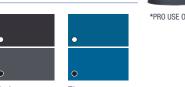
Antifoulings



















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

Dover White

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

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

O PRE-IMMERSION



We know our customers and that is why some of our products are manufactured locally, to meet a specific local requirement. So if you need Everdure, Epiglass HT9000 or Goldspar, you can have them, quickly - they're produced here in Asia Pacific.

You're on first name terms with your local International representative. You know and trust the products that they sell. You know where they are made and that they will perform in our region.

You also know that behind our local service, stands the technical expertise, constant innovation and renowned customer support of one of the world's largest coatings manufacturers.



So if you want Ultra 2, Micron globally available, market-leading coatings we can supply these right here in Asia Pacific or wherever your voyages may take you.

It's the best of both worlds: first class local service, backed by the absolute confidence of dealing with an international company that truly values your business, here or no matter where you are.

Visit our website for more information international-yachtpaint.com

AkzoNobel

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"Visit our website for even more expert advice."

Our Boat Painting 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 international-yachtpaint.com



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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 Printed in the UK using vegetable oil and naturally occurring resin-based inks

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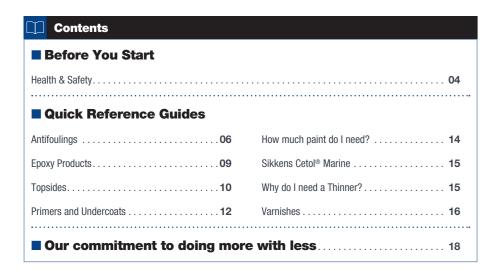
Helplines: 1800 251 431 (Aus) / 0800 808 807 (NZ) / +61 7 5573 9600 (PI) / +65 6261 5033 (Asia)

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.

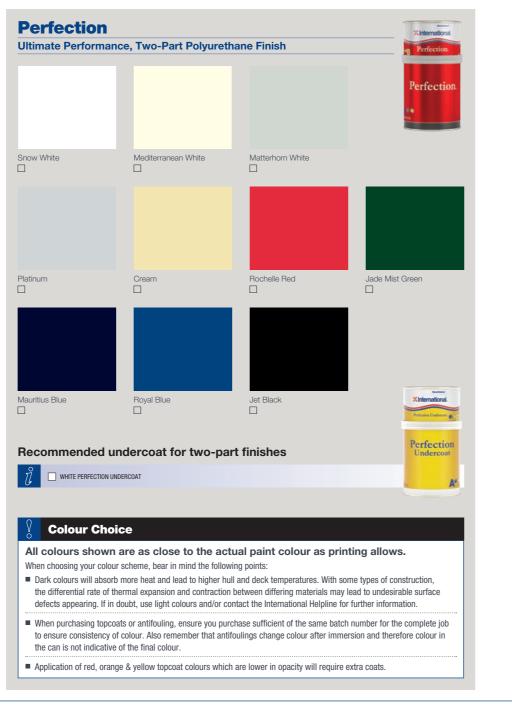
No matter where you are, in whichever waters around the globe, you'll find high performance coatings backed by meticulously researched knowledge and support from International Paint.

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...

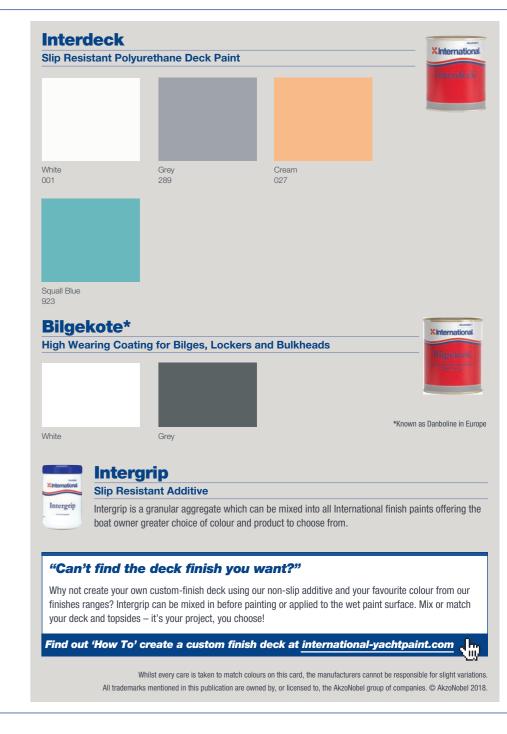
XInternational



Topside Finishes







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...



