



Inland Waterways Manual

Thank you for choosing Hempel



This manual covers key aspects of painting and repainting steel narrowboats, barges, dutch barges, inland cruisers and wide beamed vessels. The information will be useful for both professional painters and boat owners wishing to paint or repaint a boat.

A paint system provides both resistance against corrosion and a cosmetic appearance. By selecting the correct paint specification corrosion can largely be overcome, giving steel vessels long periods of service with minimal maintenance.

More information is available from our website www.hempelyacht.com. The website will also list local stockists and product data sheets. Please contact us on 01633 874024 or e-mail sales.uk@hempel.com for additional technical advice.

www.hempelyacht.com

Our products are easy to use

We offer a comprehensive range, covering all substrates, needs, conditions and techniques. With Hempel, you can rely on one brand for all your paint projects.

Our products are thoroughly tested and developed to the highest criteria

They meet all environmental standards and legislative requirements. They are easy to apply, effective and long-lasting, however challenging the conditions. Our product quality is trusted by customers around the globe.

We have nearly 100 years in the business

Hempel has been delivering coating solutions for a range of environments for nearly 100 years – from motor boats to supertankers, oil rigs to bridges, superyachts to small dinghies.

We're here to help

We pride ourselves on being approachable and helpful, offering you service that is second to none. We're always happy to hear from you, and will do our best to answer any painting queries you may have.

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Preparing to paint a new boat

- **Overview of finishes**
- **Main considerations**
- **Cathodic protection**



Preparing to paint a new boat

There are a number of grades of steel and possible treatments for the steel panels used in the construction of a new boat. To ensure that painting is successful the following points need to be considered:

- 1. If the metal has been treated with a holding primer is the holding primer suitable to weld through?**
- 2. Is the existing priming system suitable for overcoating with your chosen paint system? Generally it is not advisable to overcoat a single pack product with a two pack product.**
- 3. For bare steel, it is recommended that all mill scale should be removed prior to painting to ensure a long lasting paint system.**
- 4. For best performance of any system grit blasting is recommended.**

Before you start it is important to take into account the finish that will be required, as this will largely determine the preparation and the primer. The type of finish is determined by the durability and type of service that a particular area will be subject to. Planning should also take into account the various stages of work to be carried out, to ensure minimum disruption to areas that may have already been coated. For example, plan to undertake most of the welding prior to painting to avoid damaging paint both internally and externally. Similarly, welding will damage a primer

or holding primer and will require surface preparation and re-priming. Ideally, a written log detailing the type of coatings used, when applied, colour reference and amount used would be of benefit, both throughout the project and for the future. Please use the record details page at the back of this manual. By logging this information you will be able to start the job correctly and save yourself a great deal of time and trouble in the future. Practical limitations, such as time, budget and facilities must also be considered.

Overview of finishes



Please note that all Hempel products are specifically designed for the environment and usage that they are going to be put to and will protect your investment far better than non specialist products. In addition to value for money, you will have greater gloss

retention, better UV filters and harder and more durable surfaces. Use of two pack high performance products will provide long term benefits in reduced maintenance costs. Our products are available in convenient tin sizes to suit most jobs.



Main considerations



Many boats are produced to individual specifications, therefore planning for the end result and ongoing maintenance is important. For example, vessels used for charter or living on board will often require a higher paint specification than a conventional paint system both internally and externally. Similarly, vessels that will encounter severe high abrasion in certain areas may benefit from a single pack system that is easier to recoat. Particular requirements can also benefit from a combination of both two pack and single pack paints.

Another point for consideration is whether an antifouling is required. An antifouling will be required if the boat is kept afloat for long periods in salt

water. Certain freshwater locations can also benefit from an antifouling to minimise problems such as, lime scale and weed fouling. The use of an antifouling will help to keep the bottom clean which will ensure that the boat speed is not adversely affected.

It is not routine practice to coat the flat bottom of a narrowboat; however a coating may be required under certain conditions, for example, when the water has high oxygen content.



Cathodic protection



On a steel vessel good cathodic protection is essential for a successful paint system. This involves anodes, earthing of electrical appliances and the possible installation of equipment to protect against stray currents from

external sources. To ensure that correct cathodic protection is installed we recommend that professional advice is obtained. Painting of anodes with antifouling or a paint coating will prevent them from working properly.

