

# Boat Paint Guide & Colour Card

UK Edition



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.

Whether we're in the lab researching and developing new products, or at sea putting our products to the test, we're in our element. Getting the chemistry right is critical to us, as is knowing the subtle differences between people and water all over the world. Wherever there are boats, we're right at the heart of the matter, making connections, solving problems, sharing knowledge...

Our World is Water

## Ask the Experts

At International Paint, we recognise the importance of providing high-quality technical support and advice to all our customers. Whether you're a novice or a more experienced DIY'er, you're sure to have a question for us – and we'd love to help – here's how you can reach us...



**Chris Jones**  
UK Sales and  
Marketing Team

 [yachtpaint.com](http://yachtpaint.com)

 +44 (0) 1489 77 50 50

 [iyp.uk@akzonobel.com](mailto:iyp.uk@akzonobel.com)



**Product data sheets**



**Material safety data sheets**



**Product labels**

**Got a question? We've got experts who've got the answer!**



**International and the environment:** We have products and systems designed to help you reduce your boating environmental footprint. Call us or see the appropriate sections on [yachtpaint.com](http://yachtpaint.com) for more information.

## ■ Quick Reference Guide

Antifoulings .....	.04	Topsides .....	.08
Why do I need a Thinner? .....	.07	Varnishes .....	.10
Working with Fillers .....	.07	Primers and Undercoats .....	.12

## ■ Before You Start

Health & Safety .....	.15	Equipment guidelines .....	.18
-----------------------	-----	----------------------------	-----

## ■ 'Step-by-Step' Project Guides

Getting to know your substrates .....	.20	Painting your bilge .....	.35
Always check the weather! .....	.23	Preparing a non-slip deck .....	.37
Making small repairs to GRP .....	.26	Applying varnishes .....	.40
Removing aged finishes or varnishes .....	.28	Applying antifouling .....	.43
Removing antifouling .....	.30	Painting outdrives, stern gear, propellers and keels .....	.46
Applying finishes .....	.32		

## ■ The Complete Antifouling Guide

What is antifouling? .....	.48	How much antifouling paint do I need? .....	.53
Antifouling types .....	.50	Below water systems .....	.54
Is my new antifouling compatible? .....	.52	Propellers, outdrives and sterngear .....	.57

## ■ The Complete Topsides Guide

Working with finishes .....	.58	One-part conventional paint systems .....	.61
Testing for compatibility .....	.59	Varnishes .....	.62
Application techniques .....	.59	Varnish systems .....	.64
Two-part premium paint systems .....	.60	Complete boatcare .....	.65

## ■ Blister Repair and Prevention

What is osmosis? .....	.66	How to recognise osmosis .....	.68
How to protect against osmosis .....	.66	How to treat osmosis .....	.69
Osmosis protection schemes .....	.68		

## ■ Troubleshooting Guide

Common problems and how to avoid them .....	.70	Painting and project diary .....	.73
---	-----	----------------------------------	-----



































































































## ■ Colour Card

Topside Finishes .....	.74	Antifoulings .....	.77
------------------------	-----	--------------------	-----

Antifoulings

Use this guide to our antifouling products to help you choose the perfect product for your project.




	Polishing				Slow Polishing	Inter speed® Ultra	Hard	VC® Offshore	Thin Film	Special Purpose
	Micron® Optima	Micron® Extra	Cruiser® UNO	Bottomcoat	Trilux® 33	Inter speed® Ultra	Navigator®	VC® Offshore	VC®17m Extra	Trilux® Prop-O-Drev
Key attributes	<ul style="list-style-type: none"><li>For the absolute cleanest hulls</li><li>Minimum build-up – reduced preparation time</li><li>Activated Biolux® technology for sustained antifouling protection</li><li>Water based – low odour, easy clean up</li></ul>	<ul style="list-style-type: none"><li>Premium, multi-season copolymer antifouling for harshest fouling areas</li><li>24 months protection from one application</li><li>Minimum paint build up, washes away with use</li><li>Biolux® technology for sustained antifouling protection</li></ul>	<ul style="list-style-type: none"><li>One season's protection in all but harshest fouling conditions</li><li>One coat to save time</li><li>For power (up to 25 knots) and sail boats</li><li>Can be re-immersed within 24 hours</li></ul>	<ul style="list-style-type: none"><li>Cruising antifouling offering good level of protection</li><li>Contains organic booster to improve performance</li><li>Suitable for application several weeks prior to immersion</li><li>Season-long performance</li></ul>	<ul style="list-style-type: none"><li>Slow polishing, avoids seasonal paint build up</li><li>For all substrates including aluminium; recommended for propellers and boottops</li><li>Bright colours, including bright white</li><li>Effective fouling protection for up to 18 months</li></ul>	<ul style="list-style-type: none"><li>Ultra strong formula for high fouling areas</li><li>Hard, durable finish</li><li>Biolux® technology for sustained antifouling protection</li></ul>	<ul style="list-style-type: none"><li>Formulated specifically for use in fresh and brackish waters</li><li>Provides a hard scrubbable finish</li><li>Can be applied up to 3 months before launch</li></ul>	<ul style="list-style-type: none"><li>Suitable for salt and freshwater</li><li>Hard, smooth finish can be burnished to a very low profile</li><li>For racing sailing and power boats</li></ul>	<ul style="list-style-type: none"><li>Extra strong thin film antifouling for racing sailboats and powerboats</li><li>With fluoro microadditive for a low friction surface</li><li>Hard, smooth surface</li><li>Quick drying for fast re-launch</li></ul>	<ul style="list-style-type: none"><li>Aerosol application for difficult to reach areas</li><li>For propellers, outboards and sterngear</li><li>For aluminium, stainless steel and alloy</li><li>Biolux® technology for sustained antifouling protection</li></ul>
Thinners	Water	 No. 3	 No. 3	 No. 3	 No. 3	 No. 3	 No. 3	 VC® General Thinner	 VC® General Thinner	 VC® General Thinner FOR CLEAN UP
Practical coverage (m² per litre)	8.3	9.0	8.5	9.0	8.3	9.4	8.2	9.9	11.7	1 can per medium-sized outdrive
Number of coats	2-3	2-3 (1 season) / 3-4 (2 seasons)	1-2	2-3	2-3 (1 season) / 3-4 (18 months)	2-3	2-3	2-3	2-3	3 minimum
Substrates	   	   	   	   	      	   	   	  	  	  
Suitable for high speed craft			 Up to 25 knots				 Up to 25 knots			
Application method	 	 	 	 	 	 	 			
Suitable for high fouling areas	  	  	 		 	  		 	  	 


Use antifouling paints safely. Always read the label and product information before use.

CONTINUES OVER ➡

 GRP WOOD STEEL ALUMINIUM BRONZE STAINLESS STEEL LEAD

 BRUSH ROLLER AEROSOL GOOD EXCELLENT OUTSTANDING

**International and the environment:** We have products and systems designed to help you reduce your boating environmental footprint. Call us or see the appropriate sections on [yachtpaint.com](#) for more information.

 For comprehensive application and scheme information, always read the **product data sheet** before you start.

**Richard Jerram, Technical Helpline**

**“Need to know how to remove old antifouling?”**






**The answer is only a click away at [yachtpaint.com](#)**





Why do I need a Thinner?

Thinners are solvents which are usually the same, or very similar, to those used within the product they are recommended with. Thinners can be used as an additive to ease application, or to clean brushes and equipment.

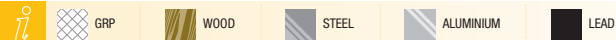
				
No. 1	No. 3	No. 7	No. 9	VC® General Thinner
A general purpose thinner, for use with one-part paints and varnishes	Typically used with antifouling paints (excluding Micron® Optima and VC® products), also used to aid with the spray application of our one-part varnishes	Formulated for use with epoxy type products	For use with two-part polyurethane products	Specially formulated for use with VC® products

Working with Fillers

Your boat is not only under attack from the elements. Damage can also result from collisions or other physical impacts. Watertite is a two-part water resistant filler, suitable for use with most common substrates. It can be used both above and below the waterline, filling up to 20mm in depth in one application.









































	Watertite
Key attributes	<ul style="list-style-type: none"><li>Two-part, water resistant formulation</li><li>Fill up to 20mm depth in one application</li></ul>
Substrate (after priming)	    
Suitable for above and below waterline	
Coverage (m² per litre)	1.0 (at 1mm thick)



Topsides

Use this guide to our topside products to help you choose the perfect product for your project.

				
	Perfection	Toplac®	Interdeck®	Danboline
Key attributes	<ul style="list-style-type: none"><li>Ultimate performance, two-part polyurethane finish</li><li>Chemical cure for the hardest finish &amp; highest abrasion resistance</li><li>Unique UV protection for superior, long-lasting gloss and colour</li><li>Professional-quality results made easy</li></ul>	<ul style="list-style-type: none"><li>Premium quality high-gloss durable yacht enamel</li><li>Silicone alkyd formula lasts twice as long as conventional one-part enamels</li><li>Excellent UV resistance</li><li>Extended gloss and colour retention characteristics</li><li>Easy to apply giving deep, lustrous finish</li></ul>	<ul style="list-style-type: none"><li>Slip resistant polyurethane deck paint</li><li>Contains fine mineral additive for hard wearing, non-slip surface</li><li>Suitable for all substrates</li><li>Low sheen finish prevents sunlight dazzle</li><li>Apply straight from the can with brush or roller</li></ul>	<ul style="list-style-type: none"><li>Hard wearing coating for bilges, lockers and bulkheads</li><li>Chemical resistance to fumes, fuel and oil</li><li>High opacity for thorough coverage</li><li>Cleans easily for reduced maintenance</li></ul>
Thinners	 No. 9	 No. 1	 No. 1	 No. 1
Practical coverage (m² per litre)	12.0	12.0	9.5	11.0
Number of coats	2-3	1-2	1-2	1-2
Substrates	   	   	    * * *	    * * *
Application method	 	 	 	 
Recommended undercoat	 Perfection Undercoat	 Pre-Kote	–	–
Additives	For a satin finish add:  Polyurethane Matting Additive	 Matting Additive	–	–
	For a non-slip finish add:  Non-Slip Additive	 Non-Slip Additive	–	–

\* Over suitable primer



“Need some hints and tips to achieve a professional topside finish?”

Get advice from the experts at [yachtpaint.com](https://yachtpaint.com)

**What is a matting additive?...**  
Matting additives can be added to both International finishes and varnishes; and depending on the mix ratio between the product and the additive, a variety of gloss, satin or matt effects can be achieved. International produces two types of matting additive, suitable for use with either the two-part or one-part products in the range.



**What is Non-Slip Additive?...**  
Non-Slip Additive is a synthetic, granular material that can be added to topside finishes prior to application or sprinkled onto wet paint as an aid to providing a more slip-resistant finish. As with the matting additives, the final result is determined by the amount of material added into the finish.



Further information on Polyurethane Matting Additive, Matting Additive and Non-Slip Additive and their uses can be found on the product label or on the product data sheets, which are available at [yachtpaint.com](https://yachtpaint.com)



## Varnishes

Use this guide to our varnish products to help you choose the perfect product for your project.



NEW



NEW



NEW



	Perfection Plus	Schooner® Gold	Compass®	Goldspar® Satin	Original
<b>Key attributes</b>	<ul style="list-style-type: none"> <li>■ Ultimate performance, clear, two-part polyurethane varnish</li> <li>■ Chemical cure for the hardest finish &amp; highest abrasion resistance</li> <li>■ Superior gloss lasts four times longer than conventional one-part varnishes</li> <li>■ Professional-quality results made easy</li> <li>■ 2:1 mix ratio: Easy to measure and mix</li> </ul>	<ul style="list-style-type: none"> <li>■ Advanced UV technology in our longest-lasting one-part varnish</li> <li>■ Exceptional deep gloss and colour are retained over the lifetime of the coating</li> <li>■ Sand between every other coat</li> <li>■ Traditional amber colour</li> <li>■ Use without thinning in warm/higher temperature climates</li> </ul>	<ul style="list-style-type: none"> <li>■ Fast-dry, high durability, polyurethane high gloss varnish</li> <li>■ Excellent resistance to abrasion, oils and chemicals</li> <li>■ Fast-drying, apply 2 coats per day, sand only after 2-3 coats</li> <li>■ Light amber colour</li> <li>■ Contains HALS and UV absorbers (find more information at yachtpaint.com)</li> </ul>	<ul style="list-style-type: none"> <li>■ A satin finish polyurethane varnish for interior use</li> <li>■ Resistant to hot water, mild acids and alkalis</li> <li>■ Fast-dry formulation minimises dust contamination</li> </ul>	<ul style="list-style-type: none"> <li>■ Traditional, general purpose gloss varnish</li> <li>■ Good flow, flexibility and gloss retention</li> <li>■ High clarity finish for light colour woods</li> <li>■ Interior, exterior and over existing varnish</li> </ul>
<b>Thinners</b>	No. 9	No. 1  No. 3	No. 1  No. 3	No. 1  No. 3	No. 1  No. 3
<b>Practical coverage (m² per litre)</b>	12.0	12.9	12.9	10.3	11.7
<b>Number of coats</b> Will vary depending on usage. Please check product label/data sheet.	2-5	2-6	3-6	3	3
<b>Suitable for use direct to oily timber (e.g. teak or iroko)</b>					
<b>Application method</b>					
<b>UV protection/Gloss retention</b>				For interior use only	
<b>Additive</b> For a satin finish add:	Polyurethane Matting Additive	Matting Additive	Matting Additive	—	Matting Additive

### “Ever wondered how the professionals achieve a glass-like appearance to their varnished surfaces?”

When working with varnishes the final finish can be affected by the profile of the wood grain itself. A smoother finish will be achieved by increasing sanding preparation and the number of coats you apply. But, did you know that by using **International Clear Wood Sealer Fast Dry** under your varnish, this fast-drying, clear primer and surface sealer will fill and seal the wood grain, to provide an exceptionally smooth, crystal clear finish over which you can apply any of our high quality varnishes?



\* Based on the results of our trials conducted in Florida.








































For a non-slip finish, use **Non-Slip Additive** with your chosen varnish.

Find more information on achieving professional results at [yachtpaint.com](http://yachtpaint.com)

■ Primers & Undercoats

Use this guide to our primers and undercoats to help you choose the perfect product for your project.



	Primer						Undercoat	
	Yacht Primer	Primocon®	Interprotect®	VC® Tar2	Gelshield® 200	Gelshield® Plus	Perfection Undercoat	Pre-Kote
Key attributes	<ul style="list-style-type: none"><li>■ Conventional one-part primer for use above the water</li><li>■ Quick drying, with anticorrosive properties</li><li>■ Pigments contain aluminium flake to provide an anti-corrosive protective barrier</li></ul>	<ul style="list-style-type: none"><li>■ Conventional one-part primer for use below water</li><li>■ Quick drying, with anticorrosive properties</li><li>■ Can be used under all major antifoulings* or as a conversion coat over incompatible or unknown antifoulings</li></ul>	<ul style="list-style-type: none"><li>■ Quick drying, easy to apply, two-part epoxy primer</li><li>■ Offers excellent anticorrosive protection</li><li>■ Can be used as an antifouling tie-coat over existing epoxy primers</li></ul>	<ul style="list-style-type: none"><li>■ Osmosis defence for GRP and anticorrosion barrier for metal</li><li>■ Advanced self-levelling formulation requires no sanding between coats</li><li>■ Smooth surface – ideal primer base for antifoulings</li></ul>	<ul style="list-style-type: none"><li>■ Quick drying, easy to apply, epoxy primer for protection of GRP against osmosis</li><li>■ Provides protection against osmosis in five coats (250 µm)</li><li>■ Useable down to 5°C</li><li>■ Fast drying allows multiple coat application in a single day</li></ul>	<ul style="list-style-type: none"><li>■ A high build, solventless epoxy primer</li><li>■ Available in two colours to aid self-on-self application</li><li>■ Contains no harmful solvents to migrate into the hull and cause reblistering</li></ul>	<ul style="list-style-type: none"><li>■ High performance two-part polyurethane undercoat</li><li>■ Provides an excellent base for a long-lasting gloss finish</li><li>■ Easy application, fast drying and easy sanding</li><li>■ Semi-gloss appearance</li></ul>	<ul style="list-style-type: none"><li>■ Undercoat for one-part finishes</li><li>■ Excellent opacity allows for easy colour changing</li><li>■ Long-lasting, easy to apply and rub down</li><li>■ Long overcoating times allow coat-on-coat application</li></ul>
Typically used	Above water, under one-part undercoats <b>Do not overcoat with two-part products</b>	Below water, under antifoulings or to seal unknown antifoulings <b>Do not use with VC®17m systems</b>	Where a high-performance anti-corrosive system is required <b>Do not use over one-part products or antifoulings</b>	Under VC® antifoulings, due to exceptionally smooth surface profile	To prevent osmotic blistering on fibreglass hulls and bilges	To treat osmotic blistering on fibreglass hulls	Under Perfection finish <b>Do not use over one-part products</b>	Under International one-part finishes <b>Do not use under two-part products</b>
Thinners	 No. 1	 No. 3	 No. 7	 VC® General Thinner	 No. 7	Do not thin under any circumstances	 No. 9	 No. 1
Practical coverage (m² per litre)	12.0	7.4	8.1	11.3	8.1	6.0	12.0	12.0
Number of coats	4	1-5	2-5	3-7	5-6	4	1-2	1-2
Substrates						Apply to hull after removing gelcoat		
Application method								
Suitable for above waterline						Refer to product data sheet		
Suitable for below waterline								

\* Over suitable primer



! For comprehensive application and scheme information, always read the **product data sheet** before you start.