international-yachtpaint.com



Product data sheets



Australia 1800 251 431 New Zealand 0800 808 807 Pacific Islands +61 7 5573 9600 Asia +65 6261 5033



Material safety data sheets



yacht.australia@akzonobel.com yacht.newzealand@akzonobel.com vacht.asia@akzonobel.com



Product labels

Our website has been developed to provide you with a comprehensive information source, available in over 20 languages worldwide and accessible 24 hours a day, 7 days a week. Whether you're looking for boat painting or maintenance advice, information on new or current products, hints and tips, 'how to' information, news, views or simply just where to find us or our products — you'll find all of this and more at international-yachtpaint.com.

We are pleased to offer technical support to all our customers. Our **help desks** are staffed by members of our technical support team, who are on hand to provide you with information and advice on all aspects of boat painting and maintenance, to ensure you achieve the best possible results from our products.

All of our products are supported by a **Product Data Sheet (PDS)** – copies can be found at **international-yachtpaint.com**. A PDS will provide
you with information about the product, its application
and use, drying and overcoating information and
transportation, storage and safe use.

We have a responsibility, by law, to provide a Material Safety Data Sheet (MSDS) for every product and product variant we sell. A material safety data sheet is designed to provide the proper procedures for handling or working with a particular substance. MSDSs include information such as physical data, toxicity, health effects, first aid, reactivity, storage, disposal, protective equipment and spill/leak procedures. MSDSs are an information source for anyone who wants to know the correct methods for storing our products or for emergency responders, in the event of a spill or an accident. Our MSDSs can be viewed and downloaded at international-vachtpaint.com

The information on our **Product Labels** has been designed to enable you to get the best results from our products, whilst observing best practices in health and safety. Always read the information on the label thoroughly, before you start. Further information on our product labels and the symbols used can be found on page 4 of this booklet.

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

Before You Start

Boat Paint Guide

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 appropriate local standards. 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.

"Need more expert advice on working safely with our products?"

The information shown in this section is provided as a basic guideline only. To ensure you have access to up-to-date information on personal and environmental health and safety and choosing the most suitable tools and equipment, we now publish more comprehensive 'Before You Start' information on our website. Alternatively, you can always call us via your local International help line number, where a member of our **Technical Support Team** will be pleased to provide you with information and advice, tailored to your particular needs.

Click or call - expert advice at your fingertips



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

Quick Reference Guide

Boat Paint Guide

Antifoulings

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











	Polis	hing	Slow Polishing	Hard			
	Micron® 77	Micron [®] Extra 2	Trilux [®] 33	Ultra 2	VC [®] Offshore EU		
Key attributes	 Ultimate antifouling performance – one complete application protects even for prolonged stationary periods in the harshest fouling conditions Available in red, blue and black Superb protection in any fouling area Long term performance Suitable for both fresh and salt water areas Reduces slime build-up 	 Premium copolymer antifouling for harshest fouling areas Excellent protection from one complete application Minimum paint build-up, wears away with use Biolux® technology for sustained antifouling protection 	 Premium antifouling for use on aluminium Slow polishing, avoids seasonal paint build-up For all substrates including aluminium; recommended for propellers and boottops Bright colours, including bright white Biolux® technology for sustained antifouling protection Premium performing, high strengt antifouling oconditions Ideal for fast powerboats and competitive sailing Hard scrubbable finish for easy clean-off Can be burnished for a smoother finish for maximum slip through the water Biolux® technology for reduced slim 		 For racing, sailing and power boats Suitable for salt and freshwater With fluoro microadditive for a low friction surface Hard, smooth finish can be burnished to a very low profile 		
Thinners	No. 3	No. 3	No. 3	No. 3	No. 3		
Practical coverage (m² per litre)	10.0	9.0	8.3	9.0	10.5		
Number of coats	3-4	2-3	3	2-3	2-3		
Substrates* * Substrates must be suitably primed	₩ ■	₩ M ■		₩ ■	₩ № ■		
Suitable for frequently used high speed craft	✓ Up to 25 knots	✓	<u>/</u>	✓	✓		
Application method	₹ 7	₹ 7	₹7	† 7	7		
Suitable for high fouling areas	***	**	***	**	*		

SUITABLE FOR BURNISHING TO PROVIDE A SMOOTHER FINISH.

