MAINTAINING YOUR BOAT
The complete guide to preparing, protecting and painting all types of boat.

www.venezianiyacht.it

E D I T I O N
2012

Veneziani
Leaders in yacht paint systems.

www.venezianiyacht.it
“Maintaining your boat” is edited annually by Veneziani’s Main Technical Department and updated to take into account the most recent technological advances and our experience gained from continuous dialogue with user. Check that you have the most recent edition.

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MAINTAINING YOUR BOAT

The complete guide to preparing, protecting and painting all types of boat.

The purpose of this manual is to help you to select the best way of protecting and embellishing your boat so that nothing is overlooked and no mistakes are made during the various painting phases. The manual has been planned so that the information is immediately identifiable and the subjects are divided into different colour-coded sections for easy reference. By simply following the suggestions given and using your own experience you will be able to maintain your boat yourself, although in some cases you may find it easier to seek the help of a professional or a boatyard with more equipment. In this case you will find the manual useful in order to compare our suggestions (well known to the boatyard) with your own experience.

All Veneziani Yachting products have been developed to be applied directly, easily and safely. However, for some types of work we recommend that you consult one of our many approved, specialist, Veneziani Yachting centres.

SPECIALIZED CENTERS

VENEZIANI YACHTING SALE CENTERS
These are available for additional practical advise on products and application procedures.

AQUASTOP APPLICATION CENTER
These are boatyards specialized in Aquastop application. They have a contractual agreement with Veneziani Yachting, are provided with the necessary equipment and have a staff with training for osmosis treatment.

REPAIR AND RESTORATION CENTERS
These are boatyards able to carry out with great workmanship the complete restoration of ancient boats with RESINA 2000 as well as preventative treatments on new boats.

MAIN TECHNICAL DEPARTMENT

Monday to Thursday from 8.30 a.m. to 12.30 p.m. and from 1 to 5 p.m. closing at 4 p.m. on Friday, please leave a message on the answerphone at all other times.
Phone: +39 040 3783911 - Fax: + 39 040 3783906
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Names, addresses and reference data are available at the website www.venezianiyacht.it or can be obtained from the Veneziani Yachting Main Technical Department.
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What paints are used for

Paint can be defined as a mixture of chemical compounds intended to form a film with sufficient mechanical and physical strength to protect the painted surface from external agents over time. Paint is used to protect and decorate. Generally, these two requirements go hand in hand. In fact, painting to protect means the boat will be decorated and painting to decorate also implies its protection. Paint is used in almost all the phases of boat painting: preparation, priming, protection and finishing. Despite the fact that no paint is used in the preparation phase, getting the preparation right will affect the ultimate success of the job. Poor preparation usually means a disappointing result.

The next step after preparation is to apply the primer. The primer protects the surface and also guarantees that successive protective layers and finishes will adhere to the surface, avoiding delamination. After the primer, the undercoats form a protective layer which prevents water, humidity and atmospheric agents from coming into contact with the surface and causing it to deteriorate (metal will oxidise, wood will rot and GRP will suffer from osmosis). A minimum protective layer with a thickness of 300-600 microns* (when dry) for submerged parts and 250-350 microns for parts above the waterline is required to ensure sufficient protection. The final step is to apply the finish. The finish is used to improve the appearance of the boat and enhance the surface (colour, texture, shine), or to give it specific protective properties (such as painting antifouling onto the submerged areas). The finish must be regularly renewed to maintain the boat permanently in good condition. The surface may need to be filled to ensure that the finish is uniform and to give a smooth surface. To achieve a good enamel finish, it is recommended that you use an enamel undercoat which forms a protective barrier and also smoothes the surface, eliminating the roughness left by the filler.

What they contain

Paints have four main constituents: binders, solvents, additives and pigments. Binders are the main constituent and are formed by polymers or resins which form a tough, dry film bonding the paint to the surface. Solvents are volatile liquids used to dissolve and disperse the other components. At the same time, lowering the viscosity of the paint makes it easier to apply. The solvent's evaporation controls the film formation of the binder, allowing the formation of a uniform film which is why the correct use of thinners is important.

For environmental and safety reasons the use of solvents is being reduced through the use of binders which are more fluid. Veneziani has created paints with little or no solvents such as AQUASTOP, CERAMITE YACHTING, EPOMAST, RESINA 2000, etc.

Pigments are micronized powders which give the paint its colour, its spreadability and other special properties, such as pigments based on copper or zinc salts which have antifouling properties.

Additives are components which are added in small quantities to improve the properties of a paint (drying, resistance to ultraviolet light, ease of application, stability in the can, etc).

How they are classified

Painting products are subdivided into varnishes, paints and enamels. Varnish is transparent, mainly consists of binders, solvents and additives, but has no pigment. Paint contains both pigments and extenders. Paints are called enamels when they have particular characteristics such as shine and resistance to external agents.

Fillers are also paint products characterised by a high percentage of extenders so that they can be used to level cavities and imperfections in the surface. There is an important difference between one-pack and two-pack paints. One-pack paints have a single component and the film is formed by the evaporation of the solvent. Whilst this product is easy to apply, its performance is good for a limited period only. Two-pack paints (A + B) require mixing to achieve a chemical cure and the right temperature and humidity must be maintained. Filming occurs by means of chemical crosslinking of the two components. This process produces unbeatable durability and extends the life of the paint.
How they are applied

PREPARATION

After opening the can, ensure that the paint is evenly mixed to attain an even consistency and colour, especially if the pigment (at the bottom) has separated from the binders (at the top).

If you are using a two-pack paint it is important to mix the two components separately before pouring component B (hardener) into component A (base), and then mix to ensure an even consistency and colour.

When you are preparing a two-pack paint, take into account how much paint you will be able to use before it becomes unusable. The pot life given on the product label is measured at a temperature of 20°C. If you are working at a higher temperature, you must reduce this time by around 20% for each additional 5°C. Stir the paint from time to time in its container during application and keep it at a low temperature to extend its application time, at the same time avoiding prolonged exposure to sunlight.

Don’t wait for brushes to harden before changing them.

REMEMBER

When you are preparing to paint, always remember the following indications which will enable you to paint safely without making mistakes:

- Mask the edges of the area to be painted using adhesive tape. Always remember to remove the tape immediately after the application of each coat, especially when you are using two-pack paints.
- Only thin as required using the recommended.
- Apply paint at the recommended spreading rate and comply with the recommended drying times even if the paint appears to be dry.
- Apply the paint at a temperature of between 15 and 25°C and at an humidity of less than 75%.

It is possible to work at higher or lower temperatures than these but you must expect the drying characteristics to change. Remember to take into account not only the temperature at the moment of application but for the entire drying period (overcoating time) and therefore, for example, also the temperature overnight.

If you have to apply the paint under unfavourable conditions, please contact our Technical Department for advice.

- Never paint in full sunlight. If necessary, create a shaded areas using tarpaulins.
- Do not paint in strong winds or mist.
- Do not vary arbitrarily the ratio between the base and the hardener in two-pack paints or the chemical characteristics of the product will be changed.
- Despite their high standard of compatibility, Veneziani Yachting paints may not be compatible with the existing paint on the boat. If you are unsure of the paint previously used, we recommend that you paint a small test area first. Should any problems arise (cracking, bubbles, “bleeding”, softening of the previous paint), please contact Veneziani Yachting. Normally, you simply need to apply a coat of sealer appropriate to your type of surface.
- To check the evenness of the paint, use a paint thickness gauge at various points to measure “coat by coat” the thickness of the wet paint before the solvent evaporates. Compare the volume of dry paint: if this is 100%, the thickness when dry will be equal to that when wet; if this is 50%, the thickness will be half.

THE TOOLS

Paint can be applied by a brush, a roller or a spray. Veneziani Yachting products are always prepared to be directly applied by brush or roller and only need to be thinned in exceptional cases. Always use the recommended thinner and never use them in greater proportions than those advised.

For spray applications please consult our technical data sheets, which indicate the solvents to be used as well as recommended pressures and tip sizes.

A brush is used both to spread enamels (use an “oval” brush) and antifouling (use a “rectangular” brush). For enamels, repeatedly cross the brush-strokes, for antifouling cross them only once. It is preferable to use a brush when applying primer so that the surface is as “wet” as possible.

A roller is the most practical and quickest solution. Be careful not to “pull” the roller which will result in the coat being too thin. Always use a roller with a short pile and do not “rush”. Apply an even pressure to the roller to ensure that there are no unpainted patches.

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Safety and hygiene

These basic safety and hygiene rules must be obeyed whenever you are using paint.
• Carefully read the instructions printed on the can before starting to paint.
• In particular, check the safety label for the precautions which must be taken for each product.
• Certain paint ingredients (particularly in antifouling) are irritant if touched, noxious if inhaled and sometimes are toxic. These dangers, which vary from product to product, are clearly indicated on the safety label by the appropriate symbols and with the relevant precautions.
• Do not smoke when painting.
• Almost all paints contain inflammable solvents which evaporate during drying. Be careful not to inhale the vapours, especially in a closed environment. Ensure adequate ventilation to avoid the accumulation of vapours and the risk of fire or explosion and use an appropriate mask.
• Always wear gloves, a mask and protective goggles.
• Always sand with wet sandpaper on a wet surface, particularly with antifouling, and wear gloves, a mask and protective goggles.
• Use the water-based paint stripper AQUASTRIP to remove old paint. Dry sand or use a heat stripper only where it is impossible to use another method.
• When you have finished, or during breaks for refreshment, thoroughly wash your hands with soap and water or with a hand cleansing agent. Never use thinners or strippers based on solvents to wash your hands.

Veneziani Yachting labels comply with EEC regulations incorporated into Italian legislation regarding dangerous products and materials.

Main danger symbol

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Xn</td>
<td>Noxious</td>
</tr>
<tr>
<td>C</td>
<td>Corrosive</td>
</tr>
<tr>
<td>F</td>
<td>Easily inflammable</td>
</tr>
<tr>
<td>xi</td>
<td>Irritant</td>
</tr>
<tr>
<td>N</td>
<td>Harmful to environment</td>
</tr>
</tbody>
</table>

Instruction for use

Product name

Bar code

Tactile instructions for blind people

Colours which identify the various groups of Veneziani products. For example: RED = antifouling

Safety warnings:
1) Potentially hazardous components
2) Instructions to be followed according to European standards.

