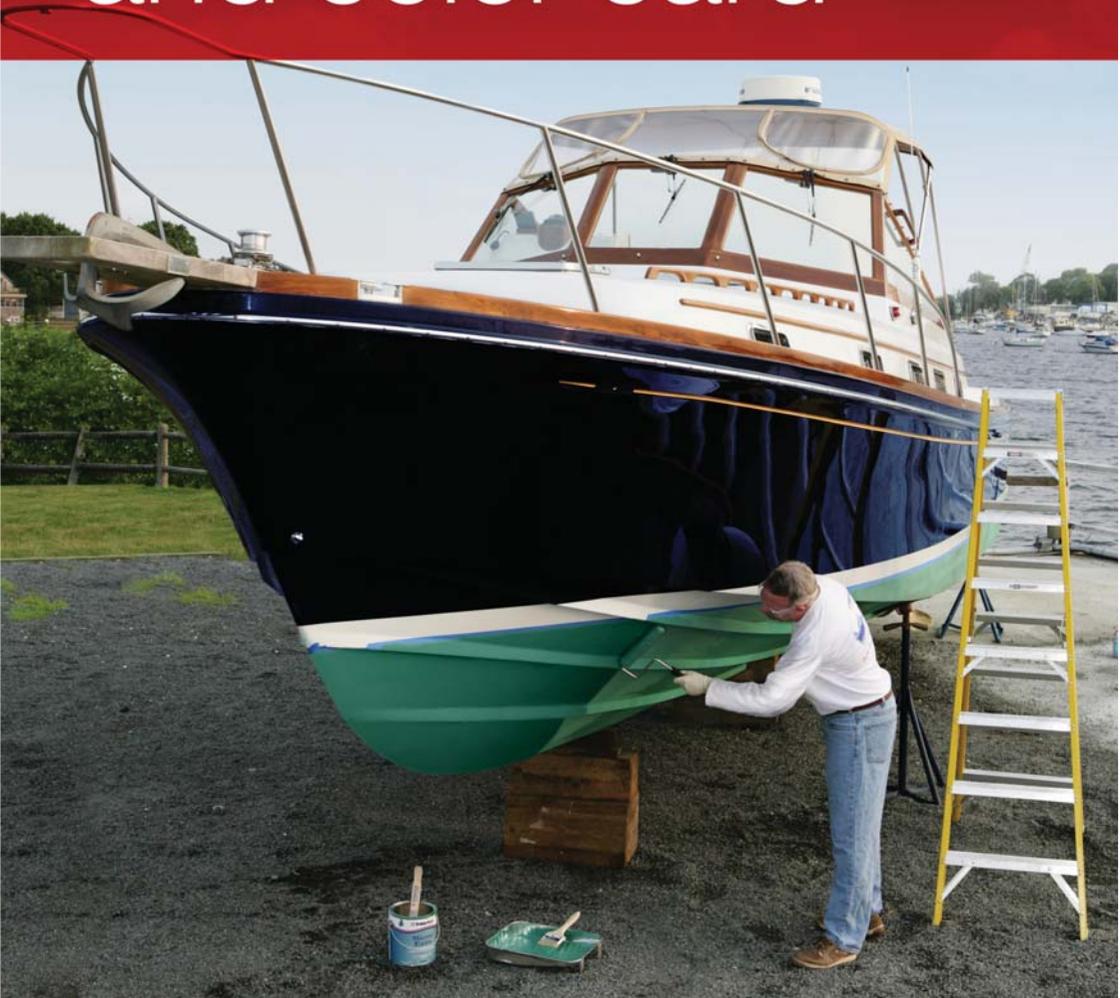
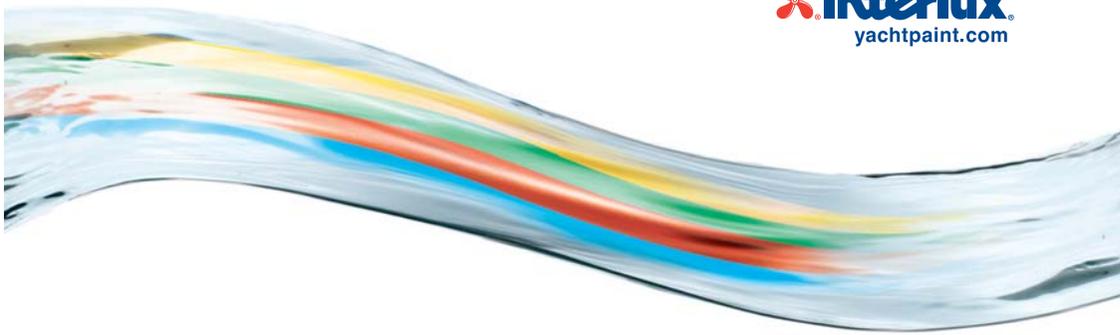


boat painting guide and color card





For over a century we've been creating the most innovative paint solutions to protect, beautify and improve the performance of all types of boats.

No matter where you are, in whichever waters around the globe, you'll find high performance coatings backed by meticulously researched knowledge and support from International Paint.

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Our World is Water

We are happy to share our knowledge with you and help with any questions, if you require further assistance you can find it at:



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yacht.us@yachtpaint.com



yachtpaint.com

topsides, decks, bilges and cabins

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TOPSIDES,
DECKS, BILGES
& CABINS

CARING FOR
YOUR WOOD

CETOL®

FIBERGLASS
BLISTER REPAIR
& PREVENTION

ANTIFOULING

EPOXY
CONSTRUCTION
& REPAIR

BOATCARE

EVERYTHING
ELSE

3 EASY STEPS TO A PERFECT FINISH

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topsides, decks, bilges and cabins

OUR MOST FREQUENTLY ASKED TOPSIDES QUESTION:

“How do I apply a non-skid deck finish?”

‘Interlux offers three solutions for re-finishing a non-slip deck:

Stir and apply – Interdeck

Our ready to use, skid resistant, low gloss, single-component finish that can be applied over bare fiberglass or any other substrate, over an Interlux® topside primer.

Mix your own non-skid finish

Any Interlux® topside finish (including Perfection®) can be transformed into a non-skid deck finish by the addition of Intergrip 2398c Polymeric No-Skid Additive. This additive consists of man-made plastic spheres, which are regular in shape.

They have a low tendency to collect dirt, and provide excellent non-skid properties.

Apply two coats of paint with Intergrip 2398c Polymeric No-Skid Additive mixed in.

Hand Broadcasting Method

Roll on a coat of Perfection, Brightside® or Toplac and while it is still wet, sprinkle the Intergrip as required to obtain the texture of your choice. It is best to put the Intergrip in a flour sifter or salt shaker to dispense the compound. Avoid heavy application, which will not assist in providing a more slip resistant surface. After the paint has been allowed to dry overnight, remove the excess Intergrip and apply the second coat of finish.

PAINTING NON-SKID DECKS

A deck demands a tough coating to protect it from the normal wear and tear of walking on it plus all the things that get dragged across or dropped on it. A 2-part polyurethane, such as Perfection, is the best choice for the job because of its durable, abrasion-resistant finish. Many professionals choose it when using a brush and roller because of its durability and ease of handling, but application of Perfection is not beyond the skills of a novice painter.

Preparation: Scrub the deck using Fiberglass Surface Prep YMA601 and coarse bronze wool. Rinse with fresh water. Work a small area at a time, scrubbing in different directions and wiping the residue off before it dries. This will remove all contamination and provide a good anchor pattern to which the paint can adhere. Be sure to wear gloves and a mask.

Application: Apply one thin coat of Perfection using a short-nap, solvent resistant roller and tipping off with a high quality natural bristle brush. Wait overnight and lightly scuff with fine bronze wool and apply a second coat. When using Intergrip no-skid additive there is no need to scuff sand.

FOR MORE INFORMATION ON PAINTING NON-SKID DECKS CHECK OUR WEBSITE WWW.YACHTPAINT.COM

PAINT FINISHES

Apart from providing an enhanced cosmetic finish to your boat, paints provide a barrier of protection against the elements that will attack the surface during the season: sea, rain, wind and sun.

THE 3 MOST CRITICAL QUESTIONS FOR ANY PAINTING PROJECT

1) What preparation is necessary?

The most critical aspect of a painting job is preparation. Poor surface preparation will always show through the final coat, will reduce the effectiveness of the coating system and can potentially lead to the premature failure and separation of the coating from the substrate. As a guide you should be aware that you will need to spend up to 80% of the job on preparation and priming, in order to achieve a first class finish of which you will be proud.

2) Does the substrate matter?

Yes! Quite simply, if you are painting onto metal or fiberglass you can use any of our paint systems. However, for wooden substrates, your choice may be different. All one-part paint systems are suitable for all wood constructions.

Do not use Perfection® two-part polyurethane on lapstrake constructions.

The wood in these flexible constructions moves as the moisture content varies, leading to cracking. For more stable wood systems – like double diagonal planking, cold or hot molded veneers, plywood and strip planking, where epoxy or resorcinol type adhesives have been used, you can use any of our systems.

3) What repair and upkeep is required?

Areas where there is considerable foot traffic or harsh abrasion, such as gunwale rails and coaming sides, will need frequent repair to keep them in pristine condition. Perfection offers excellent resistance to abrasion, but can still wear through in excessive circumstances. Our one-part systems are easier to touch up than our high performance, two-part systems, and may be more suitable for these areas.



© Billy Black 2002

The perfect paint for your project

This chart provides answers to the most commonly asked questions.

IMPORTANT: Use the correct primer for your choice of finish.



COMMON PROBLEMS	PERFECTION®	TOPLAC	BRIGHTSIDE®	INTERDECK	BILGEKOTE®
	 <ul style="list-style-type: none"> • Ultimate performance 2-part polyurethane finish • Professional quality results made easy • Highest gloss & highest abrasion resistance • Unique UV protection for longest-lasting color and gloss 	 <ul style="list-style-type: none"> • Premium quality one part silicone copolymer finish • Excellent UV resistance • Extended gloss and color retention characteristics • Easy to apply, giving a deep, lustrous finish 	 <ul style="list-style-type: none"> • Hard, high gloss one part polyurethane finish • With Teflon® for easy cleaning, resistance to staining and added abrasion resistance • Range of bright, crisp colors 	 <ul style="list-style-type: none"> • Slip resistant polyurethane deck paint • Contains fine mineral additive for hard wearing, non-slip surface • Suitable for all substrates • Apply straight from the can with brush or roller 	 <ul style="list-style-type: none"> • Formulated specifically for bilge areas and bulkheads, with excellent hide • Helps prevent absorption of oil & gas into wood and fiberglass • Water and chemical resistant
Can I achieve a high-gloss, professional looking, topside finish with this paint?	YES	YES	YES	∅	∅
I have lots of sunlight beating down on my boat. What topside paints offer the best UV protection?	★★★★★	★★★★	★★★★	★★	★
I want an easy to apply topside paint.	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★
I do not want a high gloss finish in my cabin areas. Can I get a satin, or semi-gloss finish with your products?	YES <i>(with Flattening Agent YZM914)</i>	YES <i>(with Flattening Agent YMA715)</i>	YES <i>(with Flattening Agent YMA715)</i>		
What paint should I use for a non-skid deck?	★★★★★ <i>(with Intergrip No-Skid Compounds)</i>	★★★★ <i>(with Intergrip No-Skid Compounds)</i>	★★★★★ <i>(with Intergrip No-Skid Compounds)</i>	★★★★★	∅
Which is the best paint for my mast? (Aluminum and Wood).	★★★★★	★★★	★★★★	∅	∅
When painting my cabin, which paint will give me the best alcohol and chemical resistance?	★★★★★	★★★★	★★★★	∅	∅
Which product should I use to paint my bilge?	∅	★★★★	★★★★	∅	★★★★★
Can I use this product over an existing topside one-part finish?	∅	YES	YES	YES	YES
My boat gets lots of abuse and abrasion. Which topside products offer the best protection?	★★★★★	★★★	★★★★	★★★★	
What paint should I use for waterline or boottop striping?	★★★	★★★★	★★★★★ <i>(available in half pints)</i>	∅	∅
PRIMER	Epoxy Primekote® 404/414	Pre-Kote, or Epoxy Primekote® 404/414	Pre-Kote, or Epoxy Primekote® 404/414	Pre-Kote, or Epoxy Primekote® 404/414	Pre-Kote, or Epoxy Primekote® 404/414

KEY: ★★★★★ Excellent for this purpose ★★★ Good for this purpose ★ Average for this purpose ∅ DO NOT USE for this purpose

Handy Specifications

ONE-PART TOPSIDE SYSTEMS – Toplac, Brightside®, Yacht Enamels

This preparation scheme provides a good level of protection

STAGE	PRODUCT	FIBERGLASS	ALUMINUM	WOOD	STEEL	OVERCOATING TIME*
CLEAN	Fiberglass Solvent Wash 202 or Special Thinner 216	202	216	216	216	20 minutes
SAND		180-220 grit** sandpaper	sand blast or disc grind (coarse emery cloth)	80-180 grit sandpaper	sand blast or disc grind (coarse emery cloth)	
CLEAN	Fiberglass Solvent Wash 202 or Special Thinner 216	202	remove residue (with broom or airline)	216	remove residue (with broom or airline)	
SURFACE PRIMER	Viny-Lux Primewash 353/354	Ø	1 (thinned with 355)	Ø	1 (thinned with 355)	1 hour
PRIMER	Pre-Kote	1	Ø	1 (thinned 10-15%)	Ø	8 hours
PRIMER	Epoxy Primakote	Ø	1	Ø	1	8 hours
FILLER (IF NEEDED)	Surfacing Putty 257 or Special Thinner 216	257	Waterite	257	Waterite	4 hours
PRIMER	Epoxy Primakote	Ø	1	Ø	1	8 hours
PRIMER	Pre-Kote	1	Ø	1	Ø	8 hours
TOPCOAT	Toplac or Brightside®	2	2	2	2	12 hours

* Minimum wait time between coats or between overcoating with the next step in the system, at a temperature of 73°F (23°C). Please consult product data sheets (available at yachtpaint.com) for overcoating times at different temperatures.

** If in poor condition, sand with 80-grit.

KEY: ● No. of coats ● Minutes ● Hours Ø Do not use for this purpose

TWO-PART TOPSIDE SYSTEMS – Perfection®

This preparation scheme provides the maximum level of protection available

STAGE	PRODUCT	FIBERGLASS	ALUMINUM	WOOD	STEEL	OVERCOATING TIME*
CLEAN	Fiberglass Solvent Wash 202 or Special Thinner 216	202	216	216	216	20 minutes
SAND		120-220 grit sandpaper	sand blast or disc grind (coarse emery cloth)	80 grit sandpaper	sand blast or disc grind (coarse emery cloth)	
CLEAN	Fiberglass Solvent Wash 202 or Special Thinner 216	202	remove residue (with broom or airline)	216	remove residue (with broom or airline)	
SURFACE PRIMER	Viny-Lux Primewash 353/354	Ø	1 (thinned)	Ø	1 (thinned)	1 hour
PRE PRIMER	Epiglass® Epoxy Resin	1-2 coats (as necessary)	Ø	1-2 coats (as necessary)	Ø	4 hours
PRIMER/UNDERCOATER	Epoxy Primekote® 404/414	1	1	1	1	8 hours
FILLER (IF NEEDED)	Interfil® Epoxy Filler or Waterite	YES	YES	YES	YES	4 hours
PRIMER/UNDERCOATER	Epoxy Primekote® 404/414	1	1	1	1	8 hours
TOPCOAT	Perfection	2	2	2	2	12 hours

* Minimum wait time between coats or between overcoating with the next step in the system, at a temperature of 73°F (23°C). Please consult product data sheets (available at yachtpaint.com) for overcoating times at different temperatures.

