

# Seeing Through the Hype

## PS Tests Dozens of Clear-vinyl Restorers.

Preserving a clear view through soft plastic glass on dodgers or enclosures is one of the most challenging tasks in boat maintenance. Attempting to restore an old or sorely neglected soft plastic window is almost impossible, but that doesn't stem the tide of products that claim to make this job easy.

*Practical Sailor* last delved into the world of clear-plastic maintenance products back in February 2003. Since then, a number of new products have hit the market, each making its own specific claims.

Maintaining clear-plastic windows requires special care, and the article on the facing page, "In Search of Clarity," covers the basic precautions. For a more detailed discussion of maintaining marine plastics, see "Caring for Clear Plastics on Your Boat," at [www.practical-sailor.com](http://www.practical-sailor.com), in the Tools and Techniques section.

Although many of the products in this article can be used on hard acrylic or polycarbonate hatch glazing, this article examines their performance only on the soft, flexible clear-vinyl windows, such as those that you'll find in a dodger or cockpit enclosure.

Canvas shops use a variety of clear

vinyl (PVC) products to make these windows. Ultraclear, Crystal Clear, Seaflex, Achilles, and Strataglass are some common brand names. *Practical Sailor* will be comparing these and other types of clear plastics (such as Stamoid) in a future article.

All of these materials are very susceptible to scratching, smudging, and wear. Over time, they become brittle as they lose the chemicals that keep them soft and pliable. In addition, ultraviolet rays can quickly damage the vinyl, causing hazing, cracking, and yellowing. The products reviewed here help delay that process.

### WHAT WE TESTED

*Practical Sailor* evaluated 27 products (three were two-step applications) from 18 manufacturers that were advertised, labeled, or recommended primarily as cleaners or treatments for clear-vinyl windows. All are available through marine dealers, chandlers, or the Internet.

For comparison, we broke them down into the following categories: cleaners; scratch repairers; polish/protectants; UV protectants.

Eight claimed to have UV protection, 10 included a formula or fine abrasives to remove light scratches

*Practical Sailor tests showed that clear-vinyl cleaners last longer when they are followed by a polish.*

and smudges, and all but two products promised a polished finish.

Products that stood out (for good or for bad) in the field are discussed below. Test results and ratings for all of the products appear in the Value Guide on page 25.

### ARMADA

Armada's 210 Plastic Cleaner/Polish, a 14-ounce aerosol, excelled in cleaning and polishing our test vinyl. It provides a clear, lustrous finish with a protective coating that is anti-static and anti-fog. For older or scratched windows, use the Armada 210 Plus, which includes a very mild abrasive compound that does a reasonably good job of removing dirty residues, smudges, and fine scratches.

**Bottom line:** The 210 Plus is an excellent cleaner with anti-fog and anti-static properties. The 210 polishes well, but aerosol cans don't keep well aboard saltwater boats.

### 3M

Step-one in a two-step process, 3M's Marine Vinyl Cleaner and Restorer removes haze, dirt, and stains with a thick creamy liquid. It is an above-average cleaner. The second step involves applying the 3M Marine Plastic Polish, a thick white cream that cleans and when buffed, yields a protective, high-gloss finish. The formula includes restorative mineral oils, glycerin, and carnauba wax.

**Bottom line:** The 3M cleaner worked fine, but the polish produced only Fair results.

### 303 AEROSPACE PROTECTANT

Often recommended to preserve inflatable dinghies, 303's Aerospace Protectant spray cleans, shines, and leaves a UV protection of SPF 40. Directions call for renewing the finish monthly.

**Bottom line:** The 303 spray has multiple uses, offers good protection, and is modestly priced.

## In Search of Clarity

Many of the problems with clear-vinyl windows are actually the result of overzealous cleaning.

"You can quickly ruin a brand-new vinyl window if you're not careful," says Eric Kolek, whose family-run canvas business, American Canvas (941/388-3078), has been serving Southwest Florida for more than 20 years. Kolek and other canvas professionals that *PS* spoke with for this article offered these tips to preserving a clean and clear vinyl window. (More tips are available online under "Tools and Techniques," at [www.practical-sailor.com](http://www.practical-sailor.com).)