## Health & Safety

Providing health and safety precautions for paint products is a legal requirement and forms a specific section on our labels. However, the wording is laid down by law and is often difficult to understand. This section is intended to help you interpret and understand the symbols and phrases you will find in our literature and on our product labels. We've also included some further information to make applying paint a safer job.

Before starting work always read the label. Each tin will display a number of warning symbols and written warning phrases which will quickly indicate those areas where particular care should be taken. 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, do NOT induce vomiting.

#### Avoid inhalation

The inhalation of solvent vapour 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 antifoulings – never burn off or dry-sand antifoulings as this may create harmful fumes or dust.



In badly ventilated areas wear an air-fed hood or cartridge respirator with an organic vapour 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 paint application and when there is any risk of paint splashing on the face. Safety glasses or goggles are inexpensive, available from many DIY stores, and are well worth wearing. Use eyewear that complies with EN 166. 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. Skin cream, of a non-greasy barrier type, may be used on the face. 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.



### Risk of fire or explosion

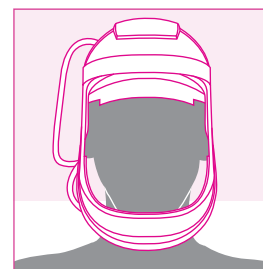
Most paints contain organic solvents – some of which evaporate into the air upon opening the container. Any dangers can be reduced if a few simple precautions are taken:

- **Avoid naked 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 tin 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.

### Personal Protective Equipment (PPE)

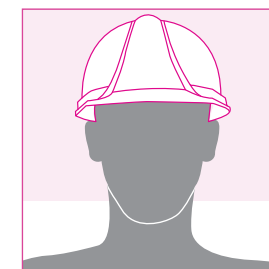
Before undertaking any work always consider the personal protective equipment that you will need; this will change based on the job in hand and the product being used. Some of the most common items are listed below together with guidelines on when they should be used. However, for further information, consult your International Help Desk.

For your convenience, your local helpline number is shown on the inside front cover of this booklet and at the foot of each page spread.



#### Face Masks

The type of mask that should be worn depends on the hazard of the paint, length of time of the job, amount of paint used and where the job is being carried out. Spray application will require the use of full face masks and respiratory protection and as such it is recommended that it is only carried out by professionals with specialist equipment.



#### Hard Hat

A hard hat should be worn to protect the head if painting in areas where there is a risk from falling objects or debris.



### Warning symbols



#### Corrosive

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



#### Highly Flammable

A spark or cigarette end will start a fire, more easily than with petrol. Paint or thinners in tins, or vapours in the air, can catch fire or explode.



#### Harmful/Irritant

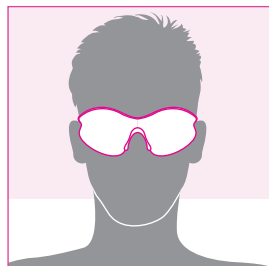
This material may harm you from skin contact, from breathing in or ingesting. The wording will indicate which.



#### Harmful to the Environment

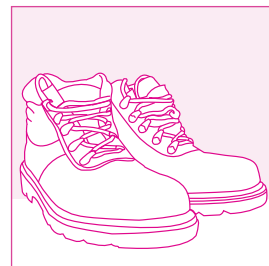
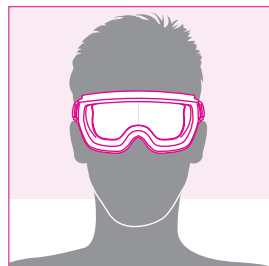
This material is toxic to aquatic organisms and may cause long-term adverse effects in the aquatic environment.





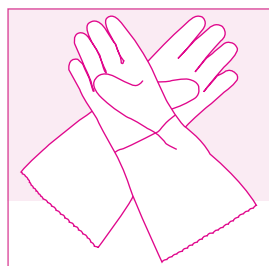
## Safety Glasses and Goggles

Eye protection should always be worn when using paint. The type of protection required depends on the job to be carried out. Safety glasses will avoid minor splashes, whereas goggles offer more protection.



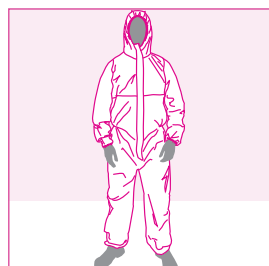
## Safety Boots

Steel toecap, anti-static boots are advisable when painting your boat. These should provide ankle protection, as a minimum.



## Gloves

When painting, chemical resistant gloves, that are in good condition, should be worn. The gloves should be replaced frequently and always as soon as the inside looks dirty.



## Overalls

A cotton overall (minimum 60% cotton) with full length sleeves and legs should be used in all situations where exposure to the paint is potentially high. Alternatively, if the risk to paint exposure is low, suitable disposable overalls can be worn.



## Barrier Cream

Barrier cream should be used on exposed skin that cannot be covered by protective equipment. However, it must not be used instead of or in lieu of it.

**Do not use petroleum jelly based products as this will aid penetration of the product into the skin.**

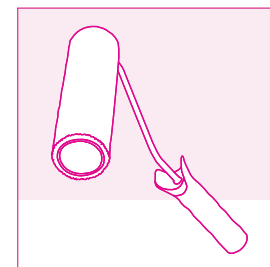
## Equipment guidelines

The type of equipment you choose 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](http://yachtpaint.com), however, this section should provide you with the basics.



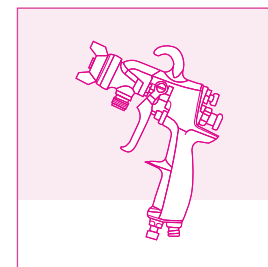
## Brush

It is always important to choose a good quality brush, which is as large as you can comfortably use. A good brush is a good investment and should be cleaned properly after use.



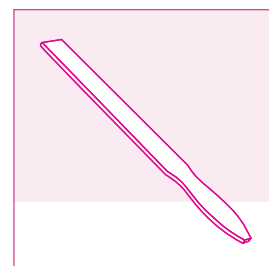
## Roller

Generally, a medium pile roller is recommended for antifouling application, and a small cell foam roller for gloss finishes.



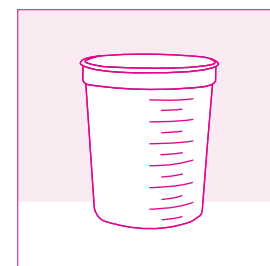
## Spray

Although our products are designed for easy application by brush or roller, many can also be spray applied but will require specialist equipment. Consult product data sheets for spray equipment recommendations.



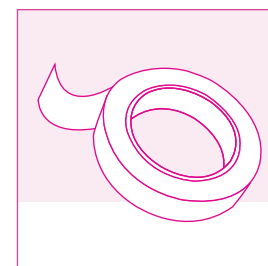
## Stirring Stick

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 dust wipe.



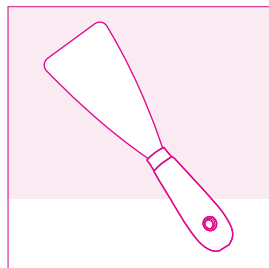
## Mixing Cup

Mixing cups with graduated mixing ratio indicators are designed to ensure the correct and precise measuring and mixing proportions of paints, activators and thinners.



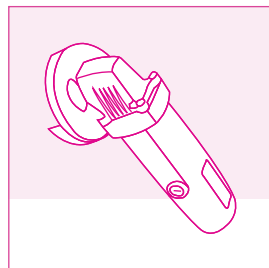
## Masking

Prior to painting, the target area should 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 topsides finishes and will prevent creep.



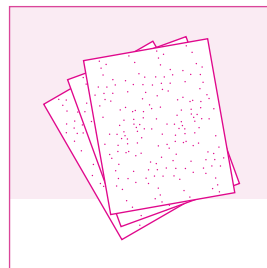
## Scraper

Use a scraper to remove old paint. Ensure you keep the tool sharp; it's a good idea to round off the corners to minimise the risk of gouging. A 'dragging' type is usually more controllable than a 'pushing' type.



## Grinder

Angle grinders are used for grinding, polishing and cutting. With a wide variety to choose from, the most important factors to consider are the disc size and how powerful the motor is. The type of disc required will depend on the job being carried out.



## Sandpaper

When sanding, the amount of paper you will use will vary enormously. A very approximate guide would be one sheet per square metre of bare substrate, such as wood or glass fibre. It is always better to use a sanding block to achieve a smoother surface. For previously painted surfaces, half a sheet per square metre is a rough guide and rubbing down between coats will use a similar amount. **Antifouling must only be wet sanded.**



## Choosing the right sandpaper

The possible uses of the various grades of sandpaper can be summarised as follows:

<b>60-120</b>	To remove old paint or promote mechanical adhesion. This grade will leave the surface scratched therefore a finer grade of paper should subsequently be used.
<b>180-200</b>	On new wood, these grades are too coarse for rubbing down wood which is to be varnished.
<b>220</b>	For rubbing down finishes prior to the application of an undercoat or primer.
<b>280-320</b>	To sand bare wood and fibreglass or undercoats prior to the application of a finish.
<b>320</b>	To rub down varnishes or a mixture of finish/undercoat.
<b>400</b>	For sanding freshly applied finishes.
<b>400 and above</b>	For taking out any blemishes in a paint film.

## Top tips from the experts...

Commencing with some basic advice on substrates and preparation, this section provides a series of useful step-by-step guides to common boat painting projects, along with all those useful bits of extra information and advice that can really contribute to making your project an outstanding success. Written by experts in a series of easy-to-follow steps, complemented with simple illustrations, these guides provide the ultimate quick reference tool to the discerning DIY boat owner.

**Fred Cole**  
UK Sales Manager



## Getting to know your substrates

### Working with fibreglass

Fibreglass, or GRP as it is often known, is made from polyester resin reinforced with chopped or woven glass fibres. Once the resin sets to a hard matrix the resulting laminate is strong and rigid. The smooth external appearance is due to a protective gelcoat, made from polyester resin.

Despite its obvious advantages, experience has shown that glass fibre is susceptible to the effects of sunlight and the marine environment.

There are two problems to be aware of:

**Fibreglass is prone to osmosis!**



For detailed information see **Pages 66-69.**

### Gelcoats fade!

Eventually the gelcoat will begin to fade as a result of exposure to UV (Ultra Violet) light in sunlight.



Polishing with wax may delay this, but eventually a coat of paint will be needed to restore colour and protect the surface.



See **The Complete Topsides Guide on Page 58.**

### Working with aluminium

Aluminium is an excellent material for boats. However, aluminium alloys are prone to corrosion if untreated or damaged. When new alloys are exposed, an oxide layer forms on their surface. The oxide layer does not protect the alloy in the long term when exposed to damp marine environments. 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.

### Aluminium inspection

Periodically the paint system will need to be removed in areas of stress and any corrosion treated. Careful inspection on an annual basis of all weld seams will allow for early identification of the occurrence of this problem.

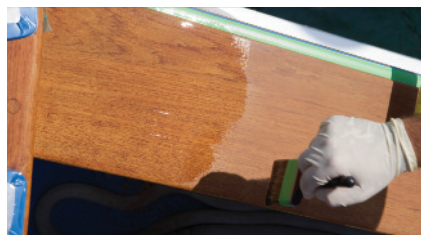
### Aluminium compatibility

Aluminium reacts with some copper-based antifouling paints causing serious corrosion. Therefore antifouling containing metallic copper or cuprous oxide should never be used on aluminium. Only use copper thiocyanate based antifouling on aluminium, firstly ensuring it is primed properly.

### Working with woods

Wood is the only natural boat building material used today, and although it generally requires more maintenance than the more common glass fibre vessels, a well cared for boat, built of wood, will always attract admiring glances when she sails into view.

The fibrous nature of timber means that it has a tendency to absorb moisture from the atmosphere, and swell and contract 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. The moisture content in wood can allow the growth of fungal spores, which leads to rotting and decay. Wood can also be subject to attack by marine borers, which eat the wood fibres. Wood therefore needs to be protected by good quality preservatives and coatings. Many different woods can be used, which can differ immensely.



### Hardwoods

Hardwood comes from slow growing deciduous trees. They 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 decorative application, as well as boat building.

**Mahogany:** Mahogany will last for many years in a marine environment with little protection as the seawater has an antiseptic quality. The same is not true with regard to fresh water, which will lead to rot and decay if allowed to permeate the wood fibres. Mahogany should, therefore, be protected from freshwater at all times and wherever possible washed down with seawater.

**Teak and Iroko:** Teak and iroko are particularly oily timbers with a natural resistance to rot and decay. Additionally they contain silica, which gives them hard-wearing characteristics.

**Oak:** Ferrous metals, such as steel and iron, react badly with oak, due to the tannin in the fibres. This will cause dark staining and even chemical attack on the metal by the tannic acid, which is formed.

### 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 with a lower carbon content and small quantities of other elements. The high strength of steel in relation to the plate thickness and the ability to cut and bend it into many different shapes makes it suitable material for building hulls and superstructures. Fastenings such as bolts and rivets are often a different alloy for added strength, while fittings contain added chromium, to make the steel 'stainless' and resistant to rust. Having stated that steel is a good material for building boats, 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 and strength of steel it is hard to break, but impact damage may well result in a dent owing to the metal stretching and deforming locally. This can present problems for a protective coating, which may not be so flexible.

### How to prepare bare substrates

All surfaces should be thoroughly degreased and free from any sanding debris prior to the application of any paint to the surface.

### Aluminium

Degrease with solvent or Super Cleaner. Sand well using 60-120 grade (aluminium compatible) paper. Clean thoroughly and allow to dry. Prime using an International primer as soon as possible (within 8 hours) following the product recommendations provided in the paint systems guides.

### Lead

Degrease with solvent or Super Cleaner. Sand well using 120 grade paper or power wire brush. Clean thoroughly and allow to dry. Prime using an International or VC primer following the product recommendations provided in the paint systems guides.

### Zinc/Galvanised Steel

Degrease with solvent or Super Cleaner. Sand well using 60-120 grade paper. Clean thoroughly and allow to dry completely. Prime using an International or VC primer following the product recommendations provided in the paint systems guides.

### Steel

Degrease with solvent or Super Cleaner. Grit blast to Sa 2.5 – near white metal surface. If grit blasting is not possible, grind the metal surface with 24-36 grade abrasive discs to a uniform, clean, bright metal surface with a 50-75 micron anchor pattern. Use angle grinder on small areas. Clean thoroughly and allow to dry completely. Prime using an International or VC primer following the product recommendations provided in the paint systems guides.

### Stainless Steel

Light grit blast to produce a profile of 50 microns, clean thoroughly and allow to dry completely prior to application of an International primer following the product recommendations provided in the paint systems guides.

### Bronze

Clean thoroughly and abrade to bright metal using 80 grade paper. Take care when abrading bronze propellers, as excessive abrading can alter the profile of the propeller causing it to be out of balance. Clean thoroughly and allow to dry completely before applying products recommended for application direct to bronze (see paint systems guides).

### Cast Iron

Degrease with solvent or Super Cleaner. Grit blast to Sa 2.5. If grit blasting is not possible, grind the metal surface with 24-36 grade abrasive discs to a uniform clean surface with a 50-75 micron anchor pattern. Use an angle grinder on small areas or a wire brush, prepare to a minimum St.3 according to ISO8501-1. Clean thoroughly with solvent and allow to dry completely. Ensure that all evidence of corrosion (e.g. iron oxide and iron sulphide) is removed prior to the application of an International or VC primer, following the product recommendations provided in the paint systems guides.