Before you paint

- **Conditions**
- **Temperature**
- **Removing Old Paint & Antifouling**
- **Cleaning & Degreasing**
- **Abrading**
- **Application methods & tools**



Conditions

All Hempel paints are very tolerant to application conditions which can vary greatly. All curing rates and overcoating times quoted in this book are calculated assuming the following (unless otherwise stated):

- temperature of 20°C
- a relative humidity (RH) of 60-65%
- a well ventilated working area

Full product data sheets are available at our website www.hempelyacht.com

Temperature



Painting can take place at a wide range of temperatures; you will need to adjust the drying and curing times accordingly. A good guide is to double the drying/curing time with a drop of 10°C and halve the time with an increase of 10°C (adjust accordingly between these temperatures).

Paint properties change with temperature variation. Paint thickens at lower temperatures which can make it more difficult to apply. Always note correct/maximum thinner ratios and take care not to add more than is recommended. At high temperatures the increased drying/curing rates of the paint reduce the flowing properties which can result in visible application marks. This also applies when painting in direct sunlight where the boat's surface has a much higher temperature than the ambient temperature. The minimum application temperature for the majority of Hempel products is 5°C, the exceptions to this

are Polygloss and Diamond Varnish which should not be applied at less than 10°C. These limits must be observed, as products will not cure below stated temperatures, resulting in poor film formation, poor adhesion between the coats and poor gloss finishes.

Note: To avoid paint getting too thick during cold weather, warm it by sitting the opened can in a bowl of warm water.

Relative humidity:

Ideally relative humidity should not be above 65% (this is measured with the use of a hygrometer). However, humidity up to 85% can be tolerated, depending on individual products (see product data sheet). A good test is to moisten the surface to be painted and if it dries within 10-15 minutes, it should be all right to paint. Outdoor painting should not take place too early or too late in the day when there is a risk of condensation or dew.

Removing old paint & antifouling



The potentially difficult job of removing old paints and antifouling can be made easier with the use of paint and antifouling removers. These products can be used on single pack paints and varnishes and on antifouling. However they are not suitable for stripping two pack systems, such as polyurethanes and epoxies. For certain jobs we recommend grit blasting – please refer to page 19.

Ventilation

Indoors

Ample ventilation is important to allow the paint solvents to evaporate, thereby, allowing the paint to cure properly and avoid blistering.

Outdoors

When painting outdoors, choose a calm day to minimise the risk of dust pollution on the paint surface and to allow solvent based paints to flow out naturally which will improve the final finish.



Cleaning and Degreasing



Good surface preparation is vital to achieve a high quality finish. Part of this preparation is ensuring that the surface is free from any contamination.

Cleaning before painting

Pre Clean is a high strength water soluble cleaner, especially suitable for cleaning old paint surfaces, removing fuel, oils and grease and areas where there are stubborn stains. **Pre Clean** may be diluted up to 50% with fresh water for soft coatings like antifouling or bitumens. It can also be used to

clean brushes covered in part cured paint. It is particularly useful for engine compartments as it can be hosed off with freshwater. It is not recommended for use on bare or untreated wood which is liable to absorb the water.



Abrading



To ensure good coating adhesion the surface to be painted must be: dry, clean, free from grease, even but not too smooth.

Dry abrading is recommended for the removal of fillers, old paint (not antifouling as the dust is toxic) and the initial preparation of wood, aluminium, lead and GRP.

Dry sanding creates a lot of dust and a good quality particle mask and eye protection should always be worn. Dry abrasive paper is available in various grades and comes in sheets or on a roll. To ensure even abrading, wrap the paper around a cork sanding block.





Wet Abrading

Antifoulings should always be wet abraded to avoid inhalation of toxic dust particles. Due to the lubricating action of the water, there is minimum amount of paper clogging and a clean surface can be quickly achieved. Wet abrasive paper is available in sheets in various grades and should be used around a cork sanding block to ensure an evenly abraded surface.

Note: many areas of the world now require old antifouling to be collected and disposed of correctly. By using a scraper you can collect the old antifouling on sheets underneath the boat which will allow easy disposal or use a vacuum attachment to the scraper or a grinding machine.

Choosing the right grade paper

Surface to sand	Dry paper	Wet paper no
two component filler	60 – 100	n/a
previously painted surfaces	150 – 180	180 – 240
paint or varnish	220	240

Mechanical Abrading

The main types of mechanical sanders are:

Belt Sander – allows rapid removal of material on flat surfaces.

Random Orbital/Dual Action Sanders – allows rapid removal of material from most surfaces. With careful selection of paper grade they can be used for rough fairing through to final sanding of undercoats prior to topcoat application.

Orbital Sander – general purpose sander for most preparations. Standard abrasive paper can be used making it a relatively economic abrading machine.

