International

Boat Paint Guide

With removable color card

Aus/NZ Edition

international-yachtpaint.com

AkzoNobel

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®.

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.

Ask the experts

At International®, 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...

international-yachtpaint.com

tech.support@akzonobel.com
technz.support@akzonobel.com

Australia 1800 251 431
New Zealand 0800 808 807
Pacific Islands +61 7 5573 9600

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 visit **international-yachtpaint.com** for more information.

Contents

Boat Paint Guide

Product guide

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

	SPC	Polishing			Slow Polishing	Hard	
	Micron® 99	**Micron® AP**	**Micron® Extra 2**	**Micron® One**	**Trilux 33**	**Ultra 2#**	**VC® Offshore#**
Key attributes	PRO USE ONLY • Provides ultimate protection against slime, aquatic plants and animals • Low VOC helps boatyards cut solvent emissions • High surface coverage reduces the amount you need	• Maximum strength antifouling • Contains Biolux® technology and boosted biocide levels • Advanced performance for difficult fouling in all environments • Suitable for the widest variety of vessels	• High strength antifouling • Contains Biolux® technology, optimizing performance and longevity • Formulated to provide improved resistance to slime	• Seasonal ablative antifouling • Proven performance • Economical and dependable antifouling protection • Designed to erode away with use which reduces paint build-up and sanding	• Formulated for use on aluminium • Slow polishing antifouling; avoids seasonal paint build-up • Available in bright colors • Proven antifouling protection for aluminium vessels of all sizes	• High strength, hard antifouling • Contains Biolux® technology • Ideal for fast power boats and competitive sailing • Hard, scrubbable finish • Fast dry formula allows painting and launching in the same day	• Thin film coating for racing, sailing and performance powerboats • Reduces friction and drag for increased racing performance
Thinners/Cleaners	Thinner No.3	Thinner No.3	Thinner No.3	Thinner No. 3	Thinner No.3	Thinner No.3	Thinner No.3
Practical coverage (m² per litre)	9.0	9.0	9.0	5.4	8.3	9.0	12.0
Number of coats	1-2	3	3	2	3	2-3	2-3
Substrates (Substrates must be suitably primed)	GRP / W / S / B / SS / L	GRP / W / S / B / SS / L	GRP / W / S / B / SS / L	GRP / W / S / B / SS / L	GRP / W / S / A B / SS / L	GRP / W / S / L	GRP / W / S / B / SS / L
Application method	Brush / Roller	Brush / Roller	Brush / Roller	Brush / Roller	Brush / Roller	Brush / Roller	Roller
Suitable for high fouling areas	●●●	●●●	●●●	●●	●●●	●●●	●

Suitable for burnishing to provide a smoother finish.

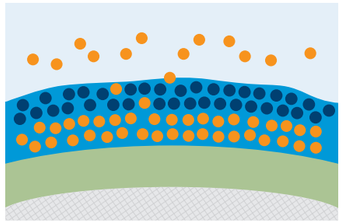
Important: If you are regularly travelling at high speed (eg. 30 knots) you might experience early wear through. Consult your local International® representative for further advice if you are unsure about the suitability of a product for your specific requirements.

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

GRP Glass-reinforced plastic W Wood S Steel/Iron
A Aluminium B Bronze SS Stainless Steel L Lead
● Good ●● Excellent ●●● Outstanding

Types of antifouling

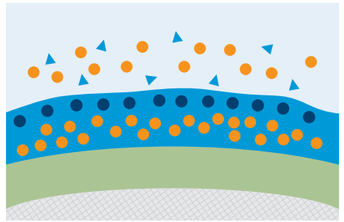
The types of antifouling available can be split into two types, hard and eroding. You will also find other descriptions such as ablative, polishing or self-polishing. All these descriptions can be put under the umbrella of eroders.



Hard antifouling

Hard antifouling does not wear away much at all, although abrasive material in the water such as silt and sand may lead to a very minor reduction in film build. Eventually however, you are left after a few seasons with a build up of product that requires removal. The product becomes unsound and does not retain sufficient internal strength to be able to hold together when new product is applied to it.

If you have a seriously fast boat or a fast boat that is used very regularly then hard is probably the best way to go. Boats moored in fresh water normally use these types, as the eroding types may not erode very well. Keen racing types sometimes prefer hard products as they can be wet sanded to a smooth finish prior to racing.



Polishing antifouling

As the name suggests such products wear away leaving eventually no antifouling on your hull. They are ideal for boat owners who list easy maintenance as a priority. They work by slowly wearing down whenever water moves across the hull leaving a fresh layer of biocides. This results in minimal coating build-up at the end of the season and reduces the amount of preparation needed for the next season. Some polishing products such as Micron 99 will smooth themselves out with time and this can help to reduce hull drag which in some cases can result in an increase in hull speed and/or reduced fuel burn. With most polishing types when the paint film starts to become very thin the biocides can be dissolved out leaving paint that has a reduced performance and this is the time to apply new product.

Note: To avoid build up of eroding antifoulings, allow the coating to erode away as much as possible before applying a new coat, otherwise a build up can occur over a few years, possibly leading to paint detachment.

Substrate
Primer
Antifouling paint
Antifouling paint flake
Copper oxide
Cavities in leached layer

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.

Existing Antifouling (in Good Condition)	New Antifouling: Micron® One	Micron® AP	Micron® Extra 2	Micron® 99	Ultra 2	Trilux 33	VC® Offshore
Micron® AP							
Micron® Extra							
Micron® Extra 2							
Micron® 77	●	●	●	●	●	●	●
Awlcraft							
Awlcraft CSC							
Bottomkote	●	●	●	●	●	●	●
Trilux 33							
VC® Offshore							
Ultra	●	●	●	●	●	●	●
Ultra 2							
Unknown product	●	●	●	●	●	●	●
Previous antifouling in poor condition	●	●	●	●	●	●	●

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

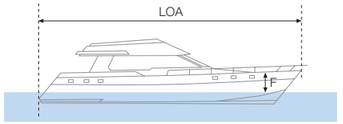
● Remove the antifouling. See **removing antifouling** on Page 37.