### Fibreglass

Degrease with solvent or Super Cleaner. Sand well using 180-220 grade paper. Clean thoroughly and allow to dry completely. Prime using an International or VC primer following the product recommendations provided in the paint systems guides.

### Bare Wood/Plywood

Sand smooth with 80-180 grade paper and then 280 grade paper. Remove sanding dust by brushing or dusting. Wipe down thoroughly with solvent and allow to dry completely, to ensure any residual sanding dust is removed, before applying products recommended for application direct to wood (see paint systems guides).

### Oily woods e.g. teak

Ensure that the surface is thoroughly degreased using a recommended solvent to ensure all oils are removed. Sand smooth with 80-180 grade paper and then 280 grade paper. Remove sanding dust by wiping with solvent, to ensure any residual dust is removed. Ensure the surface is completely dry before applying products recommended for application direct to wood (see paint systems guides).



Always check the weather!

When painting outside, always check what weather conditions are anticipated during the preparation, application and drying phases of any project. Should fair weather prevail, whether or not to commence painting will then depend on the air and surface temperatures, humidity and dew point.

You may find the following hints and tips helpful when planning your project – further, product-specific guidelines can be found on individual product labels and data sheets.

Richard Jerram  
Technical Helpline



General Guidance Notes:

- Dew point is important when applying paint to a surface, as the evaporation of the solvent from the paint draws heat and/or energy from that surface, cooling it down. If conditions are right condensation may form on the surface of the paint resulting in various problems.
- Relative humidity is important as air can only hold so much water or solvent vapour at any one time. So, as the relative humidity increases, the level of solvent vapour the air can hold reduces, meaning paint will effectively dry more slowly.

- Air and substrate temperature will affect the drying properties of any paint. Failing to observe the recommended drying times can result in coating failure, including improper drying, wrinkling and loss of adhesion.
- Always avoid extreme air or temperature conditions; International products are tested across a range of temperatures, to ascertain the drying times and application characteristics of each product. Drying time recommendations are provided on our products labels; further information relating to weather considerations can be found on our product data sheets, available on our web site.

What is 'Relative Humidity'?

Relative Humidity, or 'RH', measures the amount of water in the air in vapour form, comparing it to the maximum amount of water that can be held at a given temperature. For example, if the RH is quoted as being 50% at 23°C, this would imply that the air contains 50% of the maximum level of water vapour it could hold at 23°C. 100% RH indicates that the air is at maximum saturation.

When humid air comes into contact with cooler air, or a cooler surface, the water vapour will turn into water droplets. When this occurs on a surface it is referred to as the 'Dew Point'.

Never apply paint above a maximum relative humidity of around 85% as at that level you will reach the dew point regardless of surrounding temperatures.

Relative Humidity can be measured using a hygrometer; a hygro thermometer will measure both temperature and humidity.

What is 'Dew Point'?

We have all experienced 'Dew Point' at some stage. Condensation on windows is an obvious example. Dew Point is the temperature at which the air can no longer hold its water vapour and starts to form water droplets i.e. condensation. Condensation forms when air temperature lowers, reducing the amount of energy available to keep the water in vapour format. For example, a window forms condensation when the cool night air hits the outside surface of the glass, lowering the surface temperature and the humidity in the house is high enough to cause condensation on the inside of the glass surface.

When painting, it is essential that you are able to paint a surface and avoid condensation forming during the application and drying stages. The optimum surface temperature for paint application is normally around 6°C above the Dew Point; however some products may be more or less tolerant. When working with International products, if in doubt, it's always worth checking the relevant technical data sheet – available on our website – for further advice.

Dew Point can be calculated using the relative humidity and the air temperature; however, Dew Point 'look-up' tables are widely available via the internet.

- Low temperatures will increase drying times; always check the 'through-dry' of each interim coat, before sanding or overcoating.

- Sanding too early can cause the paint to wrinkle under the sand paper, in some cases even tearing or gouging into the paint film making refurbishment difficult. Sanding before the paint film is 'through-dry' can also block the sand paper, meaning more sheets are needed to complete the task.

- Overcoating too early can cause wrinkling, blistering and loss of gloss in the finished paint job.

- High temperatures will reduce drying times, but can make application more difficult, as product flow and levelling can be compromised – particularly when applying finishes or varnishes. Where appropriate, thinning recommendations to help with higher temperature application are provided on labels and data sheet.

When applying two-part products in higher temperatures the pot life of the product will also be affected, reducing your work time window.

- Do not paint in direct sunlight, or when the substrate itself is excessively warm, as the residual heat of the substrate can adversely affect the application and drying properties of any paint product; this can result in poor flow and levelling, rapid drying, cracking and loss of gloss. Surface temperature can be measured using a surface thermometer.

Remember that surfaces heat up and cool down at a different rate to the surrounding air temperature, meaning even though the ambient temperature might seem warm, the temperature of the surface being worked on may still be quite cold. Very often one side of a boat will be in the shade and the other in bright sunlight meaning the application conditions will differ. Additionally, in the morning the surface temperature of the sunny side will generally be lower than the ambient temperature, whereas in the afternoon it may be higher.

Key points to note when applying finishes and varnishes:

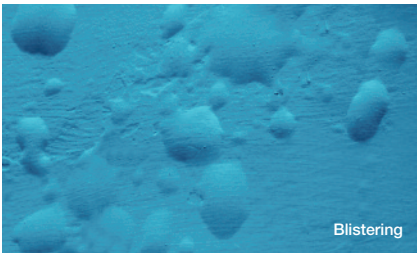
- Dry, well ventilated conditions are preferable when applying finishes or varnishes. Whilst gentle air movement will assist the drying process, a dust-free environment is critical to achieving a good quality gloss finish; always avoid painting in windy conditions.

Choosing a faster drying product or scheme, where available, will help to minimise the window for dust contamination.

- The effects of dust contamination may be further reduced by sanding lightly between each coat, removing residual dust by wiping down with a suitable solvent and allowing to dry before applying the next coat. This will also help improve the initial aesthetics.

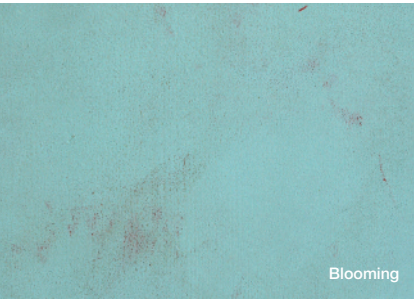
- Avoid applying two-part finishes or varnishes late in the afternoon or when relative humidity exceeds 80% as these products are particularly sensitive to moisture. Condensation during application or due to overnight ambient temperature changes can affect the chemical cure of these products resulting in loss of gloss.

- When painting or varnishing timber avoid applying if the ambient temperature is increasing (or predicted to increase) significantly. This is because rising temperatures cause timber to expand, which can lead to blisters forming in the paint or varnish film. A good tip is to apply when the temperature is falling, as the timber will better absorb the paint or varnish, giving better overall results.



Key points to note when applying epoxies (e.g. Watertite, Interprotect®, Gelshield® Plus)

- Whilst curing in high humidity conditions, particularly at lower temperatures, epoxies can develop an 'amine bloom' on the surface. This slightly sticky substance must be removed and can normally be washed off with a mild detergent. If it is not removed it can lead to the de-lamination of subsequent coats. Failure to remove the bloom will also make sanding more difficult.



- High humidity conditions can reduce the amount of solvent evaporation during the drying/curing stages; with epoxies this can lead to a 'soft cure'. As epoxy-based materials are generally applied at a higher film thickness, solvent can remain trapped in the film for many days leading to slow or poor final cure.

- Although epoxies generally cure well in most conditions, when the temperature falls to 7°C or below, curing can slow or even stop. Remember to check both day and overnight temperatures whether working outdoors or in a shed.

- Epoxy products usually respond well to a little heat; on cold days introducing a safe form of heating into the application area is well worth considering.

## ■ Making small repairs to GRP surfaces

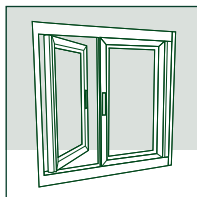
When working with fillers it's important to remember that epoxy fillers are recommended for both above and below the water areas; polyester fillers are suitable for use above the water only. International Watertite is a two-part epoxy filler, suited to most DIY repairs above and below water.

**Stuart Jordan**  
Specialist in Epoxies/Fillers Development



### 1 Health and Safety

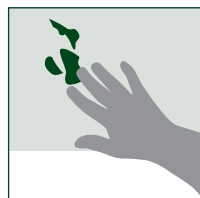
Before commencing preparatory work, ensure the area you are working in is adequately ventilated. Ensure you are wearing the correct PPE; we recommend safety spectacles, goggles or visors, nitrile rubber gloves, overalls (ensuring skin is not exposed) and a face mask.



➡ Before starting your project, **always check the weather conditions!** See **Pages 23-25**.

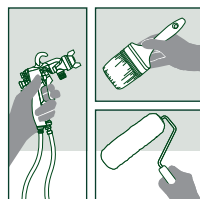
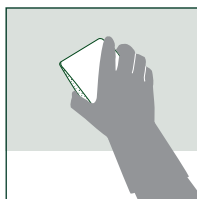
### 2 Inspection

Inspect for damage. Small repairs can be tackled easily, but any damage affecting a large area, or affecting the structure or hull integrity, should be referred to a professional for proper assessment.



### 3 Preparation and Priming

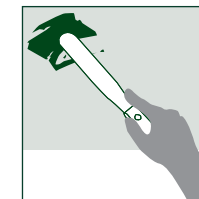
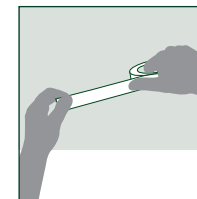
Remove any loose filler or gelcoat and abrade edges to remove loose material. Remove all debris and prime with an International or VC primer, according to the scheme recommendations provided elsewhere in this guide. For an osmosis protection scheme use Gelshield 200 or VC Tar 2.



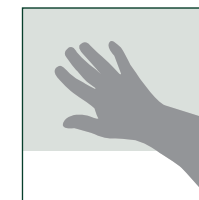
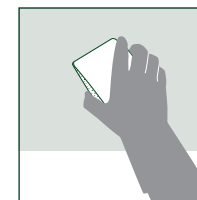
➡ See **Pages 66-69** for information on **osmosis treatment and prevention**.

### 4 Applying the filler

Mask off the damaged area and apply Watertite using a palette knife or spatula. Allow to cure, following the recommendations provided on the product label.



Once cured, sand with 80-220 grade paper. The finished repair should be smooth and level with the surface. If required a second layer of filler may be applied, repeating the same process. The repaired area can then be primed, ready for painting.



➡ See **Page 19** for **sandpaper guidelines**.

**Richard Jerram, Technical Helpline**



### "Working with epoxy fillers?"

- Two-part epoxy fillers are the most widely used fillers in the yachting 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.
- Below the waterline, epoxy fillers must be used. Polyester fillers should not be used as they have a greater propensity to absorb water.

**Click or call and ask the experts!**

## ■ Removing aged finishes or varnishes

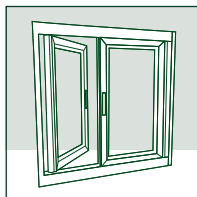
When preparing a surface previously painted with a finish or varnish scheme it may be necessary to remove the aged product, back to bare substrate. This will be required if the existing coating is in poor condition or if you're intending to apply a two-part product onto a surface previously painted with a one-part finish or varnish.

**Louise Bebbington**  
Senior Product Manager, Finishes and Varnishes



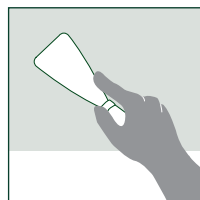
### 1 Health and Safety

Before commencing work ensure the area you are working in is adequately ventilated. Ensure you are wearing the correct PPE; we recommend safety spectacles, goggles or visors, nitrile rubber gloves, overalls (ensuring skin is not exposed) and a dust mask.

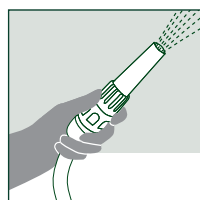
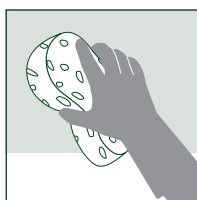


➔ Before starting your project, **always check the weather conditions!** See **Pages 23-25**.

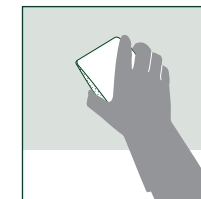
2 Remove any sections of the aged finish or varnish that are already loose, flaking or detached using a scraper – rounding the ends of the scraper before commencing will avoid gouging the surface, resulting in unnecessary repairs.



3 Clean the surface with Super Cleaner and rinse with fresh water to remove any polish, wax or contaminants.

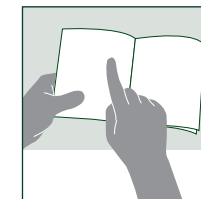


4 Abrade using 60-120 grade paper, removing as much of the paint or varnish as possible.



➔ See **Page 19** for **sandpaper guidelines**.

5 Prepare according to substrate, following bare substrate preparation guidelines.



➔ See **Page 22** for **bare substrate preparation guidelines**.

**Richard Jerram, Technical Helpline**



### "Hints to help you achieve a perfect finish."

- We do not recommend using a chemical paint stripper when working with fibreglass as this may cause damage to the substrate.
- When working with wood, always work in the direction of the grain, whether sanding or applying varnish. This will avoid scratches that can still show through, even after many coats of paint or varnish.

**Click or call and ask the experts!**



## ■ Removing antifouling

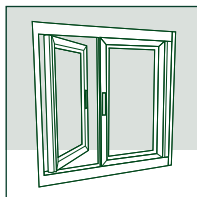
If your existing antifouling is in poor condition, we recommend removing it completely before repainting. Interstrip AF has been formulated for removing antifouling from all substrates and is safe to use on glass fibre without harming the gelcoat.

**Kate Moss**  
Specialist in Antifoulings Development



### 1 Health and Safety

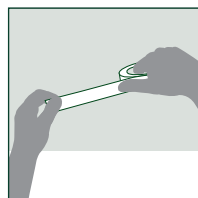
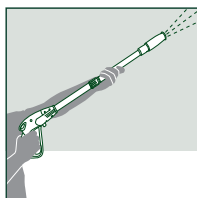
Before commencing preparatory work, ensure the area you are working in is adequately ventilated. Ensure you are wearing the correct PPE; we recommend safety spectacles, goggles or visors, nitrile rubber gloves, overalls (ensuring skin is not exposed) and a solvent mask or a respirator (if working on larger areas or in confined spaces).



➔ Before starting your project, **always check the weather conditions!** See **Pages 23-25**.

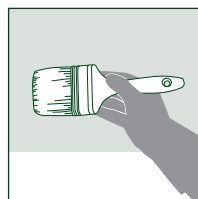
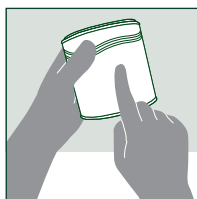
### 2 Preparation

High pressure fresh water wash, to remove loose antifouling; ensuring all residue and wash water is contained and disposed of, according to local legislation. Mask off areas to be stripped.



### 3 Applying Interstrip

Apply Interstrip AF liberally, using an old brush, following the application guidelines provided on the product label.



Leave on the surface. The product needs time to work; the time needed will vary depending on the temperature and the amount of old antifouling on the hull.

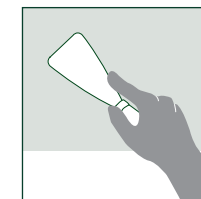


For best results, work on a small area at a time – do not allow the product to dry out. See product label for more information.



### 4 Removing old antifouling

Remove while still soft with a blunt scraper. Interstrip AF can remove several coats at a time, but heavy build up may require more than one application. Residue should be disposed of according to local legislation. Reapply fresh antifouling after sanding and priming the hull.



See **Page 43** for **antifouling application advice**.

**Richard Jerram, Technical Helpline**



### "Is your existing antifouling in good condition?"

If your existing antifouling is in good condition, it may not need removing and can simply be overcoated, following a high pressure fresh water wash. Always ensure you check for compatibility before applying new antifouling; incompatible or unknown antifouling should be sealed with Primocon. See **Page 52** for more information on **antifouling compatibility**.