Note: only lightly sand plywood and veneered surfaces to avoid sanding through the thin layer of veneer. The use of a hot air gun is also risky on veneered surfaces – use only with low temperature.

Note: drilling machine attachments and angle grinders should only be used for rough abrading as they can cut in and tend to leave marks.

Abrasive blasting – grit, slurry, sand are all used for abrasive blasting. Generally this means removing paint and coatings is carried out by a professional person with the correct equipment and will leave you with the ideal surface for any new coatings.

Application Methods & Tools



Film Thickness

Paint coat film thickness is measured in microns (a micron = 1/1000 mm). A wet film thickness gauge can be used when applying the product if coating depth is critical, but normally the area to be covered is calculated and the recommended amount of paint is applied.

To help you to get the correct amount of paint on to the surface our specifications list the litreage required per square metre to allow you to calculate quantities needed for the area you will be painting.

Brush

Always use a good quality brush which is as large as possible for the job you are doing. Avoid using a new brush for a final coat as new brushes have a tendency to shed bristles. For best results use a crisscross technique on an area that is manageable. This involves brushing from side to side, followed by up and down.

This process is continued until the paint is evenly distributed over the area with the final strokes being very light (laying off) and in a vertical direction. Paint with the brush at an angle of 45° to minimise brush marks. During painting the paint will start to cure on the brush, so to ensure consistent performance, clean the brush approximately every 30 minutes.

Paint roller

Applying paint with a roller is a fast method of covering large areas and

using the correct roller head can produce excellent results. Where speed of application is more important than surface finish, a short pile mohair roller can be used. To produce a better quality finish, small diameter felt and closed cell foam rollers are recommended. In all cases use the crisscross technique described above to distribute the paint evenly. Alternatively laying off paint applied by a roller with brush or pad will give you an improved finish.

Paint pad

With a paint pad you can obtain an excellent finish. Both conventional and high performance top coats are suitable for paint pad application. Whilst the paint can be applied directly with the pad, it is most effective for levelling off paint which has been applied by brush or roller. The pad should be used immediately after the paint has been applied.



Do not work the pad back and forward, but draw it in one direction only, using vertical strokes to avoid a paint build up which may sag. This technique will eliminate almost all application marks and result in an excellent finish.

Spray equipment

It is generally accepted that paint applied by a spray gun will give the best results, providing the job is carried out by a skilled operative. Where possible keep the job at a steady temperature with low humidity, this is best achieved inside a shed. A full air fed mask should always be worn. If you do not have the skill and the necessary spray equipment, it is advisable to leave spray application of paint and varnish to a professional.



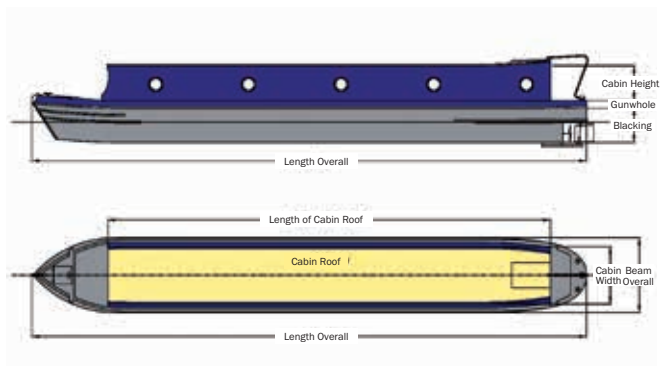
Preparation

- **Calculating paint quantities**
- **Preparation above and below the waterline**

Calculating paint quantities



To calculate the amount of Blacking required per coat = Length Overall x Blacking Height x 2. To calculate the side of the cabin = Length Overall x Height of Cabin minus the estimated area of windows x 2



Ideally take measurements using metres or alternatively convert feet to metres: 1 foot x 0.305 metres. At this stage you will have a surface area in m². To determine how much paint is required per coat, divide the surface area by the coverage of the product. Multiplying by the number of coats will provide the total litreage required.

From the table below calculate the most convenient tin size.

Colours can be made to order for a two pack polyurethane, single pack enamel and deck paint. These need to be ordered through your local stockist, providing a BS or RAL colour reference. The minimum order size is 5 litres.