Trade name and manufacturer’s address

NOXIOUS: products which carry limited risks to health if inhaled, ingested or allowed to penetrate the skin.
CORROSIVE: products which can have a destructive effect if placed in contact with living tissue.
INFLAMMABLE: products which can burst into flames when brought into contact with air at a normal temperature; or which can be easily ignited and which will continue to burn when the source of ignition is removed.
IRRITANT: products which, while not being corrosive, can have an inflammatory effect on skin and tissue if placed in immediate, prolonged or repeated contact.
HARMFUL TO ENVIRONMENT: products which in the long term may cause environmental pollution.
### One-pack paint system

#### DECKHOUSE
- 1 coat of **ADHERGLASS** (DFT 15 microns per coat, theoretical coverage per coat 13.3 m²/L)
- 2 coats of **UNIGLOSS** (DFT 40 microns per coat, theoretical coverage per coat 13.8 m²/L)

#### DECK
- 1 coat of **ADHERGLASS** (DFT 15 microns per coat, theoretical coverage per coat 13.3 m²/L)
- 2 coats of **UNIGLOSS** (DFT 40 microns per coat, theoretical coverage per coat 13.8 m²/L)

#### TOPSIDE
- 1 coat of **ADHERGLASS** (DFT 15 microns per coat, theoretical coverage per coat 13.3 m²/L)
- 2 coats of **UNIGLOSS** (DFT 40 microns per coat, theoretical coverage per coat 13.8 m²/L)

### Two-pack paint system

#### DECKHOUSE
- 1 coat of **POLYREX PRO** (DFT 100 microns per coat, theoretical coverage per coat 4.6 m²/L)
- 2 coats of **GEL GLOSS PRO** (14 colours, please refer to colour chart) (DFT 40 microns per coat, theoretical coverage per coat 13.5 m²/L)

#### DECK
- 1 coat of **POLYREX PRO** (DFT 100 microns per coat, theoretical coverage per coat 4.6 m²/L)
- 2 coats of **GEL GLOSS PRO** (14 colours, please refer to colour chart) (DFT 40 microns per coat, theoretical coverage per coat 13.5 m²/L) + **ANTISKID POWDER**

#### HULL
- 1 coat of **ADHERGLASS** (DFT 15 microns per coat, theoretical coverage per coat 13.3 m²/L)
- 2 coats of **ANTIFOULING** (DFT and theoretical coverage depending on antifouling type used) 3 coats on rudder and areas with higher friction

#### TOPSIDE
- 1 coat of **ADHERGLASS** (DFT 15 microns per coat, theoretical coverage per coat 13.3 m²/L)
- 2 coats of **UNIGLOSS** (DFT 40 microns per coat, theoretical coverage per coat 13.8 m²/L)

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**FOR NEW OR STRIPPED BoATS**
### One-pack paint system

#### DECKHOUSE
- 3 coats of **EUROGEL**
  - (DFT 40 microns per coat, theoretical coverage per coat 12.5 m²/L)
- 2 coats of **UNIGLOSS**
  - (DFT 100 microns per coat, theoretical coverage per coat 13.8 m²/L)

#### DECK
- 3 coats of **EUROGEL**
  - (DFT 40 microns per coat, theoretical coverage per coat 12.5 m²/L)
- 2 coats of **UNIGLOSS**
  - (DFT 100 microns per coat, theoretical coverage per coat 13.8 m²/L)

#### HULL
- 5 coats of **TICOPRENE YACHTING**
  - (DFT 50 microns per coat, theoretical coverage per coat 8.6 m²/L)
- 2 coats of **ANTIFOULING**
  - (DFT and theoretical coverage depending on antifouling type used)
  - 3 coats on rudder and areas with higher friction

#### TOPSIDE
- 3 coats of **EUROGEL**
  - (DFT 40 microns per coat, theoretical coverage per coat 12.5 m²/L)
- 2 coats of **UNIGLOSS**
  - (DFT 100 microns per coat, theoretical coverage per coat 13.8 m²/L)

### Two-pack paint system

#### DECKHOUSE
- 1 coat of **FIBRODUR**
  - (DFT 20 microns per coat, theoretical coverage per coat 12.5 m²/L)
- 2 coats of **RESINA 2000**
  - (DFT 100 microns per coat, theoretical coverage per coat 10.0 m²/L)
- 1 coat of **PLASTOLITE PRO**
  - (DFT 100 microns per coat, theoretical coverage per coat 5.0 m²/L)
- Apply, if necessary
- 1-2 coats of **POLYPREX PRO**
  - (DFT 100 microns per coat, theoretical coverage per coat 4.6 m²/L)
- 2 coats of **GEL GLOSS PRO**
  - (14 colours, please refer to colour chart)
  - (DFT 40 microns per coat, theoretical coverage per coat 13.5 m²/L)

#### DECK
- 1 coat of **FIBRODUR**
  - (DFT 20 microns per coat, theoretical coverage per coat 12.5 m²/L)
- 2 coats of **RESINA 2000**
  - (DFT 100 microns per coat, theoretical coverage per coat 10.0 m²/L)
- 1 coat of **PLASTOLITE PRO**
  - (DFT 100 microns per coat, theoretical coverage per coat 5.0 m²/L)
- Apply, if necessary
- 1-2 coats of **POLYPREX PRO**
  - (DFT 100 microns per coat, theoretical coverage per coat 4.6 m²/L)
- 2 coats of **GEL GLOSS PRO**
  - (14 colours, please refer to colour chart)
  - (DFT 40 microns per coat, theoretical coverage per coat 13.5 m²/L)

#### HULL
- 1 coat of **FIBRODUR**
  - (DFT 20 microns per coat, theoretical coverage per coat 12.5 m²/L)
- 3 coats of **RESINA 2000**
  - (DFT 100 microns per coat, theoretical coverage per coat 10.0 m²/L)
- 1 coat of **ADHERGLASS**
  - (DFT 15 microns per coat, theoretical coverage per coat 13.3 m²/L)
- 2 coats of **ANTIFOULING**
  - (DFT and theoretical coverage depending on antifouling type used)
  - 3 coats on rudder and areas with higher friction

#### TOPSIDE
- 1 coat of **FIBRODUR**
  - (DFT 20 microns per coat, theoretical coverage per coat 12.5 m²/L)
- 2 coats of **RESINA 2000**
  - (DFT 100 microns per coat, theoretical coverage per coat 10.0 m²/L)
- 1 coat of **PLASTOLITE PRO**
  - (DFT 100 microns per coat, theoretical coverage per coat 5.0 m²/L)
- Apply, if necessary
- 1-2 coats of **POLYPREX PRO**
  - (DFT 100 microns per coat, theoretical coverage per coat 4.6 m²/L)
- 2 coats of **GEL GLOSS PRO**
  - (14 colours, please refer to colour chart)
  - (DFT 40 microns per coat, theoretical coverage per coat 13.5 m²/L)
VARNISHED WOOD

One-pack paint system

**DECKHOUSE**
- 6 coats of **TIMBER GLOSS**
  (DFT 40 microns per coat, theoretical coverage per coat 11.2 m²/L)

**TOPSIDE**
- 6 coats of **TIMBER GLOSS**
  (DFT 40 microns per coat, theoretical coverage per coat 11.2 m²/L)

**INTERIOR**
- 6 coats of **TIMBER GLOSS**
  (DFT 40 microns per coat, theoretical coverage per coat 11.2 m²/L)

Two-pack paint system

**DECKHOUSE**
- 1 coat of **FIBRODUR**
  (DFT 20 microns per coat, theoretical coverage per coat 12.5 m²/L)
- 2 coats of **RESINA 2000**
  (DFT 100 microns per coat, theoretical coverage per coat 10.0 m²/L)
- 6 -12 coats of **WOOD GLOSS**
  (DFT 20 microns per coat, theoretical coverage per coat 19.0 m²/L)

**TOPSIDE**
- 1 coat of **FIBRODUR**
  (DFT 20 microns per coat, theoretical coverage per coat 12.5 m²/L)
- 2 coats of **RESINA 2000**
  (DFT 100 microns per coat, theoretical coverage per coat 10.0 m²/L)
- 6 -12 coats of **WOOD GLOSS**
  (DFT 20 microns per coat, theoretical coverage per coat 19.0 m²/L)

**INTERIOR**
- 1 coat of **FIBRODUR**
  (DFT 20 microns per coat, theoretical coverage per coat 12.5 m²/L)
- 2 coats of **RESINA 2000**
  (DFT 100 microns per coat, theoretical coverage per coat 10.0 m²/L)
- 3 coats of **WOOD MAT**
  (semi-gloss clear finish)
  (DFT 30 microns per coat, theoretical coverage per coat 18.7 m²/L)
  or:
- 6 -12 coats of **WOOD GLOSS**
  (glossy clear finish)
  (DFT 20 microns per coat, theoretical coverage per coat 19.0 m²/L)
Paint system with primer for one-pack A/F

**DECKHOUSE**
- 1 coat of EPOXY PRIMER (DFT 40 microns per coat, theoretical coverage per coat 10,5 m²/L)
- 2 coats of PLASTOLITE PRO (DFT 100 microns per coat, theoretical coverage per coat 5,0 m²/L)
- Apply, if necessary
  - 1-2 coats of POLYREX PRO (DFT 100 microns per coat, theoretical coverage per coat 4,6 m²/L)
- 2 coats of GEL GLOSS PRO (14 colours, please refer to colour chart) (DFT 40 microns per coat, theoretical coverage per coat 13,5 m²/L)

**HULL**
- 1 coat of EPOXY PRIMER (DFT 40 microns per coat, theoretical coverage per coat 10,5 m²/L)
- 3 coats of PLASTOLITE PRO (DFT 100 microns per coat, theoretical coverage per coat 5,0 m²/L)
- 1 coat of ADHERGLASS (DFT 15 microns per coat, theoretical coverage per coat 13,3 m²/L)
- 2 coats of ANTIFOULING (DFT and theoretical coverage depending on antifouling type used)
- 3 coats on rudder and areas with higher friction

**DECK**
- 1 coat of EPOXY PRIMER (DFT 40 microns per coat, theoretical coverage per coat 10,5 m²/L)
- 2 coats of PLASTOLITE PRO (DFT 100 microns per coat, theoretical coverage per coat 5,0 m²/L)
- Apply, if necessary
  - 1-2 coats of POLYREX PRO (DFT 100 microns per coat, theoretical coverage per coat 4,6 m²/L)
- 2 coats of GEL GLOSS PRO (14 colours, please refer to colour chart) (DFT 40 microns per coat, theoretical coverage per coat 13,5 m²/L) + ANTISKID POWDER

**TOPSIDE**
- 1 coat of EPOXY PRIMER (DFT 40 microns per coat, theoretical coverage per coat 10,5 m²/L)
- 2 coats of PLASTOLITE PRO (DFT 100 microns per coat, theoretical coverage per coat 5,0 m²/L)
- Apply, if necessary
  - 1-2 coats of POLYREX PRO (DFT 100 microns per coat, theoretical coverage per coat 4,6 m²/L)
- 2 coats of GEL GLOSS PRO (14 colours, please refer to colour chart) (DFT 40 microns per coat, theoretical coverage per coat 13,5 m²/L)

**HULL**
- 1 coat of EPOXY PRIMER (DFT 40 microns per coat, theoretical coverage per coat 10,5 m²/L)
- 3 coats of PLASTOLITE PRO (DFT 100 microns per coat, theoretical coverage per coat 5,0 m²/L)
- 1 coat of ADHERPOX (DFT 100 microns per coat, theoretical coverage per coat 6,0 m²/L)
- 2 coats of ANTIFOULING (DFT and theoretical coverage depending on antifouling type used)
- 3 coats on rudder and areas with higher friction

**TOPSIDE**
- 1 coat of EPOXY PRIMER (DFT 40 microns per coat, theoretical coverage per coat 10,5 m²/L)
- 2 coats of PLASTOLITE PRO (DFT 100 microns per coat, theoretical coverage per coat 5,0 m²/L)
- Apply, if necessary
  - 1-2 coats of POLYREX PRO (DFT 100 microns per coat, theoretical coverage per coat 4,6 m²/L)
- 2 coats of GEL GLOSS PRO (14 colours, please refer to colour chart) (DFT 40 microns per coat, theoretical coverage per coat 13,5 m²/L)

+ ANTISKID POWDER

Paint system with primer for two-pack A/F

**DECKHOUSE**
- 1 coat of EPOXY PRIMER (DFT 40 microns per coat, theoretical coverage per coat 10,5 m²/L)
- 2 coats of PLASTOLITE PRO (DFT 100 microns per coat, theoretical coverage per coat 5,0 m²/L)
- Apply, if necessary
  - 1-2 coats of POLYREX PRO (DFT 100 microns per coat, theoretical coverage per coat 4,6 m²/L)
- 2 coats of GEL GLOSS PRO (14 colours, please refer to colour chart) (DFT 40 microns per coat, theoretical coverage per coat 13,5 m²/L) + ANTISKID POWDER