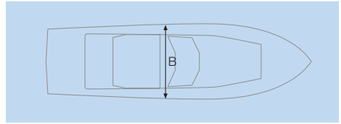
● Apply a barrier coat of Primocon® before applying antifouling. See **applying antifouling** on Page 46.

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 practical 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.

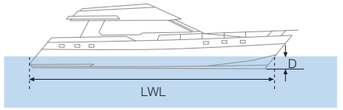




LOA Length Overall LWL Length Waterline B Beam D Draft F Freeboard

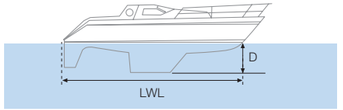
Underwater area formulations

Full bodied craft



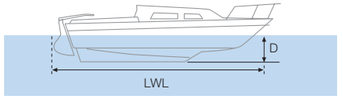
LWL x (B + D) = Underwater Area (m²)

Fin keeled racing craft



0.50 x LWL x (B + D) = Underwater Area (m²)

Medium draft racing craft



0.75 x LWL x (B + D) = Underwater Area (m²)

Tips

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.

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 product guide** on Page 4.

Important: If you own an aluminium boat, only apply antifouling paints specifically recommended for aluminium to prevent corrosion.

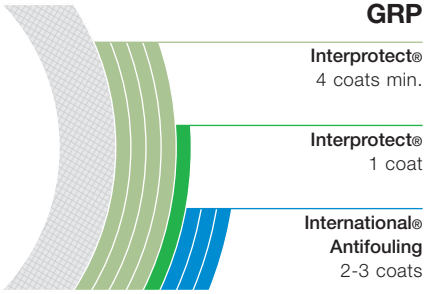
Never apply products containing Cuprous Oxide to aluminium.

Below water systems:

Two-part products

These schemes provide the maximum level of protection available.

GRP

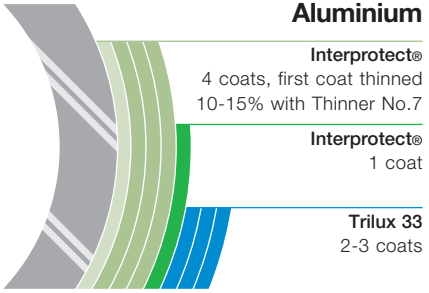


Interprotect®
4 coats min.

Interprotect®
1 coat

International® Antifouling
2-3 coats

Aluminium

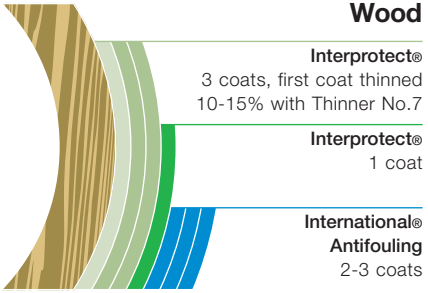


Interprotect®
4 coats, first coat thinned 10-15% with Thinner No.7

Interprotect®
1 coat

Trilux 33
2-3 coats

Wood

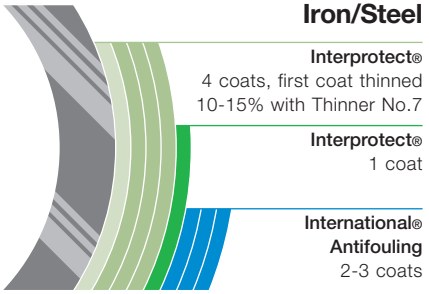


Interprotect®
3 coats, first coat thinned 10-15% with Thinner No.7

Interprotect®
1 coat

International® Antifouling
2-3 coats

Iron/Steel

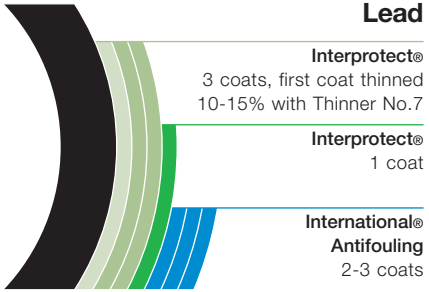


Interprotect®
4 coats, first coat thinned 10-15% with Thinner No.7

Interprotect®
1 coat

International® Antifouling
2-3 coats

Lead



Interprotect®
3 coats, first coat thinned 10-15% with Thinner No.7

Interprotect®
1 coat

International® Antifouling
2-3 coats

Filler

If required for small areas, Epifill® Filler should be applied after the first coat of Interprotect®.

See **substrate preparation** on Pages 28-29.

Important: If you own an aluminium boat, only apply antifouling paints specifically recommended for aluminium to prevent corrosion.

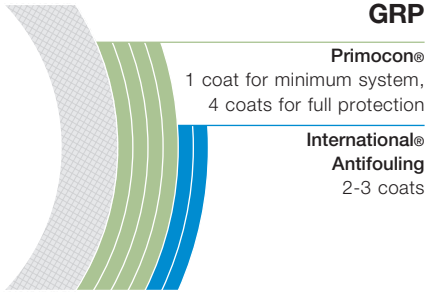
Never apply products containing Cuprous Oxide to aluminium.

- Primer
- Tie Coat
- Antifouling

One-part products

These schemes provide a good level of protection.