Product	Coverage m ² /litre	Tin sizes
PRIMER UNDERCOAT	10	750ml & 2.5ltr
UNDERWATER PRIMER	8	750ml & 2.5ltr
LIGHT PRIMER	8.5	375ml, 750ml & 2.25ltr
BRILLIANT GLOSS	11	375ml*, 750ml & 2.5ltr* (*Pure White only)
SUPREME GLOSS	11	750ml & 2.5ltr* (*Pure White only)
MULTICOAT	11	750ml & 2.5ltr
BILGE & LOCKER PAINT	11	750ml & 2.5ltr
NON - SLIP DECK COATING	9.5	750ml
VARNISHES	various	375ml, 750ml & 2.5ltr
WATERBORNE VARNISHES	12	750ml
ANTIFOULINGS	13	750ml & 2.5ltr
HEMPINOL 10220 (BLACK BITUMEN)	7	4ltr & 18ltr
UNI PRIMER 1314	9	5ltr
HEMPADUR 45140	6	5ltr
BLAST PRIMER 15560	10	5ltr
HEMPATHANE 55810 - FULL GLOSS	11	5ltr
HEMPALIN 52140 - TINTED TO COLOUR	12	5ltr
HEMPATEX 46410 - TINTED TO COLOUR	6	5ltr
HEMPADUR MULTI-STRENGTH 35530 - WATER POTABLE APPROVAL	4	9ltr

Note: Coverage based on typical thickness and can vary depending on application method.

Inadequate preparation is the main cause of paint system failures. If you are in any doubt about the surface coating it is advisable to remove any existing primers or coatings and start from bare steel.

Equally important for successful painting is accessibility, ventilation and suitable environmental conditions. Following the specification, calculating the surface areas and applying the correct amount of product will all help to ensure that the paint system is successful.

Preparation above and below the waterline



The methods of surface preparation employed and the degree of cleanliness achieved will directly influence the performance and life of any coating system.

Grit Blasting

This is by far the most effective method of preparing metal surfaces and is the recommended method of preparing steel to a standard suitable for the use of anticorrosive systems. As a general rule steel will require grit blasting to a minimum standard of Sa 2^{1/2} (ISO Standard ie near white metal). New methods of grit blasting are now available which are more environmentally acceptable and can be undertaken in small boatyards or suitable private premises.

Prior to grit blasting it is advisable to pressure wash the boat using a detergent and fresh water. This is particularly important when removing old paint coatings.

Power Tools

Power tools with the appropriate abrasive or rotary wire attachments provide a quick and effective means of removing corrosion and preparing the surface. The disadvantage of power tools is that they can polish the surface to such an extent that adhesion of subsequent paint layers may be adversely affected. This can be overcome by giving the surface a final

grind with a new coarse grinding disc or angle grinder.

Hand Tools

The use of chipping hammers, wire brushes and abrasive paper is a slow and often unsatisfactory form of surface preparation. These methods of preparation are labour intensive, of an inferior quality and should only be used for local repairs or when alternative methods are not available.

Following any of the above...

to minimise flash rusting, apply the first coat of primer promptly after removing dust and grit by brushing, vacuuming or using dry compressed air.



Specifications

- **Standard single pack system**
- **Two pack surface tolerant system**
- **Cabin roof system**

Standard Single Pack System



For narrowboats, dutch barges, wide beam vessels and general canal vessels

Product	No of coats	Overcoating times @ 20 °C	Coverage m ² /litre	Thinners
Above the Waterline				
PRIMER UNDERCOAT	5	4 hours – 3 days	10	No 1
BRILLIANT GLOSS	3 – 4	8 hours – 6 days	11	No 1
Below the Waterline				
HEMPINOL	4	when dry – indefinite	7	No 3

Note: In all cases, if overcoating times are exceeded - abrade the surface and wash off with fresh water.

Two Pack Surface Tolerant System



For narrowboats, dutch barges, wide beam vessels and general canal vessels

Product	No of coats	Overcoating times @ 20 °C	Coverage m ² /litre	Thinners
Above the Waterline				
HEMPADUR 45143 EPOXY PRIMER (option 1)	2 – 3	8 hours – 4 days	6	No 5
LIGHT PRIMER 45551 (option 2)	2 – 3	4 hours – 30 days	8.5	No 5
SUPREME GLOSS TOPCOAT (option 1)	2	12 hours – 30 days	11	No 2 Brushing No 6 Spraying
HEMPATHANE 5510 TOPCOAT (option 2)	2	8 hours – indefinite	14.9	No 3
OCEAN GLOSS SYSTEM (option 3)	2 – 3	16 hours – 5 days	15 – 17	No 6 – No 7
Below the Waterline				
HEMPADUR 45143 EPOXY	4	8 hours – 5 days	6	No 5



If an antifouling is required, please follow the specification below. Please note that to avoid abrading the last coat of HEMPADUR 45140, a tie coat of Underwater Primer will need to be applied promptly.