**HULL**
- 1 coat of EPOXY PRIMER (DFT 40 microns per coat, theoretical coverage per coat 10,5 m²/L)
- 3 coats of ADHERPOX (DFT 100 microns per coat, theoretical coverage per coat 6,0 m²/L)
- 2 coats of ANTIFOULING (DFT and theoretical coverage depending on antifouling type used)
- 3 coats on rudder and areas with higher friction

**DECK**
- 1 coat of EPOXY PRIMER (DFT 40 microns per coat, theoretical coverage per coat 10,5 m²/L)
- 2 coats of PLASTOLITE PRO (DFT 100 microns per coat, theoretical coverage per coat 5,0 m²/L)
- Apply, if necessary
  - 1-2 coats of POLYREX PRO (DFT 100 microns per coat, theoretical coverage per coat 4,6 m²/L)
- 2 coats of GEL GLOSS PRO (14 colours, please refer to colour chart) (DFT 40 microns per coat, theoretical coverage per coat 13,5 m²/L)

**TOPSIDE**
- 1 coat of EPOXY PRIMER (DFT 40 microns per coat, theoretical coverage per coat 10,5 m²/L)
- 2 coats of PLASTOLITE PRO (DFT 100 microns per coat, theoretical coverage per coat 5,0 m²/L)
- Apply, if necessary
  - 1-2 coats of POLYREX PRO (DFT 100 microns per coat, theoretical coverage per coat 4,6 m²/L)
- 2 coats of GEL GLOSS PRO (14 colours, please refer to colour chart) (DFT 40 microns per coat, theoretical coverage per coat 13,5 m²/L)
SPECIAL PARTS

Metal keels

1 coat of **EPOXY PRIMER** (DFT 40 microns per coat, theoretical coverage per coat 10,5 m²/L)
3 coats of **AQUASTOP** (DFT 200 microns per coat, theoretical coverage per coat 5,0 m²/L)

Propellers, shafts and stern drives

1 coat of **PROPELLER PRIMER** (DFT 15-20 micron per coat, theoretical coverage per coat 19,0-14,5 m²/L) or 1 coat of **PROPELLER PRIMER SP** (DFT 8 micron per coat, theoretical coverage per coat 15 m²/L)

Peaks, storerooms, iceboxes and bilges

1 coat of **EPOXY PRIMER** (DFT 40 microns per coat, theoretical coverage per coat 10,5 m²/L)
3 coats of **AQUASTOP** (DFT 200 microns per coat, theoretical coverage per coat 5,0 m²/L)

Teak decks

Products for cleaning and protecting the wood:
For cleaning: **TEAK 1**
For bleaching: **TEAK 2**
For protecting: **TEAK 3**

Inflatable boat

Non submerged inflatable parts:
2 coats of **GUMMIPAINT** (DFT 35 microns per coat, theoretical coverage per coat 6,6 m²/L)

Submerged inflatable parts:
2 coats of **GUMMIPAINT A/F** (DFT 18 microns per coat, theoretical coverage per coat 15 m²/L)

Rigid GRP hull:
Refer to the hull paint system for GRP boats
When repainting your boat, you must follow some preliminary steps to clean it and to ensure that any remaining layers of paint are still closely bound to the surface. If the old paint is deteriorating or delaminating it must be completely removed or it will cost you more wasted time and money at a later date.

After removing all the layers, clean and wipe down the surfaces which should now be “as new” and ready to be treated according to the painting systems for new boats.

To keep your boat in good condition, we recommend that you completely remove the old painting system from the hull at least once every four years.

CLEANING AND INSPECTION

Follow the cleaning programme below:
- wash with fresh water, with a pressure-jet if possible, to thoroughly clean all the surfaces;
- degrease only areas affected by mineral oils, using a sponge soaked in DETERSIL, and rinse. Check that the old layer of antifouling is well bonded;
- larger areas can be stripped with mechanical means such as scrapers or disc sanders - which are quite slow procedures - or with a portable heater - suitable only for one-pack coatings - or with chemical strippers. Chemical strippers may be divided in two categories: acid or solvent based strippers are corrosive liquids, which in contact with skin may cause burns or ulcers. These strippers, after application, should be removed as soon as the coating has been softened, otherwise the substrate could be damaged. Water based strippers are gels, which can be handled without risk or danger. These strippers require a longer reaction time, but have the same effectiveness as the previously mentioned ones. One should always use water based strippers such as AQUASTRIP formulated by Veneziani Yachting.

STRIPPING (Only for deteriorated surfaces)

To remove old, deteriorated antifoulings use AQUASTRIP, a water based, biodegradable stripping gel, which does not damage gel coats or GRP, penetrates deeply into the coating layer and is effective on large surfaces, saving time and work. AQUASTRIP has good stripping power also on one-pack primers, undercoats and finishes. Proper stripping is carried out as follows:
- Apply a wet coat with a thickness of 1 mm (about one can of 0,75 L for 1 m², or one can of 5,00 L for 6 - 7 m²);
- Let the stripper act for a few hours (also during a whole night if the temperature is not too high);
- Remove the softened layer with a spatula. Often the removal can be carried out with a pressurized water jet;
- Do not carry out stripping with strong wind or in strong sunlight.

If the layer of antifouling is very thick repeat the above procedure. Use mechanical means for the removal only if no AQUASTRIP is available.

AQUASTRIP

Water based stripper for antifoulings

CHARACTERISTICS
Ecological water based stripping gel with low environmental impact solvents. Specifically formulated for removing old antifoulings from wood, GRP, steel and other metals. It has good stripping power also on one-pack primers, undercoats and finishes. Being water-based it does not damage gel coats or GRP and can be handled without hazard risk. AQUASTRIP requires longer softening time if compared to solvent-based strippers, but is effective on large surfaces such as hulls applying one coat only without any danger for the boat, the operators and the environment. AQUASTRIP is free from toxic or harmful components: it does not contain N-methyl-2-pyrrolidone (NMP). It has a neutral pH and can be used indoors without requiring special ventilation. Caution: store between 5 to 35°C.

TECHNICAL DATA
Specific weight: 1,00 +/- 0,02 kg/L
Colour: light green
Packaging: 0,75 L/5,00 L

APPLICATION DATA
Apply with: brush - spatula
Thinner: water for cleaning only
DFT per coat: 2,00 m²
Theoretical coverage per coat: 1,5 - 2,0 m²/L

DETERSIL

Emulsifying detergent for silicones

CHARACTERISTICS
Detersil is an emulsifying detergent for silicones. To obtain maximum adhesion of paint to GRP surfaces without the need of sanding, it is necessary to remove first all mould-release agents. Since these agents contain wax, paraffin or silicone, a special detergent must be used. Detersil has a dissolving and emulsifying action and can be used whenever a surface has to be cleaned thoroughly before painting.

TECHNICAL DATA
Specific weight: 0,93 +/- 0,02 kg/L
Solids by volume: 44%
Colour: clear
Packaging: 1,00 L

APPLICATION DATA
Apply with: brush - swab
Thinner: water for cleaning only
Theoretical coverage per coat: 30,0 m²/L
SANDING
Always wet sand, this means you must first wet the surface and sandpaper with water. This reduces the amount of dust produced (especially from the antifouling which can be dangerous). Always wear a mask, gloves and goggles when sanding.

Parts still covered by old paint must be sanded.
Follow the steps below:
- **hull**: sand with 80 grade sandpaper, always wet, and roughen the entire surface of the old antifouling, leaving the undercoat intact.
- **topsides**: sand with 180-240 grade sandpaper. Before starting to paint, remove all dust and degrease well using a rag dampened in water and never in a solvent.

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**Table of abrasive papers**

**Corresponding grades of dry and wet sanding paper**

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3 PAINTING YOUR BOAT

PREPARING AND PRIMING A NEW OR STRIPPED BOAT

If your boat is new, the steps to be followed and the products to be used for preparation and priming will depend on the material of which your boat is made. To obtain good results and the best performance from the products, you must prepare the surfaces well. If you spend a little more time and effort in the preparation phase, you will be rewarded by better, longer lasting results.

The preparation phase must be followed by the application of a coat of primer. This primer will temporarily protect the surface and ensure better bonding of the undercoat and finish.

GEL COAT
Degrease thoroughly with DETER-SIL and rinse well to eliminate traces of wax, paraffin, silicon or other substances which could affect the bonding of successive products. To completely degrease the surface, wash it with circular movements using a coarse sponge soaked with DETERSIL, then rinse with water. Follow this with a light sanding.

Apply a very thin layer of ADHERGLASS, a adhesion primer for glass-fibre reinforced plastic, by brush or roller, taking care because if applied too thickly, it can lead to poor adhesion of the subsequent layers of antifouling.

As an alternative you can use ADHERPOX, a primer for antifouling with extended recoating time: up 3 months if recoated with an antifouling and unlimited if recoated by itself.

LEGNO
Check that this is dry, clean and without oil, grease, adhesive or any other substance. Sand the entire surface and remove the remaining dust with dry rags or rags slightly dampened with water (not solvent). Apply FIBRODUR, a sealer for wood, before starting the proper painting system, especially on new or untreated wood. Apply one coat by brush to impregnate the wood fibres.

ADHERGLASS
Adhesion primer for GRP

CHARACTERISTICS
Adherglass is a primer based on synthetic polymers. It is a one-pack primer providing excellent adhesion and suitable for use on gel coats, GRP and epoxies such as Plastolite Pro and Aquastop. Adherglass is quick drying and used mainly as a primer for antifoulings on GRP and on new or stripped gel coats. The surface does not require sanding to provide proper adhesion but must be degreased thoroughly.

TECHNICAL DATA
Specific weight: 1,21 +/- 0,02 kg/L
Solids by volume: 20% Colour: pink
Packaging: 0,75 L/2,50 L

APPLICATION DATA
Drying time: 6 hours
Instant: 3780 for cleaning only DFT per coat: 15 µ
Theoretical coverage per coat: 13,3 m²/L
Recoating time: 2 days

TECHNICAL DATA
Specific weight: 1,30 +/- 0,02 kg/L
Solids by volume: 60% Colour: white
Packaging: 0,75 L/2,50 L

APPLICATION DATA
Drying time: 6-8 hours
Instant: 3780 for cleaning only DFT per coat: 100-200 µ
Theoretical coverage per coat: 6-8 m²/L
Recoating time: 10 hours

FIBRODUR
Sealer for wood

CHARACTERISTICS
A two-pack primer for wood with excellent sealing properties. Fibrodur penetrates deeply into the wood fibers producing a highly impermeable and hard surface. This product is recommended for new and stripped wood. When applied properly in a single coat, it does not form a film but penetrates into the surface. The clear Fibrodur does not alter the original colour of the wood and does not yellow when aging. Fibrodur can be over-coated with a wide range of products such as Plastolite pro, Ticoprene Yachting, Eurogel, Timber Gloss, Wood Gloss, Wood Mat and Resina 2000.

TECHNICAL DATA
Specific weight: 0,98 +/- 0,02 kg/L
Solids by volume: 25% Colour: clear, mahogany, nut-brown, teak
Packaging: 0,75 L

APPLICATION DATA
Drying time: 3 days
Instant: 5780 for cleaning only DFT per coat: 21 µ
Theoretical coverage per coat: 12,5 m²/L
Recoating time: 3 days

You can tell when the surface is fully degreased because water will spread evenly over the surface without forming droplets.