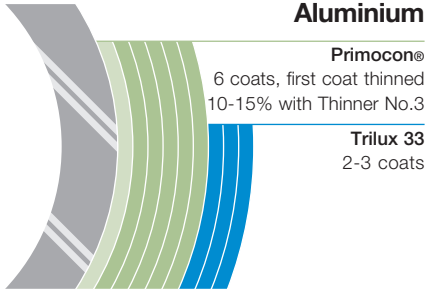
GRP



Primocon®
1 coat for minimum system, 4 coats for full protection

International® Antifouling
2-3 coats

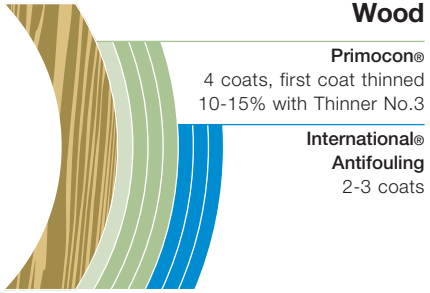
Aluminium



Primocon®
6 coats, first coat thinned 10-15% with Thinner No.3

Trilux 33
2-3 coats

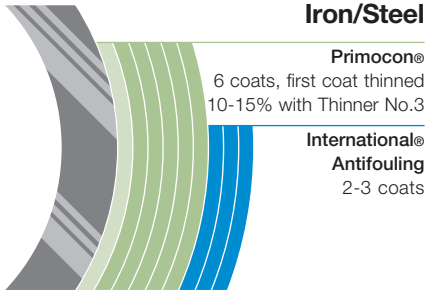
Wood



Primocon®
4 coats, first coat thinned 10-15% with Thinner No.3

International® Antifouling
2-3 coats

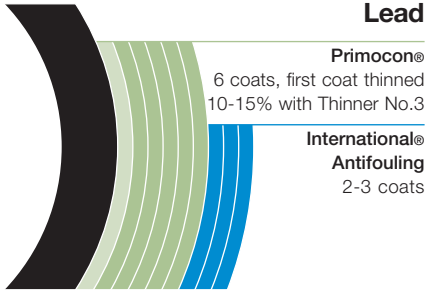
Iron/Steel



Primocon®
6 coats, first coat thinned 10-15% with Thinner No.3

International® Antifouling
2-3 coats

Lead



Primocon®
6 coats, first coat thinned 10-15% with Thinner No.3

International® Antifouling
2-3 coats

Filler

If required for small areas, Epifill® Filler should be applied between the first and second coats of primer.

See **substrate preparation** on Pages 28-29.

Important: If you own an aluminium boat, only apply antifouling paints specifically recommended for aluminium to prevent corrosion.

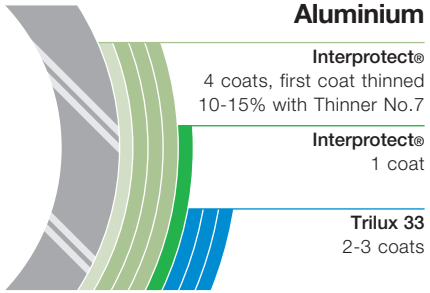
Never apply products containing Cuprous Oxide to aluminium.

- Primer
- Antifouling

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. See painting outdrives, stern gear, propellers and keels on Page 48.

Aluminium

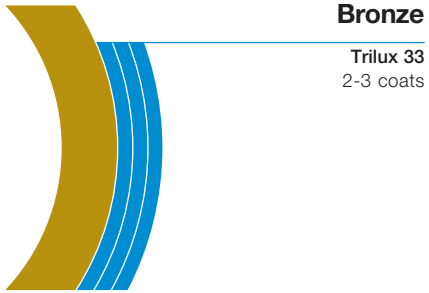


Interprotect®
4 coats, first coat thinned
10-15% with Thinner No.7

Interprotect®
1 coat

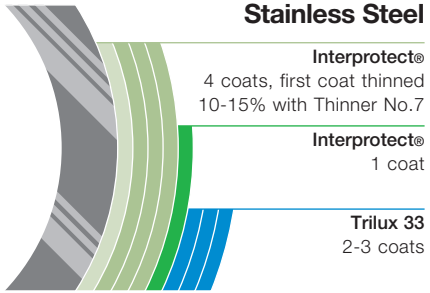
Trilux 33
2-3 coats

Bronze



Trilux 33
2-3 coats

Stainless Steel



Interprotect®
4 coats, first coat thinned
10-15% with Thinner No.7

Interprotect®
1 coat

Trilux 33
2-3 coats

See **Painting outdrives, stern gear, propellers & keels** on Page 48.

- Primer
- Tie Coat
- Antifouling

What is a Tie Coat?

Many of our antifouling schemes show several primer coats followed by a Tie Coat of Interprotect. Quite often, primer coats are applied and the boat left on hard standing for some months before the antifouling is applied. The job of the tie coat layer is to ensure maximum adhesion of the antifouling within the overcoating window for Interprotect.

How can I best achieve fuel efficiencies?

It is estimated that Antifouling Coatings provide approximately $30bn in fuel savings per annum.

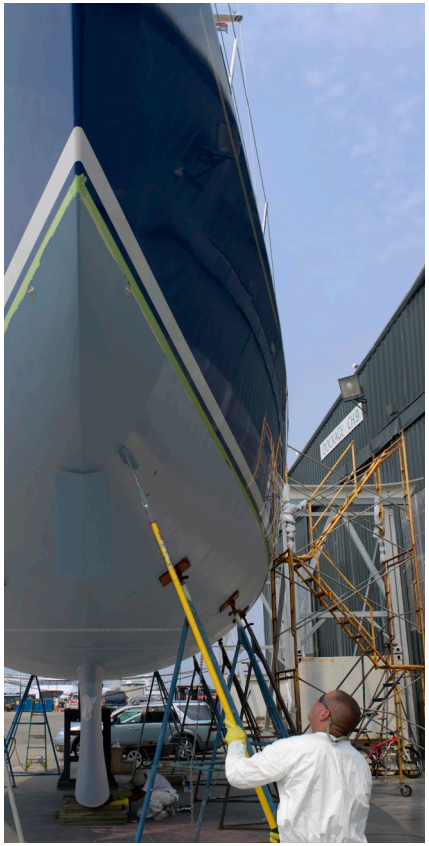
By selecting and specifying a bottom paint that offers optimal results you achieve three things:

1. Improved speed and/or maintained speed at less power
2. Reduction in fuel emissions and their impact on the environment
3. Performance longevity

We recommend you consider the AHR (Average Hull Roughness) when assessing bottom paints and their attributes. An increase in underwater hull roughness will increase the frictional resistance (or drag). With additional drag you will need additional power – and more fuel – to maintain speed.

Over time antifoulings generally become microscopically rougher by up to 50 microns a year despite many of them eroding or ablating away. This leads to an increase in hull drag that can increase fuel bills by up to 5-10%.

Please contact us today should you look for opportunities to further improve boating efficiencies.