**Click or call and ask the experts!**

■ Applying finishes

Before starting any painting project consider the 3 most critical questions:

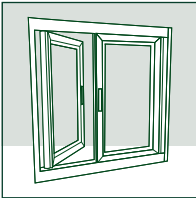
- 1) What preparation is necessary 2) Does the substrate matter and 3) What repair and upkeep is needed. Page 58 of this guide will provide this information and help you choose the best product for your project.

Neil Nicolson  
Specialist in Finishes Development



1 Health and Safety

Before commencing preparatory work, ensure the area you are working in is adequately ventilated. Ensure you are wearing the correct PPE; we recommend safety spectacles, goggles or visors, nitrile rubber gloves, overalls (ensuring skin is not exposed) and a solvent mask.



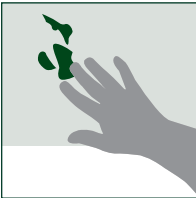
➡ Before starting your project, **always check the weather conditions!** See Pages 23-25.

🔍 For health and safety reasons, two-part polyurethane products should only be spray applied by a professional applicator.

Previously painted surfaces:

2 Inspection

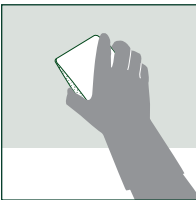
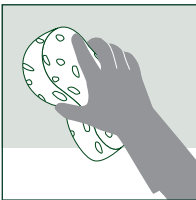
Check for areas of damage, separation or peeling, or any other indications that the existing coating is not firmly adhered to the substrate.



➡ Using a two-part finish? **Ensure your existing coating is compatible.** See Page 59 for **compatibility testing guidance.**

3 Preparation – in good condition

Clean with Super Cleaner to ensure any residual polish, wax or surface contaminants are removed. Rinse with fresh water and allow to dry. Sand smooth with 280-320 grade paper. Clean thoroughly and allow to dry completely. Continue at Step 6.



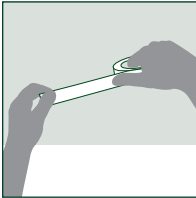
Preparation – in poor condition

If previous finish is cracking, peeling or showing signs of separation from the substrate this should be totally removed.

➡ See Page 29 for advice on **removing existing finishes.**

4 Masking

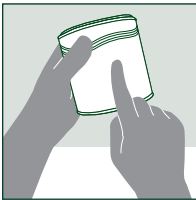
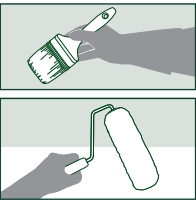
Before priming/undercoating, mask off the area to be painted.



Bare substrate:

5 Priming

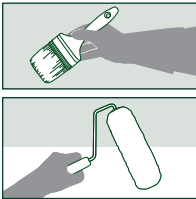
Bare substrates should be primed to promote good adhesion and provide a smooth even surface, prior to undercoating. Your choice of primer will be dictated by the substrate; product recommendations are provided on labels and data sheets. Remember to pay particular attention to drying times and overcoating intervals.



🔍 Due to the porous nature of aged gelcoats, the risk of moisture or solvent entrapment – leading to blisters – is increased; applying Interprotect followed by Perfection Undercoat can reduce this risk and seal the gelcoat, prior to applying the finish.

6 Undercoating

Primed or previously painted surfaces should be undercoated. An undercoat will provide additional depth of colour and improve the durability and film build of the overall paint system. International offers two undercoats for use with its finishes range.

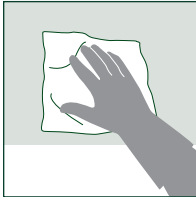
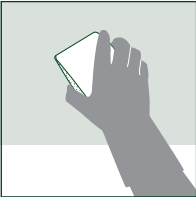


➡ See Pages 60-61 for **undercoat recommendations.**

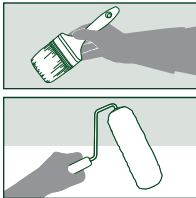
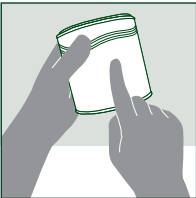
🔍 Mixing the second coat of undercoat 50:50 with the topcoat will produce a satin effect, which will highlight any imperfections (to be sanded smooth) as well as improving the gloss and depth of colour of the finish.

7 Application

Sand the undercoat smooth with 320-400 grade paper and remove dust with a wipe or tack rag.



Apply the finish, according to label recommendations.



➡ See Page 59 of this guide for information on **finish application techniques.**

Richard Jerram, Technical Helpline



“Achieve a perfect result every time!”

- Ensure an even spread by holding the brush at 45° – this minimises brush marks.
- The best finish is achieved on large areas by two people, one to apply the paint, the other following immediately behind to ‘tip off’ 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 damp will spoil the gloss.
- Never apply direct from the can as this will introduce contamination.
- Always pour the amount of paint that you expect to use into a separate container.

Click or call and ask the experts!



## ■ Painting your bilge

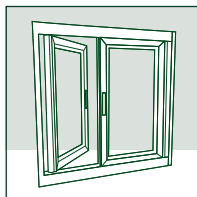
A freshly painted bilge is much easier to wipe down and keep clean, reducing the risk of odours that may result from unwanted residue. A clean bilge will also make it easier to find small parts or fastenings, which may have been dropped whilst working on your engine or other equipment.

**Boris Webber**  
Technical Helpline



### 1 Health and Safety

Before commencing preparatory work, ensure the area you are working in is adequately ventilated. Ensure you are wearing the correct PPE; we recommend safety spectacles, goggles or visors, nitrile rubber gloves, overalls (ensuring skin is not exposed) and a solvent mask or a respirator (if working in confined spaces).

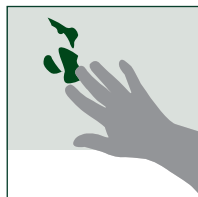


➔ Before starting your project, **always check the weather conditions!** See Pages 23-25.

### Previously painted surfaces:

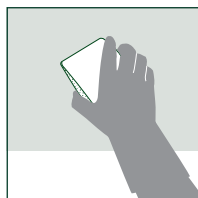
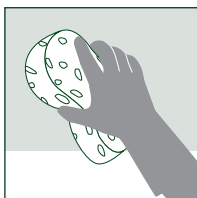
#### 2 Inspection

Check for areas of damage, separation or peeling, or any other indications that the existing coating is not firmly adhered to the substrate.



#### 3 Preparation – in good condition

Clean with Super Cleaner and rinse with fresh water. Allow to dry. Sand smooth with 280-320 grade paper. Clean thoroughly and allow to dry completely. Continue at Step 5.



### Preparation – in poor condition

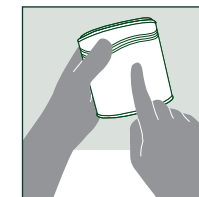
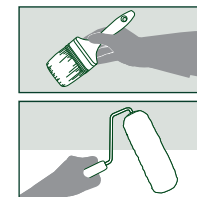
If previous finish is cracking, peeling or showing signs of separation from the substrate this should be totally removed.

➔ See Page 28 for advice on **removing existing finishes**.

### Bare substrate:

#### 4 Priming

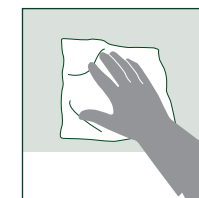
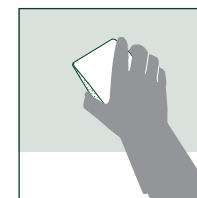
Bare substrates should be primed to promote good adhesion and provide a smooth even surface, prior to applying Danboline. Your choice of primer will be dictated by the substrate; product recommendations are provided on labels and data sheets. Remember to pay particular attention to drying times and overcoating intervals.



i Pay particular attention if the substrate is the reverse side of moulded GRP – this does not need to be primed.

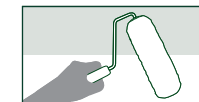
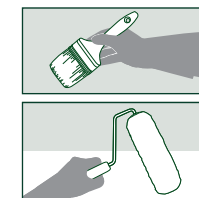
#### 5 Application

Sand the primer smooth with 180-280 grade paper and remove dust with a wipe or tack rag.



Apply 1-2 coats of Danboline.

i For added protection against moisture absorption and osmosis in bilge areas, use International Gelshield products – prior to applying Danboline – always follow the label instructions.





■ Preparing a non-slip deck

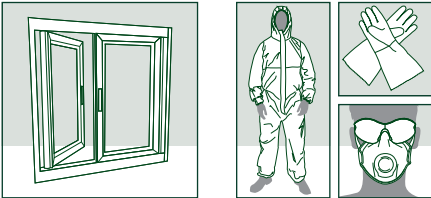
A deck demands a tough coating to protect it from everyday wear and tear. Where a non-slip surface is required International offers 3 alternative solutions.

Heather Morton  
Specialist in Retail Finishes Development



1 Health and Safety

Before commencing preparatory work, ensure the area you are working in is adequately ventilated. Ensure you are wearing the correct PPE; we recommend safety spectacles, goggles or visors, nitrile rubber gloves, overalls (ensuring skin is not exposed) and a solvent mask.



➡ Before starting your project, **always check the weather conditions!** See **Pages 23-25**.

Previously painted surfaces:

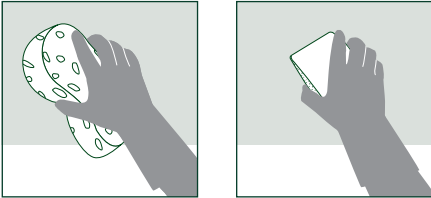
2 Inspection

Check for areas of damage, separation or peeling, or any other indications that the existing coating is not firmly adhered to the substrate.



3 Preparation – in good condition

Clean with Super Cleaner, rinse with fresh water and allow to dry. Sand smooth with 280-320 grade paper. Clean thoroughly and allow to dry completely. Continue at **Step 6**.



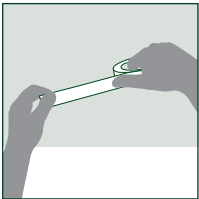
Preparation – in poor condition

If previous finish is cracking, peeling or showing signs of separation from the substrate this should be totally removed.

➡ See **Page 28** for advice on **removing existing finishes**.

4 Masking

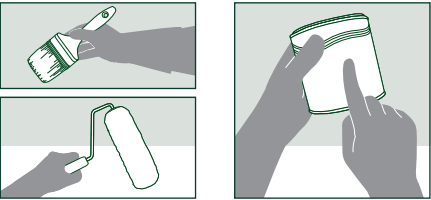
Before priming or applying a deck finish, mask off the area to be painted.



Bare substrate:

5 Priming

Your choice of primer will be determined by the substrate and the choice of deck finish product. Priming recommendations are provided on labels and data sheets. Remember to pay particular attention to drying times and overcoating intervals.

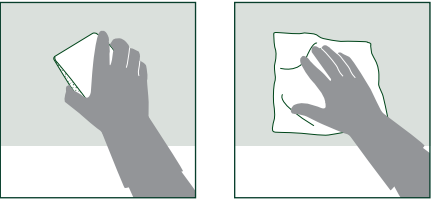


*i* Due to the porous nature of aged gelcoats, the risk of moisture or solvent entrapment – leading to blisters – is increased; applying Interprotect followed by Perfection Undercoat can reduce this risk and seal the gelcoat, prior to applying the finish.

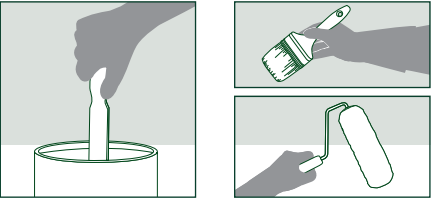
Using Interdeck (ready-mixed formula):

6 Application

Sand the primer (if used) with 180-220 grade wet or dry paper. Remove dust with a dust wipe or tack rag, according to label recommendations.



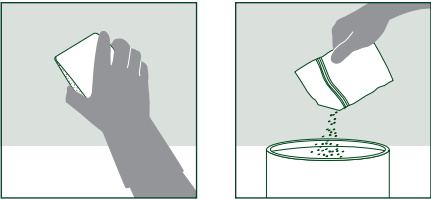
Mix Interdeck thoroughly; apply 1-2 coats. For best results either stipple by brush or use a mohair roller.



Using Non-Slip Additive with International® Toplac® or Perfection (hand-mixed method):

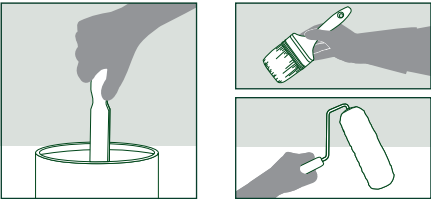
7 Application

Choose your paint system – see **Pages 60-61** of this guide. Apply primer (if required) and undercoat following label recommendations. Add the contents of the Non-Slip Additive sachet to International Perfection or Toplac.



➡ Using a two-part finish? **Ensure your existing coating is compatible.** See **Page 59** for compatibility testing guidance.

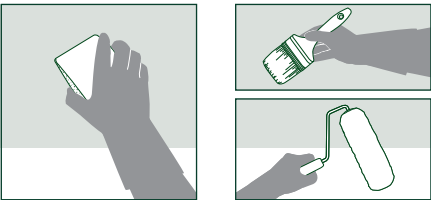
Mix thoroughly. Apply 1-2 coats to deck area, using a brush or roller. For best results either stipple by brush or use a mohair roller.



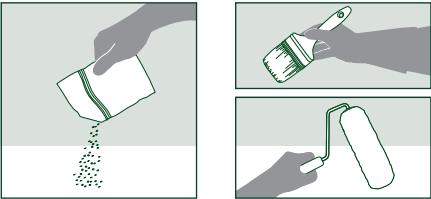
Using Non-Slip Additive with International® Toplac® or Perfection (broadcast method):

8 Application

Choose your paint system – see **Pages 60-61** of this guide. Apply primer (if required) and undercoat following label recommendations.



Apply one coat of topcoat. While the paint is still wet, sprinkle Non-Slip Additive over the surface. Allow to dry thoroughly following the recommendations provided on the finish label. Remove excess grit. Apply second coat of finish.



■ Applying varnishes

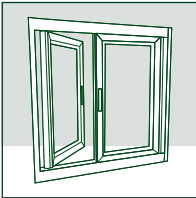
To achieve a professional result from any varnish project, thorough preparation is critical. If applying on to a previously varnished surface, the condition of the existing coating and its compatibility with the new varnish product should thoroughly checked before commencing any preparatory or application work.

Sam Bruce  
Specialist in Varnishes Development



1 Health and Safety

Before commencing preparatory work, ensure the area you are working in is adequately ventilated. Ensure you are wearing the correct PPE; we recommend safety spectacles, goggles or visors, nitrile rubber gloves, overalls (ensuring skin is not exposed) and a solvent mask.



➡ Before starting your project, **always check the weather conditions!** See **Pages 23-25**.

Previously varnished surfaces:

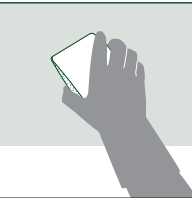
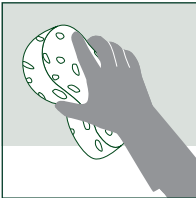
2 Inspection

Check for areas of damage, separation or peeling, or any other indications that the existing coating is not firmly adhered to the substrate.



3 Preparation – in good condition

Clean with thinners. Sand smooth with 280-320 grade paper. Remove sanding dust by brushing or dusting. Wipe down thoroughly with solvent and allow to dry completely, to ensure any residual sanding dust is removed. (Note: Small imperfections may be spot primed and sanded down prior to full varnish application.) Continue at **Step 6**.



➡ Using a two-part varnish? **Ensure your existing coating is compatible.** See **Page 59** for **compatibility testing guidance**.

Preparation – in poor condition

If previous varnish is cracking, peeling or showing signs of separation from the substrate this should be totally removed.

➡ See **Page 28** for advice on **removing existing varnishes**.

Continue at **Step 5**.

Bare wood:

4 Preparation

Bare wood should be prepared following the appropriate bare substrate preparation guidelines.

➡ See **Page 22** for **substrate preparation guidelines**.

Continue at **Step 5**.



It is important to ensure all sanding residue is removed prior to varnishing, as this will impair adhesion and give a 'bitty' finish. Before commencing any varnish work, decant the amount of varnish you expect to use into a separate container, to avoid introducing contamination into the tin.