Product	No of coats	Overcoating times @ 20 °C	Coverage m ² /litre	Thinners
OVERCOATING HEMPADUR 45143 WITH UNDERWATER PRIMER		8 hours – 12 hours		
UNDERWATER PRIMER	1	3 hours – 6 months	8	No 3
HEMPEL ANTIFOULING	2	TBA		No 3

Note: In all cases, if overcoating times are exceeded - abrade the surface and wash off with fresh water. If overcoating HEMPADUR 45143 with a single pack alkyd product allow 10 days for the HEMPADUR 45143 to cure, then key surface prior to application of chosen topcoat.



The illustration shows a vessel which has been grit blasted and masked up ready for the application of HEMPADUR 45143. HEMPADUR 45143 is a high performance priming system which will provide a priming or finish coat. It can be overcoated with a two pack or a conventional single pack finish.

Cabin roof



After priming the cabin roof there are a number of options.

1. Non-Slip Deck Coating which contains anti slip pearls.
2. Multicoat satin finish (requires anti slip pearls).

If a special colour is required use HEMPATEX 46410 which can be tinted to most colours.

To all of these finishes an anti-slip additive can be added if required. A coarser additive, Anti Slip Pearls are available for areas such as the walkways around the boat where an antislip finish is very important.

For smaller areas on the deck, we recommend Non Slip Deck Coating, which contains Anti Slip Pearls.

Cabin Roof Single Pack System

Product	No of coats	Overcoating times @ 20 °C	Coverage m ² /litre	Thinners
PRIMER UNDERCOAT/ HEMPEL UNI PRIMER 13140	3 – 4	6 hours	8	No 3
NON-SLIP DECK COATING	2	3 hours – 5 days	9.5	No.3
MULTI COAT/ HEMPATEX 46410	2	8 hours	10	No 1

Cabin Roof Two Pack System

Product	No of coats	Overcoating times @ 20 °C	Coverage m ² /litre	Thinners
HEMPADUR 45143	2 – 3	7 hours	4	No 5
HEMPATHANE 55810	2	5 hours	16	No 3

If a two pack priming system is used allow 10 days for the product to cure, then key the surface prior to the application of single pack coating.

If a non slip finish is required add anti slip pearls to the product (Pearls not required if using Non Slip Deck Coating)

Varnishing

Varnishes



**Varnish will protect wood against the elements.
And – where the wood is of good quality – enhance
the natural beauty of the surface.**

Favourite Varnish

A single component alkyd based, full bodied, high gloss varnish. For use above the waterline, both inside and outside, as part of a single component system. Especially easy to use, giving a tough, durable, long-lasting finish, with depth of gloss. Ideal for areas where structural flexibility of the wood is needed.

**5°C/40°F Minimum
application temperature**



375ml

750ml

2.5l

Temp	Touch dry	Re-coat (min/max)	Thinner/Tool clean	Covers
10°C	12 hrs	12 hrs – 4 days	Thinner No 1	16m ² /l
20°C	6 hrs	6 hrs – 2 days		

Tools



Classic Varnish

A single component traditional varnish produced from the highest quality materials, including tung oil. Use inside and outside above the waterline. Excellent flow at application, a flexible finish and long term UV filters ensure an uncompromising finish that will last for a long time.

**5°C/40°F Minimum
application temperature**



375ml

750ml

2.5l

Temp	Touch dry	Re-coat (min/max)	Thinner/Tool clean	Covers
10°C	20 hrs	16 hrs – 4 days	Thinner No 1	18m ² /l
20°C	10 hrs	8 hrs – 2 days		

Tools



Wood Impreg

Wood Impreg is a clear alkyd oil for use on wooden boats and hardwood. Excellent penetration properties allows the oil to saturate the wood before application of HEMPEL's varnishes and paints. For internal and external use above the waterline.

**5°C/40°F Minimum
application temperature**



750ml

2.5 ltr

Temp	Touch dry	Re-coat (min/max)	Thinner/Tool clean	Covers
10°C	12 hrs		Thinner No 1	16m ² /l
20°C	6 hrs			

Tools





Dura-Gloss Varnish/Dura-Satin Varnish

A single component, urethane modified alkyd with excellent resistance to alcohol and cleaning materials. For inside and outside areas above the waterline requiring a beautiful durable varnish. Quick-drying to an extremely hard and durable high gloss/satin surface, highly resistant to wear and abrasion within hours of application.