USE ANTIFOULING PAINTS SAFELY. ALWAYS READ THE LABEL AND PRODUCT INFORMATION BEFORE USE.



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 to specifically target weed and slime fouling.





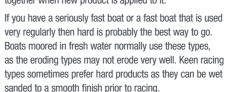
Antifoulings

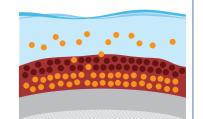
"How do I know which type of antifouling to use?"

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

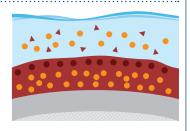
Hard antifouling does not wear away much at all, although abrasive material in the water such as silt and sand may lead to a very minor reduction in film build. Eventually however, you are left after a few seasons with a build up of product that requires removal. The product becomes unsound and does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





Eroding antifouling

Eroding antifoulings, as their name suggests, wear away leaving eventually no antifouling on your hull. Eroders 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 eroders such as Micron® 66 and Micron® 77 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. When the paint film starts to get thin, the biocides are preferentially washed out leaving paint that is essentially not antifouling paint. 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.



Click or call and ask the experts!



 \rightarrow

Epoxy Products

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.





Everdure



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 colourless • epoxy resins to allow maximum glue line once cured and is suitable for above and below the waterline. Epiglue has an easy to use 2:1 mix ratio.

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 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.

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 (standard and fast) to accommodate all uses. HT9000 has a 3:1 mix ratio.





Interfill® 830

Interfill 830 is the best choice for profiling above and below the waterline on Steel, Aluminium and Composite hulls. The special 2-component epoxy formulation can fill up to a thickness of 1 inch in one coat without the risk of sagging/slumping. It is easy to sand and waterproof and is particularly suitable for application over large areas.

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.

Topsides

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







Perfection® Toplac® Interdeck Key attributes ■ Ultimate performance, two-part ■ Premium quality high-gloss ■ Slip resistant polyurethane deck polyurethane finish durable yacht enamel paint ■ Chemical cure for the hardest ■ Silicone alkyd formula lasts Contains fine mineral additive for finish & highest abrasion twice as long as conventional hard wearing, non-slip surface resistance one-part enamels Suitable for all substrates ■ Excellent UV resistance Unique UV protection for superior, Low sheen finish prevents long-lasting gloss and colour ■ Extended gloss and colour sunlight dazzle retention characteristics Professional-quality results made Apply straight from the can with Easy to apply giving deep, brush or roller lustrous finish **Thinners** No. 1 12.0 12.0 10.8 Practical coverage (m² per litre) Number of coats 2-3 1-3 1-2 Substrates* Application method Perfection Pre-Kote Pre-Kote Recommended undercoat Pre-Kote Undercoat For a non-slip finish add: 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 Intergrip by the amount of material added into the finish.

"Which product should I choose for my topside?"

Before starting your project, it's important to consider the area you're painting, as this might affect your choice of product. Modern construction methods using fibreglass, steel and aluminium provide a stable surface and are 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.

Diagonally planked constructions or moulded veneers are highly stable, so present no problem. However, carvel and clinker (or lapstrake) constructions are flexible by nature, meaning the wood tends to move as the moisture content varies. Hard systems – such as Perfection® – cannot sufficiently flex to accommodate this movement, making them likely to crack. A one-part product, such as Toplac, is therefore recommended.