- **Rinse** well with a fresh water hose before wiping.
- **Clean** with a mild, environmentally safe soap and a soft cotton cloth (diapers or micro-fiber cloths are good) with straight strokes (no swirls), thoroughly rinse with fresh water, and dry with a soft chamois. Avoid glass cleaners and ammonia-based cleaners such as Windex. Alcohol can also accelerate the loss of the plasticizers. Do NOT use paper towels, brushes, or salt water to clean your dodger windows. Quickly rinse off any beer, suntan lotion, or soft drinks that spill on the vinyl.
- **Protect** windows with a polish that includes a UV blocker and a barrier to keep the chemical plasticizers in and the elements out. Use soft plastic stand-offs to prevent any contact between metal supports and the clear vinyl.



*Eric Kolek of American Canvas in Sarasota, Fla., installs a zipper on a clear-vinyl window for an enclosure on a sportfishing boat.*

- **Store** or roll up windows carefully, and protect both sides with a soft sheet or towel. Rolling a soft towel up with a window will prevent scratching.

### AQUATECH

The Aquatech Clear Enclosure Cleaner and Protectant (No. 750) sprays a light, clear liquid that is designed to clean, without any alcohol, ammonia, or harsh chemicals. The Premier Polish and UV Protectant (No. 201) is a general-purpose polish for gelcoat, paint, and metal. It is a thick, white cream that slowly dries to a haze.

**Bottom line:** The 750 cleaner and protectant cleans quickly and leaves a slight shine. The 201 adds an excellent polished sheen with UV protection.

### COLLINITE

The Collinite 845 Insulator Wax is a thick cream designed for marine and industrial applications where a heavy-duty, high-gloss UV protective coating is required. It keeps dirt, dust, and salt from sticking and assures full protection against sun, rain, bugs, and salt spray.

**Bottom line:** Collinite polishes well and has multiple uses and a good track record at an affordable price. It's our Budget Buy.

### IMAR

Imar's Strataglass Protective Cleaner (No. 301) and Strataglass Protective Polish (No. 302) are the only products recommended by Strataglass. The Imar 301 produces a fine, clear mist from a 16-ounce spray bottle. Imar recommends using the product regularly when you wash and rinse the boat. The 302 provides the same UV protection as 301, but the creamy liquid adds a thicker protective coating and brighter shine. Imar recommends reapplying 302 about every three to four months.

**Bottom line:** Imar's 301 ranked high as a very good cleaner. The 302 was one of the better polishers that we tested, beading up best in the water test.

### MARYKATE

Marykate's Glassplex Glass Cleaner (No. 3918) multipurpose glass, acrylic, and vinyl cleaner—a fine, clear liquid delivered through a trigger spray nozzle—does an acceptable job of cleaning oil and dirt. Marykate also makes Clear Vinyl Cleaner and Polish (No. 6414), which we did not test. Neither

contains alcohol or ammonia.

**Bottom line:** Though not a stand-out, the Marykate 3918 was the most economical of the cleaning products tested.

### MER-MAIDS

A Best Buy in 2003, Mer-maids Plexiglass/Plastic Cleaner and Polish is a clear spray that goes on fast and is easy to wipe off. It is reasonably priced, and does a fairly good job cleaning and shining.

**Bottom line:** Mer-maid's product cleaned well, provides anti-static and anti-fog protection, and does not contain alcohol or ammonia. A good bet for routine cleaning.

### MEGUIAR'S

Testers looked at three products from Meguiar's. The Clear Plastic Detailer (No. 18) is a handy one-step cleaner and polish in an 8-ounce spray bottle. It sprays a clear liquid that you wipe and polish immediately. If allowed to dry, it can leave streaks. The Clear Plastic Cleaner (No. 17) helps remove ground-in dirt and small scratches with a non-abrasive cleaning formula.



*A gaggle of clear-vinyl treatments: top row, from left, Turtle Wax Ice, Yacht Brite Serious Shine, Collinite 845, Plexus, and Armada 210 Plus; second row, X-16, Imar 302, Mothers Power Plastic, Meguiar's No. 10, Meguiar's No. 17, Star brite Plastic Scratch Remover, Star brite Plastic Polish/Restorer, 3M Plastic Restorer, 3M Plastic Polish, Aquatech Premier Polish, Davies Klear To-Sea, Mer-maids Cleaner and Polish, Meguiar's No. 18, 303 Aerospace Protectant, Zep Vinyl Window Cleaner (not tested), Aquatech Enclosure Clear, Marykate Glassplex, 3M Vinyl Cleaner, West Marine Cleaner Polish, and Imar Protective Cleaner.*

The Clear Plastic Polish (No. 10) is a thick, creamy liquid that can follow the No. 17 cleaner, and provides a static-free coating that repels dust and shines up nicely.