375ml

750ml

5°C/40°F Minimum application temperature

Temp	Touch dry	Re-coat (min/max)	Thinner/Tool clean	Covers
10°C	4-6 hrs	8 hrs - 4 days	Thinner No 1	17m ² /l
20°C	2-3 hrs	4 hrs - 2 days		

Tools



Diamond Varnish

A two component polyurethane varnish. Use inside and outside above the waterline. Use where a hard, extremely durable and long lasting finish is required. Highly resistant to abrasion and chemicals, for the ultimate finish in durability and beauty.



750ml

10°C/50°F Minimum application temperature	Pot life at 20°C	Mix ratio
	Mixed product: 6hrs	2:1

Temp	Touch dry	Re-coat (min/max)	Thinner/Tool clean	Covers
10°C	12 hrs	32 hrs - 10 days	Thinner No 2	12m ² /l
20°C	6 hrs	16 hrs - 5 days	Thinner No 6 (spray)	

Tools



SeaTech Gloss Varnish/SeaTech Satin Varnish

A single component waterborne, acrylic varnish, offering a durable finish with high resistance to water and UV damage. For use above the waterline. Use on new and previously varnished wood, inside and out. Particularly good for use on interior areas as there is no solvent odour during application. Overcoating times and waterborne properties enable 2 to 3 coats to be applied in one day. Low VOC.



750ml

5°C/40°F Minimum application temperature

Temp	Touch dry	Re-coat (min/max)	Tool clean	Covers
10°C	2-4 hrs	4 hrs - 12 days	Water	12m ² /l
20°C	1-2 hrs	2 hrs - 6 days		

Tools





Interior coatings

- **Interior Coatings**
- **Water Tanks**

Interior Coatings



Although there are a number of options and preparation methods, grit blasting is restricted in interior locations. Therefore, we suggest that a single pack system is used. After priming the bilge area/engine room we recommend the application of HEMPEL Bilge & Locker Paint. If a lining is to be installed 3 – 4 coats of primer will provide adequate protection.

Product	No of coats	Overcoating times @ 20 °C	Coverage m ² /litre	Thinners
PRIMER UNDERCOAT/ HEMPEL UNI PRIMER 13140	3 – 4	6 hours	8	No 3
BILGE & LOCKER PAINT	2	8 hours	11	No 1

Water Tanks



Recent legislation concerning products that can be used on mild steel fresh water tanks has restricted the number of products that have a water potable certificate. Please contact us for more details on HEMPADUR MULTI-STRENGTH 35530 which is an epoxy coating with a potable water tank certificate. To apply HEMPADUR MULTI-STRENGTH 35530 to a mild steel tank, grit blasting will be required.



Repainting an existing topcoat

- **Above Waterline**
- **Below the Waterline**

Repainting an existing topcoat



Both two pack and single pack paint finishes require repainting. It is important to maintain the coating on your narrowboat as this will ensure adequate protection for the substrate, keep the boat looking good and help to maintain the value.

Above Waterline

Assuming the existing coating is sound and you are recoating with the same, or a compatible, product: clean thoroughly with **Pre Clean** to remove any surface contamination and then wash thoroughly with fresh water.

Allow to dry fully.

Abrade with 180-280 grade abrasive paper. Wash thoroughly with fresh water and allow to dry.

Apply appropriate undercoat where necessary, followed by two coats of **Brilliant Gloss, Supreme Gloss** or **Ocean Gloss** as required.

For areas where the coatings are damaged, filling and priming may be necessary prior to application of undercoat and topcoat.

Clean the surface thoroughly as above with **Pre Clean**.



Below the Waterline

Wash thoroughly, (ie pressure wash) with fresh water and allow to dry.

Abrade with 100-150 grade abrasive paper.

Apply new coating.



General Painting Tips



Make sure that you have thoroughly prepared the surface as this is the key to a successful finish.

Bare metal must be primed immediately after surface preparation to avoid contamination and surface deterioration prior to coating and to obtain maximum adhesion to the surface.

Read all labels carefully and follow all application and health & safety recommendations.

Always stir paint thoroughly to an even consistency.

Stir paint periodically during application.

To avoid dust rising, dampen the ground prior to painting.

Decant enough paint to do the job into a suitable container. Reseal paint tin lid to maintain the quality of the paint for future use.

It is often easier if two people carry out the painting, with the first person applying the paint and the second person laying off with a high quality brush or pad.

Remove any masking tape before the paint has completely cured as this will help avoid exaggerated paint edges. When using two pack products, a special plastic masking tape is required.

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



Boatcare



A boat will need maintaining during the season to ensure it keeps its good appearance and sailing capabilities and the coating system is maintained. How much maintenance and care is needed will depend on the environment in which the boat is sailed.