> Need more hints and tips to achieve a professional finish? Get advice from the experts at international-yachtpaint.com













ROLLER



^{*} Substrates must be suitably primed

Quick Reference Guide

Boat Paint Guide

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	Perfection® Undercoat	Pre-Kote			
use above the water Quick drying, with anticorrosive properties		 Conventional one-part primer for use below water Quick drying, with anticorrosive properties Can be used under all major antifoulings* or as a conversion 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 tiecoat over existing or unknown epoxy primers 	 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 colour changing Long-lasting, easy to apply and rub down Long overcoating times allow coat-on-coat application 			
Typically used	Above water, under one-part undercoats Do not overcoat with two-part products	Below water, under antifoulings or to seal unknown antifoulings	Where a high-performance anti-corrosive system is required Do not use over one-part products or antifoulings	Under Perfection finish (can also be used with Toplac® and Interdeck®) Do not use over one-part products	Under International one-part finishes Do not use under two-part products			
Thinners	Minimal No. 1	No. 3	No. 7	No. 9	No. 1			
Practical coverage (m² per litre)	12.0	7.4	8.1	11.8	12.0			
Number of coats	4	1-5	1-5	1-2	1-2			
Substrates	₩ ™ ■ ■			₩ • • •	₩ ₩ * * *			
Application method	† 7	† 7	† 7	† 7	† 7			
Suitable for above waterline	✓	X	/	7	✓			
Suitable for below waterline	X	✓	<u></u>	X	X			

Perfection Undercoat and Pre-Kote can be blended with appropriate topcoat to give a coloured undercoat

* Over suitable primer

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

How much paint do I need?

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

- 1. Calculate the area needing paint. For a rough estimate of the area to be painted, multiply the length of your hull (LOA) by the beam and multiply by 0.85. (LOA x B x 0.85 = Area) Then divide the area by the practical coverage rate of the paint you have chosen, as per the appropriate product description from this book, to determine how many litres per coat you will need, or
- **2.** Refer to the reference chart below for a guick estimate:

	×		×									
	Hull Shape A		Hull Shape B			Hull Shape C						
x (metre)	6.1	7.6	9.1	12.2	6.1	7.6	9.1	12.2	6.1	7.6	9.1	12.2
X (feet)	20	25	30	40	20	25	30	40	20	25	30	40
Litres required* (standard range)	4.0	5.0	7.0	12.0	3.0	4.0	5.0	9.5	2.0	2.5	3.5	6.0
Litres required* (VC® range)	3.0	4.0	5.5	9.5	2.5	3.0	4.5	7.5	1.5	2.0	3.0	5.0

.....

* Average amount based on 2 coats

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

WOOD STEEL ALUMINIUM LEAD ZINC FIRUSH ROLLER

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 Teak, Natural or Natural Teak colours, Cetol Marine is designed for interior and exterior use above the waterline.



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.



paints (excluding

antifouling) and

varnishes









Polyurethane Retarder

Thinner No.9



Enamel Thinner No.1	Antifouling Thinner No.3
A general purpose thinner, for use with one-part	Typically used with antifouling paints

and brushing

Brushing Thinner No.6 Brushing aid for Toplac and Perfection® colours when temperature conditions reduce products' flow

properties

Ероху Thinner No.7 Thinning two-part

epoxy paints

Thinning two-part polyurethane paints

Quick Reference Guide

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

Varnishes











	Perfection® Plus	Schooner® Tropical	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 varnish with excellent UV protection Rich golden colour and deep gloss Good flow-out and self-levelling characteristics for easier application Suitable for interior and exterior use 	 High quality one-part polyurethane varnish Suitable for interiors, exteriors and over existing varnish Good UV resistance and abrasion resistance Quick drying 	 A satin finish polyurethane varnish for interior use Resistant to hot water, mild acids and alkalis Fast-dry formulation minimises dust contamination 	 Low maintenance 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	No. 9	No. 1	No. 1	Towns No. 1	Research No. 1	
Practical Coverage (m² per litre)	12.0	18.0	16.0	10.3	10.0	
Number of coats Will vary depending on usage. Please check product label/data sheet.	2-5	6-10	6-10	3	2-3	
Suitable for use direct to oily timber (e.g. teak or iroko)	✓	✓	<u>✓</u>	<u>✓</u>	<u>/</u>	
Application method	₹7	₹ 7	₹7	₹7	₹ 7	
UV Protection	****	* * *	* * *	For interior use only	* * *	





Creating more value from fewer resources

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.

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



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

25-30%

resources

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



Deople

We're developing our
employees, working with our
suppliers and customers and
forming partnerships to create

> 4 out of 5

more value from fewer

resources

Employee engagement score, as measured by Gallup Q12