KEY: ● No. of coats ● Minutes ● Hours Ø Do not use for this purpose

For maximum longevity of your wood finish system, only use Interlux® Boatcare products when cleaning and maintaining your boat. Many household cleaners and some marine soaps, stain removers, teak cleaners and waxes will damage the topside finish.



Go to www.yachtpaint.com to download an 11 page manual and a video on how to apply Perfection.



How to paint like a professional



PREPARATION AND PRIMING FOR TOPSIDES PAINT WORK	
	<i>To achieve a good finish, the condition of the existing paint work should be thoroughly checked to determine the extent of the preparation required. Look for areas of damage, separation or peeling of the paint or any other signs that the paint does not have a firm hold on the substrate.</i>
1	Clean bare fiberglass with Fiberglass Solvent Wash 202 or Fiberglass Surface Prep YMA601. For previously painted surfaces use Special Thinner 216 to remove any contamination.
2	Re-inspect the hull to ensure no damage has been missed.
3	If the paint is in good condition, sand with 220-320 grit wet or dry sandpaper and when dry, wipe with a cloth dampened with Brushing Liquid 333 to remove any dust residue. If existing surface is in poor condition, sand with 80-grit.
4	If the paint shows localized areas of damage, these areas can be repaired using Watertite Epoxy Filler or Interfill® Epoxy Filler (see page 12).
5	If the previous coating is cracking, peeling or generally showing signs of separation over the whole area, it should be totally removed. Typical methods are scraping, sanding, grinding and/or using Interstrip Paint Stripper. After old paint has been removed begin with preparation for bare surface.
6	Application of an undercoat will provide additional depth of color and durability to the finished surface. To create the best finish, when working with single part finishes, we advise mixing the second coat of Pre-Kote 50:50 with the topcoat. This will create a satin finish, which highlights final imperfections, which can thus be sanded smooth. This procedure will also help achieve greater gloss and color depth in the topcoat.

TESTING FOR COMPATIBILITY: To test if an existing topside paint product is compatible with our two-part polyurethane finish; tape a cloth soaked in Spray Reducer 2316N to the previously painted surface for 24 hours. If the surface is softened, it is probably not compatible. In this instance only a one-part paint product should be applied.



APPLYING THE FINISH

1

APPLYING BY BRUSH

Use the largest brush possible. Long flexible bristles are best for gloss paints. When applying by brush a good technique is the 'Criss-Cross' method. Paint is applied to the surface with a diagonal brushing action from the left and right (Step 1). This is then spread further with horizontal strokes (Step 2) before finally 'laying off' with light vertical strokes (Step 3). This results in any brush marks being able to flow out to give the best possible finish.



2

APPLYING WITH ROLLER AND BRUSH

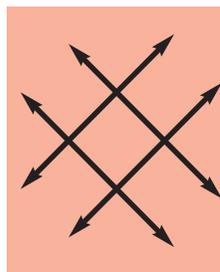
Our products are formulated so that a great gloss finish can be obtained through application with a solvent resistant, high density/closed cell foam roller and good quality China Bristle Brush. This will minimize the formation of bubbles in the surface that can occur with mohair and large cell foam rollers. The paint applied will be thinner and so more coats may be required.



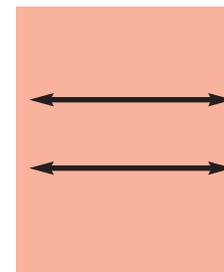
The roller is used to apply paint to the surface and the pad or brush is used to create a smooth surface by 'tipping off'. This works particularly well when two painter's work side by side.

While many traditional painters will apply topside finishes by tipping off horizontally, the diagram below will yield a better result for most 'Do it Yourselfers', as it helps reduce brush marks.

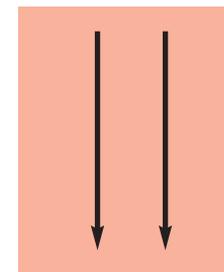
Always test your choice of application method, to establish if it provides the finish you require.



Step 1



Step 2



Step 3

FILLING HOLES, VOIDS AND NICKS ABOVE & BELOW THE WATERLINE



The quality of your topside finish is crucially dependant upon preparation. Filling in small areas of damage is an important part of this. Your boat is not only under attack from the elements, damage may also result from collision, abrasion and other mechanical damage. Correct use of fillers is essential if the job is to last.

Follow these hints and tips to achieve a great result:

- *Watertite Epoxy Fillers can be used above and below the waterline. Use either as a surfacing putty to fill screw holes and hairline cracks in gelcoat, prior to repainting with a two-part, high performance, polyurethane system, such as Perfection® Polyurethane. Below the waterline, use as part of osmotic blister protection or repair system. Mix Watertite in a 1:1 ratio.*
- *These epoxy compounds are 100% solids. Do not add thinners to these compounds as that will lead to shrinkage. Clean equipment with the recommended thinner. Refer to the label or product datasheet.*
- *When mixing epoxy compounds check the label to see what the pot life is for the temperature you are working in and mix only what can be used in that time.*
- *To avoid flat spots when applying and sanding fillers on curved surfaces, use spreaders and sanding boards that are longer than the width of the area by at least half as much again.*
- *No matter how smooth a finish you have achieved, when filling or fairing, all fillers must be sanded before overcoating to ensure good adhesion.*
- *For screw holes and small repair areas, ensure that all dust is removed and clean the area by wiping with solvent. Over-fill the area to allow you to sand back to a flush finish.*
- *If taking on a major profiling job, Interlux® has a range of professional epoxy fillers more suited to the task than those described above.*

For more information please call our helpline at 1-800-468-7589.

FOR MAXIMUM LONGEVITY OF COLOR AND GLOSS OF BRIGHTSIDE®, TOPLAC, OR PERFECTION®, ONLY USE INTERLUX® BOATCARE PRODUCTS WHEN CLEANING AND MAINTAINING YOUR BOAT. MANY HOUSEHOLD CLEANERS AND SOME MARINE SOAPS, STAIN REMOVERS, TEAK CLEANERS AND WAXES WILL DAMAGE THE TOPSIDE FINISH.



Photo supplied by Swobbit®

Regular cleaning and protection with Interlux® Boatcare products will help avoid build-up of dirt, grease, salt and other surface contaminants which can slowly cause premature aging of Interlux topside finishes. Each Interlux® Boatcare product has been specially formulated to protect and increase the longevity of Interlux® finishes.

The right tool for the job! We recommend the use of high quality cleaning tools when cleaning and maintaining the finishes on your boat.

PAINTING THE BILGES

- 1 Clean thoroughly with Fiberglass Solvent Wash 202, Fiberglass Surface Prep YMA601 or Special Thinner 216. (In the case of Fiberglass you should decide if any anti-osmosis treatment is necessary. Please refer to the Gelcoat Blistering section on pages 24-28 for further information).
- 2 If the bilges have been painted before, remove all old, flaky paint, and make sure the area to be painted is completely dry.
- 3 Remove all oil and grease from your bilges before painting.
- 4 Sand with 220-grit sandpaper. If in poor condition, sand with 80-grit. Paint with two coats of Bilgekote®. This is a highly durable finish that can withstand oils and chemicals, knocks and scrapes, and is equally effective for use in lockers and on bulkheads.

HINTS TO HELP YOU ACHIEVE A PERFECT RESULT EVERY TIME

TWO-PART EPOXY FILLERS

✓ Two-part epoxy fillers are the most widely used fillers in the marine industry. They are invariably solvent free. A benefit of being solvent free is that they do not attack the underlying primer.

- ✓ Epoxies must be mixed in the proper ratio. Too much curing agent and they will leave a sticky film on the surface that is not suitable for overcoating. Too little curing agent will weaken the filler and cause it to crumble later on.
- ✓ Epoxy fillers are preferred over polyester fillers below the waterline as polyester fillers have a greater propensity to absorb water.

DO'S AND DON'TS FOR PAINT FINISHES

- ✓ Ensure an even spread by holding the brush at 45° – this minimizes brush marks.
- ✓ The best finish is achieved on large areas by two people, one to apply the paint, the other following immediately behind to smooth the finish.
- ✓ Clean or change brushes every 20 minutes or so.
- ✓ Always use lint-free cleaning cloths.
- ✓ Stir the can occasionally during the work.
- ✓ Dampen the ground with water before commencing painting to avoid any dust rising.
- ✓ Use a worn brush for the final coat, this will ensure less brush marks.
- ✓ Painting is best achieved on warm, dry mornings – cold weather retards drying and dampness will spoil the gloss.
- ✓ Always pour the amount of paint that you expect to use at any one time into a separate container.
- ✓ Always use the good quality china bristles for topside finishes.
- ✓ Always use top quality fine line masking tape to ensure good crisp lines.
- ✗ Never apply direct from the can, as this will introduce contamination.

How much topsides paint do I need?

	– POWER					– SAIL				
Waterline Length (feet)	20	25	30	35	40	20	25	30	35	40
2 part products (quarts)	2	3	4	5.5	6	2	3	4	5	6
1 part enamels (quarts)	3	4.5	6	8	9	2.5	4	5.5	7	8.5
1 part primers (quarts)	4	5.5	7.5	10	11	3	5	7	9	10.5

3 EASY STEPS TO A PERFECT WOOD FINISH

PRODUCT SELECTION 16-17
Pick the best product for your project

HANDY SPECIFICATIONS 18
Step-by-step guide to your project from our technical team

**HOW TO PAINT LIKE
A PROFESSIONAL** 20-21
Instructions for an expert result explained by our professionals

caring for your wood

OUR MOST FREQUENTLY ASKED VARNISH QUESTION:

“What is the best varnish for interior and exterior wood?”

‘We have several varnishes to meet your needs. Exterior high gloss varnishes with excellent ultra-violet protection include:

Perfection® Varnish – a two-part polyurethane designed to be an extremely durable clear coating for wood and epoxy surfaces.

Schooner® Varnish – a traditional easy to use tung-oil varnish with a classic varnish look.

Goldspar® Clear – a one-part polyurethane varnish with incredible abrasion, chemical and water resistance.

Goldspar® Satin – has been designed for interior surfaces. It is a low sheen polyurethane varnish producing a flexible but very hard-wearing surface, that is resistant to scratching and abrasion.’

Original Varnish – a quality traditional varnish for general use.

So if you have an area to varnish that gets a lot of abrasion use Goldspar Clear or Perfection. If you are varnishing over a clear epoxy such as Epiglass® use Perfection and if you want that beautiful traditional look of varnish use Schooner.

VARNISH DURABILITY AND UV PROTECTION

Varnishes have always been considered a mysterious blend of black art and science but there are only five main ingredients that go into a top quality marine varnish – oil, resin, solvent, dryers and additives. The trend in modern varnish technology that most directly affects the long-term durability of varnish is the use of additives specifically to combat the effects of UV energy.

The first and most commonly used additive is the UV absorber. UV absorbers diffuse the UV energy through the coating so that degradation of the substrate is avoided.

Interlux uses two additional additives to help protect the varnish from UV damage – surface stabilizers and antioxidants. Surface stabilizers work at the surface to repair damage from UV light by pulling together polymer segments. By keeping the surface stabilized, color and gloss are maintained.

Antioxidants are used to combat photo-degradation and oxidation. This helps maintain color stability and keeps the varnish from fading and becoming cloudy.

WOOD CARE SYSTEMS

Wood has a beauty that good maintenance will enhance and protect. Interlux has several systems for caring for the wood on your boat. All of the systems will provide a barrier to protect your boat against the elements which attack the surface during the season such as sea, sun, rain and wind while enhancing the natural appearance of the wood.

VARNISH

Varnishes provide excellent protection for the wood on your boat while allowing the natural beauty of the wood to show through. Varnishes are made up of five specific ingredients: oil, resin, solvent, dryers and additives. The combination of these five determines a varnish's performance. Use the chart on pages 16-17 to help determine what varnish is best for you.

SYNTHETIC FINISHES

Cetol® Marine is an easy to apply, low maintenance alternative to oils and varnishes. Cetol is formulated with synthetic pigments to protect the wood from exposure to UV and keep it looking beautiful with the least maintenance necessary.

It is flexible, resistant to impact damage and abrasion. It allows for natural expansion and contraction of wood. See pages 22-23 for more information on Cetol® Marine.

TEAK OIL

Interlux uses a traditional Scandinavian blend of oils that is easy to apply, fast drying and provides a warm, golden color for the ultimate protection against the elements.

WHAT SHOULD YOU CONSIDER IN YOUR CHOICE OF A WOOD CARE SYSTEM?

In order to choose between these various systems, you will find it useful to consider your project from a number of different perspectives.

WHAT PREPARATION IS NECESSARY?

The most critical aspect of any job is the preparation of the surface prior to the application. Varnish takes more time to prepare but lasts longer than Teak Oil.

WHAT REPAIR AND UPKEEP IS REQUIRED?

Varnishes may require sanding and application of another coat of varnish once or twice a year depending on conditions, where the Teak Oil may need to be reapplied every couple of months.

REMEMBER: Like most paint applications, preparation is the most difficult and important part of the project. Poor preparation always shows through and reduces the effectiveness of the coating.



The perfect varnish for your project

Use this guide to our varnish products, which answer the most common customer questions, to help you pick the perfect varnish for your project.

If varnishing bare wood, use Interprime Wood Sealer 1026 or thin your first coat of varnish 15-20%. This first 'sealer coat' will soak into the wood, giving a better, smoother base for your varnish job, that will last longer.



SOLUTION CHOICES	 PERFECTION®	 SCHOONER®	 GOLDSPAR® CLEAR	 GOLDSPAR® SATIN	 ORIGINAL
	<ul style="list-style-type: none"> • Ultimate performance polyurethane two part varnish • Excellent chemical and abrasion resistance and very hard finish • Exceptional gloss and gloss retention • Ultimate UV protection – lasts up to 4 times longer than ordinary varnishes 	<ul style="list-style-type: none"> • Premium quality, traditional tung oil varnish • Rich golden color and deep gloss • Excellent UV protection • Good flow-out and self-leveling characteristics for easier application • Suitable for interiors, exteriors and over existing varnish 	<ul style="list-style-type: none"> • High quality one part polyurethane varnish • Allows the color of the wood to come through • Good UV resistance and abrasion resistance • Quick drying • Suitable for interiors, exteriors and over existing varnish 	<ul style="list-style-type: none"> • Goldspar quality interior varnish with a satin finish • Good flow-out and fast drying for easier application • UV, scratch and alcohol resistant • For interior use 	<ul style="list-style-type: none"> • Traditional, general purpose gloss varnish • Good flow, flexibility and gloss retention • High clarity finish for light color woods • Interior, exterior and over existing varnish
Can I achieve a high gloss professional looking finish with this varnish?	YES	YES	YES	∅	YES
What's the best varnish for interior wood?					
What's the best varnish for scratch resistant, exterior decking?				∅	
Is this product suitable for interior and exterior wood?	YES	YES	YES	INTERIOR ONLY	YES
How durable and long lasting is this varnish?					
Can I apply this directly onto existing varnish?	YES, IF EXISTING VARNISH IS A TWO-PART	YES	YES	YES	YES
Which thinners do I need?	2333N	333	333	333	333
Which varnish offers the best UV protection and resistance to yellowing?				FOR INTERIOR USE ONLY	
Which varnish offers the best gloss retention?				∅	

KEY:  Excellent for this purpose  Good for this purpose  Average for this purpose  DO NOT USE for this purpose

Two-part Perfection Varnish will give you the best and the longest lasting protection from UV damage and abrasion.



For maximum longevity of your wood finish system, only use Interlux® Boatcare products when cleaning and maintaining your boat. Many household cleaners and some marine soaps, stain removers, teak cleaners and waxes will damage the topside finish.