Product guide

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

	Perfection	Toplac®	Interdeck®	Bilgekote
Key attributes	• Ultimate performance, two-part polyurethane finish • Chemical cure for the hardest finish & highest abrasion resistance • Unique UV protection for superior, long-lasting gloss and color • Professional-quality results made easy • Easy mix ratio	• One-part finish • Solid reputation – admired on yachts and boats for decades • Easy to use – silky-smooth flow achieves a brush-mark-free, professional look • Silicone alkyd technology delivers a high-gloss shine and rich, lustrous color • Excellent durability; lasts longer than conventional one-part enamels	• Slip resistant one-part polyurethane deck paint • Contains fine mineral additive for hard wearing, non-slip surface • Suitable for all substrates • Low sheen finish prevents sunlight dazzle • Apply straight from the can with brush or roller	• Hard wearing one-part coating for bilges, lockers and bulkheads • Chemical resistance to fumes, fuel and oil • High opacity for thorough coverage • Cleans easily for reduced maintenance
Thinners	Thinner No. 9	Thinner No. 1	Thinner No. 1	Thinner No. 1
Practical coverage (m² per litre)	11.9	12.0	10.8	11.0
Number of coats	2-3	2	1-2	1-2
Substrates (Substrates must be suitably primed)	GRP / W / S / A	GRP / W / S / A	GRP / W / S / A	GRP / W / S / A
Application method	Brush / Roller	Brush / Roller	Brush / Roller	Brush / Roller
Recommended undercoat	Perfection Undercoat	Pre-Kote	Pre-Kote	–
For a non-slip finish add	Intergrip	Intergrip	–	Intergrip

What is Intergrip?

Intergrip 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. The final result is determined by the amount of material added into the finish.

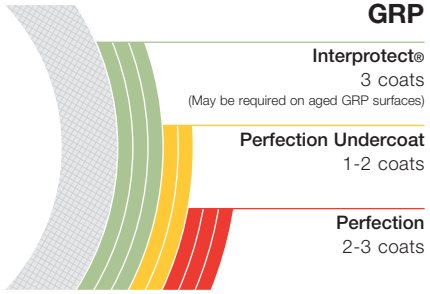
GRP Glass-reinforced plastic W Wood S Steel A Aluminium

Above water systems:

Two-part premium paint systems

These schemes provide the maximum level of protection available.

GRP

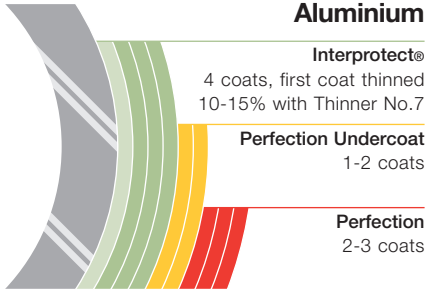


Interprotect®
3 coats
(May be required on aged GRP surfaces)

Perfection Undercoat
1-2 coats

Perfection
2-3 coats

Aluminium

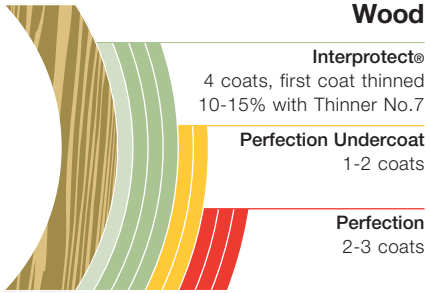


Interprotect®
4 coats, first coat thinned
10-15% with Thinner No.7

Perfection Undercoat
1-2 coats

Perfection
2-3 coats

Wood

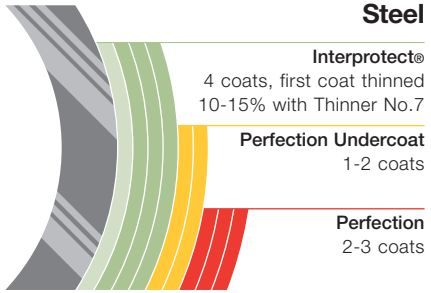


Interprotect®
4 coats, first coat thinned
10-15% with Thinner No.7

Perfection Undercoat
1-2 coats

Perfection
2-3 coats

Steel



Interprotect®
4 coats, first coat thinned
10-15% with Thinner No.7

Perfection Undercoat
1-2 coats

Perfection
2-3 coats

Note: Due to the potentially porous nature of aged or weathered gel coats, the risk of solvent or moisture becoming entrapped after painting is much higher than when the gelcoat is new. This entrapment can lead to blistering of the paint film, and so priming with three coats of Interprotect is recommended to seal the gelcoat before applying undercoat.

Filler

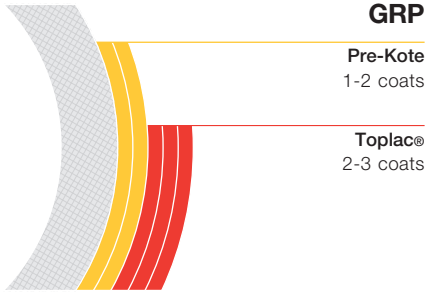
If required for small areas, Epifill® Filler should be applied after the first coat of Primer.

- Primer
- Undercoat
- Topcoat

One-part conventional paint systems

These schemes provide a good level of protection.