**Bottom line:** Of the three Meguiar's products, the No. 10 polish stood out best in its category.

**MOTHERS**

Mothers Marine Power Plastic is a one-step cleaner, restorer, polish, and UV protectant. It is a creamy liquid in a bright red, 8-ounce plastic bottle that claims to remove light scratches, oxidation, stains, and yellowing. Once dried to a haze, it buffs out to a nice bright finish.

**Bottom line:** A good do-it-all product for reviving and protecting old

windows. When polishing soft, clear vinyl, *PS* doesn't recommend using it with a drill-mounted polisher, as Mothers suggests.

**NOVUS**

The Novus No. 1 Clean and Shine Plastic Polish did an excellent job of leaving a lustrous shine that resists fogging and static, and provides a good protective coating. Despite its name, the Novus No. 2 Fine Scratch Remover is meant as the first step in cleaning, and it does a good job of it. (There is also a more abrasive No. 3.)

**Bottom line:** These Novus products offer an excellent two-step program, particularly for scratched windows.

**PLEXUS**

Originally developed for airplane windshields, Plexus Plastic Cleaner and Polish is well known for cleaning and polishing a multitude of plastic surfaces. The can sprays out a fine mist of clear liquid that cleans as it polishes and leaves a shiny anti-static protective residue.

**Bottom line:** This is a good product for well-maintained vinyl, but the metal can will rust.

**SAILOR'S SOLUTIONS**

Sailor's Solutions' X-16 Plastic Window Polish is a combination cleaner (with extra-fine abrasive), polish, and UV protectant that works well but can separate over time. Follow directions and don't let it dry too much, or it will be difficult to remove and will leave streaks.

**Bottom line:** The packaging is cheap (the label and directions smeared after a few uses), but the creamy liquid formula quickly removed some light scratches and left a nice shine.

**STAR BRITE**

Star brite has a two-step process for restoring and reviving clear plastic. Star brite Step 1 Plastic Scratch Remover is an ultra-fine abrasive for cleaning and restoring older plastic windows. The Step 2 Plastic Polish/Restorer is a light, clear liquid in an 8-ounce bottle that leaves a thin, polished coating.

**Bottom line:** This is an inexpensive and effective one-two punch for older vinyl.

**WEST MARINE**

Packaged in an easy-to-stow 8-ounce spray bottle, West Marine's One-step Plastic Cleaner Polish is a light, cream-colored liquid. It does a nice job of both cleaning and removing fine scratches, and it leaves a protective coating.

