gelcoat and paint, leaving a hard, high-gloss, glass-like finish. It produced a high-gloss shine, but did not bead water well. Since our test was launched, Re-Structure has reformulated its product, adding more UV inhibitors. Look for a report on the new product in a test update. **Interlux Premium** Teflon Marine

Wax: This is a semi-thick, white liquid cleaner/wax that leaves a slick Teflon coating. Its initial gloss and beading was average.

Interlux UV Protectant & Teflon Wax Sealer: This is a very thin, almost clear liquid with a strong smell that goes on easily and dries quickly. Its shine was average, but if it truly seals and provides good sunscreen, it would be easy to apply every few months since it does not require buffing. Our long-term test will help determine this.

Nu Finish: "The Once a Year Car Polish" is a white liquid is relatively easy to apply and buff off. It gives a fairly good shine for a reasonable price and for reasonably long time, according to past tests. It also touts a money-back guarantee.

Rejex Soil Barrier & Anti-Stain Protectant: A true final coat product,

Rejex is an advanced polymer treatment designed to provide an impervious ultra-slick

coating to seal and protect gelcoat, paint, Plexiglass, and other surfaces. It does not contain any silicones, oils, or waxes. Application directions require it to cure for 12 hours before use. They recommend washing and re-applying in four to six months. It is a good sealant, but it did not bead water as well as others in our test.

Imar No. 402: Yacht Polish cleans, shines, and





REMIT









MAKER	PRODUCT	PRICE/ PRICE SOURCE	SIZE/ COST PER OZ.	CLAIMS UV Inhibitors	INITIAL GLOSS
STAR BRITE	Premium Marine Polish No. 85716 ★	\$28.99 / westmarine.com	16 oz. / \$1.81	Yes	Excellent
STAR BRITE	Marine Polish # 80116 ★	\$19.99 / westmarine.com	12 oz. / \$1.67	No	Excellent
CAJUN	Shine All	\$17.95 / cajunshine.com	16 oz. / \$1.12	No	Good
COLLINITE	No. 870 Heavy-duty Fleetwax	\$28.99 / westmarine.com	16 oz. / \$1.81	Yes	Very good
COLLINITE	No. 845 Insulator Wax (No. 925) 🛩	\$25.99 / westmarine.com	16 oz. / \$1.62	Yes	Very good
3M	Scotchgard Marine Liquid Wax	\$34.99 / westmarine.com	16.9 oz. / \$2.07	Yes	Good
MOTHERS	Marine Synthetic Wax	\$15.99 / basspro.com	16 oz. / \$1	No	Good
RE-STRUCTURE	Professional Marine Polish	\$29.95 / re-structuremarine.com	12 oz. / \$2.50	No	Fair
INTERLUX	Premium Teflon Marine Wax	\$28.99 / westmarine.com	16.9 oz. / \$1.72	Yes	Good
INTERLUX	UV Protectant & Marine Wax Sealer	\$12.30 / jamestowndistributors.com	16.9 oz. / 73¢	Yes	Fair
NU-FINISH	The Once a Year Car Polish	\$9.99 / acehardware.com	16 oz. / 62¢	No	Very good
REJEX	Anti-Stain Protection	\$19.95 /corrosionx.com	16 oz. / \$1.25	No	Fair
IMAR	Yacht Polish No. 402	\$22.99 / westmarine.com	16 oz. / \$1.44	Yes	Fair
FLITZ WAXX	Super Gloss Protectant	\$14.38 / dtep.com	7.6 oz. / \$1.89	Yes	Good
YACHT BRITE	Pro Polish	\$15.99 / overtons.com	16 oz. / 99¢	Yes	Good
WOODY WAX	Carnauba Glass Coat	\$26.79 /defender.com	16 oz. / \$1.67	No	Good
RAYMARINE	Marine Shield	\$29.99 / Raymarine	22 oz. / \$1.36	Yes	Good
MEGUIAR'S	No. 56 Pure Carnauba Wax 🛩	\$15.99 / westmarine.com	16 oz. / \$1	No	Excellent
MEGUIAR'S	Flagship Premium Marine Wax 🛩	\$19.99 / westmarine.com	16 oz. / \$1.25	Yes	Excellent
GLARE	Professional Polish	\$34.95 / glare.com	12 oz. / \$2.91	Yes	Good
GLARE	Micro Finish & Professional Polish	\$69.90 / glare.com	12 oz. / \$5.83	Yes	Good
WEST MARINE	Pure Oceans with PTFE	\$19.99 / westmarine.com	16 oz. / \$1.25	No	Good
TURTLE WAX	F-21 \$	\$9.99 / acehardware.com	20 oz. / 50¢	Yes	Excellent
ISLAND GIRL	Mirror Hard Superglaze 🛩	\$63.95 / Island Girl	12 oz. / \$5.32	Yes	Excellent
PRISM POLISH	Mirage	\$19.99 / prismpolish.com	16 oz. / \$1.25	Yes	Good
ZAINO BROS.	Z-3 Show Car Polish 🖊	\$14.95 / zainostore.com	8 oz. / \$1.87	Yes	Very good

protects gelcoat. It is a blend of polymers that will remove light oxidation without abrasives, provide a UV sunscreen, create a protective barrier, and leaves a reasonable shine. This liquid did well in vinyl tests (*PS*, March 2009) but did not bead water in this one.