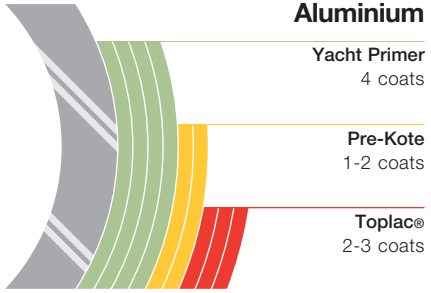
GRP



Pre-Kote
1-2 coats

Toplac®
2-3 coats

Aluminium

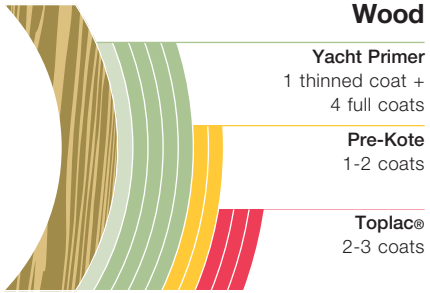


Yacht Primer
4 coats

Pre-Kote
1-2 coats

Toplac®
2-3 coats

Wood

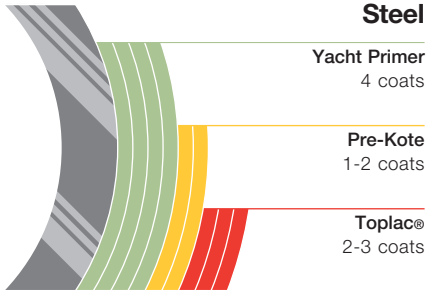


Yacht Primer
1 thinned coat +
4 full coats

Pre-Kote
1-2 coats

Toplac®
2-3 coats

Steel



Yacht Primer
4 coats

Pre-Kote
1-2 coats

Toplac®
2-3 coats

Note: Due to the potentially porous nature of aged or weathered gel coats, the risk of solvent or moisture becoming entrapped after painting is much higher than when the gelcoat is new. This entrapment can lead to blistering of the paint film, and so priming with three coats of Interprotect is recommended to seal the gelcoat before applying undercoat.

Filler

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

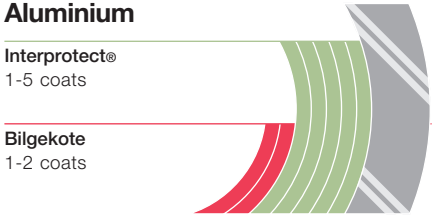
- Primer
- Undercoat
- Topcoat

Bilge systems:
Bilgekote with one & two-part primers

GRP

Bilgekote
1-2 coats

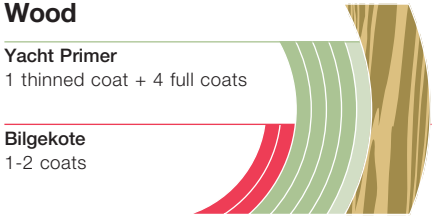
Aluminium



Interprotect®
1-5 coats

Bilgekote
1-2 coats

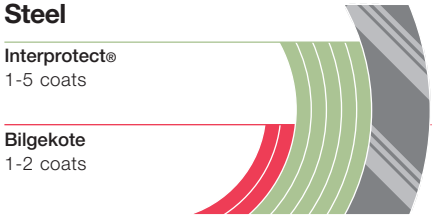
Wood



Yacht Primer
1 thinned coat + 4 full coats

Bilgekote
1-2 coats

Steel



Interprotect®
1-5 coats

Bilgekote
1-2 coats

Primer
Topcoat

What is Sanding Guide Coat?

Surface preparation is the most important job when it comes to obtaining the best possible finish. Sanding Guide Coat is used to highlight fine sanding and scratch marks into easily visible blue lines that can be sanded away as you progress from coarse to fine sand paper. It saves time and helps you achieve the best possible result.

How much topside paint do I need?

Determining how much paint you will need is fairly simple. For topsides, refer to the reference chart below:

	Motor					Sail				
Overall length (metre)	**6.1**	**7.6**	**9.1**	**10.7**	**12.2**	**6.1**	**7.6**	**9.1**	**10.7**	**12.2**
Overall length (feet)	**20**	**25**	**30**	**35**	**40**	**20**	**25**	**30**	**35**	**40**
Beam (metre)	1.5	2.5	3.5	4.0	4.5	2.0	2.4	3.5	3.7	4.0
Freeboard height (metre)	1.0	1.25	1.25	1.5	1.5	0.75	1.0	1.25	1.25	1.5
Litres required*	2.6	4.4	5.5	7.7	8.7	2.1	3.5	5.5	6.3	8.5

* Average amount based on 2 coats.

Sikkens® Cetol® Marine

Cetol Marine is a unique high performance, hard wearing, one-part, satin impregnating wood oil finish. With no need to sand between coats, its superb flow allows for a uniform silky finish that is suitable for most timbers, especially teak.

Cetol Marine is the low maintenance alternative to wood oils and varnishes. Its durable, attractive, translucent finish has been specially formulated with two main aims in mind:

1. To protect your wood and keep it looking beautiful throughout the season
2. To be as easy as possible to apply and maintain

Available in Natural Teak color, Cetol Marine is designed for interior and exterior use above the waterline.

Product guide

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

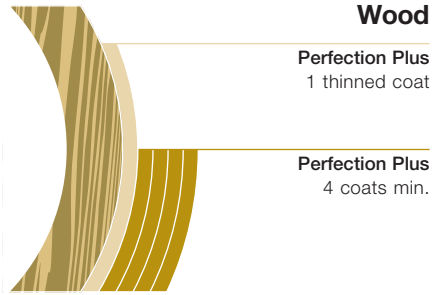
	Perfection Plus	Goldspar® Original	Goldspar® Satin	Cetol® Marine
Key attributes	• Ultimate performance, clear, two-part polyurethane varnish • Chemical cure for the hardest finish & highest abrasion resistance • Superior gloss lasts four times longer than conventional one-part varnishes • Professional-quality results made easy • 2:1 mix ratio: easy to measure and mix	• Premium quality, traditional one-part varnish with excellent UV protection • Rich golden color and deep gloss • Good flow-out and self-levelling characteristics for easier application • Suitable for interior and exterior use	• A satin finish one-part polyurethane varnish for interior use • Resistant to hot water, mild acids and alkalis • Fast-dry formulation minimises dust contamination	• Low maintenance one-part wood treatment • Less work, wipe clean and recoat – no need to sand • Superior UV protection • Does not crack or flake • Microporous – allows wood to breathe • Longer lasting – affords a longer time period before the need to recoat
Thinners	Thinner No. 9	Thinner No. 1	Thinner No. 1	Thinner No. 1
Practical coverage (m^2 per litre)	12.0	16.0	10.3	10.0
Number of coats (Will vary depending on usage. Please check product label/data sheet.)	2-5	6-10	3	2-3
Suitable for use direct to oily timber (e.g. teak or iroko)	●	●	●	●
Application method	Brush / Roller	Brush / Roller	Brush / Roller	Brush / Roller
UV protection/gloss retention	●●●●●	●●●	For interior use only	●●●

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

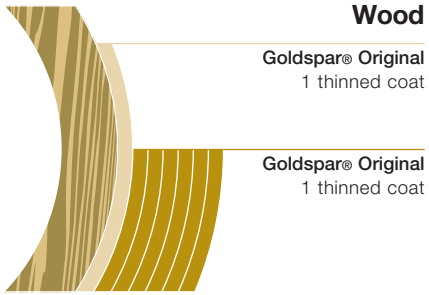
● Good ●●●●● Outstanding

Varnish systems:

Two-part premium system



One-part conventional system



Primer ■ Varnish

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.