USING PASTE WOOD FILLER STAIN	
	<i>Interlux® Interstain Paste Wood Filler and Stain fills the grain of the wood so that the number of coats of varnish can be reduced and it stains the wood to enhance its natural beauty.</i>
1	Surface Preparation: Wood surface must be clean and dry. If bleaching has been necessary be sure to neutralize surface prior to application of any paint product.
2	Sand with 80-grit production sandpaper. Wipe with Brushing Liquid 333 to remove sanding residue.
3	Reduce stain with Brushing Liquid 333 to a consistency of heavy house paint. (NOTE: Excessive thinning will produce a stain only – not filling qualities).
4	Apply filler stain by brush, with the grain. After the stain appears to flatten (5-10 minutes), wipe across grain with burlap pad until surface appears uniform. Use cloth moistened with Brushing Liquid 333 to even out any streaking that may have developed.
5	When dry (4-6 hours), sand lightly to remove fuzz caused by grain swelling.
6	Apply 4-6 coats of varnish.

Note – Paste Wood Filler Stain is not available in Canada

APPLYING VARNISH TO EPIGLASS® EPOXY OR OTHER CLEAR EPOXY RESINS	
1	After applying epoxy allow to cure for a minimum of 3-7 days. In cool temperatures allow 7 days clear epoxies to fully cure. Scrub Epiglass® Epoxy with a stiff brush using Interlux All-Purpose Boat Soap with Wax and water. Rinse with fresh water to remove soap residue. (SANDING WILL NOT REMOVE SURFACE CONTAMINATION).
2	Wet sand the surface using 120-150-grit wet-or-dry sand paper Remove sanding residue by wiping the surface with a rag that has been dampened with Fiberglass Solvent Wash 202. Wipe only small areas at a time and change rags frequently.
3	Sand in between coats with 220-320 grit wet-or-dry sandpaper. Apply 5-6 coats of Interlux® Perfection® Varnish YVA853, Schooner® 96, Goldspar® Clear 95 or Goldspar® Satin 60. Sand in between coats with 220-320 grit wet-or-dry sandpaper. Remove sanding residue with a cloth that has been dampened with the proper solvent.

For maximum longevity of your wood finish system, only use Interlux® Boatcare products when cleaning and maintaining your boat. Many household cleaners and some marine soaps, stain removers, teak cleaners and waxes will damage the topside finish.



Handy Specification

VARNISH SPECIFICATION RECOMMENDATIONS

STAGE	PRODUCT	PREVIOUSLY VARNISHED	BARE WOOD	OILY WOOD (TEAK, IROKO)		OVERCOATING TIME*
				PREVIOUSLY VARNISHED	BARE WOOD	
SAND		220-320 grit	80-180 grit	220-320 grit	80-120 grit	
PRE-TREATMENT	Perfection® Schooner® Goldspar® Clear, Goldspar® Satin Original	Ø	1 thinned 15-20%	Ø	1 Thinned 15-20%	12 hours
VARNISH CHOICE <small>Follow one complete product scheme</small>	Jet Speed	Ø	2-3	Ø	2-3	4 hours
	Schooner®	3-4	4-6	3-4	4-6	12 hours
	Goldspar Clear	3-4	4-6	3-4	4-6	12 hours
	Goldspar Satin	3-4	4-6	3-4	4-6	12 hours
	Original	3-4	4-6	3-4	4-6	12 hours
	Perfection	2-3 †	3-5	2-3 †	4-6	12 hours

* Minimum wait time between coats or between overcoating with the next step in the system, at a temperature of 73°F (23°C).

† Always avoid applying a two-part product onto a surface previously varnished with a one-part varnish.

Note Interprime Wood Sealer 1026 can be used instead of a thinned coat of varnish

KEY: ● No. of coats ● Hours Ø Do not use for this purpose



How to varnish like a professional



PREPARATION FOR VARNISH WORK	
	<i>To achieve a good finish, the condition of the existing varnish should be thoroughly checked to determine the extent of the preparation required.</i>
1	Look for areas of damage, separation or peeling or any other signs that the varnish does not have a firm hold on the substrate.
2	Clean and prepare the surface by washing with Special Thinner 216 to remove any contamination. Then inspect again to ensure no damage has been missed.
3	VARNISH – GOOD CONDITION – NO DAMAGE: Sand with 220-320 grit wet-or-dry sandpaper and when dry, wipe with a cloth dampened with 333 (2333N if varnishing with Perfection®).
	VARNISH – GOOD CONDITION – SOME DAMAGE: These areas may be repaired using Interstain Paste Wood Filler Stain. Spot priming and varnishing may then be required and the area sanded prior to the full varnish job.
	VARNISH – POOR CONDITION: If the previous varnish coating is cracking, peeling or generally showing signs of separation over the whole area, it should be totally removed by either scraping, sanding or with a chemical paint stripper such as Interstrip 299E.

PRO TIP: Always work in the direction of the grain, whether sanding or applying varnish. This will avoid scratches that can even show through many coats of varnish



APPLYING VARNISH	
1	We recommend that the first coat of varnish applied is thinned up to 15%-20%. This will promote good penetration of the surface, and adhesion of subsequent coats.
2	After the first coat has been applied, the surface will appear rough. This is a result of the exposed ends of grain absorbing the varnish and lifting. Sand smooth with a 220 grit sandpaper.
3	Applying varnish with a brush is usually the best method, although roller application can be effective on large flat surfaces. Brush out the varnish with firm strokes along and across the grain holding the brush at 90° to the surface. Then 'tip-off' by gently stroking the surface with the brush at 45°. Your brush should be used for varnish only.
4	A minimum of three full, unthinned coats is recommended for all varnishes. However, to achieve long lasting protection, you should plan to apply up to ten coats, depending on the system. As the number of coats increases, sand in between to increase the level of gloss and depth of luster.

HINTS TO HELP YOU ACHIEVE A PERFECT RESULT EVERY TIME	
<ul style="list-style-type: none"> ✓ Round the edges of any scrapers with a file to avoid gouging. ✓ Keep the sandpaper clean and change it frequently. ✓ On bare wood sand by numbers, finishing the surface with a progressively finer grade of paper. ✓ Do not hard sand edges. Sand only lightly to create enough sand scratches for the next coat of varnish to adhere. ✓ Varnishing is best achieved on warm, dry mornings – cold weather slows drying and dampness spoils the gloss. ✓ Always use a clean brush, previously used only for varnish. ✓ Always buy the highest quality varnish and brush available. This will ensure you achieve the most attractive finish. ✓ Clean new brushes before use. ✓ Test the finish on a spare piece of wood before applying to the boat. ✓ On large areas use a foam roller to apply the initial coat, followed immediately behind with a wide brush for the finishing strokes – this is best done by two people. ✓ Alternatively, having cleaned and washed the 	<ul style="list-style-type: none"> brush, suspend it by its handle to avoid any 'fishtailing' of the bristle. ✓ As the varnish ages in the can you may find there are lumps or contamination. Filtering the varnish into a separate container through a paint filter, cheesecloth or an old stocking is a good solution to this problem. ✓ Always pour the amount of varnish that you expect to use at any one time, into a separate container. ✓ When applying varnish always be sure to have good ventilation. Poor ventilation will result in a hazy or flat finish. ✓ Make sure that all joints are properly bedded down with 214 Bedding Compound. Varnish may not dry over some newly applied caulking type compounds. ✗ Never apply direct from the can, as this will introduce contamination. ✗ Don't use varnish which has been open for a long period as it will have picked up dust. ✗ Do not varnish wood when exposed to direct sunlight. ✗ Never leave bare wood exposed too long as it will absorb moisture from the atmosphere.

HOW IS CETOL® MARINE DIFFERENT?

Cetol Marine contains synthetic transparent iron oxide pigments, which shield the wood against sunlight. This effectively protects the wood's lignin, a key component in its strength, which is degraded by exposure to UV. It is these pigments that give Cetol Marine its attractive appearance.

Cetol Marine durable surface film protects the wood from the elements and marine environment. It has excellent weathering properties and, importantly, is flexible. This characteristic means that its protective shell is very resistant to impact damage and abrasion, and allows for natural expansion and contraction of wood.

Cetol Marine is microporous, allowing the wood to breathe. This helps to keep the moisture content of the wood stable as it allows it to escape from the wood. It also means it may be applied to wood with a higher moisture content (up to 18%) compared to varnish application.

Cetol Marine penetrates the surface of the wood on application, providing long-term water repellence and protecting the wood from water damage.

Cetol Marine is formulated to a lower viscosity than most varnishes. This allows excellent wood penetration, easy and rapid application of coats and superb flow and leveling preventing the need for sanding between coats.

This, combined with its quick drying, makes it a really easy-to-use. Cetol Marine is formulated for use on all marine woods, and is particularly suitable for tropical hardwoods like teak.

Cetol® Marine Natural Teak

Is the first Cetol Marine product that offers 'Next Wave' technology from Sikkens. Cetol Marine Natural Teak will truly bring out the natural beauty and grain of wood and offer the rich traditional look that every boat owner loves. Cetol Marine Natural Teak is the lightest color and also does not have the amber appearance when compared Cetol Marine and Cetol Marine Light. The 'Next Wave' technology in Cetol Marine Natural Teak has an enhanced unique UV-absorbing package that acts like a sunscreen to protect wood by deflecting the damaging effects of the sun's UV rays. Cetol Marine Natural Teak is a durable, translucent, satin protective wood finish with high quality unique UV-absorbing package and new improved color that will provide superior performance and enhance the natural beauty of wood and can be used for interior or exterior wood.



Cetol® Marine Light

Is a durable, translucent satin protective wood finish formulated with a special alkyd resin and high quality synthetic UV-absorbing pigments which shield wood against damaging UV rays. Identical to the Cetol Marine but formulated with different pigments to produce a lighter amber appearance and can be used for interior or exterior wood.

Cetol® Marine

Is a durable translucent satin protective wood finish, formulated with a special alkyd resin and high quality synthetic UV-absorbing pigments which shield wood against damaging UV rays. It produces an attractive dark amber look to wood and can be used for interior or exterior wood.

Cetol® Marine Gloss

Is a durable clear gloss protective wood finish, developed as a topcoat for Cetol Marine, Cetol Marine Light and now Cetol Marine Natural Teak. Cetol Marine Gloss provides a high gloss, hard wearing, UV protection and an easy to clean finish. It can be used where a gloss appearance is preferred on top of Cetol Marine, Cetol Marine Light and Cetol Marine Natural Teak. Do not use on decks.



Cetol® Marine

HOW DO I PREPARE THE WOOD PRIOR TO USING CETOL PRODUCTS?

EXTERIOR AND INTERIOR – NEW WOOD	
1	Wipe the wood with Special Thinner 216 using the 'two-rag' method to remove any natural surface oils and contaminants. Once dry sand surfaces with 180-220 grit sandpaper, always sand along the grain.
2	Remove all sanding dust by vacuuming followed by wiping the surface with a dampened cloth with Interlux® Special Thinner 216. Let the surface dry completely.
3	Wipe the surface once more and let dry completely before applying Cetol.

HOW SHOULD I APPLY AND MAINTAIN CETOL MARINE, MARINE LIGHT, MARINE NATURAL TEAK AND MARINE GLOSS?

If Cetol Marine, Marine Light or Marine Natural Teak has not been used before or if the wood is old and dry apply Cetol until it puddles on the surface. This usually takes a minimum of 3 coats but may take more. Apply these coats within a period of 2 weeks. Sanding between coats is not necessary, but for a smoother surface sand lightly between coats with a sanding pad. A minimum of 4 coats is advised in this case. Use a long-haired natural bristle brush. Do not use a foam brush.

If Cetol Marine, Marine Light or Marine Natural Teak has been used before an annual maintenance coat is recommended. Prior to applying a maintenance coat, clean the surface, rinse with fresh water, and allow to dry. Roughen the surface with a sanding pad and clean and apply 1 or 2 coats Cetol Marine, Marine Light or Marine Natural Teak.

Cetol Marine Gloss System

If a high gloss exterior finish is desired, apply Cetol Marine, Marine Natural teak or Marine Light and apply a minimum of 2 coats of Cetol Marine Gloss. For the best finish, sand lightly between coats with 220-320 grit sandpaper. Note that Cetol Marine Gloss should be applied only in conjunction with a Cetol Marine, Marine Light or Marine Natural Teak.

IMPORTANT: TO FIND MORE INFORMATION ON THE APPLICATION OF CETOL, VISIT yachtpaint.com OR CALL **1-800-468-7589**

OSMOSIS PROTECTION & TREATMENT

WHAT IS OSMOSIS? 25

HOW TO RECOGNIZE & TREAT OSMOSIS 26
Step-by-step guide to osmosis treatment

HOW TO PROTECT AGAINST GELCOAT BLISTERING 27
Step-by-step guide to osmosis protection

osmosis (oz-mŌ'sis, os-), -n.

Dictionary definition;

The diffusion of fluids through membranes or porous partitions.

Boater's definition;

Boat owner's greatest enemy. Water absorbs through gelcoat causing damage and weight gain. Can be prevented with the INTERPROTECT® SYSTEM.

AN OUNCE OF PREVENTION IS WORTH A POUND OF CURE...

The importance of having a moisture-free hull cannot be overemphasized. The drier the laminate, the lighter the hull, the better the performance, the more efficient fuel use and the longer the gelcoat life. A boat hull that has absorbed moisture will also sit lower in the water than intended and will reduce the responsiveness of the boat.

The InterProtect® System was designed to repair hulls which have experienced gelcoat blistering. However, the best time to attack hull blistering is before it happens.

Taking preventative action before a problem occurs will greatly reduce the likelihood of an expensive repair and increase resale value. If you're buying a new boat, protect your investment with the InterProtect® System before it ever goes in the water!

InterProtect® is a unique two-part epoxy designed to reduce the potential of water absorption by fiberglass hulls. InterProtect® is unique among epoxies because it has Micro-Plates®, a protective barrier within its film to slow down water permeation. Technically, InterProtect® Micro-Plates® provide millions of overlapping microscopic plates that create a barrier similar to shingles on a roof. These overlapping Micro-Plates® eliminate any direct path for water migration and also improve the sag resistance of the epoxy making application easier.

The InterProtect® Micro-Plates® Formula provides:

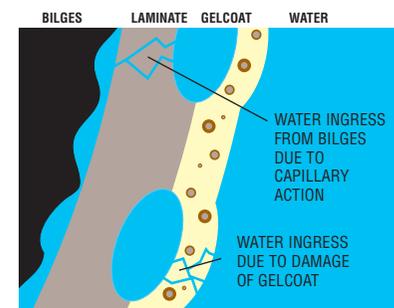
- Fast drying, easy application
- A barrier in the epoxy coating to reduce water damage to your hull
- Sag resistance to insure the elimination of sags and runs during application

InterProtect® has been the product of choice for Boat Builders and Repair Yards since 1985.

fiberglass blister repair & prevention

WHAT IS OSMOSIS?

Osmosis is a process of degeneration within a fiberglass laminate. It is caused by a chemical reaction between water and unreacted substances remaining in the manufactured hull. The water enters the hull through the gelcoat and once inside, reacts with the chemical components creating acidic substances. These substances create pressure behind the gelcoat, which causes blisters and eventually cracking. Once the gelcoat is breached in this manner, the underlying laminate is capable of absorbing water like a sponge.



Osmosis is not only caused by water on the outside of the hull – bilge water from the inside can also cause a problem. It is therefore worth making efforts to keep your bilges dry.

WHEN MIGHT OSMOSIS OCCUR?

Any unprotected hull is likely to show signs of osmosis eventually, like rust on a car.

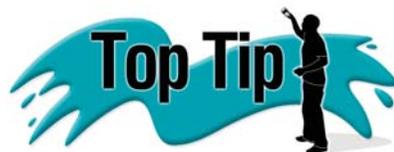
The exact length of time before osmosis occurs depends on many factors including: the type of water in which the hull is moored; the temperature of the water and most importantly, the quality of the original hull construction.