For additional information on application procedures please consult the TECHNICAL DATA SHEET or the website WWW.VE NEZIANIYACHT.IT
IRON AND STEEL
Grit blasting is the best method of eliminating rust and impurities from metal surfaces. If your boatyard is unable to carry out grit blasting, use mechanical disc sanding with 36 grade abrasive discs in order to produce a silvery surface with a rough profile. Immediately afterwards apply one coat of EPOXY PRIMER. As an alternative apply ADHERPOX or UNIKOTE YACHTING PRO.

A well prepared surface is rough and has a silver colour.

Don’t wait for tomorrow
Immediately after preparation, apply the primer. Never leave the prepared surface in the open overnight without primer. Metal surfaces oxidise rapidly, even in an enclosed environment.

LIGHT ALLOY AND ALUMINIUM
We recommend light grit blasting or abrasive discs to prepare the metal. Degrease the surfaces with DETERSIL and rinse well. The primer which should be applied is EPOXY PRIMER. As an alternative apply ADHERPOX or UNIKOTE YACHTING PRO. If welding work has been carried out, use an abrasive disc or brush to prepare the surface before applying the primer.

If you cannot grit blast the keel, use an abrasive disc.

CAST IRON, LEAD AND OTHER METALS (keels, flaps and rudders)
Grit blasting the keel is the best method to eliminate rust. Alternatively, you could use abrasive discs using grade 36 discs. Immediately paint with EPOXY PRIMER and follow with AQUASTOP.

PROPELLERS, SHAFTS AND STERN DRIVES
Remove all traces of old paint and oxidation with grade 40-80 abrasive paper. Degrease with DETERSIL or a liquid detergent without using solvents. The product selected must completely clean the surface so brush the surface energetically with a natural bristle or nylon brush and rinse thoroughly. Primer to apply it is PROPELLER PRIMER or PROPELLER PRIMER SP alternatively EPOXY PRIMER.

Degreasing
When degreasing, never use solvents or thinners, which dissolve the grease but do not remove it. The best products to use are DETERSIL (a high quality degreaser).

EPOXY PRIMER
Two-pack adhesion primer
CHARACTERISTICS
A two-pack adhesion primer suitable for any type of metal surface. Providing excellent adhesion, improved corrosion protection and quick drying, this primer is particularly recommended for boats made of steel, light alloys or galvanized plates as well as for parts made of bronze. It can be over-coated with epoxy paints such as Plastolaite pro, Aqastop, two pack enamels and with primers for antifoulings such as Adherglass.

TECHNICAL DATA
Specific weight: 1.35 +/- 0.02 kg/L
Solids by volume: 42%
Colour: light green
Packaging: 0.75 L/4.00 L

APPLICATION DATA
Apply with: roller - brush - spray
Drying time before use (20°C): 4 days
Pot life (20°C): 8 hours
Mixing ratio by volume: 3:1
Mixing ratio by weight: 82:18
Thinner: 5610
DFT per coat: 40 µ
Theoretical coverage per coat: 10.5 m²/L
Recoating time (20°C): min 6 hours
max 36 hours
Number of coats: 1

PROPELLER PRIMER
Primer for propellers, shafts and stern-drives
CHARACTERISTICS
A one-pack primer for Propeller Antifouling, based on synthetic resins with excellent adhesion to metals and alloys in general. Especially formulated as an adhesion primer for the Propeller Antifouling it can however be used for all underwater parts which need to be protected against fouling, such as shafts, flaps, etc. An improved primer which is quick drying, has good anticorrosion properties and is easy to use.

TECHNICAL DATA
Specific weight: 1.10 +/- 0.02 kg/L
Solids by volume: 29%
Colour: light grey
Packaging: 0.25 L

APPLICATION DATA
Apply with: brush
Drying time before use (20°C): 24 hours
Thinner: 6470
DFT per coat: 15-20 µ
Theoretical coverage: 19.0 - 14.5 m²/L
Recoating time (20°C): min 6 hours
max 12 hours
Number of coats: 1

PROPELLER PRIMER SP
Spray Primer for propellers, shafts and stern-drives
CHARACTERISTICS
A one-pack primer, based on synthetic resins with excellent adhesion to metals and alloys in general. Especially formulated as an adhesion primer for the Propeller SP Antifouling, it can however be used for all underwater parts which need to be protected against fouling, such as shafts, flaps, etc. An improved primer which is quick drying, has good anticorrosion properties and is easy to use.

TECHNICAL DATA
Specific weight: 0.75 +/- 0.02 kg/L
Solids by volume: 12%
Colour: light grey
Packaging: 0.40 L

APPLICATION DATA
Application: spray
Drying time before use (20°C): 24 hours
Thinner: 6470 for cleaning only
DFT per coat: 8 µ
Theoretical coverage: 15 m²/L
Recoating time at 20° C: min 6 hours
Number of coats: 1
FILLING

3 PAINTING YOUR BOAT

Filling eliminates any porosity in the boat’s surface, smoothing it and removing any imperfections. The filler must always be applied on top of an undercoat or a primer and must then be overcoated. Use a flexible filling knife, working on small areas at a time, or for larger areas use a filling board. Small-scale filling on the boat’s super-structure can be carried out directly onto the gel coat, iron or wood; however, only an epoxy filler should be used on the hull. Fillers are available with a number of different characteristics depending on how they will be used.

To assist you in selecting the right product, we have listed below the fillers and their characteristics.

**EPOMAST**

**General purpose epoxy filler**

**CHARACTERISTICS**

High-strength two-pack epoxy filler. Excellent adhesion to any type of surface and to epoxy primers. Impervious to water and non shrinking even when applied as a thick layer. Suitable for the construction of joints and for repairs of surfaces with heavy damages, where the restoration can performed applying layers up to 10 mm with a spatula. Epomast can be applied directly to wood, GRP steel prepared by disc sanding and aluminium.

**TECHNICAL DATA**

- ** Specific weight:** 1,55 +/- 0,02 kg/L
- **Solids by volume:** 95%
- **Colour:** light grey
- **Packaging:** 0,50 kg/2,00 kg

**APPLICATION DATA**

- **Applying with:** spatula
- **Drying time before use:** (20°C): 7 days
- **Pot life:** (20°C): 1 hour
- **Mixing ratio by volume:** 1:1
- **Mixing ratio by weight:** 50:50
- **Thinner:** 5610 for cleaning only

- **DFT per coat:** depending on surface conditions
- **Drying time before sanding:** min 24 hours
- **Max thickness:** 10 mm

**POXY FILLERS**

These are high-strength fillers which can be used in two-pack systems anywhere on the boat. However, only an epoxy filler should be used below the waterline. If the filling is carried out at low temperatures, it may be useful to pre-heat the containers before mixing in order to make the product more fluid. Curing of the product is significantly slower if the temperature of the surface is below 15°C. Never apply fillers at temperatures below 10°C.

For levelling at medium to high thickness use **EPOMAST**, suitable for any type of boat material. The product should be applied to substrates previously coated with epoxy primers or with epoxy fillers after sanding with 60 grade paper and cleaning. Mix base and hardener until homogeneous. Apply with a spatula or a trowel without adding thinner. Apply a smooth layer with an average thickness of 2 - 10 mm without leaving any bits of filler which would make sanding tougher. Let dry for at least 24 hours (at 20°C) before sanding with 60 grade paper.

If several layers of **EPOMAST** are required, sanding between layers is recommended. Before application of the finish, at least one undercoat is recommended in order to improve the final result. For levelling at very high thickness use **EPOMAST PRO**, a filler with low specific weight (less than 1, lighter than water) suitable for application also on large areas, where ease of application and low weight is required in order to avoid an increase of the boat’s weight. The product should be applied to substrates previously coated with epoxy primers or with epoxy fillers after sanding and cleaning, but can be applied also directly to bare metal. Mix base and hardener until homogeneous. Apply with a spatula or a trowel without adding thinner. Apply a smooth layer with a maximum thickness of 25 mm. Let dry for at least 24 hours (at 20°C) before sanding with 40 - 80 grade paper. If the over-coating is carried out after more than 36 hours, the sanding must be very accurate. For levelling smaller areas, if application times are limited, use **EPOMAST RAPIDO**, a filler which can be sanded after only 3 hours. The product should be applied to substrates previously coated with epoxy primers or with epoxy fillers after sanding with 120 - 180 grade paper and cleaning. Mix base and hardener until homogeneous. Apply with a spatula or a trowel without adding thinner. Apply a smooth layer with a thickness up to 10 mm maximum for each pass. Let dry for 3 - 4 hours (at 20°C) before sanding with 120 - 180 paper. The surface is then smooth and ready for the over-coating. In order to avoid an increase of the boat’s weight. The product should be applied to substrates previously coated with epoxy primers or with epoxy fillers after sanding and cleaning, but can be applied also directly to bare metal. Mix base and hardener until homogeneous. Apply with a spatula or a trowel without adding thinner. Apply a smooth layer with a maximum thickness of 25 mm. Let dry for at least 24 hours (at 20°C) before sanding with 40 - 80 grade paper. If the over-coating is carried out after more than 36 hours, the sanding must be very accurate. For levelling smaller areas, if application times are limited, use **EPOMAST RAPIDO**, a filler which can be sanded after only 3 hours. The product should be applied to substrates previously coated with epoxy primers or with epoxy fillers after sanding with 120 - 180 grade paper and cleaning. Mix base and hardener until homogeneous. Apply with a spatula or a trowel without adding thinner. Apply a smooth layer with a thickness up to 10 mm maximum for each pass. Let dry for 3 - 4 hours (at 20°C) before sanding with 120 - 180 paper. The surface is then smooth and ready for the over-coating.

For additional information on application procedures please consult the TECHNICAL DATA SHEET or the website WWW.VENEZIANIYACHT.IT
EPOMAST PRO’s two components must be mixed together until a uniform colour is obtained.

**SUBCOAT S**

Two-pack epoxy filler for underwater applications

**CHARACTERISTICS**

A pure epoxy compound, 100% solids by volume, which removes water from the surface to be treated, providing excellent adhesion even to wet surfaces. Particularly useful for temporary repairs of leaks and cracks on a boat when in the water or moving. Subcoat S adheres easily to GRP gel coats, aged epoxies, coal tar epoxies as well as to steel and concrete. Suitable for temporary repairs on sea chests, boot-toppings and submerged parts of concrete quays. Resistant to temperatures up to 100°C.

**TECHNICAL DATA**

Specific weight: 1,80 +/- 0.02 kg/L
Solids by volume: 100%
Colour: light blue
Packaging: 2.00 kg

**APPLICATION DATA**

Apply manually
Full curing time (20°C): 12 - 15 days
Pot life (20°C): 1 hour
Mixing ratio by volume: 1:1
Mixing ratio by weight: 53:47
Thinner: 5610 for cleaning only
DFT per coat: depending on surface conditions

**STUCCO VELOX**

Conventional one-pack knitting filler

**CHARACTERISTICS**

Stucco Velox is generally used for final profiling as part of one-pack painting systems on topsides and deckhouses with a maximum thickness per coat of 1 mm. Not suitable for underwater areas or areas with intermittent immersion. Applications of more than 1 mm per layer may result in cracking. Stucco Velox can be overcoated with alloyed resin undercoats and finishes such as Eurogel, Unigloss and Europa.