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.

Enamel Thinner No.1

For thinning one-part alkyd paints and varnishes.

Antifouling Thinner No.3

For thinning antifouling paints and Primocon Primer.

Brushing Thinner No.6

Brushing aid for Toplac and Perfection colors when temperature conditions reduce products flow and brushing properties.

Epoxy Thinner No.7

For thinning two-part epoxy paints.

Polyure-thane Retarder Thinner No.9

For thinning two-part polyurethane paints.

Product guide

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

	Perfection Undercoat	Pre-Kote
Key attributes	• High performance two-part polyurethane undercoat • Provides an excellent base for a long-lasting gloss finish • Easy application, fast drying and easy sanding • Semi-gloss appearance	• Undercoat for one-part finishes • Excellent opacity allows for easy color changing • Long-lasting, easy to apply and rub down • Long overcoating times allow coat-on-coat application
Typically used	Under Perfection Finish (can also be used under Toplac® and Interdeck®) **Do not use over one-part products**	Under International® one-part finishes **Do not use under two-part products**
Thinners	Thinner No. 9	Thinner No. 1
Practical coverage (m² per litre)	11.8	12.0
Number of coats	1-2	1-2
Substrates	GRP / W* / S* / A*	GRP / W* / S* / A*
Application method	Brush / Roller	Brush / Roller
Suitable for above waterline	●	●
Suitable for below waterline	●	●

Note: Perfection Undercoat/Pre-Kote can be blended with topcoat to give colored undercoating.

* Over suitable primer.

GRP Glass-reinforced plastic W Wood S Steel A Aluminium

Product guide

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

	Yacht Primer	Primocon®	Interprotect®	Everdure	Etch Primer
Key attributes	• Conventional one-part primer for use above the water • Quick drying, with anticorrosive properties • Pigments contain aluminium flake to provide an anti-corrosive protective barrier	• Conventional one-part primer for use below water • Quick drying, with anticorrosive properties • Can be used under all International® antifoulings* or as a barrier coat over incompatible or unknown antifoulings	• Quick drying, easy to apply, two-part epoxy primer • Offers excellent anticorrosive protection • Can be used as an antifouling tie-coat over existing or unknown epoxy primers	• Primer especially formulated for timber surfaces • Can be used to help seal and harden soft timber surfaces to reduce moisture absorption • Easy application and simple 1:1 mix ratio • Gives a hard tough film	• Two pack chromate-free above and below water primer with excellent anticorrosive protection • Can be over-coated without sanding • Excellent adhesion on aluminium • Fast cure time
Typically used	Above water, under one-part undercoats **Do not overcoat with two-part products**	Below water, under International® antifoulings or to seal unknown antifoulings *** Do not overcoat with two-part products**	Where a high-performance anti-corrosive system is required **Do not use over one-part products or antifoulings**	For sealing timber to reduce moisture absorption **Do not use over one-part products**	Above water, under one- and two-part undercoats. Below waterline prior to application of Primocon® or Interprotect®
Thinners / Cleaners	Thinner No. 1	Thinner No. 3	Thinner No. 7	Thinner No. 7	Do not thin (Thinner No. 7 to clean only)
Practical coverage (m^2 per litre)	12.0	7.4	8.1	10.2	9.0
Number of coats	4	1-5	1-5	As required	1-2
Substrates (Substrates must be suitably primed)	W / S / A / Z	GRP / W / S / A / L / Z	GRP / W / S / A / L / Z	W	A
Application method	Brush / Roller	Brush / Roller	Brush / Roller	Brush / Roller	Brush / Roller
Suitable for above waterline	●	●	●	●	●
Suitable for below waterline	●	●	●	●	●

GRP Glass-reinforced plastic W Wood S Steel A Aluminium L Lead Z Zinc

Epoxy Products

Product guide

Epoxies are extremely robust and versatile products suitable for use above and below the waterline. These products have been sold for decades and their strength, reliability and performance have surpassed the test of time. The products below are suitable for use under all International yacht paint systems.

Epifill®

A medium to high density two-part epoxy filler. Epifill can be used above and below the waterline and is ideal for all manner of filling jobs. It is especially suitable for those jobs where compressive forces are high (ie: between keels and hulls). It is also ideal for use as bedding material under deck fittings such as winches. It has an easy to use 2:1 mix ratio.

Epiglue®

Epiglue is a high performance marine and general purpose epoxy resin adhesive. Its thixotropic nature enables it to be used for both close contact and gap filling joints. It offers a virtually colorless glue line once cured and is suitable for above and below the waterline. Epiglue has an easy to use 2:1 mix ratio.

Everdure®

Everdure is a high performance two-part epoxy timber sealer which effectively seals out dry rot and densifies the timber. Everdure is blended from selected epoxy resins to allow maximum penetration and migration in to the timber. This seals out moisture, hardens the surface and densifies the timber. Everdure is also an ideal base before the application of a clear varnish on either interior or exterior wood. Everdure has a 1:1 mix ratio.

Microsurfacer

Microsurfacer is a two-pack, ultra high build surfacing compound that can be applied by brush roller or spray. It can be used to fill low areas, typically around 0.5mm deep prior to applying primers and undercoats. It is a very easy to use and very easy sanding product. Should be overcoated with Interprotect after being sanded smooth. Mix ratio is 6:1 by volume.