**Bottom line:** This cleaner-polish is held back by its higher price.

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## MAINTENANCE

PS VALUE GUIDE		CLEAR-PLASTIC CLEANERS, RESTORERS, & POLISHES								
NAME	PRICE /SOURCE	SIZE	COST/OZ	TYPE	CLEAN	SCRATCH	UV	POLISH	COMMENTS	
303 AEROSPACE PROTECTANT	\$15/ westmarine.com	16 oz.	94¢	Spray	X		X	X	Good cleaner & protectant	
3M MARINE PLASTIC POLISH	\$14/ westmarine.com	8 oz.	\$1.75	Liquid				X	Fair/Good polish	
3M MARINE VINYL CLEANER & RESTORER	\$14/ jamestown distributors.com	15 oz.	94¢	Spray	X				Fair cleaner	
AQUATECH CLEAR ENCLOSURE CLEANER & PROTECTANT (750) ✓	\$9 / aquatech.com	16 oz.	56¢	Spray	X			X	Good cleaner	
AQUATECH PREMIER POLISH & UV PROTECTANT (201) ✓	\$16 / aquatech.com	16 oz.	\$1	Liquid			X	X	Excellent polish	
ARMADA 210 PLASTIC CLEANER/POLISH	\$12/ jamestown distributors.com	14 oz.	86¢	Aerosol	X	X		X	Excellent cleaner & polish	
ARMADA 210 PLUS ✓	\$17/ jamestown distributors.com	15 oz.	\$1.13	Liquid	X	X		X	Good cleaner & scratch remover	
COLLINITE NO. 845 INSULATOR WAX \$	\$14/ jamestown distributors.com	16 oz.	88¢	Liquid			X	X	Excellent polish & protectant	
DAVIES KLEAR-TO SEA CLEANER & PROTECTANT	\$15/ westmarine.com	16 oz.	94¢	Spray	X	X		X	Fair/good combo protectant	
IMAR STRATAGLASS 301 PROTECTIVE CLEANER ★	\$16/ defender.com	16 oz.	\$1	Spray	X		X		Excellent cleaner & polish	
IMAR STRATAGLASS 302 PROTECTIVE POLISH ★	\$18/ defender.com	16 oz.	\$1.13	Liquid			X	X	Excellent polish	
MARYKATE GLASSPLEX GLASS CLEANER (3918)	\$9/ jamestown distributors.com	18 oz.	50¢	Spray	X				Fair cleaner	
MEGUIAR'S CLEAR PLASTIC POLISH (NO. 10)	\$9/ defender.com	8 oz.	\$1.13	Liquid				X	Good polish	
MEGUIAR'S CLEAR PLASTIC CLEANER (NO. 17)	\$10/ westmarine.com	8 oz.	\$1.25	Liquid	X	X			Good cleaner & scratch remover	
MEGUIAR'S CLEAR PLASTIC DETAILER (NO. 18)	\$8/ defender.com	8 oz.	\$1	Spray	X			X	Fair cleaner	
MER-MAIDS PLEXIGLASS/ PLASTIC CLEANER & POLISH \$	\$9 / Mermaid.com	16 oz.	56¢	Spray	X			X	Fair/Good cleaner & polish	
MOTHERS MARINE POWER PLASTIC ✓	\$11/ westmarine.com	8 oz.	\$1.38	Liquid	X	X	X	X	Excellent combo polish	
NOVUS NO. 1 CLEAN & SHINE PLASTIC POLISH ✓	\$8/roxys marinemart.com	4 oz.	\$2	Liquid	X			X	Excellent polish	
NOVUS NO. 2 FINE SCRATCH REMOVER ✓	\$8/roxys marinemart.com	4 oz.	\$2	Liquid	X	X			Excellent cleaner & scratch remover	
PLEXUS PLASTIC CLEANER & POLISH	\$20/ westmarine.com	13 oz.	\$1.54	Aerosol	X	X		X	Good cleaner & polish	
SAILOR'S SOLUTIONS X-16 PLASTIC WINDOW POLISH \$	\$12/ sailorssolutions.com	16 oz.	75¢	Liquid	X	X	X	X	Good/Excellent cleaner & polish	
STAR BRITE STEP 1 PLASTIC SCRATCH REMOVER	\$8/ shipsstore.com	8 oz.	\$1	Liquid	X	X			Fair cleaner & scratch remover	
STAR BRITE STEP 2 PLASTIC POLISH/RESTORER	\$8 / shipstore.com	8 oz.	\$1	Liquid				X	Good polish	
TURTLE WAX "ICE" SYNTHETIC LIQUID POLISH	\$16/ Ace Hardware	16 oz.	\$1	Liquid				X	Good polish	
WEST MARINE ONE-STEP PLASTIC CLEANER POLISH	\$9/ westmarine.com	8 oz.	\$1.13	Liquid	X	X		X	Good cleaner	
WEST MARINE PLASTIC RESTORER	\$14/ westmarine.com	8 oz.	\$1.75	Liquid	X	X			Fair cleaner	
YACHT BRITE SERIOUS SHINE	\$16/defender.com	14 oz.	\$1.14	Aerosol	X		X	X	Good cleaner & polish	

★ Best Choice ✓ Recommended \$ Budget Buy

## Comparing Clear-vinyl Products



The clear-plastic cleaners/polishes test panel was left in the sun and salt air to weather for 30 days.

**P**ractical Sailor applied the products to a variety of used clear-vinyl panels and judged ease of use. Testers then applied each product as directed to 1-foot-square sections of windows from a large dodger. The test panel had some minor scratches and a little hazing. The amount of wear was fairly consistent.

Testers evaluated the convenience and suitability of the container, ease of application, ease of buffing (where directed), and the visible results of each product or prod-

uct combination. The panels were then sprayed with fresh water, and the ability to bead water was rated. The panels were left out in the weather for 30 days, and the water test was repeated.