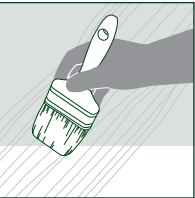
5 Priming

To promote penetration of the surface and the adhesion of subsequent coats; we recommend thinning the first coat of varnish. Decant the amount of varnish you expect to use into a separate container. Thin for priming according to label recommendations.



Apply 1-2 thinned coats of varnish following label recommendations.

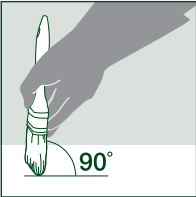
Alternatively, prime using Clear Wood Sealer Fast Dry; a clear polyurethane primer with excellent grain filling properties that will improve overall scheme durability and aesthetics.



6 Application

Applying varnish with a brush is usually the best method, although roller application can be effective on large, flat surfaces.

Brush out, using firm strokes along and then across the grain, holding the brush at 90° to the surface.



Finally, 'tip off' by gently stroking surface with the brush at a 45° angle, following the grain. The brush you use should be used only for varnishing.



Richard Jerram, Technical Helpline

“Achieve a perfect result every time!”

Always follow the scheme recommendations as specified on the label; this will indicate the minimum number of coats required and the sanding recommendations between coats. This information will vary depending on the product. To achieve long-lasting protection, you should plan to apply up to ten coats (depending on the system). As the number of coats increases, sanding between coats with a fine grade paper will increase the level of gloss and depth of lustre.

Click or call and ask the experts!



Hints and tips

- Keep the sandpaper clean and change it frequently.
- Sand by numbers, finishing the surface with a progressively finer grade of paper.
- Varnishing is best achieved on warm, dry mornings – cold weather slows drying and damp 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.

- After cleaning with the correct thinners, wash the brush in detergent and warm water, dry and wrap in greaseproof paper in a fine chisel shape.
- Alternatively, having cleaned and washed the brush, suspend by its handle to avoid any 'fishtailing' of the bristle.
- As the varnish ages in the tin you may find there are lumps or contamination. Sieving the varnish into a separate container through cheesecloth, a paint filter or an old stocking is a good solution to this problem.
- 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.

■ Applying antifouling

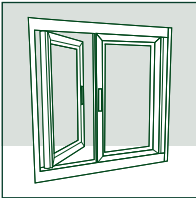
Antifouling can be applied using a brush or roller. Using a small roller is less work on the arm but takes longer to cover the surface area. If a brush is preferred, choose a large width brush; the finish will not be as smooth as a topside paint so the type of brush used is not critical.

**Colin Anderson**  
Specialist in Antifoulings Development



**1 Health and Safety**

Before commencing preparatory work, ensure the area you are working in is adequately ventilated. Ensure you are wearing the correct PPE; we recommend safety spectacles, goggles or visors, nitrile rubber gloves, overalls (ensuring skin is not exposed) and a solvent mask.

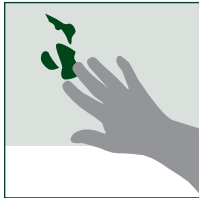


➡ Before starting your project, **always check the weather conditions!** See Pages 23-25.

**Previously painted surfaces:**

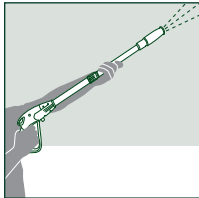
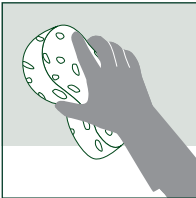
**2 Inspection**

Check for areas of damage, separation or peeling, or any other indications that the existing coating is not firmly adhered to the substrate.



**3 Preparation – in good condition**

High pressure fresh water wash, to remove loose antifouling; ensuring all residue and wash water is contained and disposed of, according to local legislation. Allow to dry. Check for compatibility. Continue at **Step 5**.



➡ See **Page 52** to check **antifouling compatibility**.

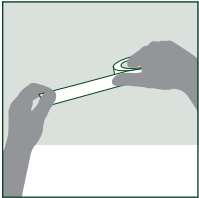
**Preparation – in poor condition**

If existing antifouling is cracking, peeling or showing signs of detachment from the substrate this should be totally removed.

➡ See **Page 30** for advice on **removing existing antifoulings**.

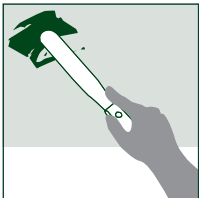
**4 Masking**

Before priming or applying antifouling, mask off the area to be painted.

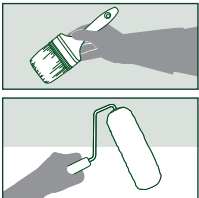


**5 Repair/Priming**

Repair damage with Watertite Epoxy Filler where necessary. Inspect GRP for gelcoat damage and signs of osmosis – treat accordingly.



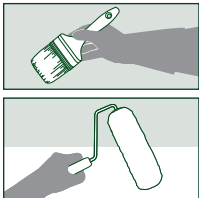
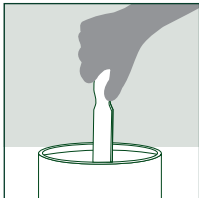
Seal incompatible or unknown antifoulings with Primocon. Bare substrates should be primed, according to substrate. Product recommendations are provided on labels and data sheets. Remember to pay particular attention to drying times and overcoating intervals.



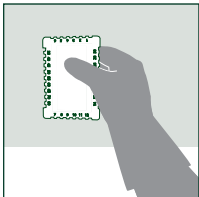
➡ See **Page 69** for advice on **osmosis treatment**. See **Page 26** for advice on **repairing GRP**.

**6 Application**

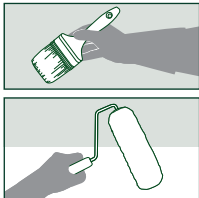
Mix paint thoroughly with a stirring stick, ensuring that any settlement is mixed in. Apply according to label recommendations, using a brush or roller.



Apply the antifouling at the correct thickness; this may mean an extra coat is needed, depending on application methods and conditions.



Apply an extra coat to leading and trailing edges; e.g. waterline, trim tabs, outdrives, keels and rudders. These areas experience more water turbulence and so more wear on the paint surface.



Follow overcoating times and immersion times carefully. Failure to do this could result in detachment, blistering or cracking of the antifouling. The marine environment is harsh for paint so it must be allowed to dry thoroughly before immersion.

**Richard Jerram, Technical Helpline**



**“Remember your PPE!”**

Most antifoulings contain biocides so should be handled with care; ensure the correct personal protective equipment (PPE) is worn at all times.

**Click or call and ask the experts!**



## ■ Painting outdrives, stern gear, propellers and keels

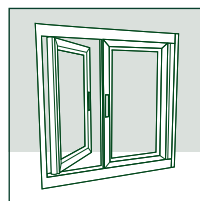
Outdrives and stern gear are usually constructed from aluminium. Propellers are usually bronze or aluminium. Keels are typically cast iron or lead. It's important to choose an antifouling that is hard, durable and suitable for these high wear areas and also one that is compatible with the substrate you are painting.

**Roger Bolton**  
UK Sales and Marketing Team



### 1 Health and Safety

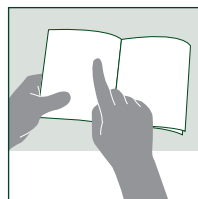
Before commencing preparatory work, ensure the area you are working in is adequately ventilated. Ensure you are wearing the correct PPE; we recommend safety spectacles, goggles or visors, nitrile rubber gloves, overalls (ensuring skin is not exposed) and a solvent mask.



⇒ Before starting your project, **always check the weather conditions!** See **Pages 23-25**.

### 2 Preparation

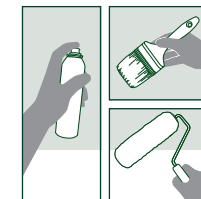
The key to protecting your underwater metals from corrosion is correct preparation of the substrate and choosing the best priming solution for your project. Before commencing any preparation, it is important to establish the type of metal you are working with.



⇒ Once you've confirmed your substrate see **Page 22** for **substrate preparation information** and follow this advice carefully.

### 3 Priming

Apply a primer recommended for the selected antifouling and substrate; always follow the recommendations given on the product label.



⇒ See **Pages 54-57** for **primer recommendations**.

### 4 Applying antifouling

Apply the selected antifouling, following the label recommendations on film thickness, overcoating and immersions times carefully.



⇒ Not all antifoulings are suitable for application to bronze and aluminium, so it's important to **check compatibility** when selecting which antifouling product to use. See **Pages 04-06** for **antifouling product information**.

**Richard Jerram, Technical Helpline**



### "Take care with zinc anodes!"

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 coating adhesion can be an issue, particularly on propellers. Thorough surface preparation is critical to promote good adhesion between the substrate and the coating.

**Click or call and ask the experts!**



## ■ What is antifouling?

Antifouling is the most common (and arguably the most important) painting job carried out by boat owners. It is vital to protect your boat through antifouling, as once fouling has a hold on your hull it will rapidly colonise the surface, making it difficult to remove.

Applying an antifouling paint will prevent the attachment of fouling organisms, such as barnacles, weeds and slime, to the hull of your boat – a fouled hull can cause serious problems, therefore prevention is much better than cure.

### How do antifoulings work?

Antifouling paints work by delivering a controlled, steady release of biocide (such as copper) from the paint surface into the microscopic layer of water next to the hull. It is this layer of biocide that stops the fouling from settling. Modern antifouling paints are specifically formulated to release just the right amount of biocide to keep the surface clean throughout the season, without the need to scrub your boat.

### How do we do this?

It's simple to control fouling, yet the process is a complex one! The paint must be formulated to release just enough biocide to stop fouling – but no more.



### Why use an antifouling?

As active boaters, we are all concerned about how our activities may impact on the environment. Fuel consumption and engine efficiency can contribute to smog: waste tank discharge can pollute waters and boating in sensitive areas can affect the balance of aquatic life. Fortunately, these effects can be controlled and minimised, ensuring a clean, safe environment for all of us to enjoy our boating passion. By taking steps to minimise your potential impact on the marine environment, you can contribute towards keeping it clean and safe for all of us to enjoy.

### There are THREE key reasons fouling growth should be prevented:

#### Safety

Heavy fouling growth will reduce the responsiveness of your boat as well as making it sit lower in the water, due to the extra weight. Fouling can also grow unevenly across the bottom, throwing your boat off balance, potentially making it dangerously uncontrollable. This can have serious implications in challenging weather conditions.

#### To prevent hull damage

Fouling can burrow into hull coatings, opening up the surface and allowing water to come in contact with unprotected metals and fibreglass. This can cause corrosion to metals and blisters in fibreglass through osmosis. These problems are expensive and time consuming to repair.

#### Speed & Efficiency

Fouling causes drag – drag reduces speed. Therefore, more fuel or energy is needed to drive the boat through the water to maintain the same speed. For racing boats this can make a big difference when competing. However, an increase in fuel consumption will not only cost more, but will also have an environmental impact due to increased air pollution.



### Choosing an antifouling

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 both to your boating style and to the fouling challenges in your area. Different water qualities and temperatures produce different types and breeds of fouling. Even in a small area the differences can be quite dramatic; affected by outfalls, pollution, inflows from rivers and streams, the speed of flow of the water, tidal exchange, salinity and even shading from cliffs, trees and buildings.

### The International antifouling range provides protection from the THREE key fouling challenges:

#### Animal

Two types of animal fouling commonly attach to boat hulls. **Hard-bodied animal fouling** organisms, such as Barnacles and Tubeworms, have a hard outer shell, can grow to a considerable size, and exert a strong negative impact on boat performance.



**Soft-bodied animal fouling**, such as Hydroids and Ascidiars, lack a shell but are still difficult to remove and significantly increase drag.

#### Weed

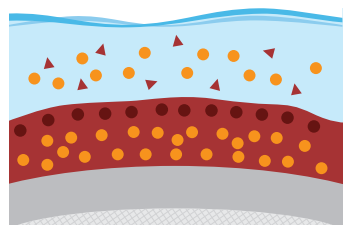
Weed requires light to grow and is normally confined to the sides of vessels, being particularly prevalent at the waterline. The three types of weed fouling are characterised by their colour, Green, Brown or Red. All types can be responsible for increases in drag and loss of performance.

#### Slime

Slime consists of a collection of many different species of single celled organisms that produce a syrupy medium in which to settle. It is present in some form on virtually every surface immersed in marine and fresh water environments. Slime can vary in appearance from clear to dark brown or green depending on the species present and may, depending on composition, reduce the efficacy of underlying antifouling coatings. Slime is often not easily removed by the motion of a hull through the water.

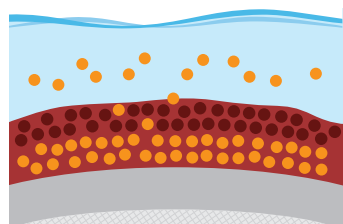
## Antifouling types

We, at International, manufacture a wide variety of antifoulings to meet all sorts of fouling challenges and often, more importantly, different boating styles. The following information will help you identify which 'type' of antifouling is most suited to your needs.



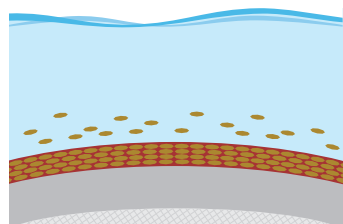
### Polishing

- Polishing action provides controlled biocide release for long-term performance
- Wears away with use
- Reduced maintenance – minimal build-up reduces preparation time
- Haul and relaunch without repainting



### Hard

- Hard, durable, season-long finish
- Resistant to abrasion and rubbing
- Suitable for fast craft and craft on dry moorings
- Scrubbable finish (see Page 51)



### Thin Film

- Fluoro microadditive for super speed
- Ultra smooth, low-friction surface for performance boat owners, that:
  - Increases speed
  - Reduces fuel consumption
  - Minimises paint build-up
  - Improves fuel efficiency
  - Extends engine life



### Biolux® Technology

'Biolux Technology' is a unique antifouling technology developed by International. It consists of a system of organic boosting biocides incorporated in a highly effective controlled release film.



### Did you know...

**Copper as an antifouling biocide:** Copper is an element. It is present throughout the natural world and it is an essential micronutrient that all living organisms need in order to survive. Indeed it is even present in small amounts in our drinking water, which occurs due to erosion of copper plumbing. All this is normal. Copper can also be used to inhibit marine fouling growth. That is why it's currently used in antifouling paint. In fact, copper has been used as an antifouling biocide for hundreds of years.

## Responsible use of antifoulings

International® leads the way in innovative technology, providing effective long-lasting antifouling paints that minimise potential impacts to the environment.

The use of antifoulings in many countries is highly regulated and all International antifoulings are registered and approved by the relevant authorities.

For more information on our products including technical data, application information, features and benefits see the appropriate sections on [yachtpaint.com](http://yachtpaint.com).

The following table is a quick checklist summary for the responsible use of antifoulings.



### Antifouling Checklist

- ✓ Consult your local boatyard for advice on maintaining your boat.
- ✓ Choose an antifouling appropriate for your boating needs (lifetime, performance etc) that requires little or no in-season maintenance.
- ✓ Avoid unnecessary frequent scrubbing of your antifouling.
- ✓ Read the product label and follow H&S guidelines for personal protective equipment when applying antifoulings.
- ✓ Use a registered antifouling paint.
- ✓ Apply the right amount of paint for the recommended lifetime, even if this means putting on an extra coat or re-applying after 1-2 years.
- ✓ Follow the correct overcoating and immersion times of the antifouling.
- ✓ Collect and dispose of wash down water and paint scrapings as required by law. Contact your local authority for advice on disposal methods.
- ✗ Do not discard tins or pour paint into water courses, use the facilities provided. It is best to allow paints to harden before disposal.

### Scrubbing your antifouling – the facts

A common misconception is that scrubbing the paint surface to reveal a fresh layer of biocide will enhance the long term performance of the paint. This is not the case. Excessive or too frequent scrubbing can, in fact, dramatically shorten the lifetime of the paint.

International antifouling paints are designed to perform with little or no maintenance. If the surface is rubbed away by regular cleaning, then a large concentration of biocide is released when some of the top layer is removed. The more you scrub, the more you can remove the paint film and the quicker the paint can fail. This will become a constant source of maintenance, as the more you scrub, the quicker the paint will fail, meaning you need to scrub again and more frequently and so on, and so on.

Constant scrubbing creates further issues. First, it releases more biocide into the water than the paint was designed to release. Second, underwater scrubbing also releases paint flakes and debris into the marine environment.