In some cases, reactive impurities in the gelcoat and laminate will cause osmosis in the early life of the boat. This is a structural problem and should be referred back to the boat manufacturer. However, even well-built, fiberglass hulls will eventually experience osmosis and blistering. This is why we recommend applying an epoxy protection layer, even to new boats.



REMEMBER: PREVENTION IS BETTER THAN CURE!

How to paint like a professional



HOW TO RECOGNIZE AND TREAT OSMOSIS

THE MAIN SYMPTOM, 'BLISTERS' – Blisters are the most common warning sign and if identified should be followed up with immediate professional examination. Blisters can vary from small pinhead blisters, to areas as large as the palm of a hand. The presence of any fluid behind a blister indicates a potential problem. If the fluid has a pungent, vinegary odor or feels greasy or sticky when rubbed between the thumb and forefinger, there is a high probability of osmosis. Before any treatment is carried out, you need to establish what has caused the problem. We recommend that you seek the advice of a professional surveyor.

Some blisters occur for reasons other than osmosis. They are often evident as a rash of small pinhead blisters or swellings, either locally (often around the waterline) or over the entire underwater area. These blisters are hard and difficult to break and when broken open will be dry, with no odor evident. The likely cause is air voids. This is not a serious problem, but hull moisture levels should be checked before commencement of any remedial treatment.

OTHER WARNING SIGNS TO LOOK FOR ARE –

STAR CRAZING – This effect can occur where the gelcoat is brittle. Fine cracks usually form due to severe flexing or impact damage, allowing water to seep into the laminate.

PINHOLES – Tiny bubbles present in the gelcoat reduce its effectiveness and promote rapid water absorption.

PROMINENT FIBERS – Seen protruding beneath or through the gelcoat and can cause 'wicking' where water is drawn into the hull by capillary action.

UNDERCURING OF THE GELCOAT – Incorrect mixing or application in unsuitable conditions can cause failure to cure properly. This results in porosity and may lead to water ingress.

IMPORTANT STEPS IN THE REPAIR OF GELCOAT BLISTERS

1	PROPER PREPARATION OF THE GELCOAT This includes getting all of the antifouling paint off and removal of as much gelcoat as necessary to get the hull dry (i.e. the entire gelcoat or just small areas). A professional, who has looked at your boat, should make this determination.
2	DRYING OF THE HULL This is the most critical step in the process. If you do not get the hull dry it will re-blisters. We recommend a comprehensive washing and drying procedure.
3	APPLICATION OF EPIGLASS® HT9000 RESIN This solventless epoxy seals up the laminate and fills any cloth that has been voided of resin. This should be done before using fillers to fill the voids.
4	APPLICATION OF INTERPROTECT® 2000E OR INTERPROTECT® 3000 These epoxies are used as a water barrier to minimize the possibility of recurrence of damage.



BEFORE STARTING A GELCOAT PREVENTION OR REPAIR SYSTEM REFER TO THE INTERPROTECT® 900F SYSTEM GUIDE BEFORE STARTING ANY WORK.
CALL 1-800-468-7589 TO OBTAIN A COPY

HOW TO PROTECT AGAINST GELCOAT BLISTERING

Protection is always better than cure and it really does make sense to protect a new boat as well as an older craft. To achieve this protection it is necessary to sheath the hull with a water barrier to seal the surface. This is done over the existing gelcoat. There is no better time to apply an anti-osmosis system than when the boat has not yet been launched. Some boat builders now offer Interlux's InterProtect® treatment as part of their production process, so it is worth finding out if this is the case. However, it must be stressed that protective systems cannot stop osmosis once it has started, or prevent it from occurring in poorly constructed hulls. It is important that a full check is undertaken before starting.

RECOMMENDED OVERCOATING INTERVALS

TEMPERATURES	TIME BETWEEN COATS OF INTERPROTECT® 2000E**		FIRST COATING OF ANTIPOULING	
	MINIMUM***	MAXIMUM	MINIMUM***	MAXIMUM
50°F (10°C)	5 hours	2 weeks	7 hours	9 hours
60°F (15°C)	4 hours	2 weeks	6 hours	8 hours
77°F (25°C)	3 hours	2 weeks	5 hours	7 hours
95°F (35°C)	2 hours	2 weeks	3 hours	5 hours
NUMBER OF COATS*	4/5		1	

*It usually takes 4-5 coats of InterProtect® 2000E/2001E but the final film thickness of 10 mils D.F.T. is more important than the number of coats. See page 28 for amount needed.

**If you exceed the maximum dry times between coats of epoxy you must sand with 80 grit and apply at least one more coat of InterProtect 2000E/2001E to ensure having 10 mils D.F.T.

***Overcoating times will vary due to wide variations in temperature and humidity. The best method to determine when the InterProtect 2000E is Ready-to-Overcoat is to check the paint film using the 'Thumb Print' test. If the InterProtect 2000E feels tacky and you can leave a thumbprint in the paint film without getting any paint on your thumb it is ready for overcoating. Test the paint film 1 hour after starting the application. Continue testing every 15 minutes using the 'Thumb Print' test until reaching the Ready-To-Overcoat stage. Immediately, begin to apply the Interlux® antifouling paint once the primer has reached the Ready-To-Overcoat stage. Do not use this method with Epiglass® Epoxy or InterProtect 3000. These times do not apply to VC® Offshore or Baltoplate, Micron® Optima or Fiberglass Bottomkote® Aqua.

KEY: Hours Weeks

Typical work schedule for application of InterProtect® 2000E at 70°F (21°C)

DAY ONE	
8 A.M.	Give boat final sanding and wipe down
9 A.M.	Apply first coat of InterProtect 2000E
12 NOON	Apply second coat of InterProtect 2000E
3 P.M.	Apply third coat of InterProtect 2000E
DAY TWO – Up to 6 months is allowed between coats of InterProtect 2000E	
8 A.M.	Apply fourth coat of InterProtect 2000E
12 NOON	Apply fifth coat of InterProtect 2000E (If needed*)
4 P.M.	Apply first coat of Interlux® antifouling paint

It usually takes 4-5 coats to apply the proper amount of InterProtect® 2000E, but the amount of paint is more important than the number of coats. See page 28 for the amount of InterProtect 2000E needed.

Your best line of defense against gelcoat blistering

				
EPIGLASS® HT9000 RESIN	INTERPROTECT® 2000E	INTERPROTECT® 3000/3001	VC® TAR2	WATERTITE
<ul style="list-style-type: none"> • Solventless epoxy used to seal the laminate and cloth • Use where Gelcoat has been removed or breached 	<ul style="list-style-type: none"> • Two-part epoxy water barrier with Micro-Plates® • For use in prevention of and repair of osmotic blistering • InterProtect 2000E is now available in 2 colors – gray and white 	<ul style="list-style-type: none"> • V.O.C compliant two part epoxy water barrier with Micro-Plates • Can be used down to 32°F (0°C) 	<ul style="list-style-type: none"> • Two-part epoxy water barrier for use with VC®17m or VC®17m Extra, thin film antifouling paints 	<ul style="list-style-type: none"> • Filler for repairing blisters and damage • Can be applied to InterProtect 2000 without sanding

IF THE BOTTOM IS NEW OR UNPAINTED	
1	Clean the surface thoroughly with Fiberglass Solvent Wash 202 or Fiberglass Surface Prep YMA601.
2	Remove all traces of antifouling, using Interstrip 299E. Inspect the hull for signs of damage or cracking and repair any defects with Epiglass® HT9000 resin and fill with Watertite Epoxy Filler. In the event of more extensive damage being found, make sure that the water has not already entered the laminate.
3	Sand the gelcoat thoroughly using 80-grit sandpaper, then remove the sanding residue using Fiberglass Solvent Wash 202.
4	Mix three parts InterProtect® 2000E base to one part InterProtect® 2001E curing agent, by volume. Mix only what can be used in four to five hours. Apply coats of InterProtect® 2000E/2001E following the overcoating intervals in the chart below. Apply enough InterProtect® 2000E/2001E build a 10 mil Dry Film Thickness (D.F.T.) This usually takes 4-5 coats but the final film thickness is more important than the number of coats.
5	Apply Interlux® antifouling paint following the overcoating intervals listed on page 27.

IF THE BOTTOM HAS BEEN PREVIOUSLY PAINTED, COMMENCE WITH STEP 2.

How much InterProtect® 2000E/2001E do I need?

It is the best to actually measure the wetted surface area of the hull. If this is difficult to do, a close approximation can be made by multiplying the length overall, times the beam, times 85% (L.O.A. x Beam x .85 = wetted surface area). Divide the wetted surface area by 60 for brush and roller applications and by 45 for spray application. The resulting number is the number of gallons that need to be applied to reach a 10 mil dry film thickness.

antifouling

Antifouling is the most common (and most important) painting job carried out by boat owners. You can very easily do a professional quality job yourself, but you must bear in mind a few important points.

The type of antifouling you choose should be tailored to the fouling challenges in your boating area. Different water qualities and temperatures produce different types and breeds of fouling. Even in a small area the differences can be quite dramatic, due to outfalls, pollution, inflows from rivers and streams, the speed of flow of the water – and even shading from cliffs, trees and buildings.

It is vital to protect your boat through antifouling as once fouling has a hold on your hull; it will rapidly colonize the surface, making it difficult to remove. Prevention is therefore much better than cure.

THERE ARE THREE KEY REASONS ANTIPOULING GROWTH SHOULD BE PREVENTED:

SAFETY: Heavy fouling growth reduces responsiveness as well as making the boat sit lower in the water. This can have serious implications in challenging weather conditions.

PROTECTION: Prolonged fouling growth will damage the substrate of the hull. For example, the natural glues organisms use to attach to the hull damage wood and fiberglass.

SPEED & EFFICIENCY: Fouling causes drag, which slows you down and increases fuel costs.

INTERLUX ANTIPOULING RANGE PROVIDES PROTECTION FROM THE THREE KEY FOULING CHALLENGES:

SHELL: Barnacles and zebra mussels release millions of larvae into the water, which move around in the currents. To be able to feed they must attach themselves to static objects. As most boats remain static for much of their time afloat, they offer extremely suitable feeding grounds for all types of fouling.

WEED: Static objects attract common seaweeds, many of which will simply fall off as the hull travels through the water. However, some types are more resilient and can withstand high speeds through the water.



SLIME: Slime is another major form of fouling. Slime is caused by billions of single celled algae, which produce a syrupy medium in which to settle. Once established they provide settling ground for more algae, so coatings of slime can grow quite thick, as they are not detached as they move through the water.

3 EASY STEPS TO ANTIFOULING PROTECTION

PRODUCT SELECTION 30-35
Pick the best antifouling for your boat

HANDY SPECIFICATIONS 36-44
Step-by-step guide to your project from our technical team

HOW TO PAINT LIKE A PROFESSIONAL 40
Instructions for an expert result explained by our professionals

OUR MOST FREQUENTLY ASKED ANTIFOULING QUESTION:

“How do I know that the product I want to apply is compatible with my old antifouling?”

‘Applying your desired Interlux® antifouling has never been easier. Compatibility is an issue most boaters worry about, but there are three easy choices to solve this problem.

1. Check for compatibility with old antifouling. If the product is known use the Interlux® compatibility chart on page 33.

2. Use Primocon as a tie coat primer over the old paint. If the old antifouling is unknown you can apply Primocon primer directly. Then simply overcoat with the Interlux® Antifouling of choice (do not use this system with VC®17m Extra, VC®17m, VC® Offshore or Baltoplate)

3. Remove the old antifouling.

If the old antifouling is in poor condition you may prefer to remove the old paint and start with a fresh surface. Use a chemical stripper like Interlux® Interstrip 299E. Interstrip can remove several coats of most antifouling paints in one application. After stripping you are ready to prime and paint’.

DOES THE AMOUNT OF COPPER IN AN ANTIFOULING PAINT AFFECT THE PERFORMANCE?

The level of copper is not the only determining factor of how an antifouling paint will perform. The resin-binder system, the material that holds the paint together, is equally important. Not only does the resin-binder system hold the paint together, it is the mechanism that determines how fast the copper and other biocide will be released. The resin-binder system must be carefully tailored for the amount and type of copper and other biocides used to obtain maximum efficiency. The amount of copper or other biocide may affect the life of an antifouling paint but the sophistication of the resin-binder system to hold and release copper or other biocide at the proper rate is far more important to the effectiveness of the anti-fouling.

Micron Technology antifouling will release biocide at nearly constant rate throughout its life. For this reason they are highly efficient and are less dependent on large amounts of copper and other biocides to deliver the best possible performance. The use of boosting biocides in combination with Biolux® Technology keeps the bottom clear of slime and makes the copper more effective.

How antifouling paints work



DIFFERENT TYPES OF ANTIFOULING PAINTS

MICRON® TECHNOLOGY

Paints that use Micron Technology provide the longest lasting protection from fouling. The biocides are chemically bound to the paint film and are only active when in the water. This allows them to be hauled and relaunched without repainting. The paint film polishes away like a bar of soap at a controlled rate reducing paint build-up and eliminating the need for sanding. This controlled polishing of Micron allows for a more efficient use of copper over a longer period of time, so less copper is needed than in old fashioned hard high copper paints. Micron paints also polish to a smoother surface than hard antifouling which reduces drag and maximizes fuel savings. The longevity of these coatings is related to the thickness of the paint.

HARD ANTIFOULINGS

The technical term for these types of antifouling paints is ‘contact leaching’. The paint dries to a porous film that is packed with biocides, which leach out on contact with water to prevent fouling growth. Once the biocide is exhausted, the hard paint film remains on the boat. Hard antifouling does not retain their antifouling ability out of the water and cannot be hauled and relaunched without repainting. The main benefit of hard antifouling paints is their predictable antifouling performance in all waters. They provide a hard scrubbable and abrasion resistant finish.

BOTTOM PAINTS WITH TEFLON®

DuPont™ Teflon® is an extraordinary and versatile technology EXCLUSIVELY available in yacht coatings from Interlux®. Teflon® has a coefficient of friction lower than ice, making it the most slippery material in existence. By featuring Teflon® in our antifouling products you get the benefit of smooth, low-friction surfaces that minimize drag and extremely hard coatings that resist damage and are exceptionally easy to clean. They are also easy to burnish to produce the smoothest, fastest antifouling surface.

Products with Teflon are VC® Offshore with Teflon®, VC®17m Extra, VC®17m, VC® Performance Epoxy and VC® Eco.

SPECIALTY ANTIFOULINGS

Bright colors and Aluminum – For boaters that want bright clean colors there is Trilux® 33®. Trilux 33 is ideal for use on aluminum and can also provide excellent antifouling protection on fiberglass, wood or steel. Trilux 33 uses Biolux Technology to control slime and has 2 biocides that work together to provide increased performance.

Outdrives – Trilux Prop & Drive is an aerosol antifouling developed specifically for use on lower units of outdrives and outboards.

Hard Racing – Maximum Speed – Baltoplate is a hard vinyl antifouling designed for the serious racers and has a long heritage of use by winning sailors.

Traditional – Work Boat – Bottomkote® is a traditional soft sloughing antifouling that provides good antifouling protection for most areas.

Biocide Free – VC® Performance Epoxy and VC® Eco* are Teflon®-containing coatings that can be used on boats that are permanently moored in the water but do not require antifouling protection. VC Performance Epoxy dries to a hard finish that is ideal for wet sanding and burnishing. The hard scuff resistant surface makes it the ideal coating for boats stored on racks and lifts as well as trailered boats.