To test scratch repair capabilities, new vinyl sheets were sectioned off and roughed up with 600-grit sandpaper to create light scratches. Those cleaners that claimed scratch removal qualities were applied with 1 minute of hand rubbing. The results were tabulated.

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### YACHT BRITE

Yacht Brite Serious Shine, a 3-in-1 cleaner, polish and protectant in a 14-ounce aerosol, buffs to a nice shine and leaves a fine film that repels water with UV inhibitors and anti-static properties. It contains alcohol and solvents that are not recommended for some plastics.

**Bottom line:** This spray is easy to use and performs well, but the rust-prone aerosol can belongs ashore.

### CONCLUSIONS

Don't put too much stock in claims that hazing, yellowing, or scratches will be eliminated. We found no miracle cure.

Products that included fine abrasives to remove light scratches took several applications and a considerable amount of hand rubbing to slowly eliminate scratches. Since abrasives can do more harm than good, we recommend them only as a last resort. Don't use electric buffers and always test on an inconspicuous area.

When testers had done a good job of cleaning the vinyl with any of the cleaners, a second step of applying and buffing with a good polish obviously improved clarity. Applying a second coat of polish the next day produced a thicker, longer-lasting protective coating that shined and beaded better.

Many products were very effective at improving visibility and preventing staining and dirt buildup.

Some were easier to use than others. The clear liquids have a tendency to run, so they should be applied to a cloth first. Creams show where you have been. Sprays are handiest and probably best for a quick retouch. Here's what we found:

- Of the products that claimed to only clean, the Imar 301 was the clear winner, and it also is safe for treated vinyl.
- For owners of older dodgers with small scratches, the Novus No. 2 Fine Scratch Remover proved to be the most effective, followed closely by the Armada 210 Plus Plastic Cleaner/Polish and Mothers Marine Power Plastic.
- Among the polishes, the Imar

302 Protective Polish, Novus No. 1, Collinite No. 845, Mothers Marine Power, and Aquatech's Premier Polish produced the best shine and beading, rating Excellent.

- The best one-bottle cleaner, scratch remover, and polish with UV protection was Mothers Marine Power Plastic. Sailor's Solutions X-16 also does it all and was rated Good-to-Excellent.

- If you prefer a two-step process, then the Imar #301/#302 combo is the way to go. They produced the cleanest and shiniest windows and beaded water the best, earning the Best Choice honors. The Novus and Star brite two-part products were close behind. ▲

### CONTACTS

**3-M,**  
877/366-2746, [www.3m.com/marine](http://www.3m.com/marine)

**303,**  
530/549-5577, [www.303products.com](http://www.303products.com)

**AQUATECH,** 800/853-7760  
[www.aquatech-marine.com](http://www.aquatech-marine.com)

**ARMADA,**  
617/482-9000, [www.sumnerlabs.com](http://www.sumnerlabs.com)

**COLLINITE,**  
315/732-2282, [www.collinite.com](http://www.collinite.com)

**IMAR STRATAGLASS,**  
703/330-4693, [www.imarsales.com](http://www.imarsales.com)

**KLEAR-TO-SEA,**  
800/888-6133, [www.dwdavies.com](http://www.dwdavies.com)

**MARYKATE,**  
800/272-8963, [www.crcindustries.com](http://www.crcindustries.com)

**MEGUIARS,**  
800/347-5700, [www.meguiars.com](http://www.meguiars.com)

**MER-MAIDS PRODUCTS,**  
800/878-1492, [www.mermaid.com](http://www.mermaid.com)

**MOTHERS,**  
714/891-3364, [www.mothers.com](http://www.mothers.com)

**NOVUS,**  
800/548-6872, [www.novuspolish.com](http://www.novuspolish.com)

**PLEXUS,** 800/405-6495,  
[www.plexusplasticcleaner.com](http://www.plexusplasticcleaner.com)

**STARBRITE,**  
800/327-8583, [www.starbrite.com](http://www.starbrite.com)

**TURTLE WAX,**  
800/887-8539, [www.turtlewax.com](http://www.turtlewax.com)

**WEST MARINE,**  
800/262-8464, [www.westmarine.com](http://www.westmarine.com)

**X-16,**  
631/754-1945, [www.sailorssolutions.com](http://www.sailorssolutions.com)

**YACHT BRITE,**  
800/962-6241, [www.shurhold.com](http://www.shurhold.com)