Interfill® 833

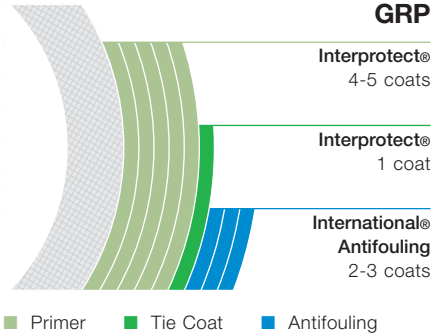
Interfill® 833 is a low-to-medium density, very smooth and creamy two-part epoxy filler suitable for all filling work and for the smaller fairing jobs. Can be used above and below the waterline and has an easy to use 1:1 mix ratio.

Epiglass® HT9000

Epiglass HT9000 Epoxy Resin system has been developed to offer a comprehensive range of resin and hardener combinations for the boatbuilding industry. It includes systems for gluing, filling, fairing and sheathing timber, GRP, steel, aluminium and ferro hulls. HT9000 has a simple hardener range (slow, standard and fast) to accommodate all uses. HT9000 has a 3:1 mix ratio.

Osmosis Protection Schemes

Product guide



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-blister. We recommend a comprehensive washing and drying procedure.
3. **Application of HT9000:** 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 HT9000 Multipurpose Epoxy Resin Manual.
4. **Application of Interprotect®:** This will act as a tie-coat to the antifouling.

Epiglass® HT9000

- Offers a range of resin and hardener combinations for the boatbuilding industry
- Includes systems for gluing, filling, fairing and sheathing timber, GRP, steel, aluminium and ferro hulls
- Simple hardener range (slow, standard and fast) to accommodate all uses
- 3:1 mix ratio

Interprotect®

- Quick drying, easy to apply, two-part epoxy primer
- Offers excellent anticorrosive protection
- Can be used as an antifouling tie-coat over existing epoxy primers

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 understand the information in our literature and on our product labels 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.

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

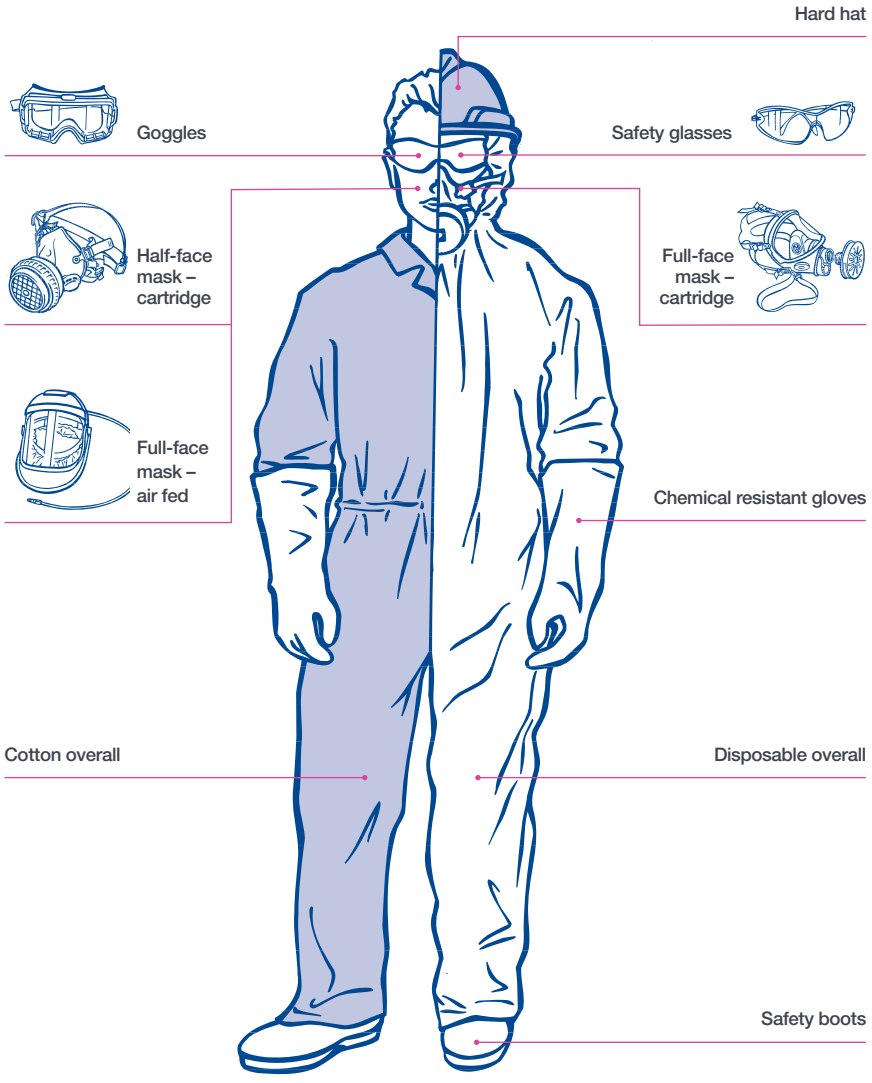
Most paints contain organic solvents – some of which evaporate into the air upon opening the container. Any dangers can be reduced if a few simple precautions are taken:

- **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**

For further information on Personal Protective Equipment, visit **international-yachtpaint.com**

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.



International

Outstanding results in just a few clicks

There's a new, easy way to create your customised coating guide, for above and below the waterline.

Get step-by-step instructions with videos, and expert advice to help you achieve stunning results, in just one click.

Everything you need, in one easy place!
Check out international-yachtpaint.com now!

AkzoNobel

Our commitment

Doing more with less

We realize that our future depends on our ability to do radically more with less.

So we're taking a major leap forward to connect value creation to resource efficiency.

It's a dynamic and committed approach to sustainability which will drive innovation and enable us to better serve our customers and our markets.

This is our commitment to doing more with less.

The International® brand has a long history of environmental stewardship and compliance. Our brand shows respect and care for the environment as we believe that a healthy planet is essential to human life and a sustainable future.