* VC Eco is only available in Canada

Antifouling Compatibility Chart

NEW ANTIFOULING	OLD ANTIFOULING								
	MICRON® EXTRA MICRON® CSC TRILUX® II ULTIMA AWLSTAR	MICRON® 44c MICRON® 33 TRILUX® II T ALUMACOAT BIO COP ALUMA SPRAY							
MICRON® OPTIMA, MICRON® EXTRA MICRON® CSC	●	●	FIBERGLASS BOTTOMKOTE® ACT SUPER ABLATIVE EPOXYCOP® ABLATIVE HORIZON CPP	ULTRA ULTRA-KOTE® TRILUX® FIBERGLASS BOTTOMKOTE® SUPER RL EPOXYCOP	TRINIDAD SR UNEPPOXY BOTTOM PROPULS BOTTOM SHIELD	BOTTOMKOTE® BOTTOMKOTE® XXX KOMPOSITION	VC® OFFSHORE BALTOPLATE OR VINYL ANTIFOULING PAINTS	VC®17m EXTRA VC®17m	FIBERGLASS BOTTOMKOTE® AQUA NEPTUNE II AQUALEAN HYDROCOAT
ULTRA, ULTRA-KOTE®	●	●	●	●	●	●	●	●	●
FIBERGLASS BOTTOMKOTE® ACT	●	●	●	●	●	●	●	●	●
FIBERGLASS BOTTOMKOTE®	●	●	●	●	●	●	●	●	●
FIBERGLASS BOTTOMKOTE® AQUA	●	●	●	●	●	●	●	●	●
TRI-LUX® II	●	●	●	●	●	●	●	●	●
TRILUX® 33®	●	●	●	●	●	●	●	●	●
TRILUX® PROP & DRIVE	●	●	●	●	●	●	●	●	●
VC®17m EXTRA, VC®17m	●	●	●	●	●	●	●	●	●
VC® OFFSHORE, BALTOPLATE	●	●	●	●	●	●	●	●	●
BOTTOMKOTE®, BOTTOMKOTE® XXX	●	●	●	●	●	●	●	●	●
MICRON® 66®	●	●	●	●	●	●	●	●	●
PROFESSIONAL APPLICATION	●	●	●	●	●	●	●	●	●

● - Remove all paint ● - Heavy sand & apply ● - Lightly sand & apply ● - Thoroughly sand and prime with TBT Sealer YPA987 ● - Clean & apply
 CPP, Bottom Pro Plus and Bottomshield refer to products sold by West Marine.
 Ultima, Alumacoat, Aluma Spray, Horizon, Trinidad, UNEPOXY, Neptune and Hydrocoat refer to products sold by Kopcoat.
 Biocop refers to a product sold by New Nautical Coatings.

What goes into an Interlux® antifouling paint?

It takes approximately five years to fully research an antifouling before its launch into the market. Much of this time is spent testing the product outside the laboratory, in the actual environment in which boats are used.

An antifouling paint is a combination of four basic ingredients:

BIOCIDE – the active compounds that repel fouling. The most common types are copper compounds such as cuprous oxide or metal copper, and now organic booster technology such as Biolux®.

RESIN – Holds the product together and forms the coating film and controls the release of the copper or other biocide. This dictates the type of anti-fouling performance achieved.

SOLVENT – Dictates the application on characteristics, flow and drying speed.

PIGMENT – Provides the color and thickness of the antifouling.



BIOLUX® THE NEW BIOLOGY OF ANTIFOULING

What is Biolux® – Biolux® is a unique antifouling technology developed by Interlux® that incorporates organic boosting biocides into a special biocide release system. This blocks slime growth for a fouling free boat bottom.

How does it work? – Just like ordinary plants, slime and algae feed on sunlight. Formulations that use Biolux® technology prevent algae and slime from being able to grow by acting like sunscreen to block this process.

WHY HAVE TEFLON® IN OUR PRODUCTS?

As a boat owner you naturally want the best quality products that you know will perform better than others, and give you the maximum long term value for money.

Teflon® is an extraordinary and versatile technology EXCLUSIVELY available in coatings from Interlux. Teflon® has a coefficient of friction lower than ice, making it the most slippery material in existence. Its non-wetting properties have seen it used extensively in water-repellent fabrics such as Gore-Tex®, and in coatings for easy cleaning surfaces. NASA uses Teflon® extensively in the design of heat shields and space suits because of its excellent heat resistance.

By featuring Teflon® in our antifouling products you get the benefit of smooth, low-friction surfaces that minimize drag and extremely hard coatings that resist damage and are exceptionally easy to clean. Products with Teflon are VC® Offshore with Teflon®, VC®17m Extra, VC®17m and VC® Performance Epoxy.

Teflon® is a registered trademark of E.I. du Pont de Nemours and Company used under license by International Paint LLC



To make the right choice of antifouling for your boat select among the following: hard scrubbable finish, or long life multi-season copolymer, or an abrasive finish that washes away minimizing build-up. Refer to pages 34-35 to make your selection.



Micron® Technology

Micron Technology formulations are second to none!
 Micron Technology was first introduced to the industry in the early 80's and has evolved into class leading antifouling paints!
 Micron Technology is the basis of all Micron bottom paints.

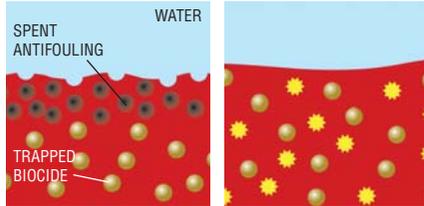


- Longest lasting, multi-season protection – with the ability to haul and re-launch without repainting
- Controlled polishing like a bar of soap reducing paint build up, eliminates the need for sanding
- Micron Technology polishes to a smoother surface than old fashioned hard antifouling maximizing fuel savings
- Unlike old fashion high copper bottom paints, Micron uses less copper more efficiently for longest lasting antifouling protection

MICRON TECHNOLOGY vs OLD FASHIONED HARD ANTIFOULINGS

OLD FASHIONED HARD ANTIFOULINGS

Old fashioned hard antifouling will eventually leave biocide trapped within a rough, honeycombed paint film that will need to be removed by sanding or scraping.



MICRON TECHNOLOGY

Controlled polishing like a bar of soap reduces paint build-up and eliminates the need for sanding.

After many years of using old fashioned hard high copper bottom paints, the paint film continues to build up, become brittle, and starts to crack and flake off.

Micron Technology antifouling polishes at a controlled rate and therefore will never build up. It is this controlled polishing that enables Micron to be used on all boats, in all waters, and at all times! No paint build up means that you will never have to remove old layers of Micron and spend precious hours or money each time you want to repaint.

MICRON TECHNOLOGY AND FUEL SAVINGS

There's another added benefit to controlled polishing: Fuel Savings!!

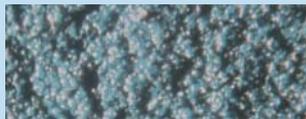
Micron surface profile on application



Micron surface profile after 12 months



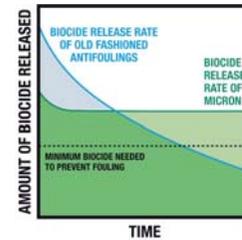
Old fashioned high copper antifouling roughens over time



Power or sail, with today's fuel prices, a smooth bottom will deliver better fuel efficiency over the long term than old fashioned hard high copper bottom paints.

Micron continues to get smoother over time!

MICRON® TECHNOLOGY USES COPPER MORE EFFICIENTLY THAN OLD FASHIONED HARD COPPER BOTTOM PAINTS:



Hard antifouling releases a lot of biocide when the boat is first launched and then slows as the paint ages, until it goes below the amount needed to maintain antifouling protection.

Micron Technology is designed to polish at a controlled rate delivering a constant amount of biocide over the life of the paint. This allows for a much more efficient use of the copper in the antifouling.

Micron Technology antifouling paints polish at a controlled rate delivering a constant amount of biocide over time. The release rate of copper is much more efficient than that of old fashioned hard antifouling. In simple terms, if you can still see Micron on the boat, it is still working for you. Hard antifouling will tend to lose their effectiveness over time.

WHY IS MICRON A BETTER CHOICE FOR MY BOAT THAN OLD FASHIONED HARD BOTTOM PAINTS?

	HARD CONVENTIONAL	MICRON TECHNOLOGY
Long lasting	12-18 months	18-36 months*
Predictable performance	✓	✓
Prevents fouling in all fouling conditions	✓	✓
Multi-season		✓
Can haul and relaunch without repainting		✓
Paint wears away with use – eliminating the need for sanding		✓
Becomes smoother as you use the boat		✓
Easy recoating – no sanding or labor to prepare		✓
Provides maximum fuel savings		✓
No need to scrub		✓
Unlike old technology bottom paints, Micron uses less copper more efficiently for longest lasting antifouling protection		✓

*The length of service depends on the choice of Micron, water temperature, usage and number of coats applied.

There is no better choice for the boat owner than Micron Technology antifouling.

- Least expensive can of bottom paint you can buy
 - You do not have to paint every year
 - No sanding to remove heavy build-up you get with hard antifouling
 - Provides maximum fuel savings
- Proven performance since 1980
- Best selling range of antifouling sold worldwide
- Suitable for all boats in all waters
- Use on power and sail boats up to 50 knots
- Highly engineered controlled polishing rate

If it's not Micron Technology it's old technology!

Painting bare fiberglass boats

BOAT HULL PREPARATION	
1	<p>Since the boat may never have been painted, take extra care and time in preparing the bottom before proceeding to the system of choice. Clean surface carefully, start by removing all contaminants and 'Mold Release Wax' on the surface as follows.</p> <p><i>Whether the boat is new or a few years old 'Mold Release Wax' and other contaminants like dirt, grime, dust, oils and even road salt can be present on the bottom of the boat.</i></p>
2	<p>Scrub the surface thoroughly using Interlux® All-Purpose Boat Soap with Wax and water and a stiff brush. Flush with fresh water to remove soap residue. Allow surface to dry.</p>
OPTION 1	 <p>Apply Fiberglass Surface Prep YMA601 with a maroon, 3M Scotch-Brite® pad and scrub well. Flush with fresh water or wipe off with a clean, wet cloth ensuring that no traces of Fiberglass Surface Prep remain.</p>
OPTION 2	 <p>Dampen cheesecloth with Interlux® Fiberglass Solvent Wash 202. Wipe thoroughly to remove all surface contamination and cleaners. Wipe off with a clean, dry rag before liquid dries. Wipe only a few feet at a time.</p>
3	<p>Lightly spray the surface with water to insure all contamination has been removed. If water beads up or separates, wax is still present. Repeat cleaning until water no longer beads. At this point all contaminants should have been removed. Proceed to one of the following No Sand Method, InterProtect Method or Sanding Method.</p>
BARE FIBERGLASS – SANDING SYSTEM	
	<p>After the surface has been prepared as described above – Sand entire surface well with 80-grit sandpaper until flat matte finish is obtained. Remember to change sandpaper frequently. Wipe off sanding residue with Fiberglass Solvent Wash 202. Apply two coats minimum of Interlux®, antifouling paint.</p>
BARE FIBERGLASS – NO SAND SYSTEM	
	<p>For use with Micron® Extra, Micron® CSC, Fiberglass Bottomkote®, Fiberglass Bottomkote® ACT, Bottomkote®, Bottomkote® XXX, Ultra, Ultra-Kote®, Tri-Lux® II and Trilux® 33®.</p> <p>PREPARE HULL AS DESCRIBED ABOVE.</p> <p>Use a solvent resistant ½ inch foam or ¼ inch mohair roller to apply one thin continuous coat of Fiberglass No Sand Primer. Antifouling overcoat times will vary due to variations in temperature and humidity. The best method to determine when the Fiberglass No Sand Primer is 'Ready-to-Overcoat' is to check the paint film using the 'Thumb Print' test. If you can leave a thumbprint in the paint film with out getting any paint on your thumb, the Fiberglass No Sand Primer is 'Ready-to-Overcoat'. Test the paint film in the area you started applying the primer no later than 30 minutes after starting the application. Continue testing every 15 minutes using the 'Thumb Print' Test until reaching the 'Ready-to-Overcoat' stage and immediately, begin to apply the Interlux® antifouling paint. For ultimate no-sand system, substitute Fiberglass No Sand Primer for InterProtect 2000E.</p>

INTERSTRIP PAINT STRIPPER THAT WORKS

Interstrip is formulated to remove antifouling paint from the bottoms of fiberglass boats without damaging the fiberglass. It will also remove all types of paints from wood, metal, and glass. The Interstrip 299E formulation incorporates special sealing agents that allow the stripper to stay wet longer, thereby lengthening action time. Interstrip does not contain compounds that can burn or blister the skin.

APPLICATION DIRECTIONS

- Use in shaded, well-ventilated area at room temperature 60°-80°F or 16°-27°C.
- Protect floor or work area with a plastic tarp to catch run-off.
- Use a natural bristle brush to apply Interstrip 5 times the thickness of the paint or varnish to you are removing. Allow Interstrip® to stand until all layers of existing paint are penetrated. This will vary from as little as 15 minutes to as long as 2 hours, depending on temperature and thickness of coating. Begin scraping – if paint is not removed to bare substrate, reapply and wait longer. After the surface is scraped clean the surface using Interlux® Fiberglass Solvent Wash 202.



It may be necessary to apply two coats of Interstrip to remove all of the paint.

BARE WOOD	
1	Sand surface with 80-grit sandpaper.
2	Remove sanding residue by wiping with a rag dampened with Special Thinner 216.
3	Repair imperfections with Watertite or Interfill® Epoxy Filler. Sand and wipe clean.
4	Apply the first coat of antifouling thinned 10% with Special Thinner 216 or Brush-Ease 433. Fill seams with Interlux® Seam Compound 30 (if necessary).
5	Apply two more coats of antifouling unthinned, allowing the appropriate dry times.-
INFLATABLE SYSTEM	
1	CLEANING – Clean entire underwater hull area (fiberglass and Hypalon areas) using Fiberglass Surface Prep YMA601 and a 3M Scotch-Brite® maroon pad. Rinse per instructions, and allow to dry.
2	STANDARD SYSTEM – Fiberglass bottom area – Clean as above. Prime with No Sand Primer YPA200 and overcoat per our instructions with any approved Interlux antifouling paint. Hypalon area – Clean as above. Prime with one coat of Primocon YPA984. Allow to dry overnight and overcoat with two coats of Interlux antifouling paint. (If painting with VC®17m Extra you will not need to prime.)
3	WATER-BASED SYSTEM – Apply one coat of Water Based No Sand Primer YPA142. Allow to dry overnight. Apply two coats of Fiberglass Bottomkote® Aqua.

BARE STEEL	
1	Degrease the surface with Fiberglass Solvent Wash 202 or Special Thinner 216.
2	Bring metal to a uniform bright finish by sandblasting with non-ferrous blast media or grind using coarse emery cloth. Remove residue with a broom and clear air hose.
3	Apply one thin coat of Viny-Lux Primewash 353/354 thinned 25% with Viny-Lux Solvent 355 and allow to dry a minimum of one hour but no more than 24 hours. For a long life system – Apply four coats of InterProtect® 2000E/2001E following dry times on label (If fairing is necessary, fair between first and second coats of InterProtect®). For a standard system – Apply four-five coats of YPA984 following dry times on label. Apply an extra coat on rivets and weld seams.
4	Apply 2-3 coats of Interlux® Antifouling paint.

HIGH PERFORMANCE TEFLON® ANTIFOULING PAINTS VC®17M EXTRA AND VC®17M

BARE FIBERGLASS	
1	Clean surface as described on page 36.
2	Sand with 220-320-grit sandpaper.
3	Remove sanding residue.
4	Apply 2-3 coats of VC®17m Extra or VC®17m.
BARE FIBERGLASS WITH BLISTER PROTECTION	
1	Clean surface as described on page 36.
2	Sand with 80-120-grit sandpaper.
3	Remove sanding residue.
4	Apply 4-5 coats of VC® Tar2.
5	Apply 2-3 coats of VC®17m Extra or VC®17m.
APPLICATION OF VC®17M EXTRA OR VC®17M TO UNDERWATER METALS (except aluminum)	
1	Degrease with Interlux Fiberglass Solvent Wash 202.
2	Bring metal to a uniform bright finish by sandblasting with non-ferrous blast media such as clean silica sand or grind using coarse to medium emery cloth. Remove blast or sanding residue with a broom and clear air hose.
3	Apply one thin coat of Viny-Lux Primewash 353/354 thinned 25% with Viny-Lux Solvent 355 and allow to dry a minimum of one hour but no more than 24 hours.
4	Apply 4-5 coats of VC® Tar2.
5	Apply 2-3 coats of VC®17m Extra or VC®17m.