### Talk to your local boatyard

Your local boatyard uses professional paint applicators to apply antifouling paints. These applicators are trained in the safe application and removal of antifoulings. Your local boatyard can give good advice on which antifoulings to choose for your type of boat (hard, polishing) and the performance strength required for your boating environment.



### Did you know...

Most antifoulings never release all the biocide in the paint film. They are designed to release just the right amount of biocide during the useful life of the paint to control fouling. At the end of this time a proportion of the biocide is still locked away in the paint that is still left on the boat. This biocide was never designed to be released. Scrubbing the paint liberates this biocide, flushing the water with much more biocide than is necessary.

## ■ Is my new antifouling compatible?

Once you've identified the International antifouling that's most suitable, if you have an existing coating on your hull you will need to establish the compatibility of the two products. Use this simple table to check compatibility between International® antifoulings and also with competitor products.

		New Antifouling									
		Micron® Optima	Micron® Extra	Cruiser® Uno	Bottomcoat	Interspeed Ultra	Trilux® 33	Navigator	VC® Offshore	VC® 17m Extra	Trilux® Prop-O-Drev
Existing Antifouling (in Good Condition)	Micron® Optima	●	●	●	●	●	●	●	●	●	●
	Micron® Extra	●	●	●	●	●	●	●	●	●	●
	Cruiser® Uno	●	●	●	●	●	●	●	●	●	●
	Waterways Plus	●	●	●	●	●	●	●	●	●	●
	Navigator	●	●	●	●	●	●	●	●	●	●
	Trilux® 33	●	●	●	●	●	●	●	●	●	●
	VC® Offshore	●	●	●	●	●	●	●	●	●	●
	Interspeed Ultra	●	●	●	●	●	●	●	●	●	●
	VC®17m Extra	●	●	●	●	●	●	●	●	●	●
	Unknown product	●	●	●	●	●	●	●	●	●	●
	Previous antifouling in poor condition	●	●	●	●	●	●	●	●	●	●
	Blakes Tiger	●	●	●	●	●	●	●	●	●	●
Blakes Hard Racing	●	●	●	●	●	●	●	●	●	●	
Awlgrip® Awl®star Gold Label	●	●	●	●	●	●	●	●	●	●	
Jotun Non Stop	●	●	●	●	●	●	●	●	●	●	
Jotun Racing	●	●	●	●	●	●	●	●	●	●	



● Apply after a light wet sand. Wash with fresh water and allow to dry.

● Remove the antifouling using Interstrip AF. ➡ See **Removing antifouling** on Page 30.

● Apply a barrier coat of Primocon® before applying antifouling. ➡ See **Applying antifouling** on Page 43.

### Interstrip AF

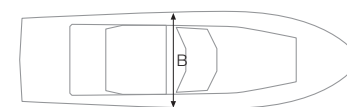
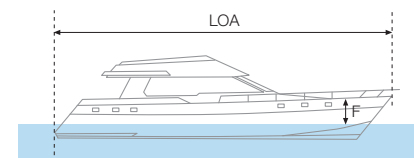
A paint stripper specially formulated for removing old or unknown antifoulings without damaging the underlying substrate (including gelcoat).



## ■ How much antifouling paint do I need?

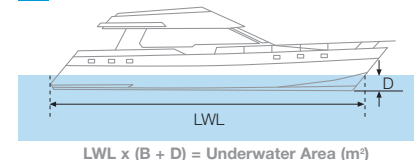
Use these following quick steps to calculate the amount of paint you need:

1. Work out the area to be painted using the appropriate formulation (below).
2. Divide the area by the coverage of the paint you've chosen to determine how many litres per coat you will need.
3. Multiply the litres per coat by the number of coats to give your total paint requirement.

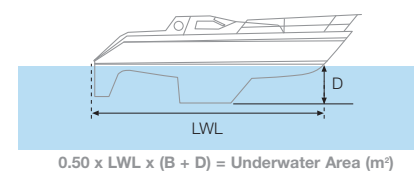


### Underwater area formulations

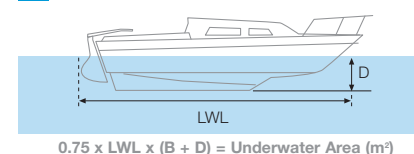
#### 1 Full bodied craft



#### 2 Fin keeled racing craft



#### 3 Medium draft racing craft



**Important:** If you own an aluminium boat, only apply antifouling paints specifically recommended for aluminium to prevent corrosion. **Never** apply products containing Cuprous Oxide to aluminium.



### Top Tip

Apply an extra coat to all leading and trailing edges, water-line, trim-tabs, outdrives, keel and rudder. High turbulence in these areas tends to wear the antifouling faster.



### Information

#### Abbreviations

LOA	=	Length Overall
LWL	=	Length Waterline
B	=	Beam
D	=	Draft
F	=	Freeboard

#### Conversion Table

1 foot	=	0.3 metres
1 metre	=	3.281 feet
1 square foot	=	0.093 square metres
1 square metre	=	10.764 square feet
1 gallon	=	4.546 litres
1 litre	=	0.219 gallon



### Top Tip

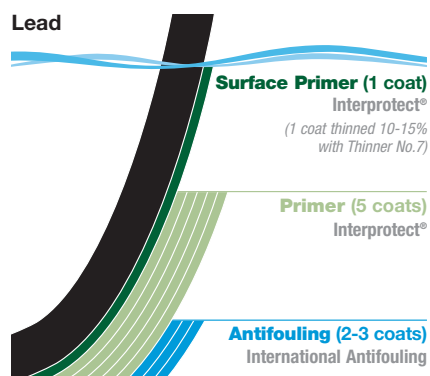
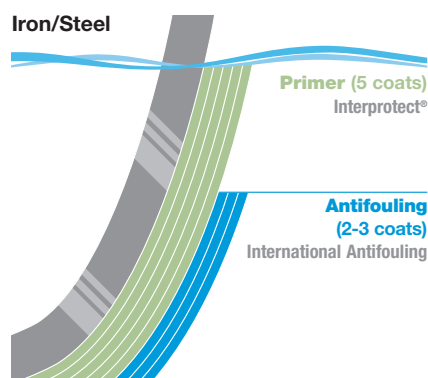
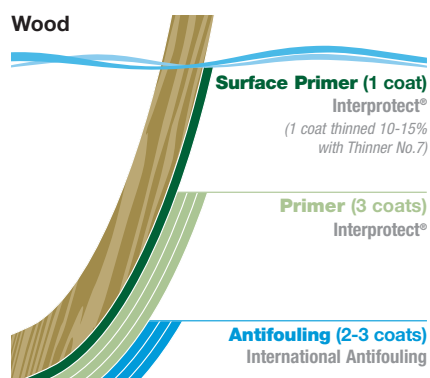
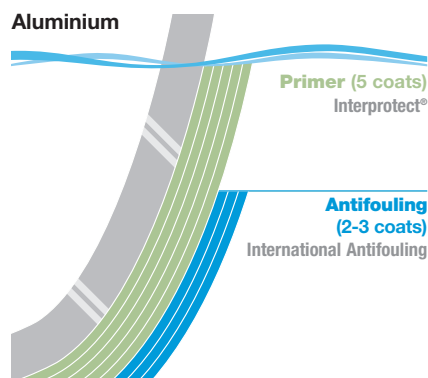
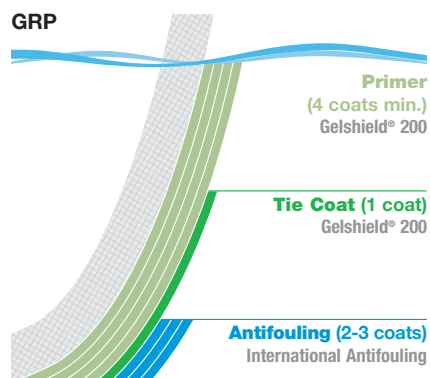
Always use the specified amount of antifouling. Under-application can result in premature fouling and costly mid-season haul out.



For more information see the **Antifouling quick reference guide** on Page 04.

## Below water schemes: two-part products

These schemes provide the maximum level of protection.

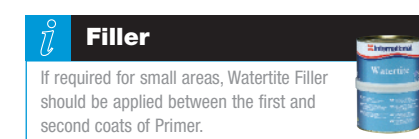
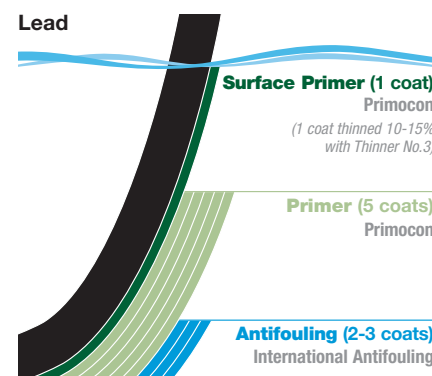
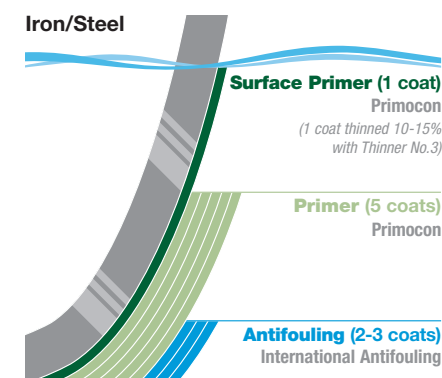
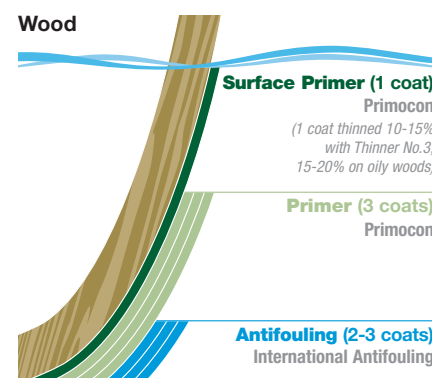
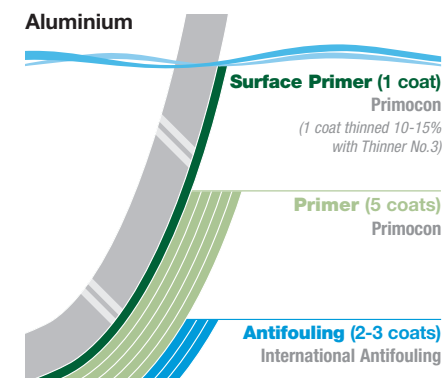
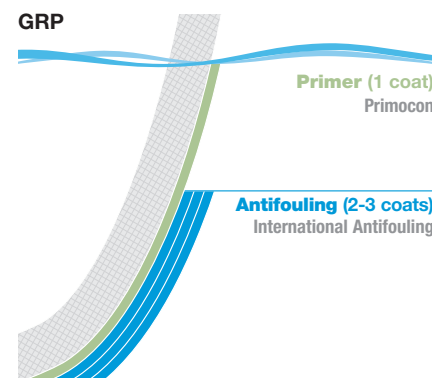


➔ See substrate preparation on Page 22.

**! Important:** If you own an aluminium boat, only apply antifouling paints specifically recommended for aluminium to prevent corrosion. Never apply products containing Cuprous Oxide to aluminium.

## Below water schemes: one-part products

These schemes provide a good level of protection.



➔ See substrate preparation on Page 22.

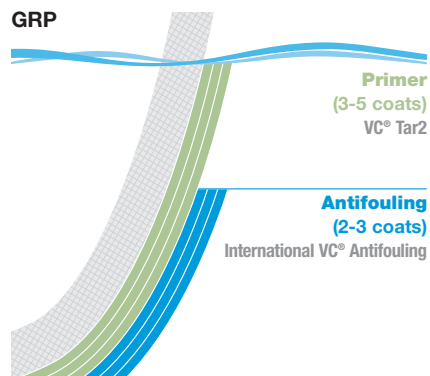
**! Important:** If you own an aluminium boat, only apply antifouling paints specifically recommended for aluminium to prevent corrosion. Never apply products containing Cuprous Oxide to aluminium.



## Below water schemes: VC® products

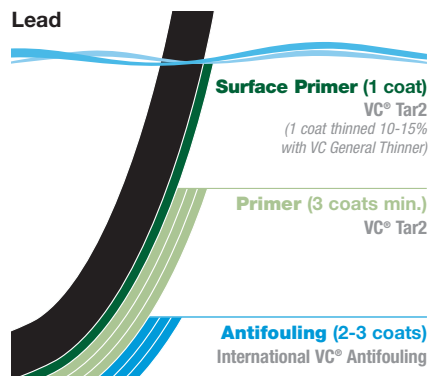
Use these schemes when using VC antifoulings.

### GRP



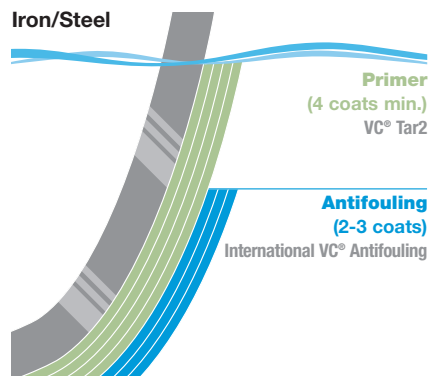
➔ See osmosis protection schemes on Page 68.

### Lead



➔ See substrate preparation on Page 22.

### Iron/Steel



### Filler

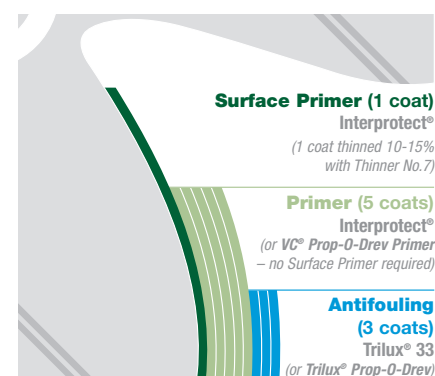
If required for small areas, Watertite Filler should be applied after the first coat of VC Tar2.



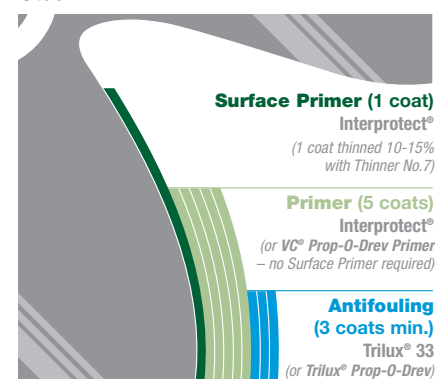
## Propellers, outdrives and sterngear

Outdrives are built out of aluminium. This presents compatibility issues with cuprous-oxide containing antifoulings. Propellers are typically made with aluminium, bronze or stainless steel.

### Aluminium



### Steel



➔ See Painting outdrives, stern gear, propellers and keels on Page 46.

### Bronze



## ■ Working with finishes

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



### Does the substrate determine product choice?

Modern construction methods using fibreglass, steel and aluminium provide a stable, rigid surface compatible with all types of finish products. However, if your boat is made of wood, the characteristics of the substrate and the construction method used will have a bearing on the product you choose.

Carvel and clinker (or lapstrake) constructions are flexible in nature; the wood tends to move as the moisture content varies. Hard systems, such as two-part polyurethanes, cannot sufficiently flex to accommodate this movement making them likely to crack – therefore, these should be avoided, in favour of a one-part system, as these are suitable for all wood constructions.

Two-part systems, such as Perfection, are more suited to the highly stable constructions of double diagonal planking, cold or hot moulded veneers and strip planking where epoxy or Resorcinol type adhesives have been used.

### What about areas of high wear and tear?

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.

Whilst a two-part system, such as Perfection, offers excellent resistance to abrasion, even this can still wear through in excessive circumstances. Using a one-part system, such as Toplac, on these areas will make it easier to touch up any areas of damage, should this be required outside of standard maintenance intervals.

### What preparation is necessary?

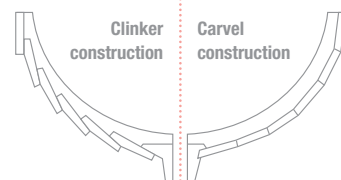
The most critical aspect of any painting job is preparation. Poor surface preparation will always show through the final coat; this will reduce the effectiveness of the coating system and can potentially lead to the premature failure and separation of the coating from the substrate. As a guide, you should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



#### Clinker or carvel construction?

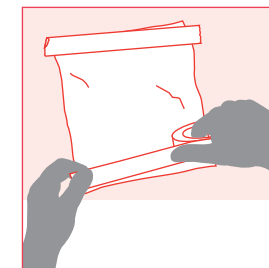
Carvel built wooden boats and tall ships are made by fixing planks to a frame so the planks butt up against one another. In Clinker building (or lapstrake) hulls the planks overlap along their edges. In a Carvel construction a smooth hull is created, that is stronger than a clinker built hull. However more caulking is required between the joints in carvel than in a clinker construction.