**TECHNICAL DATA**

Specific weight: 1.92 +/- 0.02 kg/L
Solids by volume: 75%
Colour: white
Packaging: 0.50 kg / 1.50 kg

**APPLICATION DATA**

Apply with spatula
Thinner: 6470 for cleaning only
DFT per coat: depending on surface conditions
Drying time before sanding: min 24 hours

Always remember

- Sand the surface before and after filling. Fillers from Veneziani do not contain solvents (with the exception of STUCCO VELOX) and therefore should be applied always on sanded surfaces.
- A filler is porous and therefore absorbs a lot of paint. The overcoat will develop cloudy patches unless you impregnate the filled area with an additional coat of paint before overcoating.
PROTECTING YOUR BOAT

BARRIER COATS
After preparing and priming the surfaces to be painted, fully protect your boat by applying sufficient undercoats or “barrier coats”. The thickness of these barrier coats is particularly important for metal surfaces, whether steel or aluminium. The minimum thickness of the dry film for surfaces below the waterline is 400-450 microns for the entire systems. For surfaces above the waterline, 250-300 microns is sufficient.

It is very important that these minimum thicknesses are respected. To help you with this, each product carries information concerning the theoretical coverage of the product so that you can easily calculate the quantity to be used. For paint, divide the surface area (m²) by the coverage to give the litres required per coat.

Normally barrier coats are applied using a brush or roller, being careful not to “pull” the paint. “Pulling” the paint leads to a greater coverage but less thickness and therefore less protection.

Some barrier coats have been developed to provide a greater thickness while requiring less coats. They contain binders with a low viscosity and additives (thixotropic agents) which increase their anti-sagging characteristics and allow greater thicknesses to be applied. For example, AQUASTOP has a dry volume of 100% and is formulated so that when applied with a roller the thickness is 200 microns per coat.

TICOPRENE YACHTING requires 3-4 coats to achieve the same thickness and PLASTOLITE PRO has a thickness per coat of 100 microns.

GEL COAT
After sanding of filled areas apply 2 coats of PLASTOLITE PRO or as an alternative 2 coats of ADHERPOX or UNIKOTE YACHTING PRO.

IRON, LIGHT ALLOY AND STEEL
These materials require a stronger protection since they are prone to corrosion and galvanic couples. Therefore apply at least 3 coats of PLASTOLITE PRO or as an alternative 2 or 3 coats of ADHERPOX or UNIKOTE YACHTING PRO.

WOOD
On wood apply at least 2-3 coats of ADHERPOX or RESINA 2000; for one-pack paint systems 4 coats of TICOPRENE YACHTING.

CAST IRON, LEAD, OTHER METALS (keels, flaps and rudders)
Apply 3 coats of AQUASTOP.

PLASTOLITE PRO
High-build epoxy primer

CHARACTERISTICS
A two-pack primer acting as barrier coat, suitable for the anticorrosion protection of all boat building materials (wood, steel, aluminium and GRP) exposed to the marine environment. Plastolite pro may be used both as primer for underwater areas and as undercoat for topsides and deckhouses. If the recommended recoat time is exceeded or if over-coated with an epoxy undercoat (Polyrex pro) sanding between coats is recommended. If over-coated with Pigment or with polyurethane finishes such as Gel Gloss pro or Supervex Antiskid, no sanding is required.

TECHNICAL DATA
Specific weight: 1,36 +/- 0,02 kg/L
Solids by volume: 50%
Colour: light ivory
Packaging: 0,75 L / 5,00 L

APPLICATION DATA
Applying with roller - brush - conventional - airless spray
Drying time before use (20°C): 7 days
Pot life (20°C): 6 hours
Mixing ratio by volume: 3:1
Mixing ratio by weight: 82:18
Thinner: 5610
DFT per coat: 100 µ
Theoretical coverage per coat: 5,0 m²/L
Recoating Time (20°C): min 16 hours
Number of coats: 2-4

TICOPRENE YACHTING
Chlorinated rubber paint

CHARACTERISTICS
A green, one-pack chlorinated rubber primer acting as a barrier coat, with good resistance to continuous immersion in fresh and sea water. May be used for corrosion protection of wood and steel hulls, applying several coats or as sealer on aged antifoulings, applying a single coat. Ticoprene Yachting is easy to apply and particularly suited for touch-up painting or painting of sanded surfaces without the removal of the existing painting system. Can be over-coated with all antifoulings of the Veneziani product range.

TECHNICAL DATA
Specific weight: 1,37 +/- 0,02 kg/L
Solids by volume: 43%
Colour: green
Packaging: 0,75 L / 5,00 L

APPLICATION DATA
Apply with roller - brush - conventional - airless spray
Drying time before use (20°C): 24 hours
DFT per coat: 50 µ
Theoretical coverage per coat: 8,6 m²/L
Recoating time (20°C): min 16 hours
Number of coats: 1 to 4-5

UNIKOTE YACHTING
Multipurpose epoxy paint

CHARACTERISTICS
2-pack high-build barrier coat performing both as a primer and an undercoat. Can be applied on top of existing coating systems, if in good conditions, and to all boat building materials. Unikote has an excellent chemical and mechanical resistance, withstands atmospheric agents, seawater as well as mechanical abrasion and can be used as a protective coating on boat hulls as well as undercoat and finish on topsides, decks, superstructures and interiors. The gloss resistance of Unikote Yachting is lower if compared to enamels, however its good protection and the advantage of using the same product for different areas, make it a very practical paint for all types of boats.

TECHNICAL DATA
Specific weight: 1,43 +/- 0,02 kg/L
Solids by volume: 80%
Colour: ice white
Packaging: 0,75 L

APPLICATION DATA
Apply with: roller - conventional - airless spray
Drying time before use (20°C): 7 days
Pot life (20°C): 2 hours
Mixing ratio by volume: 4:1
Mixing ratio by weight: 87:13
Thinner: 5610
DFT per coat: 150 µ
Theoretical coverage per coat: 5,3 m²/L
Recoating time (20°C): min 4 hours, max unlimited
Number of coats: 2-4

For additional information on application procedures please consult the TECHNICAL DATA SHEET or the website WWW.VENEZIANIYACHT.IT
TREATING OSMOSIS

When using AQUASTOP it is also possible to repair boats which have already been damaged by osmosis. However, treating osmosis requires a series of complex operations, and a DIY approach is to be discouraged. We recommend to contact one of the Aquastop Application Centers, which are provided with the necessary equipment and have a staff with training for osmosis treatment. Jobs carried out at these specialized centers are covered by a free guarantee provided by Veneziani.

PREVENTING OSMOSIS

Prevention is always better than cure and it is possible to prevent osmosis using specialised products which have to be very carefully applied. It is not always possible to see osmosis developing and the symptoms (the blisters) only appear when the problem is already advanced. Veneziani has developed a specific product, AQUASTOP, to prevent and treat osmosis. Preventative osmosis treatment, which effectively creates a second protective skin around the gel coat, can be carried out on new boats or boats which have been thoroughly checked for the absence of osmosis before starting. Older hulls should be checked with a humidity gauge to ensure that water is not trapped inside the protective barrier. This would create pressure behind the gel coat and cause blisters and eventually cracking. Once the gel coat is breached in this manner, the underlying laminate is capable of absorbing water like a sponge. The hull moisture level should also be checked if you think the gel coat has been over-sanded when work has been carried out on the boat. The preventative system is as follows:

- degrease the gel coat by washing it with an abrasive sponge and DETERSIL;
- dry sand with 120-180 grade paper or wet sand with 240-320 wet paper;
- apply two coats of AQUASTOP (with a brush, a foam or short pile roller) leaving at least 16 and at most 48 hours between the two coats, with a coat thickness of 200 microns and a theoretical coverage of 5 m²/L;
- after a drying time of at least 72 hours at 20°C, apply 1 coat of ADHERGLASS (DFT 15 microns per coat, theoretical coverage per coat 13,3 m²/L) or 1 coat of ADHERPOX (DFT 100 microns per coat, theoretical coverage per coat 6 m²/L);
- 2 coats of ANTIFOULING (DFT and theoretical coverage depending on antifouling type used).

ANTI-OSMOSIS PROTECTION

WHAT IS OSMOSIS?

Osmosis is a process of degeneration within a glass fibre laminate and it is recognised by the formation of water-filled blisters through the laminate. At first these appear as small pinhead blisters on a small area of the hull but as the problem spreads, the size of the blisters increases and eventually the entire surface of the hull will be affected.

Osmosis is caused by a chemical reaction between water and substances remaining in the manufactured hull. The water enters the hull, and once inside reacts with the chemical components creating acidic substances. More seawater is absorbed to balance the concentration of liquid trapped inside the laminate (technically this is called osmotic pressure). This causes the formation of the well-known blisters.

CHARACTERISTICS

Aquastop is a barrier coat designed specifically for the treatment of GRP boat hulls affected by osmosis as well as for preventative treatment against osmosis. This product is resistant against fresh and sea water and provides also an effective corrosion protection for submerged metal parts (keels, flaps, rudders, etc.).

ADDITIONAL INFORMATION:

Request the brochure “AQUASTOP by VENEZIANI” and the list of Aquastop Application Centers.

AQUASTOP

Barrier coat for anti-osmosis protection

APPLICATION DATA

Apply with: roller - brush
Drying time before use (20°C): 7 days
Pot life (20°C): 2.5 hours
Mixing ratio by volume: 3:2
Mixing ratio by weight: 65:35
Thinner: 5610 for cleaning only
DFT per coat: 200
Theoretical coverage per coat: 5,0 m²/L
Recoating time (20°C): min 16 hours
max 48 hours
Number of coats: 2-3
HOW TO PERMANENTLY PROTECT AND RESTORE WOOD

Wood has been used in boat construction from antiquity to the modern day. Wood is often used to add an air of quality to a boat, with features such as wooden decks, chart tables and items of furniture. However, wood is a material which easily deteriorates. If moisture penetrates the wood, it will lead to the formation of mould and fungus which will make the wood porous and cause it to rot. In the past, wood was protected by the use of oils and oil-based varnishes, but today systems are available which protect wood permanently and prevent moisture penetration. Veneziani’s RESINA 2000 is such a product and has the following characteristics:

- In-depth penetration of the fibres;
- It is solvent free and has 100% solids by volume;
- It is easy to use, having a mixing ratio base/hardener 2:1;
- It has a pot life which is long enough to allow you to work at your ease;
- It can be used either to permanently protect new wood or to restore damaged wood.

When you are ready to use the Veneziani epoxy system RESINA 2000, check that the wood to be treated is completely dry and moisture-free. There are simple gauges available, such as the SOVEREIGN gauge, which can be used to check the moisture level of the wood. A dehumidifier can be used to remove excess moisture. All boats, whatever material they are made of, must be ventilated since keeping the inside dry is the best method of preventing deterioration. The first phase of preparation is to clean the surfaces, sand them and then apply RESINA 2000.

RESINA 2000 can be applied by brush, roller or spatula. Mixed with its additives MICROFibre, MICROFibre and MICROsilice, RESINA 2000 can be used for filling deep dents and cracks and to glue, repair and reinforce the framework of the boat (keels, posts, frames and beams). With RESINA 2000 and the additives MICROFibre, MICROFibre and MICROsilice you can perform any gluing and repair job. Also to the family of additives for RESINA 2000 belongs a range of reinforcing FABRICS made of GLASSFibre (86, 160, 300 g/m²) or CARBONFibre (200 g/m²). These fabrics are used together with RESINA 2000 for structural reinforcing or clear finishing on substrates made of wood and GRP.