If fairing is necessary apply 1 coat of InterProtect® 2000E/2001E after blasting or sanding, wait 4 hours and apply Interfill® or Watertite Epoxy Fairing Compound, then apply 4-5 coat of VC® Tar2.

Handy Specifications

CONVENTIONAL ONE-PART PRODUCTS

This system provides a good level of protection

STAGE	PRODUCT	ALUMINUM	STEEL	WOOD
CLEAN	Fiberglass Solvent Wash 202 or Fiberglass Surface Prep YMA601 or Special Thinner 216	YES	YES	202 or 216
SAND		grind or sandblast	grind or sandblast	Sand with 80 grit sandpaper
SURFACE PRIMER	Viny-Lux Primewash 353/354	1	1	Ø
PRIMER	Primocon	1	1	1 (thinned 10-15%)
FILLER	Watertite	as needed	as needed	as needed
PRIMER	Primocon	2-3	2-3	1-2
ANTIFOULING	Interlux® Antifouling	2-3	2-3	2-3

HIGH PERFORMANCE TWO-PART PRODUCTS

This system provides the maximum level of antifouling

STAGE	PRODUCT	ALUMINUM	STEEL	WOOD
CLEAN	Fiberglass Solvent Wash 202 or Fiberglass Surface Prep YMA601 or Special Thinner 216	YES	YES	202 or 216
SAND		grind or sandblast	grind or sandblast	Sand with 80 grit sandpaper
SURFACE PRIMER	Viny-Lux Primewash 353/354	1	1	Ø
PRIMER	InterProtect® 2000E	1	1	1
FILLER	Watertite	as needed	as needed	as needed
PRIMER	InterProtect® 2000E	2-3	2-3	1-2
ANTIFOULING	Interlux® Antifouling	2-3	2-3	2-3

VC®17M & VC®17M EXTRA

This system provides the maximum level of antifouling and blister protection

STAGE	PRODUCT	FIBERGLASS	WOOD	STEEL
CLEAN	Fiberglass Solvent Wash 202 or Fiberglass Surface Prep YMA601 or Special Thinner 216	YES	202 or 216	202 or 216
SAND		80 grit sandpaper	Sand with 80 grit sandpaper	grind or sandblast
SURFACE PRIMER	Viny-Lux Primewash 353/354	Ø	Ø	1
FILLER	Watertite	as needed	as needed	as needed**
PRIMER	VC® Tar2	4-5	4-5	4-5
ANTIFOULING	VC®17m & VC®17m Extra	2-3	2-3	2-3

If gelcoat blister protection is not needed the antifouling paint can be applied directly to bare fiberglass.

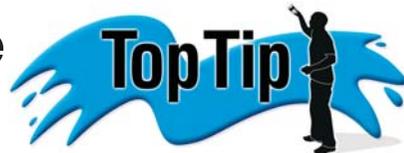
**If fairing is necessary on underwater metal surfaces apply 1 coat of InterProtect® 2000E/2001E after blasting or sanding, wait 4 hours and apply Interfill® or Watertite Epoxy Fairing Compound, then apply 4-5 coat of VC Tar2.

KEY:  No. of coats
 Do not use for this purpose

Please consult product data sheets (available at yachtpaint.com) for overcoating times at different temperatures.



How to paint like a professional



HOW TO PAINT PREVIOUSLY PAINTED BOTTOMS	
<i>The condition of any existing coating is important in order to provide a sound surface for the new antifouling. If the paint is in poor condition, remove it with Interstrip 299E and follow procedure for bare work.</i>	
OPTION A	KNOWN ANTI-FOULING Check for compatibility; see compatibility chart on page 33 or at yachtpaint.com. If you know what antifouling is currently on your boat, you can quickly determine whether your Interlux paint choice is compatible.
	1 Remove all traces of loose paint, dirt, grease and other contamination by wiping with Interlux Special thinner 216. Sand with 80-grit sandpaper. Remove sanding residue.
	2 Apply 2 coats of Interlux® antifouling.
OPTION B	UNKNOWN; PRIME BEFORE PAINTING If you do not know what the old antifouling is on your boat, it is still easy. Use Primocon as a tiecoat primer. Then simply overcoat with the Interlux bottom paint of your choice (not compatible with VC®17m, VC®17m Extra, VC® Offshore or Baltoplate).
	1 Remove any loose, flaking areas with a scraper. Sand with 80-grit sandpaper. Rinse with fresh water and allow to dry before applying the new antifouling. If the old coating is in poor condition it is advisable to remove it. Apply Primocon primer directly to the old antifouling.
OPTION C	UNKNOWN; REMOVE If the old paint is in poor condition remove it. For removal, we have the easy solution, Interstrip paint remover. It's compatible with your valuable fiberglass hull and can remove several coats of paint in one application. After stripping, you are ready to prime and paint your newly cleaned hull.

IMPORTANT: Now that you've stripped your hull, it's important to inspect for any gelcoat damage before repainting. Also, consider applying our industry-leading InterProtect® 2000E gelcoat blister protection system, to prevent long term water osmosis damage.



APPLYING ANTI-FOULING

- 1 Ensure you are wearing the recommended protective clothing and eyewear. Information on this can be found on the label, at the back of this booklet or at yachtpaint.com. Stir the paint thoroughly before application. It contains very heavy compounds, which can settle to the bottom of the can.
- 2 Common application methods include roller or brush. Spray application can be undertaken, but requires specialized equipment.
ROLLER APPLICATION: Use a good quality, 3/8 th's inch nap solvent resistant roller.
BRUSH APPLICATION: Use a large width brush. The finish will not be as smooth as a topside paint, therefore, the type of brush used is not critical.
- 3 It is very important to apply the correct thickness of antifouling even if it means putting on an extra coat. Everyone applies paint differently, so take care to apply all of the paint calculated using the guidance at the back of this manual. Normally recommended thickness is achieved by the application of two coats.
- 4 Apply an extra coat to all of the leading and trailing edges, waterline, trim-tabs, outdrives, keel and rudder. High turbulence in these areas tends to wear the antifouling faster.
- 5 Follow overcoating times and immersion times carefully. These are the biggest causes of antifouling detachment. Water is a very aggressive environment for paint and it is therefore very important that the paint is allowed to dry thoroughly, before launch.
- 6 Usually Special Thinner 216 is suitable as a thinner and equipment cleaner. This does not apply to all antifouling, so please read the label before application. It is best to clean equipment immediately after use.
- 7 Except for the first coat on bare wood thinning antifouling paints is not advised, but up to 10% may be added to aid application in very hot or windy conditions.

HOW MUCH ANTI-FOULING PAINT DO I NEED?

Determining how much antifouling you will need is fairly simple. Here are two quick guides to help you purchase the correct amount:

- 1) Calculate the area needing paint. For a rough estimate of the area to be painted, multiply the length of your hull (LOA) by the beam and multiply by 0.85. (LOA x B x 0.85 = Area). Then divide the area by the coverage (see page 50) of the paint you've chosen to determine how many gallons per coat you will need, or
- 2) Refer to the reference chart below for a quick estimate:

How much antifouling paint do I need?	- POWER					- SAIL				
Waterline Length (feet)	20	25	30	35	40	20	25	30	35	40
Quarts standard range	3.0	4.0	6.0	8.0	10.0	3.0	4.0	5.5	7.0	9.0
Quarts VC® 17m / VC® 17m Extra	3.0	4.0	5.5	7.5	9.5	2.5	3.0	4.5	5.5	7.5

Note: Coverage is for two coats for coverage information on other products, such as primers, please refer to the chart on page 57.

APPLYING ANTIFOULING PAINT TO BARE ALUMINUM HULLS

Aluminum is difficult to overcoat because it oxidizes instantly on contact with the atmosphere and aluminum oxide is very hard, sandpaper is made of aluminum oxide. The best method for getting coatings to adhere to aluminum is the following:

- 1 Degrease the surface with Fiberglass Solvent Wash 202 or Special Thinner 216.
- 2 Bring metal to a uniform bright finish by sandblasting with non-ferrous blast media such as clean silica sand or, if blasting is not possible, grind using a 36-grit wheel. Remove blast or sanding residue with clean air or a broom.
- 3 Within one hour of blasting or sanding apply the first coat of InterProtect® 2000E/2001E. If more than one hour has passed, apply one thin coat of Viny-Lux Primewash 353/354 thinned 25% with Viny-Lux Solvent 355 prior to the application of InterProtect®.
- 4 Apply a total of 3 coats of InterProtect® 2000E/2001E Apply 4 coats over riveted and welded areas.*
- 5 Apply 2-3 coats of Trilux 33®, or Tri-Lux® II.
**If overcoating times of InterProtect® 2000E cannot be followed use 5-6 coats of Primocon*

PAINTING OUTBOARDS & OUTDRIVE UNITS BELOW THE WATER

- 1 Clean thoroughly with Special Thinner 216. Sand the surface with 80-grit sandpaper or coarse emery cloth.
- 2 Prime bare spots with Viny-Lux Primewash 353/354.
- 3 Apply 2-3 coats of Primocon or Primocon Aerosol.
- 4 Apply Trilux® 33®, Tri-Lux® II or Trilux® Prop & Drive.

FAIRING AND PAINTING METAL KEEL AND CENTERBOARDS *lead, cast iron and steel*

- 1 Degrease the surface with Fiberglass Solvent Wash 202 or Special Thinner 216.
- 2 Bring metal to a uniform bright finish by sandblasting with non-ferrous blast media such as clean silica sand or, if blasting is not possible, grind using a 36 grit wheel. Remove blast or sanding residue with clean air or a broom.
- 3 Within one hour of blasting or sanding apply the first coat of InterProtect® 2000E/2001E. If more than one hour has passed, apply one thin coat of Viny-Lux Primewash 353/354 thinned 25% with Viny-Lux Solvent 355 prior to the application of InterProtect®.
- 4 If fairing is necessary, fair surface using Watertite YAV135. Sand Fairing Compound until desired smoothness is reached.
- 5 Apply four additional coats of InterProtect® 2000E/2001E and follow with antifouling paint.

REFER TO THE HANDY SPECS ON PAGES 36-39
FOR OUR FULL ANTIFOULING SCHEMES



outdrives, underwater metals & keels

Outdrives are built out of aluminum. This presents compatibility issues with antifouling that contain cuprous-oxide. Similarly, propellers are typically made with aluminum, stainless steel or bronze. Keels are made of iron, steel or lead, or cast iron.

It is important to establish the construction material of the metal you are working on. In particular, the keel needs to be treated with great care when preparing to keep it durable and free from corrosion.

THERE ARE 2 CRUCIAL ISSUES TO CONSIDER WITH ALL UNDERWATER METALS:

1) SUBSTRATE PREPARATION

The key to protecting your underwater metals from corrosion is correct preparation of the substrate,

and choosing the best priming solution for your project. The first step is to determine what metal your substrate is, then to look up which products are compatible with the substrate in the table below.

2) ANTIFOULING SOLUTIONS

The second step is to simply choose your antifouling solution. Two rules should be followed:

– **Never apply an antifouling containing cuprous oxide to aluminum**

e.g. outdrives, hulls

– Choose a hard, durable antifouling that will stand up to the wear and tear in these difficult areas.

REFER TO PAGES 34-35 TO SELECT THE BEST ANTIFOULING FOR YOUR PROJECT

PAINTING UNDERWATER METALS

Such as bronze and stainless steel, shafts, struts, props, trim-tabs and thru-hull fittings.

The painting of these areas requires special attention to initial surface preparation in order to improve adhesion. The longevity of this system will probably not be equal to that of the remainder of the boat, due to the abuse and RPM's these parts withstand. However, excellent results have been obtained utilizing the following system.

PAINTING TRIM TABS, SHAFTS, STRUTS, PROPS AND THRU HULL FITTINGS.

- 1 Degrease the metal surface with Fiberglass Solvent Wash 202 or Special Thinner 216.
 - 2 Bring metal to a uniform bright finish by sandblasting with non-ferrous blast media such as clean silica sand or grind using coarse to medium emery cloth. Remove blast or sanding residue.
 - 3 Apply one thin coat of Viny-Lux Primewash 353/354 thinned 25% with Viny-Lux Solvent 355.
 - 4 Allow Viny-Lux Primewash 353/354 to dry a minimum of one hour but no more than 24 hours and apply three coats of InterProtect® 2000E/2001E following dry times on label. (If fairing is necessary, fair between first and second coats of InterProtect®).
 - 5 Apply 2-3 coats of Interlux® antifouling paint. Hard antifouling paints work best such as Fiberglass Bottomkote® or Ultra for this application. On aluminum use Trilux® 33® or Tri-Lux® II.
- Note If dry times for InterProtect® cannot be followed use the following alternate system. Apply four coats of Primocon YPA984 over the Viny-Lux® Primewash 353/354. On rivets and weld seams apply a minimum of five coats. Finish with at least three coats of antifouling paint. When painting aluminum use Trilux® 33®, Tri-Lux® II Trilux® Prop & Drive or Trilux® antifouling paints.



WARNING: DO NOT APPLY ANTIFOULINGS OVER TOPSIDE FINISHES, TO PREVENT REACTION.

HINTS TO HELP YOU ACHIEVE A PERFECT RESULT EVERY TIME

- ✓ Good preparation and priming is essential to ensure that the antifouling adheres to the surface for the duration of the product life.
- ✓ Make sure you stir the paint thoroughly before application and again during application as it contains very heavy compounds that can settle to the bottom of the can.
- ✓ Antifouling paint should not be applied over a topside finish.
- ✓ Propellers, outboards and outdrives are either constructed of aluminum, stainless steel or bronze. There are no reaction problems in using paints containing cuprous oxide on stainless steel or bronze. For more information see page 35.
- ✓ Care should be taken not to paint zinc anodes, which are often located next to the prop shafts, as this will seriously reduce their effectiveness.
- ✓ When painting your outdrives, underwater metals and keels, the longevity of any antifouling is difficult to predict, as the coating adhesion is an issue, particularly on propellers, due to the harsh treatment these areas receive.
- ✓ Common application methods include brush roller or spray. Spray application may require specialized equipment and spraying of antifouling paints is not permitted in Canada.
- ✓ For roller application use, a 5/16th inch or 3/8th inch nap, solvent resistant roller.
- ✓ For brush application, it is advisable to use a large width brush. The finish achieved is unlikely to be as good as a topside paint; therefore, the type of brush used is not critical.
- ✓ It is very important to apply the correct thickness of antifouling paint even if it means putting on an extra coat. Different people apply products at different thicknesses, so take care to apply all of the paint calculated using the chart at the back of this manual. The recommended thickness is normally achieved by the application of two coats.
- ✓ When using copolymer and ablative type antifouling it is advisable to apply an extra coat of antifouling to the leading and trailing edges, waterline, keel and rudder. These are all areas of high turbulence where the antifouling tends to wear faster.
- ✓ The overcoating and times to launch should be followed very carefully, as this is the biggest cause of antifouling detachment. Water is a very aggressive environment for paint and it is very important that the paint is allowed to dry thoroughly between coats and prior to launch.
- ✓ Colors of the same type of antifouling paints can be mixed but do not mix paints of different types. For example, Fiberglass Bottomkote® Blue may be mixed with Fiberglass Bottomkote® Black, but not with Ultra-Kote®.
- ✓ Antifouling paints are to be applied as they are received in the can so the addition of thinners is not usually recommended; because of the cost of antifouling paints there is a tendency to stretch the paint to achieve more coverage. This procedure is a false economy and will usually result in premature failure due to inadequate film thickness. Small amounts of thinners may be required under difficult application conditions due to extra cold or hot weather, but amounts should be kept to a minimum.
- ✗ Never add anything to antifouling paints other than small amounts of the recommended thinners. The addition of oil, varnish, other paints, powders and foreign compounds can upset the critical binder balance and impair the release of biocide.