Flitz Waxx: Super Gloss Wax Protectant is another water-based, eco-friendly, multipurpose wax that contains no

silicones but includes a UV protectant and is a white carnauba and natural beeswax formula. It comes with a pump applicator, and is easy to apply and easy to remove without any residue. It produced a nice shine.

Yacht Brite Pro Polish: Fiberglass Seal & Polish is a very thick white goop. It is one of the newer polymer-based products that produce a hard coating, UV

protection, and a high-gloss shine. It goes on quickly, buffs out easily, and beads water nicely.

Woody Wax: Carnauba Glass Coat, which comes with a spray nozzle, is a very thin liquid that easily separates and must be shaken well. The maker suggests multiple applications for best results. It has a strong petroleum smell; be careful of overspray or getting it in your eyes on a windy day. Woody Wax suggests users repeat spray and buff "as necessary," and claims three coats will last six months. It rated well in our water-beading test.

Marine Shield: This fairly new petroleum distillates finishing formula is a light-blue liquid that can be applied in direct sunlight and is designed to provide a defensive shield against the harmful effects of salt water, rain, and UV rays. It produced a fairly good high-gloss shine in our test.

Meguiar's No. 56: Marine/RV Pure Carnauba & Polymer Blend is a yellow, moderately thick liquid that has the familiar sweet scent of carnauba wax. Like many of the waxes, it rated high on the initial water-beading test.

Meguiar's Flagship: Premium Marine Wax is a cream-colored liquid wax that has done well in past tests and did a nice job of beading water in this test.

Glare Professional Polish: Another fairly new product, Glare is not a wax, has no polymers or resins, but has the ability to prepare, polish, seal, protect, and shine paint, fiberglass, and gelcoat finishes. The company calls the formula "Glassplexin." It includes silicates, which flow like liquid glass to seal pores and leave an ultra-hard, glass-like coating. *Practical Sailor* tested this by itself and with the maker-recommended Glare Micro Finish formula preparation, which contains fine abrasives to remove oxidation and small scratches. The combined result looks good.

West Marine Pure Oceans: This nanotech fiberglass polish with PTFE is an eco-friendly, natural citrus formula, with no petroleum distillates. It produced an average shine in our test.

TurtleWax No. 21: Another nanotech formula car polish, No. 21 also has a UV protectant and urethane enrichment for long-lasting hardness. As with the Turtle Wax paste wax, No. 21 produced a good gloss and beaded water well. It also was the most economical of the liquids.

Island Girl: Testers applied the Mirror Hard Superglaze, following the instructions on the 12-ounce bottle. We opted to not use the supplied drying catalyst as it was a hot day and our test panel was clean, dry, and in good shape. The clear, oily liquid was applied with a paper towel, leaving a thin coating. After a half-hour, this was wiped with a clean micro-fiber cloth to remove any excess film and allowed to cure for another hour. Wiping it again with a cloth produced a high-gloss shine. Spraying with fresh water produced exceptional water beading. The instructions claim that after a day or two, the finish cures even more to a hard mirror finish. It can be used on gelcoat, plastic, chrome, stainless, paint, and varnish

Prism Polish: Made in the USA, Mirage Sealant and Protectant is a waxfree cleaner, polish, and sealant. It uses polymers to create a hard coat for protection from UV and acid rain. Using a clean damp cloth, we rubbed in the creamy liquid. It was allowed to dry to a haze for about 30 minutes and was buffed out to a nice shine with average water beading.

Zaino Bros.: Created for show cars, Z-3 Car Polish can be layered for added protection. The synthetic formula also contains a blend of emulsifiers and a UV-40 sun protectant. Its gloss and water-beading were very good.

CONCLUSIONS

Most of the two-dozen products in this test did a good job of producing a nice shine. In our initial testing, the difference in gloss, water beading, and reflection was minimal, making it difficult to tap any real winners or losers in this initial report. The reflection test was virtually a 26-way tie.

However, it was obvious that the best finishes for initial water beading were those with a slightly oily wax formula. Both Star brite polishes beaded water best, followed by Island Girl and Zaino Bros.' Z-3, Collinite No. 845/925, and both Meguiar's carnauba waxes. The Turtle Wax No. 21 was our choice for Budget Buy.

Water beading and initial gloss are not a definitive test to determine the best protective coating. Stay tuned for followup reports on protection longevity.

For more on gelcoat care, check out "Offshore Log: Gelcoat Maintenance" and at *www.practical-sailor.com*, in the "Tools & Techniques" section.