Epoxy resins can be applied only at a temperature range from 10°C to 35°C.

DISTRIBUTORS FOR 1,5 L RESINA 2000 CONTAINERS

Designed for an easy and accurate dosage of RESINA 2000, these distributors can be mounted directly on the containers A+B of a 1,5 L RESINA 2000 package. These distributors provide an accurate dosage of the base/hardener mixture, without the difficulties of manual dosing. In case of multiple use, the distributors can be left mounted on the containers.
MICROSILICE
Colloidal microsilica

CHARACTERISTICS
MICROSILICE belongs to the range of additives to be mixed with RESINA 2000 in order to produce compounds with different properties. MICROSILICE is a thickening additive used with RESINA 2000. Best suited for gluing, painting and the repair of defective spots. It may be mixed together with other additives of the range in order to improve knife application and appearance of the product and is suitable for both above and below waterline applications.

TECHNICAL DATA
Packaging: 0,75 L

TESSUTI
Reinforcing fabrics for Resina 2000

CHARACTERISTICS
These are fabrics which are suitable for structural reinforcing and small repairs on wood and GRP with clear finishes. Very useful to eliminate small surface defects and to prevent infiltrations as well as small movements of the substrate.

TECHNICAL DATA
Types:
- Tessuto vetro 86 g/m²
- Tessuto vetro 160 g/m²
- Tessuto vetro 300 g/m²
- Tessuto carbonio 200 g/m²
Packaging: 0,50 m²
3 PAINTING YOUR BOAT

ANTIFOULING PROTECTION OF THE HULL

THE HULL

CHOOSING THE RIGHT ANTIFOULING

Antifouling is the most important product you will use when you are maintaining your boat and is essential in order to keep the hull in good condition. Antifouling paints contain biocides, the active compounds which repel fouling such as slime, weed, barnacles, corals and other species. Our biocides have been fully tested and researches so that they are only active in the immediate vicinity of the hull and therefore have minimal environmental impact. The type, material and purpose of your boat will dictate the antifouling you use, and we have compiled a table below to help you choose the right product.

Here below are the Veneziani antifoulings:

**BLANC SPRINT** is the least soluble antifouling of the Veneziani range and particularly suitable for speed boats sailing at 35 to 50 knots and for boats which are frequently hauled (rigid hull inflatable boats or boats which are regularly trailer mounted). **BLANC SPRINT** is also suitable for aluminium boats. **EUROSPRINT** is a hard antifouling which offers good performance also in Mediterranean waters. Available in three colours: red, dark blue and black. Not suitable for aluminium boats.

**EVEN EXTREME 2**, the two-pack version of the successful **EVEN**, an antifouling with biomatrix technology, based on completely new polymers which ensure controlled solubility and exceptionally long durability even against microfouling. **EVEN EXTREME 2** is the right choice if you wish to have a smooth coating immediately after application even when applied with a brush. Quick drying, so 2 coats can be applied in one day.

**RAFFAELLO** is a high performance antifouling with a hydrophilic matrix, with a high content of copper compounds as well as an addition of pure carbon particles, which provide both excellent antifouling protection and drag reduction in all conditions. Effective in warm and temperate waters. This strong antifouling shows an uniform grey colour which remains stable during time.

**EUROSPRINT** is a water-based ablative antifouling designed for the protection against seaweed, barnacles and all other types of fouling in fresh water and sea water. This paint is easy to apply, harmless for the environment and safer to use.

**SPEEDY CARBONIUM** is a two-pack medium-hard antifouling which uses carbon particles as an active component for better performance on fast sailing boats. Proper application with a spray gun produces a perfectly smooth finish. After 24 hours it is possible to sand the painted area with 600 grade paper in order to improve the smoothness even more, a procedure which results in additional drag reduction and increased speed. After sanding, this antifouling shows an uniform grey colour which remains stable during time.

A/F RACING ORANGE
Orange coloured antifouling for marking

**CHARACTERISTICS**
Tin and copper free orange antifouling suitable for the marking of the waterline on bulbs and rudders during international sailing competitions. This antifouling provides constant and progressive solubility during the whole period of immersion. Can be applied also to aluminium boats.

**TECHNICAL DATA**
Specific weight: 1,36 +/- 0,02 kg/L
Solids by volume: 52%
Colour: orange
Packaging: 0,25 L

**APPLICATION DATA**
Application: brush, roller, spray
Drying time before use (20°C): 12 hours
Thinner: 6470
DFT per coat: 50 µ
Theoretical coverage per coat: 1,62 m²/L
Recoating time at 20°C: min 12 hours
Number of coats: 2 - 3

**CHARACTERISTICS**
Hard antifouling for high-speed boats. This product has been formulated for the antifouling protection of hulls made of GRP wood or light alloy, previously primed with A/Berglass. The white colour of this antifouling remains stable both above and below the waterline. Suitable for any type of water. Excellent abrasion resistance also during towing on the slipway.

**TECHNICAL DATA**
Specific weight: 1,62 +/- 0,02 kg/L
Solids by volume: 50%
Colour: white
Packaging: 0,75 L/2,50 L/5,00 L

**APPLICATION DATA**
Application: brush, roller, spray
Drying time before use (20°C): min 8 hours
Thinner: 6470
DFT per coat: 40-50 µ
Theoretical coverage per coat: 40-50 m²/L
Recoating time (20°C): min 24 hours
Number of coats: 2

**EVEN EXTREME 2**
Suitable for any type of seawater, brackish and lake water. This hard antifouling has good abrasion resistance and is suitable for sailboats and powerboats (also for speeds over 35 knots) made of GRP steel and wood but not suitable for light alloy hulls.

**TECHNICAL DATA**
Specific weight: 1,62 +/- 0,02 kg/L
Solids by volume: 45%
Colour: red, blue, black
Packaging: 0,75 L/2,50 L/5,00 L

**APPLICATION DATA**
Apply with: roller - brush
Drying time before use (20°C): min 6 hours
Thinner: 6470
DFT per coat: 40-50 µ
Theoretical coverage per coat: 12,5 - 10,0 m²/L
Recoating time (20°C): min 6 hours
Number of coats: 2

For additional information on application procedures please consult the TECHNICAL DATA SHEET or the website WWW.VENEZIANIYACHT.IT
## EVEN EXTREME 2
Two-pack Biomatrix Technology antifouling

**CHARACTERISTICS**
Biomatrix technology based antifouling of second generation. Even Extreme 2 is the development of a new antifouling formulation based on the synergy between polymers and biocides, which provides progressive solubility, high quality and longest durability even against micro-fouling. The two-pack system provides an unparalleled antifouling protection. It is quick drying, so that 2 coats can be applied during the same day. Suitable for sailboats and powerboats made of GRP, wood or steel (on suitable primers). The white type only can be applied on light alloy boats (on suitable primers). There is the possibility to launch the boat already after 4 hours drying time from the last coat application (at 20°C), but there is no maximum time limit for launching.

### TECHNICAL DATA
- **Specific weight:** 1.85 +/- 0.02 kg/L
- **Solids by volume:** 53%
- **Colour:** white, blue, black, red
- **Packaging:** 0.75 L/2.50 L

### APPLICATION DATA
- **Apply with:** roller - brush
- **Drying time before use (20°C):** min 4 hours
- **Thinner:** 6470
- **DFT per coat:** 50 µ
- **Theoretical coverage per coat:** 10.0 m²/L
- **Recoating time (20°C):** min 8 hours
- **Number of coats:** 2

### COLOURS
- White
- Red, blue, black
- Light grey, red, blue, light blue, green, black

### ABRASION RESISTANCE
- 

### CAN BE APPLIED ON ALUMINIUM?
- Yes

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## RAFFAELLO
Self-polishing hydrophilic antifouling with carbon

**CHARACTERISTICS**
A superior grade, high performance antifouling with a hydrophilic matrix, with a high content of copper compounds as well as an addition of pure carbon particles, which provide both excellent antifouling protection and drag reduction in all conditions. Effective in warm and temperate seawater, brackish and fresh water. Raffaello is self-polishing with a progressive solubility and therefore suitable for medium-speed power boats as well as for sailboats. Not suitable for boats made of aluminium. The thickness of this antifouling is reduced progressively during service, avoiding an excessive increase of the antifouling layer also after the application of several coats.

### TECHNICAL DATA
- **Specific weight:** 1.67 +/- 0.02 kg/L
- **Solids by volume:** 50%
- **Colour:** white
- **Packaging:** 0.75 L/2.50 L/5.00 L

### APPLICATION DATA
- **Apply with:** roller - brush
- **Drying time before use (20°C):** min 12 hours
- **Thinner:** 6470
- **DFT per coat:** 40-50 µ
- **Theoretical coverage per coat:** 12.5 - 10.0 m²/L
- **Recoating time (20°C):** min 8 hours
- **Number of coats:** 2

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## RAFFAELLO BIANCA RACING
A White self-polishing hydrophilic antifouling

**CHARACTERISTICS**
Superior grade, durable antifouling which is both hydrophilic and self-polishing. Because of its high content of organic biocides, this antifouling maintains a stable white colour above and below the waterline and ensures an excellent antifouling performance. The resin is hydrophilic, which means lower surface tension and reduced drag. Effective in warm and temperate seawater as well as in brackish water. Raffaello Bianca Racing has a progressive solubility and therefore can be used on medium-speed powerboats as well as on sailboats. Particularly recommended for regatta sailboats.

### TECHNICAL DATA
- **Specific weight:** 1.67 +/- 0.02 kg/L
- **Solids by volume:** 50%
- **Colour:** white
- **Packaging:** 0.75 L/2.50 L/5.00 L

### APPLICATION DATA
- **Apply with:** roller - brush
- **Drying time before use (20°C):** min 12 hours
- **Thinner:** 6470
- **DFT per coat:** 40-50 µ
- **Theoretical coverage per coat:** 12.5 - 10.0 m²/L
- **Recoating time (20°C):** min 8 hours
- **Number of coats:** 2
New water-based antifouling Seventy.

Effective antifouling protection holding the environment in high respect.

SEVENTY
Water-based antifouling

CHARACTERISTICS
Water-based antifouling designed for protection against barnacles, seaweed and all other types of fouling in freshwater and seawater. This paint is easy to apply, harmless for the environment (complies with the most stringent rules for atmospheric pollution) and (not containing chemical solvents) safer to use. Suitable for frequent launching without affecting the antifouling protection. Seventy White can be used for aluminum boats.

TECHNICAL DATA
Curing mechanism: water evaporation
Specific weight: 1.70 +/-0.02 kg/L white
2.00 +/-0.02 kg/L colours
Solids by volume: 35%
Colour: white, light blue, dark blue, black, red,
Packaging: 0.75 L/2.50 L

APPLICATION DATA
Application: brush, roller
Drying time before use (20°C): 16 hours
Thinner: water
DFT per coat: 30 - 50 µ
Theoretical coverage: 13.3 - 8.0 m²/L
Recoat time at 20° C: min 3 hours
Number of coats: 2 (apply one additional coat to the waterline)

For additional information on application procedure please consult the Technical Data Sheet or the website WWW. VENEZIANIYACHT.IT
If you want maximum performance, the two-pack antifouling Antifouling Speedy Carbonium with the exclusive carbonium technology is the right choice. Based on a polymer containing pure carbonium particles with a uniform size of 15 microns, Speedy Carbonium produces a particularly smooth and “speedy” coating. The best choice for racing boats and regatta sail boats made of GRP and composite material.