Sustainable business

We're working together with customers and suppliers to develop leading solutions that create more value from fewer resources

20%
of revenue by 2020 from products that are more sustainable for our customers than those of our competitors

REI
(Resource Efficiency Index)
A new indicator measuring how efficiently we generate value, expressed as gross margin divided by cradle-to-grave carbon footprint

Resource efficiency

We're increasing our resource efficiency across the value chain, including our use of renewable materials, to reduce our environmental footprint and to create more value from fewer resources

25-30%
more efficient resource and energy use across the entire value chain by 2020 (measured by cradle to grave carbon footprint reduction)

Capable, engaged people

We're developing our employees, working with our suppliers and customers and forming partnerships to create more value from fewer resources

> 4 out of 5
Employee engagement score, as measured by Gallup Q12

Glossary of terms

A

Activator/Curing Agent: Catalyst, hardener, accelerator, reactor; a material which accelerates a reaction

Adhesion: Bonding strength; the attraction of a coating to the substrate

B

Barrier Coat: Coat used to allow application of a paint which is not compatible with an existing scheme

Base: Refers to the usual larger volume size of a two-pack system – usually the non-activator part. May also refer to any bare surface to be painted

C

Coverage Rate: Non-technical number that tells you how much area you can paint with a given volume of material

Curing: Hardening

D

DOI (Distinction of Image): Measurement of the clarity of the coating by its ability to reflect the image of a given object

Dry Film Thickness (DFT): The film thickness of paint after all of the solvent has evaporated from the wet paint

F

Film: Any single coat or layer of paint applied to a surface, rather than a 'paint scheme'

Film Build: Dry thickness characteristics per coat

G

Gloss: Sheen; ability to reflect; brightness

M

MSDS: Abbreviation for Material Safety Data Sheet

O

Opacity: Hiding power

Orange Peel: Dimpled appearance of dried film; resembling orange peel

P

Pot Life: Time interval after mixing during which liquid material is usable with no difficulty

Primer: First complete coat of paint of a painting system applied to a surface. Such paints are designed to provide adequate adhesion to new surfaces or are formulated to meet the special requirements of the surfaces

R

Resin: A material, natural or synthetic, contained in varnishes, lacquers, and paints; the film former

S

Sealer: Paint used to seal the substrate or previous coats and prevent interaction between subsequent coats applied

Substrate: Surface to be painted

T

TDS: Abbreviation for Technical Data Sheet

Thinner: A liquid used for reducing the viscosity of paints

Tie Coat: A coat of paint applied to a previous coat to improve the adhesion of subsequent coats or to prevent other surface defects e.g. bubbling of a subsequent coating

Two-Pack: Paints based on binders which cure by the chemical reaction between two components

V

Viscosity: A measure of fluidity

W

Wet Edge: Keeping the paint wet enough when it is applied by brush so it can be brushed back into without showing lines of demarcation from one painted area to the next

Wet Film Thickness (WFT): The thickness of paint when it is first applied before solvent evaporation takes place

Australia

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New Zealand

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Colors

Antifoulings

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

Polishing

Micron® AP

Maximum strength

Black Blue

Polishing

Micron® 99

High strength, multi-season

Black Blue Red

Polishing

Micron® Extra 2

Premium protection

Black Navy Blue Red

Dark Grey Dover White

Polishing

Micron® One

Good performance

Black Blue Red

Polishing

Trilux 33

High strength, bright colors

Black Blue Red White

○ Pre-immersion ● Post-immersion

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

Hard

Ultra 2

Ultra strong

Black Navy Blue Red

Dark Grey Dover White

Hard

VC® Offshore Hard Racing Antifouling

Low friction

Dover White

○ Pre-immersion ● Post-immersion

Due to differing registration requirements between countries some antifoulings may not be available in your area. A slight variation in antifouling color may be experienced when the same product is used as a boot topping compared to the product continually immersed.

Different craft used for different purposes have quite different antifouling requirements. For further guidance on the choice of correct antifouling visit international-yachtpaint.com or call our Technical Helpline.

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Color Card

Aus/NZ Edition

international-yachtpaint.com

AkzoNobel

Colors

Topcoats

Perfection

Ultimate performance, two-part polyurethane finish

Snow White ☐ | Mediterranean White ☐ | Matterhorn White ☐ | Platinum ☐

Cream ☐ | Rochelle Red ☐ | Jade Mist Green ☐ | Mauritius Blue ☐

Royal Blue ☐ | Jet Black ☐

Recommended undercoat for two-part finishes

☐ White Perfection Undercoat

When choosing your color scheme, bear in mind the following:

- Dark colors will absorb more heat and lead to higher hull and deck temperatures. With some types of construction, the differential rate of thermal expansion and contraction between differing materials may lead to undesirable surface defects appearing. If in doubt, use light colors and/or contact the International Helpline for further information.
- When purchasing topcoats or antifouling, ensure you purchase sufficient of the same batch number for the complete job to ensure consistency of color. Also remember that antifoulings change color after immersion and therefore color in the can is not indicative of the final color.
- Application of red, orange & yellow topcoat colors which are lower in opacity will require extra coats.

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

Toplac®

Premium quality high-gloss durable yacht enamel

Snow White ○ | White ○ | Atlantic Grey ● | Cream ○

Yellow ◑ | Rescue Orange ◑ | Fire Red ◑ | Donegal Green ◑

Squall Blue ○ | Lauderdale Blue ○ | Oxford Blue ◑ | Jet Black ◑

Recommended undercoat for one-part finishes

○ White Pre-Kote ◑ Blend (50% White Pre-Kote/50% finish color)

When using some Toplac colors we recommend mixing the second coat of undercoat 50:50 with the topcoat. This will create a satin finish which highlights final imperfections that can be sanded smooth. This procedure will also help achieve greater gloss and color depth in the topcoat.

Bilgekote*

High wearing coating for bilges, lockers and bulkheads

White | Grey

* Known as Danboline in Europe

Interdeck®

Slip resistant polyurethane deck paint

White 001 | Grey 289 | Cream 027 | Squall Bue 923

Can’t find the deck finish you want?

Why not create your own custom-finish deck using our non-slip additive and your favourite color from our finishes ranges? Intergrip can be mixed in before painting or applied to the wet paint surface. Mix or match your deck and topsides – it’s your project, you choose!