CLEAN

Pre-Clean

High strength cleaner and degreaser for pre-cleaning gelcoat and painted surfaces to remove fuel, oil, grease, wax and silicone. Use prior to painting and for deep cleaning. It can also be used for cleaning bilges.

Dilute 1 part **Pre-Clean** to 20 parts water for general cleaning, 1:10 for more demanding cleaning. Use to clean brushes covered in part cured paint. Do not use on bare or untreated wood which may absorb the water.

Minimum application temperature: 5°C/40°F.



1 ltr

Barnacle Remover

Effectively removes barnacles using a combination of chemical and mechanical treatments. For use on outdrives, propellers, bottom of boats and similar areas. Contains acid - use Personal Protection Equipment.

Scrape off any loose marine growth. Shake product well. Apply directly and evenly onto barnacle shells. Leave for 3 – 5 minutes. Apply more product (especially on vertical areas) at approximately 1 minute intervals to ensure that all shells are covered by the product and therefore being dissolved. Remove dissolved barnacles by using high pressure washing and/or gently scraping. If necessary, repeat the treatment. Rinse with fresh water.



500 ml

Boat Shampoo

Concentrated solvent-free cleaner for the efficient daily cleaning of gelcoat, painted and varnished surfaces, as well as boat covers, tarpaulins and vinyl surfaces.

Dilute 1 part **Boat Shampoo** with 10 parts fresh water. Apply with a soft brush or cloth. For high pressure cleaning dilute with water 1:5. Leave the agent to take effect for a few minutes, rinse with fresh water.

Minimum application temperature: 5°C/40°F



1 ltr



Clean & Shine

Concentrated wash and wax that effectively cleans, shines and leaves a protective coating in one application. For use on all surfaces.

Dilute 1 part **Clean & Shine** with 10 parts fresh or sea water for heavy cleaning. Up to 50 parts for general cleaning. Apply with a sponge, soft brush or cloth, rinse with fresh water.

Minimum application temperature: 5°C/40°F



1 ltr

Gelcoat Cleaning Gel

High strength, non-abrasive cleaning gel for removing rust & exhaust stains, waterline deposits, fender and other marks over small/local areas. Use only on gelcoat and painted surfaces. Does not run when applied to vertical surfaces. Chemical process avoids the need to rub or scrub the surface.

Apply by brush, leave for 15 to 30 minutes, wash off with freshwater, brushing if necessary.

Minimum application temperature: 5°C/40°F



500 ml

Gelcoat Cleaning Powder

Strong, fine abrasive cleaning powder for removing tough deposits, stains and yellowing. Use only on gelcoat surfaces. Removes hull discolouration from soil deposits in fresh or brackish water. Particularly suitable for cleaning large areas such as non-slip decks where dirt accumulates.

Mix **Gelcoat Cleaning Powder** with enough freshwater to make a paste. Apply evenly onto gelcoat which has been wetted with fresh water. Leave for 10-20 minutes. Use a soft brush to clean while paste is still moist. Thoroughly hose down with fresh water before the paste hardens.



750 gr

Gelcoat Cleaning Spray

Quick and easy-to-use foaming cleaner spray, for removing marks and stains over large areas. Use only on gelcoat and painted surfaces. Particularly good for cleaning deposits from the waterline. Chemical process avoids the need to rub or scrub the surface.

Spray foam onto surface and leave for 10 to 15 minutes, wash off with freshwater. Use **Cleaning Gel** for tough stubborn stains.

Minimum application temperature: 5°C/40°F



500 ml

comes with
a trigger



RIB Cleaner

Powerful, concentrated, solvent free cleaner and degreaser for RIB tubes and hulls, as well as other rubber and vinyl surfaces. Especially suited to remove dirt and UV light degradation. Can be used with high pressure cleaning equipment. Do not use on alkaline sensitive substrates such as aluminium.

Dilute 1 part **RIB Cleaner** with 10 parts fresh water for general cleaning, reducing dilution for more demanding cleaning. After 5 minutes, wash/scrub the surface with freshwater until all residues have been removed.

Minimum application temperature: 5°C/40°F



500 ml

Textile Clean

Concentrated cleaner and degreaser for boat covers, sprayhoods, tarpaulins and other cotton and nylon materials.

Dilute 1 part **Textile Clean** with 20 parts water, 1:10 for tougher stains. Apply with a brush or sponge, leave for 5 minutes and rinse with clean water. If a white residue is left on the surface, wash off with warm water.