The framing gives a carvel construction a stronger hull, meaning it can carry a full sail plan, and can have a longer and broader hull. Clinker built vessels are lighter because they have less internal framing, meaning they move faster because they displace less water. Clinker vessels are less rigid than carvel constructions; this limits the type of sailing rigs the vessel can take.

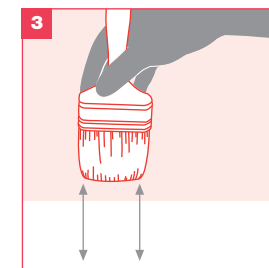
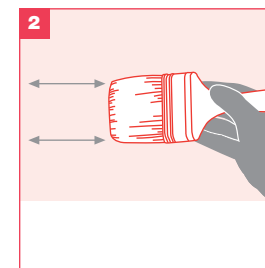
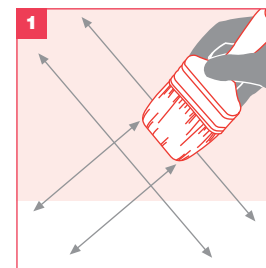


## ■ Testing for compatibility

To test if an existing topside paint product, or a varnish, is compatible with our two-part polyurethane products; tape a cloth soaked in Thinners No.9 to the previously painted substrate for 24 hours. If the surface is softened, it is probably not compatible. In this instance, unless stripping down to the bare substrate is an option, a one-part product should be applied.



## ■ Application techniques



### Applying by brush

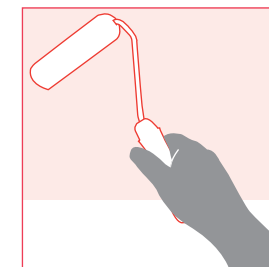
Use the largest brush possible. Long flexible bristles are best for gloss paints. When applying by brush a good technique is the 'Union Jack' method. Paint is applied to the surface with a diagonal brushing action from the left and right (1). This is then spread further with horizontal strokes (2) before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

### Applying with roller and brush

Our products are formulated so that a great gloss finish can also be obtained through application with a solvent resistant, high-density small cell size foam roller. This will minimise 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 painters work side by side.

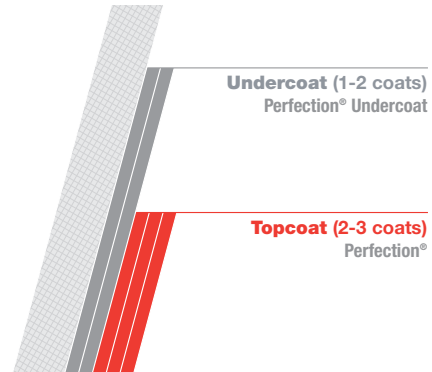
**Always test your choice of application method first, to establish if it provides the finish you require.**



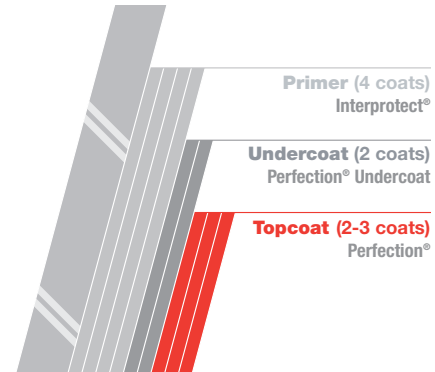
## Two-part premium paint systems

These schemes provide the maximum level of protection available.

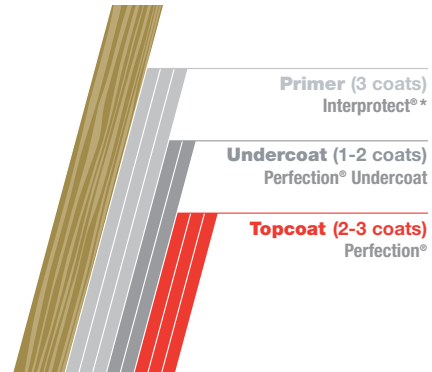
### GRP



### Aluminium

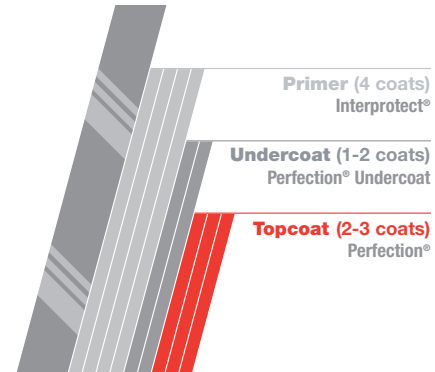


### Wood



\* or Clear Wood Sealer Fast Dry; 1 thinned + 3 full coats

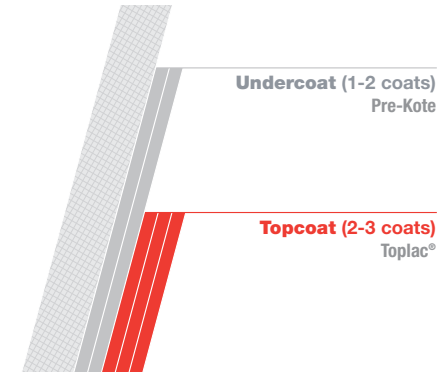
### Steel



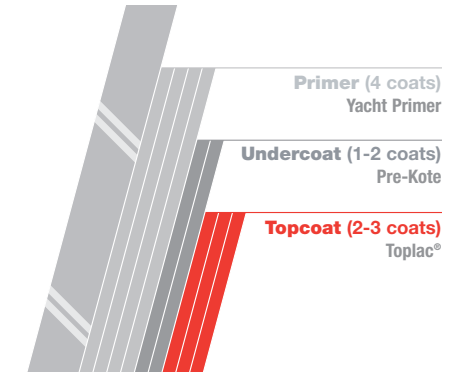
## One-part conventional paint systems

These schemes provide a good level of protection.

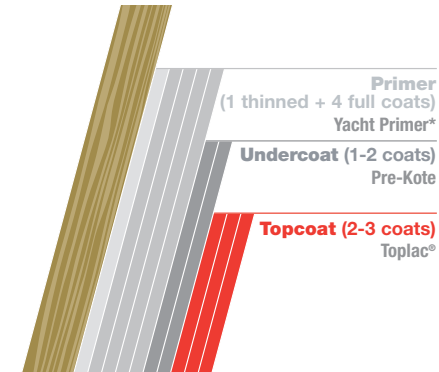
### GRP



### Aluminium

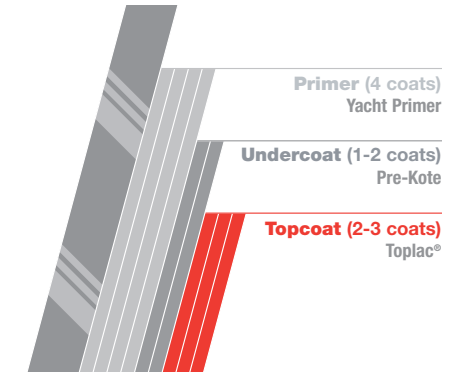


### Wood



\* or Clear Wood Sealer Fast Dry; 1 thinned + 3 full coats

### Steel



**Filler**

If required for small areas, Watertite Filler should be applied after the first coat of Primer.



## Varnishes

Wood has a beauty of its own that a good varnish should enhance, as well as protect. Most varnishes are designed to protect against man-made damage including oil, detergent and alcohol spills. However, yacht varnishes also need to provide a protective barrier against the natural elements: Sea, wind, rain and UV radiation from the sun will attack exposed surfaces. In paint products, some protection is offered from the colour pigments used in the paint formulation. However, in clear varnishes no pigment exists.

### What's in a varnish?

Varnishes have always been considered a mysterious blend of black art and science, but in reality there are only five main ingredients in a top quality marine varnish – oil, resin, solvent, driers and additives. The trend in modern varnish technology, that most affects the long-term durability of a varnish, is the inclusion of additives specifically designed to combat the harmful effects of UV energy, i.e. sunlight.

High performance varnishes from International – Perfection Plus, Schooner Gold and Compass – contain a blend of premium quality UV absorbers and Hindered Amine Light Stabilisers (HALS), as well

as UV protectors, to extend the lifespan of the varnish coating beyond that of conventional products.

### UV protection

In addition to UV absorbers and HALS, International uses two additional additives to help protect the surface from UV damage – Surface Stabilisers and Antioxidants. Surface Stabilisers repair damage from UV light by pulling together the polymer (or resin) segments at the coating's surface, keeping the surface layer stabilised, meaning colour and gloss are maintained.

Antioxidants are used to combat photo-degradation and oxidation. This also helps with colour stability, by keeping the varnish from fading or becoming cloudy.

### Which varnish should I choose?

The substrate and construction method of the area you're varnishing will affect your choice of coating. Two-part systems – such as Perfection Plus – are not suitable for application to flexible constructions. See page 58 for more information on selecting products according to substrate.

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. While the two-part, Perfection Plus systems offer excellent resistance to abrasion they can still wear through in excessive circumstances. As conventional and premium one-part systems are considerably easier to touch in and make good than the harder two-part systems, they are more suitable for these areas.

### What preparation is needed?

If you're applying over an existing varnish, ensure the surface is sound, if not the coating should be removed. Test for compatibility – see page 59.

For bare wood, unless you're using a clear surface primer, such as International Clear Wood Sealer Fast Dry, we recommend thinning the first coat of all our varnishes. This promotes good penetration of the surface and adhesion of subsequent coats. After this first coat, the surface will appear rough – as the exposed ends of the wood absorb the varnish and lift – sand this smooth with a medium grade sandpaper.



### How do I get the best results?

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 the grain, holding the brush at 90° to the surface. Then 'tip-off' by gently stroking the surface with the brush at 45°, following the grain. Always follow the minimum coat recommendations – however for long-lasting protection you can apply additional coats, depending on the system. As the number of coats increases, sanding in between each coat will increase the level of gloss and depth of lustre.



### Hints and tips

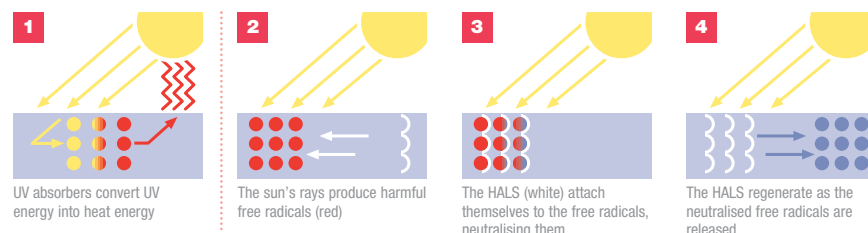
- Round the edges of any scrapers with a file to avoid gouging.
- Keep the sandpaper clean and change it frequently.
- Sand by numbers, finishing the surface with a progressively finer grade of paper.
- Varnishing is best achieved on warm, dry mornings – cold weather slows drying and damp spoils the 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.
- After cleaning with the correct thinners, wash the brush in detergent and warm water, dry and wrap in greaseproof paper in a fine chisel shape.
- Alternatively, having cleaned and washed the brush, suspend by its handle to avoid any 'fishtailing' of the bristle.
- As the varnish ages in the tin you may find there are lumps or contamination. Sieving the varnish into a separate container through cheesecloth, a paint filter or an old stocking is a good solution to this problem.
- Never apply direct from the can, as this will introduce contamination.
- Always pour the amount of varnish that you expect to use at any one time, into a separate container.
- 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.



### What are UV Absorbers and HALS?

**UV Absorbers** soak up detrimental UV rays from sunlight, converting them into heat, which is then dissipated through the surface of the coating (1).

**Hindered Amine Light Stabilisers (HALS)** do not absorb radiation; instead they protect the coating resin from the harmful effect of photochemically-produced 'free radicals' by neutralising them, hindering chemical degradation. HALS regenerate themselves during the neutralisation process, so go on providing protection throughout the lifetime of the coating (2-4).

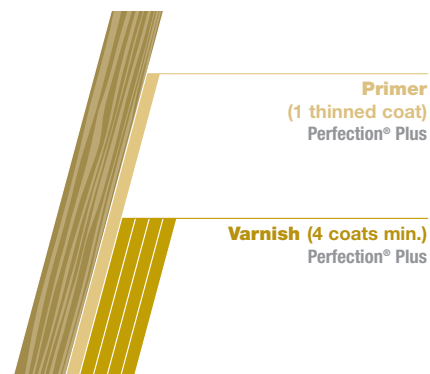


See Page 40 for advice on Applying varnishes and Test for compatibility on Page 59.

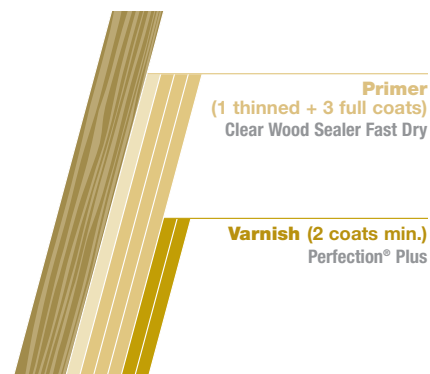


## Two-part premium varnish systems

### Traditional bare wood system

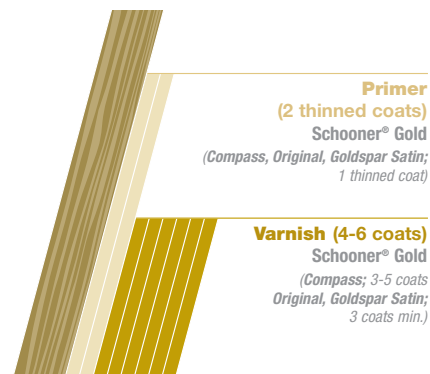


### Reduced work time bare wood system



## One part conventional varnish systems

### Traditional bare wood system



### Alternative bare wood system



### Oily woods

Hard woods such as Teak and Iroko, that are oily by nature, must be degreased adequately with the correct solvent prior to the application of a first thinned coat of varnish.



## Complete boatcare

The International Boatcare range is designed to complement our boat painting and maintenance product range and is specially formulated with ease of use in mind.

### Super Cleaner

- High strength formula removes wax, dirt, oil and grease
- Does not damage acrylic glass

#### Directions for use:

- Rinse surface, choose concentration (fresh or seawater), wash with sponge, rinse
- Repeat as required

#### Suitable for:

GRP ☒ Paintwork ☒



### Polwax

- Clean, polish and wax all in one
- Simple solution to save you time and effort

#### Directions for use:

- Apply with clean dry cloth, polish off in circular movements

#### Suitable for:

GRP ☒ Paintwork ☒



### Did you know...

All International Boatcare products are safe for painted, GRP, wood and metal surfaces.



## 2 step woodcare

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

### Teak Restorer

- Cleans and restores teak and hard wood surfaces back to new
- Does not bleach or damage the surrounding surfaces

#### Directions for use:

- Soak the wood (fresh or seawater) apply generously and leave for 5 minutes
- Scrub across the grain and rinse with fresh water



### Premium Teak Oil

- Penetrates even damp wood, to protect and enhance
- Contains rust protection wax for screws, nails and fixings

#### Directions for use:

- Apply 1-2 coats with a cloth or brush, allow to dry



## What is osmosis?

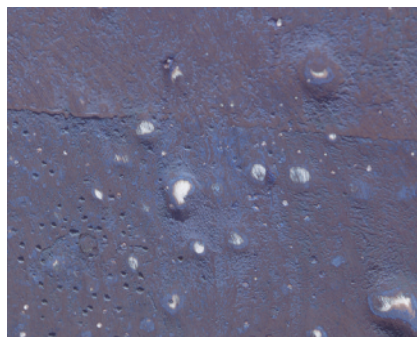
Osmosis is a process of degeneration within a glass fibre laminate. It is caused by a chemical reaction between water and unreacted substances remaining in the substrate, post manufacture. Typically, water enters the hull substrate through the gelcoat and, once inside, reacts with the chemical components to form 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, rather 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 a boat. This is a structural problem and should be referred back to the boat manufacturer. However, even well-built, fibreglass hulls will eventually experience osmosis and blistering. This is why we recommend applying an epoxy protection layer, even to new boats.