Choose the difference: Speedy Carbonium™.
HOW MUCH ANTIFOULING TO BUY?

To obtain the best result, it is essential to use the right quantity and therefore thickness of antifouling. In fact, antifouling is soluble (it is self-cleaning, self-polishing and self-eroding) or, as with hard antifoulings, the biocides it contains are soluble. The result and durability of the antifouling are dictated by the thickness applied.

When applying your antifouling, it is very important to remember the points below:

• do not exceed the coverage;
• always apply two coats and paint a third coat on the rudder and other parts which are subject to more erosion, such as the waterline.

In Table A we have compiled a fairly precise method for calculating the quantity of antifouling you should buy and use. However, if you want to avoid too many calculations, you can use Table B, which we have compiled on the basis of our experience and the information we have received from our customers.

You will find a list of boat types together with the quantities of the product to be purchased and used counted in 0.75 litre cans. The most important thing to remember is never to exceed the theoretical coverage given on the cans and the technical instructions. The exact quantity must be applied and the paint must not be “pulled” to attain greater coverage.

When painting antifouling, remember to always apply 2 coats and not to exceed a coverage of 8-10 m²/L for each coat. This means that for one coat you will apply about one can every 6 m².

IMPORTANT

Always apply the amount of antifouling advised.

### TABELLA A

How much antifouling?

To calculate how much antifouling to use, first you have to know:

1. The boat’s length at the waterline multiplicated by the boat’s width (A)
2. The boat’s length at the waterline multiplicated by draught, the results for 2 (B)
3. The LONGITUDINAL COEFFICIENT, which takes into account the shape of the hull (C):

| modern sailboat with keel | CF 0.35 |
| sailboats with full shaped hull | CF 0.40 |
| fast semi-planing powerboats | CF 0.65 |
| boats with dislocating hull such as pilot boats or trawlers | CF 0.70 |
| inflatable boats | CF 0.68 |

This is the formula: (A+B) x C= real m² to paint

If you divide the formula result by the antifouling’s theoretical coverage, you have the quantity of antifouling to use (in litres).

### TABELLA B

Antifouling quantity

<table>
<thead>
<tr>
<th>Metres</th>
<th>ADHERGLASS - 1 coat</th>
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<th>ANTIFOULING - 2 coats</th>
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<td>n° of 0.75 litre containers</td>
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<td>n° of 0.75 litre containers</td>
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<td>modern sailboats with keel</td>
<td>sailboats with full shaped hulls</td>
<td>fast semi-planing powerboats</td>
<td>boats with dislocating hull such as pilot boats or trawlers</td>
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<td>sailboats with full shaped hulls</td>
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</table>

To obtain the recommended total thickness of 80-100 microns, you must apply two coats of the undiluted product using a brush. Using a roller tends to make the coat thinner.
ANTIFOULING FORMULA
Antifouling paint is a chemical mixture of several raw materials, each having individual characteristics and functions. When correctly manufactured and applied, this mixture forms a solid, adhesive and cohesive film capable of protecting the surface to which it is applied. Antifoulings have four main constituents: pigments, binders, solvents and additive.

PIGMENTS
Pigments are finely pulverised solids with a thickness in the range of 0.2 - 20 microns. There are coloured pigments, used for colouring and covering; fillers, used to control particular physical properties such as specific weight; and antifouling pigments, like copper or zinc salts, with antifouling properties.

BINDERS
Binders are polymers or resins, which allow the paint to form a dry, compact and very adhesive layer on the surface, having typical characteristics of solubility, viscosity, stability, compatibility and toughness.

SOLVENTS
Solvents are used in paints to reduce their viscosity and make them easy to apply. When the paint is drying, after application, solvents evaporate and leave a dry film.

ADDITIONS
Additives are normally added to paint in small quantities, to create significant variations. They are grouped according to the effect they create, i.e. plasticizers, accelerators, dilatants, thixotropic, antifoaming, antiskinning, antiset-ting, etc.

COMPONENT MIXING AND TESTING
The four groups of raw material are held together by physical processes, to form a homogeneous and stable compound: paint. Following successful physical and chemical laboratory tests, the first raft tests take place. These require the application of the antifouling on 30 x 80 cm plates, which may be GRP + gel coat, iron, aluminium or bronze. Veneziani’s laboratories have a number of rafts in various locations, on which the raft test plates are mounted. Hundreds of plates are put to sea every year, some with Veneziani’s antifouling products already on the market, others with competitor’s products, while new antifouling paints are tested on the remaining plates. Every year Veneziani’s laboratories test hundreds of new formulations, comparing them against those on the market.

RAFT TEST VENEZIANI

RAFT TEST VENEZIANI

The plates are inspected and photographed every 3 months; each test taking 2 years to complete. On completion of the tests, the formulations showing the very best results are chosen and further testing is started on the boats. These tests consist of painting hull quarters with two different formulations, one for the forward port quarter and the aft starboard quarter, alternating with the other quarters for the second formulation. This test has an approximate duration of 1.5 years. When the best results have been achieved, the antifouling is put on the market.

THE IMPORTANCE OF APPLYING THE RIGHT THICKNESS OF ANTIFOULING
One of the raft tests carried out by Veneziani’s laboratories required treating the centre of the plates with one single coat of antifouling, and the remainder using the correct amount. The photographs show that after 4 months there was no obvious difference, but after one year there was some slime on the centre section, and after two years barnacles.

The performance of an antifouling depends on the quantity of biocides used, and therefore on the thickness applied (thickness = quantity). Possible coverage should not be confused with required coverage. The quantities suggested should always be applied regardless of the number of coats, the method of application or the dilution. The chart on page 24 will make it easier for you to calculate the amount required to paint the hull of your boat. If you apply less paint than advised, the results are sure to be disappointing.
Winning teams use Durepox during the most important international competitions.

Exceptional durability - Can be applied wet to wet.
Reduces the drag coefficient of the hull - Improves the sliding capacity in the water.

Born for champions, now for everybody.


Made in New Zealand by:

Resene
Automotive & Light Industrial

www.venezianiyacht.it

Official Distributor:

Veneziani
Leaders in yacht paint systems.
Durepox™ is used by the majority of sailing teams and in most renowned boatyards. It has been applied to the hulls of some of the most renowned regatta and cruise boats. All boats participating to the Louis Vuitton Cup 2003 and the America Cup winning team New Zealand Black Magic were using Durepox™. Other winning names include Prada, Play Station, Tag Heuer, High 5, Silverage, Flash Gordon. During the Louis Vuitton Cup 2007, seven out of twelve teams were using Durepox™ on the hull, deck, mast and boom of their boats. The semi-finalist and the finalist of the America Cup have conceded further confidence in this product.

Durepox™ is a free sanding, highly pigmented, two-pack epoxy urethane primer, recommended when uncompromising protection of the boat is required. Best suited for regatta boats which do not require antifouling (classes J, MUMM, MELGES, TP). Applied wet to wet and quick drying, Durepox™ may increase considerably the speed of boats to which it is applied.

Tests carried out in the flux laboratories of the Obago University of New Zealand have confirmed that even high gloss surfaces provide lesser results if compared to surfaces treated with Durepox™, which enables a 15% reduction of the drag coefficient. Durepox™ can be applied to all boat building materials but is successfully used in manifold branches. Available is also DUREPOX HIGH PERFORMANCE CLEAR, designed to improve the gloss of surfaces painted with all colours of DUREPOX or to be applied directly to bare substrates of carbon fiber.
PAINTING YOUR BOAT

ANTIFOULING PROTECTION OF SPECIAL PARTS

METAL KEELS, FLAPS AND RUDDERS
Flaps and rudders made of steel or alloys and other metal parts below the waterline are areas of high abrasion and wear. You must carefully prepare the surfaces (lead, cast iron or stainless steel) to be painted using an abrasive disc or by grit blasting to remove all traces of old paint and abrasion and wear.

We recommend that you use the two-pack system based on EPOXY PRIMER (1 coat with a brush) and AQUASTOP (3 coats with a short pile roller) to attain a thickness of 600 microns. After the last coat has been applied you must wait at least 48-72 hours before continuing the paint system with a coat of ADHERGLASS or ADHERPOX and then the antifouling as on the rest of the hull.

Where necessary fill the keel using EPOMAST PRO (on top of EPOXY PRIMER). Then sand and apply AQUASTOP.

STERN DRIVES
All boat motors are primed and stove-enamelled by the manufacturer. However they must also be treated with a special antifouling product to protect them against fouling. If the stern-drive is in a good condition, wash the immersed part thoroughly with DETERSIL and, after sanding with fine abrasive paper, apply:
• 1 coat of PROPELLE PRIMER with brush or PROPELLE PRIMER SP with spray-gun.
• 2 coats of antifouling PROPELLE PRIMER with brush or PROPELLE SP with spray-gun.

On the parts above the water:
• 2 coats of GEL GLOSS PRO finish.

When the stern-drive is in a poor condition, you must strip it to the bare metal by sanding or, where possible, using an abrasive disc. Then it should be protected using EPOXY PRIMER (1 coat with a brush) and AQUASTOP (3 coats with a short pile roller or a brush), Finish the system as for the submerged parts.

PROPELLERS (bronze) AND SHAFTS (stainless steel)
When treating propellers you must be scrupulous, even fanatical, about their cleaning and preparation. If you apply a system which is too thick, the profile, and therefore the action, of the propeller will be altered. Special products have been developed which can be applied in thinner layers and which have high adhesion characteristics.

The entire system must be renewed every season.

Follow the steps below:
• sand with coarse grade sandpaper, scoring the surface;
• degrease with DETERSIL or another degreasing detergent. Repeat several times using a clean sponge and rinsing with fresh water.
• Do not use solvents which will not eliminate the grease but simply spread it around the surface. Be careful not to smear the clean surface or touch it with rags or fingers. Any remaining traces of grease can affect the adhesion of the product.
• apply 1 coat of PROPELLE PRIMER or PROPELLE PRIMER SP and after 6-12 hours,
• 2 coats of antifouling PROPELLE or PROPELLE SP, with a drying time of 6-12 hours between coats.

The antifouling PROPELLE or PROPELLE SP should be applied only to PROPELLE PRIMER, PROPELLE SP or on top of well sanded coatings of old antifoulings. Wait at least 48 hours before launching. Note: some alloys used for propellers cannot be painted, due to adhesion problems.

Do the PROPELLE first
When you are "doing" the hull, paint the propeller first, not last. This gives the PROPELLE or PROPELLE SP hard antifouling more time to dry completely.

For additional information on application procedures please consult the TECHNICAL DATA SHEET or the website WWW.VENEZIANYACHT.IT
PAINTING YOUR INFLATABLE BOAT

RESTORE TO LIFE AND PROTECT

Veneziani has developed a range of special products for inflatable boats: the enamel GUMMIPAINT to protect and revive aged and used-up inflatable boats, the antifouling GUMMIPAINT A/F to protect the hull of inflatable boats, the DILUENTE 6380 which makes spray application of both products possible and the polish GUMMIWAX for the protection of rubber parts.

For the ordinary maintenance of inflatable boats, fenders, diving suits and chairs apply GUMMIWAX by spraying and spread the product with a cloth on the previously cleaned and dried surface; wait 30 minutes and then polish with a soft cloth.