GETTING THE RIGHT COLOR

Antifouling paints are not meant to be cosmetic or decorative coatings and while every effort is made to make them as aesthetically pleasing as possible, the copper compound within the antifouling is difficult to mask with color pigments.

All antifouling paints change when they are immersed. So don't be surprised when you have finished and the color is not what you had hoped from the color chart, the true color will establish itself after the boat has been launched. Copolymer and ablative type coatings tend to fade more than hard antifouling paints.

Along the waterline the antifouling will often look dirty or faded, and can even turn green. This is due to the reaction of the paint with oxygen forming green copper oxide. For these reasons you should try keep the paint as close to the true waterline as possible. Fading is more noticeable in copolymer or ablative coatings than in hard coatings.

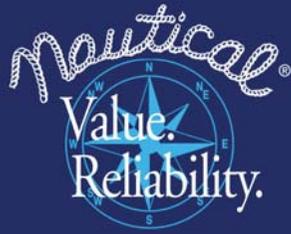
BOTTOM PAINT APPLICATION CHART

To use this chart refer to page 31 for definitions of antifouling paint types. Then pick the type that is best for your boat.

	DISPLACEMENT POWER BOAT	CRUISING SAIL	PLANNING POWERBOAT	CONSIDERATIONS
MICRON TECHNOLOGY	Micron® 66®	Micron® 66®	Micron® 66®	Top of the line Self Polishing Copolymer. Not for use in fresh water.
	Micron® Extra	Micron® Extra	Micron® Extra	Micron Extra uses Biolux Technology to control slime. In areas with little slime growth Micron CSC is also available.
	Fiberglass Bottomkote® ACT	Fiberglass Bottomkote® ACT	Fiberglass Bottomkote® ACT	Best value ablative antifouling on the market. Boosted with Ingarol® to combat slime.
HARD	Ultra or Fiberglass Bottomkote®	Ultra or Fiberglass Bottomkote®	Ultra or Fiberglass Bottomkote®	Predictable performance with excellent fouling resistance. Hard, scrubbable finish.
	Trilux® 33®	Trilux® 33®	Trilux® 33®	In Canada use Tri-Lux II.
BRIGHT COLORS & ALUMINUM COMPATIBLE				

	RACING SAIL	TRAILER BOAT & RACK STORAGE	FRESH WATER POWER & SAIL	CONSIDERATIONS
MICRON TECHNOLOGY	Micron® 66®	N/A	N/A	Top of the line Self Polishing Copolymer. Not for use in fresh water.
	Micron® Extra	Micron® Extra	Micron® Extra	Micron Extra uses Biolux Technology to control slime. In areas with little slime growth Micron CSC is also available.
ABLATIVE	Fiberglass Bottomkote® ACT	Fiberglass Bottomkote® ACT	Fiberglass Bottomkote® ACT	Best value ablative antifouling on the market. Boosted with Ingarol® to combat slime.
	VC® Offshore Baitplate Trilux® 33® VC®17m Extra	Fiberglass Bottomkote® Aqua	Ultra Trilux® 33® VC®17m Extra	Predictable performance with excellent fouling resistance. Hard, scrubbable finish.
NON ANTIFOULING	VC® Performance Epoxy	VC® Performance Epoxy	VC® Performance Epoxy	VC® Eco is also available for fresh water application in Canada.

This chart is for guidance only. Your boat and the conditions in which you use your boat will vary. Contact Interlux at 1-800-468-7589 or visit yachtpaint.com for a more specific recommendation.



NAUTICAL ANTIFOULING PAINTS

Reliable performance in all waters
Complete range of hard and ablative antifoulings
Compatible over other antifouling paints



SUPER KL WITH SLIME FIGHTER™ HARD, HIGH STRENGTH ANTIFOULING

- Hard finish gives reliable extended protection
- High copper loading in all colors
- Slime Fighter reduces slime
- Recommended for the most severe fouling conditions
- Fast dry formula allows you to paint and launch the same day



K90b Red ★

K91b Blue ★

K92b Black ★

K94b Green ★

SUPER ABLATIVE WITH SLIME FIGHTER™ MULTI-SEASON ANTIFOULING

- Wears away with use
- Slime Fighter reduces slime
- Recommended for boats that remain in the water for prolonged periods
- Haul and relaunch without recoating



K60b Red ★

K61b Blue ★

K52 Black

K64 Green



EPOXYCOP HARD MODIFIED EPOXY ANTIFOULING

- Dependable season-long protection
- Hard, smooth antifouling for all waters
- Easy to apply with excellent color stability
- Can be applied directly over most properly prepared antifouling paints



K50 Red

K51 Blue

K52 Black

K53 Green



EPOXYCOP ABLATIVE FULL SEASON ABLATIVE ANTIFOULING

- Dependable season-long protection
- All-purpose ablative antifouling for Power and Sail
- Minimal paint build-up with easy cleaning
- Compatible over all types of properly prepared bottom paints



K70 Red ★

K75 Blue ★

K76 Black ★

★ AVAILABLE ONLY IN U.S.

EPIGLASS® EPOXY FOR BLISTER REPAIR

This multi-purpose epoxy resin can be used for all of your gelcoat blister repairs and relaminating.

- Epiglass® Epoxy wets out laminate more quickly and easily than any epoxy on the market.
- It is compatible with InterProtect® 2000E and InterProtect® 3000.
- Has three hardeners to meet your schedule or accommodate weather conditions.
- Filler Powder HT450 can be added to make your own fillers
- Overcoats quickly and can be applied 'wet on tacky'.
- Resin mixed with HT450 Filler Powder can be used to seal and fair without sanding
- Saves sealing time with the use of HT450 Filler Powder in one step.
- Is easy to sand after freshwater wash.
- Epiglass® Pumps make it easy and convenient to measure the proper amounts of resin and hardener.

RECOMMENDED APPLICATION SYSTEMS:

GENERAL DIRECTIONS

Follow the proper preparation steps on page 26 of the Boat Painting Guide or on page 7 of the InterProtect® Bulletin 900F.

1. After the blisters have been ground out and sanded and the boat is dry the first thing you need to do is to seal the bare laminate with Epiglass® Epoxy Resin. Epiglass® Resin will wick in and fill the empty laminate. Mix four parts Epiglass® Resin with one part Epiglass® hardener. If using the Epiglass® Pump, one pump from each container will dispense the proper 4 to 1 mix ratio. Refer to the potlife chart below and use the appropriate hardener for your situation.
2. Apply two-to three coats of Epiglass® Epoxy to the blistered areas. Always allow enough time between coats for 'wet on tacky'

application. The resin is tacky when, if touched, it is not sticky but will leave a fingerprint (be sure to use gloves).

Note: Mix the Resin and Hardener with HT450 Filler Powder to make epoxy filler and apply to the blistered areas. If this is applied while the resin is still tacky there is no need for cleaning or sanding the resin prior application of Epiglass® Resin with HT450 Filler Powder.

4. Allow Epiglass® Resin and Filler mixture to cure overnight.
5. Wash the Epiglass® Epoxy with Fiberglass Surface Prep and a stiff bristle brush to remove any amine blush (Which is recognized by a waxy-oily residue that forms after the product cures). Rinse well with fresh water. Sand the Epiglass® with 80-grit production paper.
6. Apply InterProtect® 2000E or InterProtect® 3000.

DRY TIMES

TEMP	POT LIFE (100 GMS)			THIN FILM CURE		
	FAST HT9001	STANDARD HT9002	SLOW HT9003	FAST HT9001	STANDARD HT9002	SLOW HT9003
50°F (10°C)	45 mins	NR*	NR*	7 hrs	NR*	NR*
77°F (25°C)	14 mins	27 mins	55 mins	2.5 hrs	3.5 hrs	20 hrs
95°F (30°C)	8 mins	11 mins	27 mins	45 mins	1.75 hrs	6 hrs

	FAST HT9001	STANDARD HT9002	SLOW HT9003
Minimum Application Temp.	50°F (10°C)	55°F (13°C)	60°F (15°C)
Mixing Ratio (Resin Hardener)	4:1	4:1	4:1

*NR – Not Recommended

construction & repair with Epiglass® Epoxy

EPOXY RESINS AND MULTI-PURPOSE ADDITIVES

Epiglass® has always been at the forefront in the supply of epoxy resin products for boat use. As far back as the 1950's, Epiglass® resin technology was amongst the first to be developed specifically for marine use.

The Epiglass® system of epoxy resin, hardener and powder additives can be used for a wide variety of jobs on the boat. Epiglass® can be made to act as a base for varnish, glues, fillers or laminating resin. So if you are restoring an old boat, building a new one or simply keeping your boat in a state of good repair, Epiglass® can help produce high quality, long lasting results.

MIXING EPIGLASS®

Calibrated pumps are available as a convenient and easy dispensing system for Epiglass®. Pumps avoid spillage and contact of the resin and hardener with skin when mixing, an important factor when using epoxy material.

1

Mix by volume, four parts resin to one part hardener. (When using Epiglass® pumps, one stroke from each pump will deliver the proper 4:1 ratio.) Ensure pumps are fully primed as product may drain out between uses.

2

Stir slowly and thoroughly.

3

If necessary, add the appropriate fillers to achieve consistency desired.

PUMPS

Used for dispensing Epiglass® at a 4:1 ratio.

HT55 For Gallon Kits, HT80 For 5-Gallon Kits

Large Professional Size Pumps are also available



IMPORTANT: TO FIND MORE INFORMATION ON PROJECTS YOU CAN COMPLETE WITH EPIGLASS® EPOXY, VISIT yachtpaint.com

Visit our website for more information – yachtpaint.com

Product Selection



HT9000
Epiglass® Resin Mix



HT120 Glue Blend



HT450 Filler Blend

COMMON USES OF EPIGLASS® EPOXY SYSTEM

- High strength and durability is suitable for sheathing, laminating, filling, fairing and gluing
- Low viscosity formula for ease of mixing and wet out
- Good compatibility with a wide range of laminates and cloth types
- Range of curing agents adapted to different climates or application environments, with simple 4:1 mix ratio, good flexibility
- Solvent free, phenol free, and low odor, for a safer, cleaner working environment
- Good water barrier properties, can be used above and below the waterline

USES: sheathing, laminating

- Epiglass® HT120 Glue Blend is a combination of lightweight powders pre-mixed to produce high strength glue when mixed with Epiglass® HT9000 Resin and Hardener. Due to its unique formulation Epiglass® HT120 displays easy sanding characteristics plus some degree of filling properties. Increasing may alter the viscosity of the glue mix or decreasing the volume of Epiglass® HT120 added
- Epiglass® HT120 is easily mixed into the resin/hardener combination but should be well dispersed to avoid dry lumps of un-dispersed powder that can reduce the strength of glue lines

- Epiglass® HT450 Filler Blend is formulated to create a lightweight, low-density filling and fairing compound suitable for use above and below the waterline when mixed with Epiglass® HT9000 Resin and Hardener. Such mixtures are ideal for use as fillet bonding, filling and fairing and coving work
- Epiglass® HT450 Fairing Filler produces a white easy to sand and shape mixture

SEALING FIBERGLASS	YES		
LAMINATING	YES		
SHEATHING	YES		
FILLING & FILLETING	YES	YES	
BONDING WOOD	YES	YES	
FAIRING; FILLING ABOVE WATER	YES		YES
FAIRING; FILLING BELOW WATER	YES		YES

Type of mix required by volume	HT9000 Epiglass® Resin Mix	HT120 Glue Blend	HT450 Filler Blend
LOW VISCOSITY GLUE MIX	1	0.75	
HIGH VISCOSITY GLUE MIX/FILLET MIX	1	1.5	
FILLING OR FAIRING	1		3

Note: The above chart is parts by volume of additive to mixed resin & hardener. Volume can be altered to suit a particular job.

complete boatcare

"THE RIGHT TOOLS, THE RIGHT PRODUCTS FOR THE RIGHT JOB" FOR RESULTS THAT REALLY SHINE!

Boats have a variety of finishes and each has specific cleaning and aftercare needs. There is no better way to clean, restore and protect your boat than to use the complete line of Interlux® Boatcare products. Interlux Boatcare products are designed specifically for the marine environment and for use on all marine surfaces including fiberglass, aluminum, stainless steel, plastics, glass, wood and painted surfaces. To maintain the color and gloss of Interlux finishes only use Interlux Boatcare products, each product is paint safe and has been specially formulated to protect and increase the longevity of Interlux finishes.

The right tool for the job! We recommend the use of high quality cleaning tools when cleaning and maintaining the finishes on your boat.

1: cleaning

All-Purpose Boat Soap with Wax

- Concentrated wash & wax environmentally friendly formula, that leaves surfaces shiny and water repellent
- Can be used with fresh or salt water



Fiberglass ✓ Paint ✓ Wood ✓ Metals ✓



Photo supplied by Swobbi®

2: restoration

Heavy Duty Stain Remover

- Reactive gel formula, no need to scrub, will not run and is easy to control
- High strength, formula that aggressively and quickly removes stains, wax, yellowing, oxidation and waterline scum lines
- Great for cleaning hulls after haul outs



Fiberglass ✓ Paint ✓ Wood ✓ Metals ✓

Light Duty Rubbing Compound

- Removes light scratches, minor oxidation and restores finish to topsides
- Will not dry or chalk during application, for a long working time



Fiberglass ✓ Paint ✓ Metals ✓

THE TEFLON® ADVANTAGE! Teflon® is an extraordinary and versatile technology known for its friction reducing, easy to clean and non-stick properties it also adds durability and longevity to finishes. UV rays, salt, oil, bird droppings, acid rain along with engine exhaust, rust, and waterline stains all make the marine environment a very hazardous place for your boat. Teflon® makes surfaces easier to clean, increases durability and adds a super low friction, non-stick, dirt repellent finish. Teflon® technology is now available in PREMIUM TEFLON® MARINE WAX with Cleaner and UV PROTECTANT & TEFLON® WAX SEALER thereby making it easier to clean and protect your boat.



3: Protection

Advanced 2 step wax & sealant

Premium Teflon® Marine Wax with Cleaner

- One step cleaner wax that cleans, polishes and protects all in one easy step
- Teflon® provides ease of cleaning and a super low friction, non-stick surface that leaves a high gloss dirt repellent finish



Fiberglass ✓ Paint ✓ Metals ✓

UV Protectant & Teflon® Wax Sealer

- Reactive formula hardens after 24 hours providing ultimate surface and wax protection that will double the life of wax for season long protection
- Teflon® provides ease of cleaning and a super low friction, non-stick surface
- Excellent surface protectant keeps fiberglass, metal and painted surface shiny and clean



Fiberglass ✓ Paint ✓ Metals ✓

2 step woodcare

Enjoy the beauty of natural teak with this simple 2-step woodcare system. Clean, restore and protect your deck, hand and toe rails, cockpit gratings etc with minimum effort.

1: restoration

Premium Teak Restorer

- Cleans and brightens teak in one step, revealing its natural color and grain
- Environmentally friendly water based formula, no heavy rinse is required



2: protection

Premium Teak Oil

- Traditional Scandinavian blend of oils for ultimate protection against the elements
- Easy to apply, fast drying, warm golden color for exterior and interior use



This section covers three important areas you need to consider, whatever job you are undertaking; Substrate Information, Equipment Guidelines and Health & Safety.



everything else you need to know

Throughout this guide we have been stressing the importance of good and thorough preparation and priming. Taking the time to understand your substrate and its characteristics can often provide you with basic information to help identify possible problems you may encounter.