Minimum application temperature: 5°C/40°F



500 ml

RENEW

Rubbing Liquid

Fine abrasive rubbing compound to remove oxidation and light scratch marks from most surfaces, including aluminium. Restores and renews the gloss and colour to gelcoat and painted surfaces.

Apply with a soft cloth, rub by hand or with a polishing machine, wipe away any residue with a clean cloth.

Minimum application temperature: 5°C/40°F



500 ml

Custom Marine Polish

Liquid polish which cleans, polishes and protects gelcoat painted and varnished surfaces. Contains silicone which cures on the surface to create a protective barrier and clear gloss.



500 ml



PROTECT

Alu-Protect

Silicone free oil for cleaning and protecting aluminium masts and booms, steel and stainless steel rigging and fittings. Penetrates into wire ropes and under fittings, ensuring long term protection.

Before sealing the surface with **Alu-Protect**, clean with **Pre-Clean**, rinse with fresh water and allow to dry. If there is heavy oxidation on the surface, use **Rubbing Liquid**, then wipe surface clean and apply **Alu-Protect** with a soft cloth, leaving a fine protective film. Do not apply in strong sunlight and on hot surfaces.



500 ml

Vinyl Shine

Easy-to-use liquid gel, to condition and leave a transparent, UV protective layer on vinyl and other rubber surfaces, keeping the material soft and flexible with a smooth, water resistant effect to the surface.

Apply with a soft cloth, working it into the surface, leaving a fine transparent UV protective film.

Minimum application temperature: 5°C/40°F



500 ml

Wax

Liquid wax for use on gelcoat, painted and varnished surfaces, leaving an extremely glossy UV protective finish.

Apply with a soft cloth, polish by hand or with a polishing machine, allow to dry for 5–10 minutes, polish then wipe away any residue with a clean cloth leaving a high gloss finish.

Minimum application temperature: 5°C/40°F



500 ml

Wax^{TecCel}

Premium high performance liquid wax with TecCel technology, for a long lasting, deep gloss, tough protective finish on gelcoat, painted and varnished surfaces.

Apply with a soft cloth, polish by hand or with a polishing machine, allow to dry for 5–10 minutes, polish away any residue with a clean cloth leaving a high gloss mirror like finish.

Minimum application temperature: 5°C/40°F



500 ml

HEMPEL BOATCARE

Extreme shine!





10000 White
MC/B&L/DC



10501 Polar White
BG/SG/OG



10231 Pure White
BG/OG



10381 Off White
BG/SG/OG



10121 Matterhorn White
BG/SG/OG



21401 Cream
BG/SG/OG



22210 Pale Cream
MC/DC



50190 Survival Orange
BG/SG



50800 Pillarbox Red
MC



54121 Radiant Red
BG/SG/OG



53121 Bordeaux Red
BG/OG



33390 Light Blue
MC



38140 Ice Blue
BG/SG



32800 Souvenirs Blue
BG



30100 Navy Blue
MC/DC



34161 Cobalt Blue
BG/SG/OG



35141 Flag Blue
BG/SG/OG



31810 Britannia Blue
BG/SG



47340 Pastel Green
MC



46121 Marine Green
BG/OG



19500 Light Grey
MC/B&L/DC



12011 Pale Grey
BG/SG



10141 Town Grey
BG



11480 Mid Grey
MC/B&L/DC



12221 Smoke Grey
BG/OG



19990 Black
MC/BG/SG/OG

MC = MULTICOAT
 DC = NON SLIP DECK COATING
 B&L = BILGE & LOCKER PAINT
 BG = BRILLIANT GLOSS
 SG = SUPREME GLOSS
 OG = OCEAN GLOSS

GLOSS. QUALITY. COLOUR.

You just choose!

- ONE COMPONENT
- EASY TO APPLY
- NO MIXING
- LARGE GLOSSY COLOUR RANGE

- **NEW**
- TWO COMPONENT
- EXCELLENT PROTECTION & DURABILITY
- RESISTANT TO SCRATCHES
- HIGH GLOSS



*Up to
18 colours*



*Up to
12 colours*

BRILLIANT GLOSS is a high gloss silicone alkyd topcoat with excellent colour retention. Flexible and resistant to salt water and pollutants. Easy application ensures an exceptional finish.

For exterior and interior use above the waterline.

SUPREME GLOSS is a high gloss, two component enamel, especially suited to application by brush and roller, making it the best choice for boat owners. It has exceptional colour and gloss retention over a prolonged period of time. It also has an excellent resistance to saltwater, oil and diesel spills. Straightforward application ensures an outstanding finish and provides a robust coating for optimal protection.

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