## How to protect against osmosis

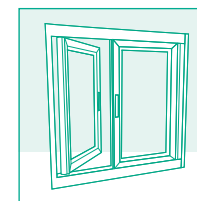
Protection is always better than cure and it really does make sense to protect a new boat as well as an older craft. To achieve this protection it is necessary to create a water barrier to seal the surface. This is done over the existing gelcoat. There is no better time to apply an anti-osmosis system than when the boat has not yet been launched. Some boat builders now offer Gelshield® treatment from International 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. Therefore, it is important that a full check is undertaken before starting.



**Important:** The application of an osmosis protection system could protect against serious and costly structural problems in the later life of your hull.

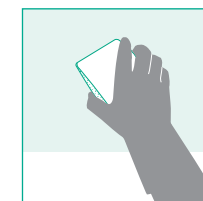
### 1 Health and Safety

Before commencing preparatory work, ensure the area you are working in is adequately ventilated. Ensure you are wearing the correct PPE; we recommend safety spectacles, goggles or visors, nitrile rubber gloves, overalls (ensuring skin is not exposed) and a solvent mask.



### 2 Preparation

Degrease with solvent or Super Cleaner. Sand well using 180-220 grade paper. Clean thoroughly and allow to dry completely.



➔ If your hull is new, proceed to Step 4.

### 3 Inspection

Inspect the gelcoat for signs of damage or cracking. Small defects can be repaired with Watertite Epoxy Filler following the instructions on the product label.



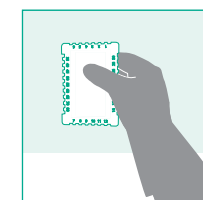
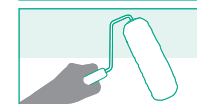
⚠ Look out for any warning signs that may suggest that water has entered the laminate or that osmosis may have occurred.

➔ For further information on osmosis and other warning signs, see Pages 68-69.

If more extensive damage is found or suspected we recommend that you seek the advice of a professional surveyor before continuing.

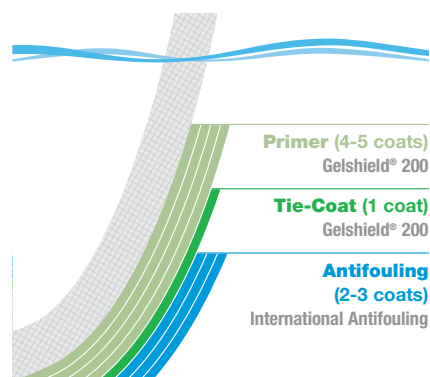
### 4 Application

Apply Gelshield 200, building up to minimum dry film thickness of 250 microns (this will typically take around 5 coats) using a brush or roller. For ease, alternate between the grey and green shades, beginning and ending with grey.

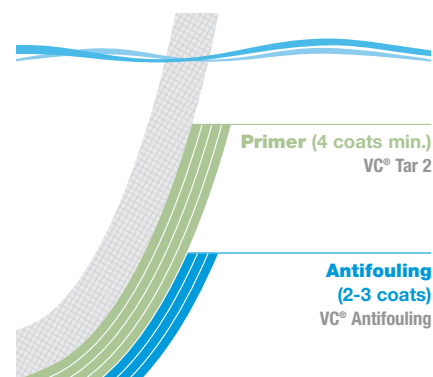


## ■ Osmosis protection schemes

### GRP: International®



### GRP: VC®



## ■ How to recognise osmosis

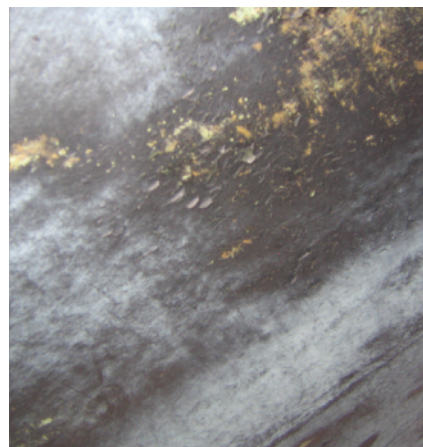
### The main symptom – blisters

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 odour 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 water-line) or over the entire underwater area. These blisters are hard and difficult to break and when broken open will be dry, with no odour 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.



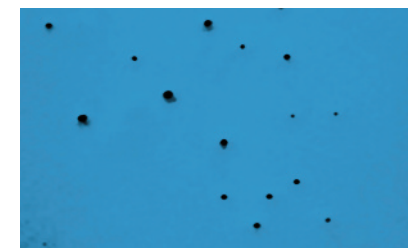
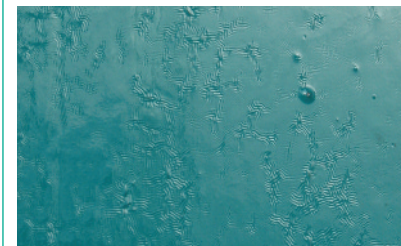
## i Other warning signs to look for

### Prominent fibres

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

### 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.

### 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.

## ■ How to treat osmosis

### 1 Proper preparation of the gelcoat

This includes getting all of the antifouling paint and primers 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 Gelshield® Plus

This solventless epoxy seals up the laminate and fills any cloth that has been voided of resin. It provides a water barrier to minimise the possibility of reoccurrence of damage. Contact our Technical Help Desk to obtain a copy of the Gelshield Plus booklet.

### 4 Application of Gelshield® 200

This will act as a tie-coat to the antifouling.

### Gelshield® Plus

#### High build solventless epoxy for osmosis treatment

- A high build, solventless epoxy primer
- Available in two colours to aid self-on-self application
- Contains no harmful solvents to migrate into the hull and cause reblisters



### Gelshield® 200

#### Epoxy primer for osmosis protection

- Quick drying, easy to apply, epoxy primer for protection of GRP against osmosis
- Provides protection against osmosis in five coats (250 µm)
- Useable down to 5°C
- Fast drying allows multiple coat application in a single day





## Common problems and how to avoid them

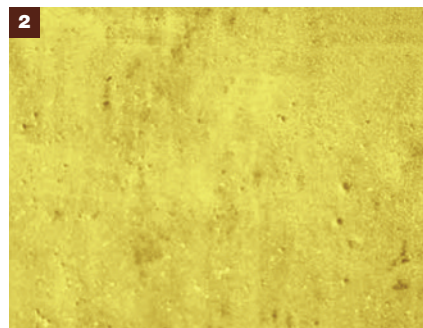
The following troubleshooting guide is aimed at helping you identify some of the common problems associated with boat painting and providing you with information to avoid these occurring. This guide is by no means exhaustive – should you encounter a problem that you cannot diagnose, please contact the Helpline for further assistance.



### Adhesion Failure

(also referred to as Flaking of Paint/  
Delamination)

**Avoid this by:** Ensuring that the surface is clean, dry and free from contamination and has been suitably prepared according to the paint specification. Oily woods, such as teak and iroko, should be degreased with a solvent prior to varnishing. Do not exceed the overcoating intervals between coats of paint.



### Bittiness

**Avoid this by:** The correct preparation of the surface. Always rub down and remove sanding debris from the surface before applying the first coat of paint and ensure that the surface is not contaminated during the curing phase.



### Blistering

**Avoid this by:** Ensuring that correct overcoating interval is followed to avoid solvent entrapment and other contamination. In immersed conditions the blistering could be osmosis.



See Blister Prevention on Page 66.



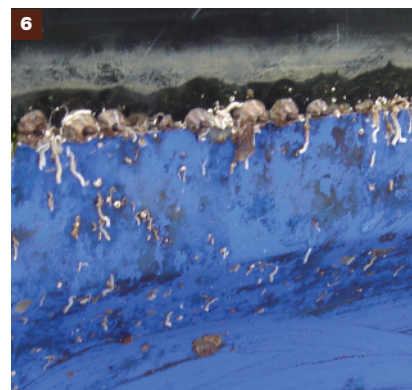
### Blooming

**Avoid this by:** Ensuring that the painted surface has not been exposed to moisture or condensation during the latter stages of drying and that the solvent blend is correct. This phenomenon is often seen with amine cured epoxies.



### Brush Marks

**Avoid this by:** Thinning your paint to the correct viscosity and ensuring that it is adequately mixed before applying. For two-part paints use the mixed product within the pot life stated on the product datasheet.



### Fouling

**Avoid this by:** Ensuring that you have applied the correct amount of antifouling, as indicated on the product datasheet. Ensure that the antifouling strength of the product used is suitable for the waters in which the boat is moored and navigates.





Crazing

**Avoid this by:** Refraining from using strong solvents on conventional coatings, as they will penetrate and soften the surface causing crazing to occur.

Darkening of Timber

**Avoid this by:** Ensuring that the end grain of your timber is sealed to avoid water penetration under the varnish layer. This will cause the underlying wood to darken.

Cissing

**Avoid this by:** Thoroughly cleaning the surface and ensuring that is clear of wax, grease and perspiration (from your hands) prior to the application of the first coat of paint.

■ Painting & project diary

Use this space to keep a record of any projects undertaken, so you have your product information to hand, when you need to touch-up or reapply.

Project 1	Preparation work			
Date	Weather (conditions, temperature, humidity)			
Products used	Colour	Quantity	No of coats	
Other remarks:				
Project 2	Preparation work			
Date	Weather (conditions, temperature, humidity)			
Products used	Colour	Quantity	No of coats	
Other remarks:				
Project 3	Preparation work			
Date	Weather (conditions, temperature, humidity)			
Products used	Colour	Quantity	No of coats	
Other remarks:				

Perfection

Ultimate Performance, Two-Part Polyurethane Finish

Snow White  
B8000

Mediterranean White  
A184

Off White  
A192

Platinum  
A183

Cream  
S070

Fighting Lady Yellow  
S056

Rochelle Red  
S299

Chilli Red  
E294

Jade Mist Green  
B663


Mauritius Blue  
F991

Flag Blue  
K990

Royal Blue  
A216

Lauderdale Blue  
S936

Jet Black  
Y999



Recommended undercoat for two-part finishes



☐ WHITE PERFECTION UNDERCOAT

Matting Additives

For One and Two-Part Finishes

Before

After





 FOR USE WITH TOPLAC (One-Part Finish)

 FOR USE WITH PERFECTION (Two-Part Finish)

Toplac®

Premium Quality High-Gloss Durable Yacht Enamel

Snow White  
001

Mediterranean White  
545

White  
905\*

Ivory  
812

Atlantic Grey  
289

Cream  
027

Yellow  
101

Rescue Orange  
265

Fire Red  
504

Rochelle Red  
011

Rustic Red  
501

Bounty  
350

Norfolk Green  
241

Donegal Green  
077

Squall Blue  
923

Bondi Blue  
016

Baltic Blue  
163


Lauderdale Blue  
936

Danube Blue  
104

Oxford Blue  
105

Mauritius Blue  
018

Jet Black  
051



Recommended undercoat for one-part finishes



☐ WHITE PRE-KOTE

☐ BLUE/GREY PRE-KOTE

☐ RED PRE-KOTE

☐ DARK BLUE PRE-KOTE

 BLEND  
(50% White Pre-Kote/50% finish colour)

Interdeck®

Slip Resistant Polyurethane Deck Paint

White  
001


Grey  
289


Cream  
027

Beige  
090

Squall Blue  
923

Pale Blue  
339





Heather Morton, Specialist in Retail Finishes Development

**“Can’t find the deck finish you want?”**

Why not create your own custom-finish deck using our non-slip additive and your favourite colour from our finishes ranges? Non-Slip Additive can be mixed in before painting or applied to the wet paint surface. Create matt or satin effects using a matting additive. Mix or match your deck and topsides – it’s your project, you choose!

**Find out ‘How To’ create a custom finish deck at [yachtpaint.com](https://www.yachtpaint.com)**


Danboline

Hard Wearing Coating for Bilges, Lockers and Bulkheads

Grey  
100

Red  
102

White  
001



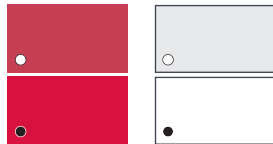
Whilst every care is taken to match colours on this card, the manufacturers cannot be responsible for slight variations. Products mentioned in this document are trademarks of, or licensed to, AkzoNobel. © Akzo Nobel N.V. 2009.

## Micron® Optima <sup>P</sup>

### Ultimate Performance



Black Light Blue



Red Dover White

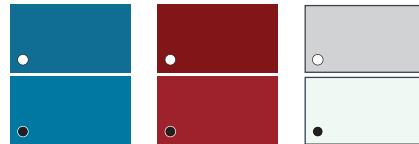


## Cruiser® UNO <sup>P</sup>

### One Season



Black Navy



Blue Red Shell White

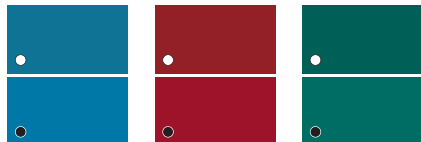


## Micron® Extra <sup>P</sup>

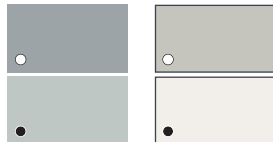
### Multi-Season Protection



Black Navy



Blue Red Green



Grey Dover White

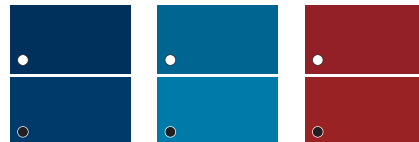


## Interspeed® Ultra <sup>H</sup>

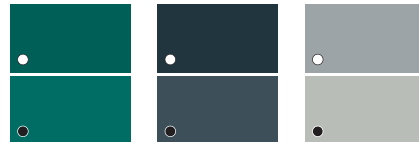
### Ultimate Strength



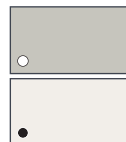
Black Navy



Blue Light Blue Red



Green Princess Grey Grey



Dover White

## Navigator® <sup>H</sup>

### Fresh Water



Black Blue



Red

NEW



## VC®17m Extra <sup>TF</sup>

### Thin Film



Graphite



## Trilux® 33 <sup>SP</sup>

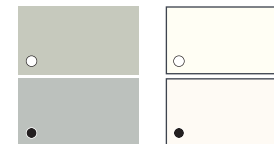
### Bright Colours



Black Navy



Blue Scarlet Green



Grey White

NEW

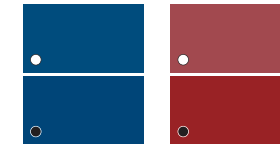


## Bottomcoat® <sup>P</sup>

### Cruising



Black Navy



Blue Red

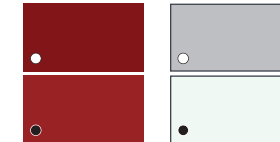


## VC® Offshore <sup>H</sup>

### Performance



Black Blue

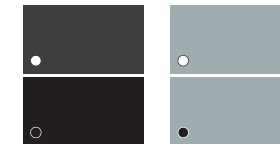


Red Shell White



## Trilux® Prop-O-Drev <sup>S</sup>

### Aerosol Application



Black Grey



Whilst every care is taken to match colours on this card, the manufacturers cannot be responsible for slight variations.



<sup>P</sup> POLISHING <sup>SP</sup> SLOW POLISHING <sup>H</sup> HARD <sup>TF</sup> THIN FILM <sup>S</sup> SPECIAL PURPOSE ○ PRE-IMMERSION ● POST-IMMERSION



**Roger Bolton, UK Sales Team**

***“Visit our website for even more expert advice.”***

Our new look Boat Paint Guide & Colour Card has been designed with you – the customer – in mind, to make it as easy as possible to choose the right product for your project. If you'd like more information on our products, schemes, surface preparation or simply need some expert advice on painting and maintaining your boat, please visit our website. Check out our 'How To' guides for simple step-by-step information and handy hints and tips to ensure you achieve professional results, every time!

***The answers are only a click away at [yachtpaint.com](http://yachtpaint.com)*** 

## Our World is Water


**International Paint Ltd.**

1 Wellington Park, Hedge End  
Southampton, Hampshire SO30 2QU

Tel: +44 (0) 1489 77 50 50

Fax: +44 (0) 1489 78 58 67

Statements made in this brochure are advisory only and are not intended to be specific recommendations or warranties of any product, combination of products or fitness for any particular purpose. Please consult our product labels, product data sheets and/or material safety data sheets directly for complete technical information.

®, International®, the AkzoNobel logo and all product names mentioned in this publication are trademarks of, or licensed to, AkzoNobel.

UK Edition © Akzo Nobel N.V. 2009