WORKING WITH FIBERGLASS

Fiberglass is made from polyester resin reinforced with chopped or woven fibers. The resin and fibers set tighter to form a hard matrix resulting in a laminate that is strong and rigid. The smooth exterior is a protective gelcoat, made from polyester or vinyl ester resin.

Despite its advantages, experience shows that it is susceptible to the effects of sunlight and the marine environment.

There are 2 problems to be aware of:

Fiberglass can blister!

For detailed information see pages 24-28.

Gelcoats fade!

As a result of exposure to sunlight the gelcoat will begin to fade. Polishing with wax may delay this, but eventually a coat of paint will be needed to protect the surface.

WORKING WITH ALUMINUM

Aluminum is an excellent material for boats, but care needs to be taken in its use to ensure a good result. Aluminum alloys are prone to corrosion if untreated or damaged. Attention to the preparation of a new hull and the maintenance of an existing hull can save you considerable difficulties and costly repairs in the future.

Aluminum Inspection: Periodically the paint system will need to be removed and the corrosion treated. Inspection on an annual basis of all weld seams and rivets will allow for early identification and treatment of this problem.

Aluminum Compatibility: Antifouling paints that contain cuprous oxide or metallic copper should never be used on aluminum. Antifouling paints that contain cuprous thiocyanate can be used if the aluminum is primed properly.

WORKING WITH WOOD

Wood is the only natural boat building material used today, and generally requires more maintenance than the more common fiberglass vessels. Wood absorbs moisture from the atmosphere, and swells and contracts to varying degrees depending on the type of construction. For a varnish or paint coating to stay intact it will need to be quite flexible in nature. Wood is subject to attack by fungal spores, which lead to rotting and decay and by marine borers, which eat the wood fibers. Wood therefore needs to be protected by good quality preservatives and coatings. Many different woods can be used, which can differ immensely.

HARDWOODS

Hardwoods have a tighter grain than soft woods. This tight grain has good strength characteristics across the timber as well as along its length, making it particularly suitable for use in boat building.

Mahogany – Saltwater has an antiseptic quality on mahogany that freshwater does not have. So, little protection will be needed in a marine environment whereas mahogany kept in fresh water will need to be carefully protected.

Teak and Iroko – The oil in these woods provide a natural resistance to rot and decay. They also contain silica, which gives them hardwearing characteristics.

Oak – reacts with steel and iron due to the tannin in the fibers. This will cause staining of the wood and chemical attack on the metal by the tannic acid.

SOFTWOODS

The grain in these woods is long, straight and generally wider spaced than hardwoods as these trees grow faster. This means that their strength is mostly along their length so they are used in such applications as masts and spars, tillers, rubbing strakes, oars and planked hulls.

WORKING WITH STEEL

Steel is a heat-treated alloy based on iron. The high strength of steel in relation to the thickness and the ability to cut and bend it into different shapes makes it suitable material for building hulls and superstructures. It is important to be aware of some of the characteristics of the material in order to ensure good results.

Steel corrodes! The most common form of corrosion in steel is rust. For the reaction to take place, water must also be present. The marine environment is therefore an ideal place for rust to occur.

Steel stretches! Due to the high flexibility steel it is hard to break, and impact damage will result in a dent. This presents problems for a protective coating that may not be flexible.



Health & Safety

Labeling of Health and Safety precautions for paint products is a legal requirement and forms a specific section on our labels. However the words are specified by law and are often difficult to understand. In this section we try to provide some guidance to enable you to better understand the warnings and advice given. In addition some further information is provided to make applying paint a safer job. Before starting work always read the label. Each label will display a number of warnings and phrases, which will quickly indicate those areas where particular care should be taken as well as potential risks, and measures needed to protect yourself during application.

WARNING SYMBOLS

Corrosive – This material will attack the eyes and skin and can give you burns.

Harmful – This material may harm you from skin contact, from breathing in or from ingesting.

The wording will indicate which.

Irritant – This material may cause a skin rash.

Highly Flammable – A spark or cigarette end will start a fire more easily than with gasoline. Paint or thinners in cans, or vapors in the air, can catch fire or explode.

General Precautions – Other general safety precautions are detailed below and will help should any problem occur whilst using our paints.

PERSONAL HEALTH

Avoid Ingestion – Food and drink should not be prepared or consumed in areas where paint is stored or is being used. In cases of accidental paint ingestion seek immediate medical attention. Keep the patient at rest and DO NOT induce vomiting.

Avoid Inhalation – The inhalation of solvent vapor from paint or dust from sanding can be reduced by the provision of adequate ventilation or extraction. If this is not sufficient or if specifically stated on the label, suitable respiratory protection should be used. Wear a cartridge type respirator when abrading old antifouling with wet and dry paper – never burn off or dry sand antifouling as this may create harmful fumes or dust.

In badly ventilated areas wear an air fed hood or cartridge respirator with organic vapor filter. Solvent fumes are heavier than air. Breathing these fumes can make you dizzy, feel drunk and headachy and could even result in collapse.

Read the label carefully and ensure that the recommended protection is worn. Spray painting creates additional health hazards. Spray mists should not under any circumstances be inhaled.

Read the label carefully and ensure recommended protection is worn; generally an air-fed hood is the best protection as it provides a fresh air feed to the user.

Avoid eye contact – Eye protection should be used during application and when there is any risk of paint splashing on the face. Safety glasses or goggles are inexpensive and are well worth wearing. Use eyewear that complies with ANSI Z871-1989 Standard. If material does contaminate the eye, it is recommended that the eye is flushed with clean fresh water for at least 15 minutes, holding the eyelids apart, and medical attention sought.

Avoid skin contact – Skin irritation can occur from contact with paint products. You should, therefore, always wear protective gloves and protective clothing when applying or mixing any paint products. Overalls, which cover the body, arms and legs, should be worn. Barrier skin creams may be used on the face but **Do NOT use petroleum jelly as this can help the absorption of paint into the body.** Remove rings and watch straps before commencing work, as these can trap paint particles next to the skin. Remove any paint that does get onto the skin by washing with warm water and soap or an approved skin cleanser. After washing, apply a skin conditioner. Never use solvent or thinners to clean the skin.

THE RISK OF FIRE OR EXPLOSION

Most paints contain organic solvents – some of which evaporate into the air upon opening the container. Any dangers can be reduced if a few simple precautions are taken:

- ~ **Avoid open flames** where paint is being stored, opened or applied
- ~ **Do not smoke**
- ~ **Store paint in a well-ventilated, dry place** away from sources of heat and direct sunlight
- ~ **Keep the can tightly closed**
- ~ **Avoid sparks** from metals, electrical appliances being switched on and off, or faulty electrical connections
- ~ **Do not leave paint soaked rags lying around**, in the pockets of overalls or in waste bins
- ~ **Some types of paint can dry out and auto-ignite**





Equipment Guidelines

The equipment used for applying the finish can make a difference to the success of your project. Guidelines for the best equipment to use are always detailed on the paint can and if a particular type of brush or roller is required, it will be specified. Further details are available at yachtpaint.com, however, this section should give you a few pointers.

- ✓ **PAINT REMOVAL** When removing old paint, a scraper should be used. Keep the tool sharp. A good idea is to round off the corners to minimize the risk of gouging. A 'dragging' type is usually more controllable than a 'pushing' type.
- ✓ **SANDING** When sanding, the amount of paper you will use will vary enormously. A very approximate guide would be one sheet per square yard of bare substrate, such as wood or fiberglass. It is always better to use a sanding block to achieve a smoother surface. For previously painted surfaces, half a sheet per square yard is a rough guide and rubbing down between coats will use a similar amount. **ANTIFOULING MUST ONLY BE WET SANDED.**
- ✓ **PREPARATION** A suitable stirrer will be needed to stir the paint prior to use; an old screwdriver is not suitable for this job. A pallet knife or stirring stick is best. Remove surface dust with a cloth dampened with the thinner that will be used in the paint.

The area to be painted must be masked off using a high quality clean edged tape. There are two types available; paper masking tape which is suitable for antifouling, and high performance tapes, which are suitable for topside finishes and will prevent creep.

- ✓ **BRUSHES** It is always important to use a good quality brush, which is as large as you can comfortably use. A good brush is a good investment, which should be thoroughly cleaned after use.
- ✓ **ROLLERS** Generally, a solvent resistant $\frac{5}{16}$ " or $\frac{3}{8}$ " nap roller can be used for antifouling application, and a small cell foam roller for high gloss topside finishes.
- ✓ **SPRAY** Application of all paint products by spray requires specialist equipment. When spraying two-part products an air-fed mask must be worn. Spraying of two-part polyurethane products is not advised without using a positive pressure air-fed hood.

All paints are designed to allow application of the correct wet film thickness when applying the recommended number of coats. This is obviously only a guideline as different people will apply different thicknesses depending on their technique or the equipment used.

Problems of over-application and under application can occur. Minimize these problems by following the correct overcoating times and by

applying the correct quantity of paint. Use the coverage chart at the back of this manual to calculate the proper amount of paint.

The application method you choose will have a direct effect on the amount of paint that is applied in each coat. A rough guide to the amount of paint applied by the different methods is as follows:

APPLICATION METHOD	AMOUNT
FOAM ROLLER	1-1.5 MILS (20-40 MICRONS)
MOHAIR ROLLER	1-2 MILS (20-50 MICRONS)
BRUSH	1-2.5 MILS (20-60 MICRONS)
CONVENTIONAL SPRAY	1-4 MILS (30-100 MICRONS)
AIRLESS SPRAY	2-8 MILS (50-200 MICRONS)

1 MIL = 25.4 MICRONS 1 MIL = 1/1000TH OF AN INCH

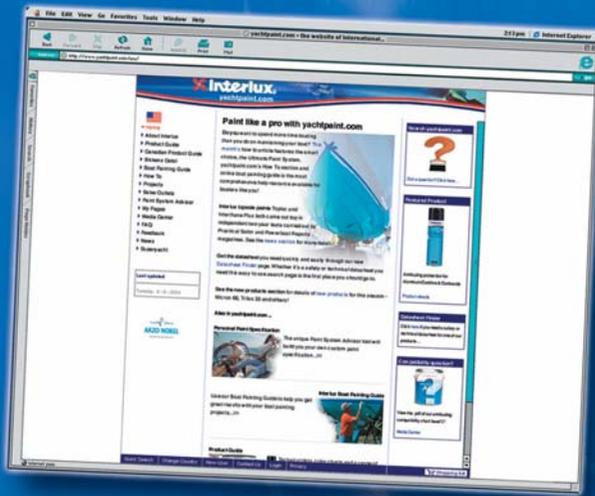


COVERAGE CHART

ANTIFOULING		
PRODUCT	COVERAGE PER GALLON	NUMBER OF COATS
MICRON® 66®	320 SQ FT/GAL YIELDS 2 MILS D.F.T.	2-3
MICRON® EXTRA WITH BIOLUX®	440 SQ FT/GAL YIELDS 2 MILS D.F.T.	2-3
MICRON® CSC	440 SQ FT/GAL YIELDS 2 MILS D.F.T.	2-3
FIBERGLASS BOTTOMKOTE® ACT	400 SQ FT/GAL YIELDS 2 MILS D.F.T.	2-3
ULTRA WITH BIOLUX®	475 SQ FT/GAL YIELDS 2 MILS D.F.T.	2
ULTRA-KOTE®	475 SQ FT/GAL YIELDS 2 MILS D.F.T.	2
FIBERGLASS BOTTOMKOTE®	400 SQ FT/GAL YIELDS 2 MILS D.F.T.	2
FIBERGLASS BOTTOMKOTE® AQUA	400 SQ FT/GAL YIELDS 2 MILS D.F.T.	2
TRILUX® 33®	400 SQ FT/GAL YIELDS 2 MILS D.F.T.	2-3
TRI-LUX® II	400 SQ FT/GAL YIELDS 2 MILS D.F.T.	2-3
TRILUX® PROP & DRIVE		1 CAN PER LOWER UNIT
BOTTOMKOTE®	400 SQ FT/GAL YIELDS 2 MILS D.F.T.	2-3
BOTTOMKOTE® XXX	420 SQ FT/GAL YIELDS 2 MILS D.F.T.	2-3
VC®17m & VC®17m EXTRA	300 SQ FT/GAL YIELDS 4.2 MILS D.F.T.	2
GELCOAT BLISTER PROTECTION		
INTERPROTECT® 2000E	240 SQ FT/GAL YIELDS 2.7 MILS D.F.T.	4-5*
INTERPROTECT® 3000	330 SQ FT/GAL YIELDS 3.8 MILS D.F.T.	3-4*
VC® TAR2	280 SQ FT/GAL YIELDS 4 MILS D.F.T.	4-5*
EPIGLASS® HT9000 RESIN	400 SQ FT/GAL YIELDS 4 MILS D.F.T.	2-3 AS NEEDED
PRIMERS		
TBT SEALER	264 SQ FT/GAL YIELDS 2 MILS D.F.T.	2
PRIMOCON	210 SQ FT/GAL YIELDS 2 MILS D.F.T.	2
VINY-LUX PRIMEWASH	425 SQ FT/GAL YIELDS 8 MILS D.F.T.	1-2
PRE-KOTE	450 SQ FT/GAL YIELDS 2 MILS D.F.T.	1-2
EPOXY PRIMEKOTE®	450 SQ FT/GAL YIELDS 2 MILS D.F.T.	1-2
TOPSIDE FINISHES		
PERFECTION® POLYURETHANE	535 SQ FT/GAL YIELDS 1.5 MILS D.F.T.	2-3 AS NEEDED
TOPLAC	550 SQ FT/GAL YIELDS 1.2 MILS D.F.T.	2-3 AS NEEDED
BRIGHTSIDE® POLYURETHANE	550 SQ FT/GAL YIELDS 1.2 MILS D.F.T.	2-3 AS NEEDED
BILGKOTE®	300 SQ FT/GAL YIELDS 1.2 MILS D.F.T.	2-3 AS NEEDED
VARNISHES		
PERFECTION®	525 SQ FT/GAL YIELDS 2 MILS D.F.T.	4-5 AS NEEDED
SCHOONER®	600 SQ FT/GAL YIELDS 2 MILS D.F.T.	4-5 AS NEEDED
GOLDSPAR® CLEAR	600 SQ FT/GAL YIELDS 2 MILS D.F.T.	4-5 AS NEEDED
GOLDSPAR® SATIN	600 SQ FT/GAL YIELDS 2 MILS D.F.T.	4-5 AS NEEDED
ORIGINAL	600 SQ FT/GAL YIELDS 2 MILS D.F.T.	4-5 AS NEEDED
JET SPEED	640 SQ FT/GAL YIELDS 2 MILS D.F.T.	2
FILLERS		
INTERFILL® EPOXY FILLER	25 SQ FT/GAL YIELDS 1/16" D.F.T.	AS NEEDED
WATERTITE EPOXY FILLER	25 SQ FT/GAL YIELDS 1/16" D.F.T.	AS NEEDED
SURFACING PUTTY	60 SQ FT/GAL YIELDS 1/16" D.F.T.	AS NEEDED
BOATYARD BEDDING COMPOUND	25 SQ FT/GAL YIELDS 1/16" D.F.T.	AS NEEDED
SEAM COMPOUND BROWN / WHITE	25 SQ FT/GAL YIELDS 1/16" D.F.T.	AS NEEDED

D.F.T. – Dry Film Thickness
Coverages are theoretical your coverage may vary
1 mil = 1/1000th of an inch
25.4 microns = 1 mil

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