CONTACTS

STAR BRITE, 800/327-8583 www.starbrite.com

CAJUN, 800/853-2880 www.cajunshine.com

COLLINITE, 315/732-2282 www.collinite.com

3M, 877/366-2746 www.3m.com

MOTHERS 714/891-3364 www.mothers.com

RE-STRUCTURE 310/639-7069 www.re-structuremarine.com

INTERLUX 908/686-1300 www.yachtpaint.com

NU FINISH 800/484-9560 www.nufinish.com

REJEX, 800/638-7361 www.corrosionx.com

IMAR, 703/330-4693 www.imarsales.com

FLITZ, 800/558-8611 www.flitz.com

YACHTBRITE 772/287-1313 www.shurhold.com

WOODYWAX 800/619-4363 www.woody-wax.com

MARINE SHIELD 603/881-5200 www.marineshieldproducts.com

MEGUIAR'S INC. 800/347-5700 www.meguiars.com

WEST MARINE 800/685-4838 www.westmarine.com

TURTLE WAX 800/887-8539 www.turtlewax.com

GLARE, 866/374-5273 www.glare.com

ISLAND GIRL PRODUCTS 800/441-4425 www.islandgirlproducts.com

PRISM POLISH 877/377-5112 www.prismpolish.com

ZAINO BROS. 732/833-8800, www.zainostore.com

MAINTENANCE UPDATE



The 10 test paste waxes were applied to a fiberglass panel and left out in the Florida sun and rain for six months. From left, top row: Kit, Meguiar's Premium, Turtle Wax Super Hard Shell, Collinite No. 885, and Star brite Boat Wax. Bottom row: Nu-Finish, Star brite Marine Polish with PTFE, Turtle Wax F21, 3M Marine Ultra Performance, and Mother's Carnauba Cleaner Wax.

Collinite is Still Tops

No. 885 stands out for durability in paste wax test field.

How long do they last? In the February 2009 issue of *Practical Sailor*, we reviewed a sampling of 10 paste waxes that were available in the old-style metal cans or newer plastic tubs. The waxes and polishes were applied to taped-off sections of a 3-foot by 5-foot fiberglass hatch and rated for ease of application as well as gloss and water beading. After six months, two products clearly stood out for their continued ability to bead water and repel dirt.

The Collinite No. 885 Fleetwax, which was a *PS* top-rated product in 2004, again

retained the best gloss and water beading in this followup. It is one of the heavier waxes, takes some rubbing to get on, and requires some serious buffing to get off.

Another repeat champion, the 3M Marine Ultra Performance Paste Wax, came in a close second. It is one of the harder waxes, but goes on and comes off easily. Third place in the water beading was the Meguiar's Flagship, one of the easiest to apply. We're also testing this on a hull on Chesapeake Bay, where it is neck and neck with Collinite No. 885.

In a tie for fourth in the water beading is Mother's Cleaner Wax and Nu-Finish

Paste. Among the automotive products, the Turtle Wax F21 and Kit waxes stood out. (We are retesting Star brite Marine Polish and Star brite Boat Wax, as the stock purchased for this test was lumpy and aged.

Although the waxes rated Good beaded some water, they're nearing reapplication time. The Fair products also beaded water, but surely needed re-application.

You can extend your fiberglass protection by applying multiple coats, which would make ease of application more important if you plan on two or three applications a season. Manufacturers are moving to softer, more high-tech formulas that are less labor intensive. We evaluated some of these in the liquid waxes test on pages 24-27.

A VALUE GUIDE PASTE WAXES AT 6 MONTHS										
MAKER	PRODUCT	PRICE/ PRICE SOURCE	SIZE/ COST PER OZ.	TEXTURE	APPLICATION	INITIAL GLOSS	6-MONTH Water Bead			
3M	Marine Ultra Performance Paste 🛩	\$25/sportsauthority.com	9.5 oz./ \$2.95	Hard wax	Good	Excellent	Excellent			
COLLINITE	No. 885 Fleetwax ★	\$29/westmarine.com	12 oz./ \$2.42	Hard wax	Fair	Excellent	Excellent			
KIT	Carnauba Car Wax	\$6/acehardware.com	12 oz./ 50¢	Runny, soft	Fair	Fair	Good			
MEGUIAR'S	Flagship Premium Marine Paste Wax 🛩	\$17/defender.com	11 oz./ \$1.54	Medium soft	Excellent	Good	Good			
MOTHERS	California Gold Carnauba Cleaner-Wax 🛩	\$12/napaonline.com	12 oz./ \$1.08	Hard wax	Good	Good	Good			
NU-FINISH	Soft Paste \$	\$8/autozone.com	14 oz./ 57¢	Very soft	Fair	Fair	Good			
STAR BRITE	Premium Marine Polish	\$18/basspro.com	14 oz./ \$1.36	Very soft	Fair	Fair	Fair			
	Presoftened Boat Wax	\$15/defender.com	14 oz./ \$1.11	Very soft	Fair	Poor	Fair			
TURTLE WAX	Super Hard Shell Wax	\$6/advanceautoparts.com	14 oz. / 39¢	Runny, soft	Fair	Fair	Fair			
	F21 Car Polish	\$8/acehardware.com	14 oz./ 64¢	Medium soft	Excellent	Good	Good			
🖈 Best Cho	ice 🛩 Recommended \$ Budg	jet Buy								