If you follow the steps below, you will obtain good results:

- carefully prepare the surface, degreasing it and washing the inflatable boat 3 or 4 times with the multipurpose detergent DETERSIL to completely remove the wax used in the manufacture of these inflatable boat.
- sand the whole surface thoroughly with 120-150 grade paper and clean with a wet cloth.
- apply 2 coats of GUMMIPAINT enamel (coat thickness 35 microns, theoretical coverage 6,6 m²/L) to the surfaces line above the water and two coats of GUMMIPAINT A/F to the hull (coat thickness 18 microns, theoretical coverage 15 m²/L). The minimum overcoating time for both products is 8 hours. Both the enamel and the antifouling are very flexible and therefore suitable for the painting of inflatable parts.

In order for the painting operation to be successful, always remember the following points:

- Inflate the boat only by 80% of the maximum pressure for the application.
- For spray application thin the products with DILUENTE 6380 as follows:
  - 40-50% for GUMMIPAINT
  - 20-30% for GUMMIPAINT A/F.
- After the first coat do not apply the subsequent coats with cross strokes to avoid softening of the coating system.
- For the cleaning of the equipment always use the thinner DILUENTE 6380.

Inflatable boats with a rigid GRP hull should also be painted with ADHERGLASS or ADHERPOX and 2 coats of antifouling.

GUMMIPAINT
Flexible coating for inflatable boats

CHARACTERISTICS
Suitable for painting neoprene, rubber fabric, PVC, Hypalon, etc. This product has excellent levelling properties and flexibility as well as very strong adhesion. Gummipaint has also excellent resistance to the marine environment, to immersion in sea and fresh water as well as to UV rays.

TECHNICAL DATA
Specific weight: 1,00 +/- 0,02 kg/L
Solids by volume: 23%
(mean value of all colours)
Colour: refer to colour chart
Packaging: 0,375 L

APPLICATION DATA
Apply with: brush - spray
Drying time before use (20°C): 24 hours
Thinner: 6380
DFT per coat: 35 µ
Theoretical coverage per coat: 6,6 m²/L
Recoating time (20°C): min 6 hours
Number of coats: 2

GUMMIPAINT A/F
Antifouling for inflatable boats with elastic hull

CHARACTERISTICS
A flexible antifouling recommended for inflatable boats. This antifouling is very effective and - because of its excellent flexibility and adhesion - suitable for painting neoprene, rubber fabric, PVC, Hypalon, etc.

TECHNICAL DATA
Specific weight: 1,20 +/- 0,02 kg/L
Solids by volume: 27%
Colour: black, grey, white
Packaging: 0,375 L

APPLICATION DATA
Apply with: brush - spray
Drying time before use (20°C): 24 hours
Thinner: 6380
DFT per coat:18 µ
Theoretical coverage per coat: 15,0 m²/L
Recoating time (20°C): min 8 hours
Number of coats: 2

GUMMIWAX
Protective polish for inflatable boats

CHARACTERISTICS
Using unsuitable protective products for inflatable boats may damage the coated fabric and endanger people (by making the surface very slippery). Gummiwax provides proper protection and does not make the surface slippery. It does not contain silicones. Gummiwax revives colours and does not leave stains if in contact with clothes or equipment.

TECHNICAL DATA
Packaging: 0,50 L
PAINTING YOUR BOAT

PAINT FINISHES FOR THE TOPSIDES, DECKHOUSE AND DECK

TOPSIDE, SUPERSTRUCTURES, DECKHOUSE

WOOD VARNISHES

When you are treating wood on your boat you can choose between two different products: TIMBER GLOSS, the traditional one-pack varnish or marine flatting, or the two-pack polyurethane varnishes WOOD GLOSS (for exterior and interior surfaces) or WOOD MAT (semi-gloss varnish for interior surface).

WOOD GLOSS has better resistance to external agents than the conventional flatting varnishes, and so offers longer durability.

If the wood is new it should first be sanded and then impregnated with 1 coat of FIBRODUR. The finishing coats should then be applied.

At least 4-6 coats of TIMBER GLOSS or WOOD GLOSS varnish must be applied for the best results, with a light sanding (360-400 grade sandpaper) between the coats to obtain a glossy, smooth surface.

On some, very prestigious boats, as many as 12 coats are applied in order to achieve the best finish and durability.

For the first coats of varnish you should thin the varnish by 30% to start with and then gradually reduce this amount until the final two coats are applied without being thinned.

Always brush along the grain of the wood and use the correct thinner.

If the wood is stained by water infiltration, you must remove all the paint from the affected area and treat the wood with 80 volumes of oxygenated water or with TEAK 2 until the wood regains the original colour.

Teak does not have to be varnished, but simply cleaned, bleached and protected with special products. However, should you decide to varnish it, we recommend you use a high-performance system.

The durability of the system also depends on regular maintenance. If you are wise enough to finely sand the surface every two years and apply 2 new coats of the product at the same time, you will guarantee that your wood will always be protected and in perfect condition for many years to come.

WOOD MAT

Semi-glossy wood finish

CHARACTERISTICS

A clear, semi-glossy two-pack wood varnish with high resistance against the marine environment. Particularly recommended for clear finishes of bulkheads, furniture and all internal wood surfaces. Excellent levelling properties and wear resistance. Easy to apply, Not suitable for areas below the waterline. Well suited for wooden decks and plancking.

APPLICATION DATA

Apply with: brush - spray
Drying time before use (20°C): 3 days
Pot life (20°C): 3 hours
Mixing ratio by volume: 4:1
80:20
Thinner: 5780
DFT per coat: 20 µ
Theoretical coverage per coat: 19.0 m²/L
Recoating time (20°C): min 8 hours
max 48 hours
Number of coats: 6 (up to 12)

TECHNICAL DATA

Specific weight: 1,00 +/- 0.02 kg/L
Solids by volume: 50%
Colour: clear
Packaging: 0.75 L

For additional information on application procedures please consult the TECHNICAL DATA SHEET or the website WWW.VENEZIANIYACHT.IT
HIGH PERFORMANCE SYSTEM
For high performance varnish systems, on new or stripped wood apply first one coat of FIBRODUR, sand after 12 hours drying time and then apply 2 coats of RESINA 2000. Sanding between the two coats is recommended in order to smooth the wood fibers. The surface is now ready for the application of 6 coats of WOOD GLOSS as mentioned above.

This system can be renewed at a later date by simply replacing the coats of WOOD GLOSS without removing the RESINA 2000. We recommend that this treatment is only used on wood which is completely dry.

ENAMEL FINISHES
For a one-pack system you can choose UNIGLOSS and for a two-pack system GEL GLOSS PRO. The two-pack system will give better exterior appearance (shine, durability, etc.) and higher performance against atmospheric elements and mechanical abrasion, but will require more care in application. The one-pack system is quicker and easier to apply but its quality is inferior to that of the two-pack system.

In both cases, after having filled and smoothed the surface, it is advisable to apply an undercoat to improve the appearance of the enamel. Depending on your system type, you could choose EUROGEL for one-pack systems and POLYREX PRO or PLASTOLITE PRO for two-pack systems.

The role of an enamel undercoat is to increase surface protection and to provide an uniform colour, avoiding the marks which can form around filled areas. The undercoat also highlights any surface defects which can be eliminated at this stage before the enamel is applied. The undercoat should be applied to the clean and sanded surface, or surface protected by an epoxy product. With one-pack systems, 2 coats of EUROGEL should be applied. For two-pack systems, the surface should be treated with two coats of PLASTOLITE PRO (can also be applied under the waterline) or with POLYREX PRO (easy to sand, but not suitable for continuous immersion). Sand and wash the surface before applying at least 2 coats of enamel.

Remember that you can also apply finishes with a brush since our products have such good levelling properties characteristics that the brush marks will be minimised by crossing your brush strokes.
PAINTING YOUR BOAT

PAINT FINISHES FOR THE TOPSIDES, DECKHOUSE AND DECK

DECK

GRP
We recommend GEL GLOSS PRO, available in several colours, with the addition of ANTISKID POWDER to revive the colour and cleanliness of your deck and to create an antiskid effect. After washing and degreasing the deck, apply two coats directly onto the gel coat, preferably with a roller or using the “brush and pad” technique. The product contains a synthetic granulate which separates from the enamel so keep mixing the paint even during application. Textured surfaces must be washed with brushes and DETERSIL and painted with 2 thin coats of GEL GLOSS PRO (applied with a brush or spraygun) so that the roughness of the existing texture is maintained.

VARNISHED WOOD
After preparing and sealing the wood with 2 coats of RESINA 2000, apply 2 coats of GEL GLOSS PRO with ANTISKID POWDER. Mix carefully even during application.

TEAK
Teak and iroko are not normally varnished. They should be treated with natural oils to protect against the action of atmospheric elements and washing, especially if they have been washed with pressurised water and abrasive detergents (not recommended). We recommend the application of 1 or 2 coats of TEAK 3. However, this protection will be of limited duration and must therefore be followed by at least 2 applications per season. This will avoid the necessity of frequent cleaning and the wood will keep its natural colour and characteristics. Use the following two products for thorough cleaning and to revive the natural colour of the teak.

- For cleaning: TEAK 1. Wet the wood with fresh water and then pour a small quantity of TEAK 1 onto the deck, rubbing it in with natural fibre brush. Synthetic fiber brushes and abrasive detergents should be avoided. Rinse thoroughly with plenty of fresh water.

- For “bleaching” (or more accurately, to revive the natural colour): TEAK 2. Apply TEAK 2 with a brush to the surfaces already wet from the previous cleaning operation with TEAK 1. When the wood changes colour, rinse it and leave it to dry. The wood should be protected as soon as possible with 2 coats of TEAK 3 which, being a protective oil, will conserve the integrity of the wood.

TEAK
The teak has always been considered a noble and precious wood and grows in South-East Asia, in an area comprising Burma, Thailand and Laos. Colour and veining may vary depending on the area of origin and the quality. The best quality shows an uniform golden colour sometimes with black veining. This wood has an oily feeling when touched, a strong and typical smell and is one of the most durable woods in the world, practically immune to attacks by insects and very resistant to water contact. Due to its beauty, durability, resistance and ductility the teak is an excellent wood for manifold uses. The teak is the only wood which can be used in all areas of the world, even in those where thermal cycling, humidity, salinity and winds may affect all other wood types. The teak has arrived to Europe at the beginning of the previous century, when its excellent quality as a boat building material was discovered. Because of its excellent resistance to the marine environment, the teak is nowadays used mainly for the construction of boat decks and does not require any protective treatment. Moreover the teak is not stained if in contact with screws or similar iron equipment. The only negative feature is the high price of teak, which restricts its use. On the other hand, the teak is the most suitable wood for the use in marine environment.

POLYREX PRO
Two-pack polyurethane undercoat

CHARACTERISTICS
A high-build, two-pack polyurethane undercoat for high performance paint systems. Very easy to sand, it is particularly recommended as an undercoat for enamels. Being high-build, Polyrex pro seals possible micro-porosities of the existing paint system. Recommended for applications to epoxy primers such as Plastolite pro, or to surfaces which have been levelled with an epoxy filler such as Epomast pro and previously sanded. It can be applied directly to GRP without a primer, if the surface has been sanded and cleaned thoroughly. Polyrex pro, if sanded with 400-600 grade paper, is an excellent undercoat for polyurethane finishes such as Gel Gloss pro and Unigloss, improving the protection of the system and the appearance of the finish, not suitable for continuous immersion.

APPLICATION DATA
Stir the paste thoroughly until homogeneous, before adding it to the paint. For larger surfaces spray-application is recommended in order to obtain better uniformity of the required gloss. If applied on larger surfaces with brush or roller, spots with different gloss might occur.

CHARACTERISTICS
Add to the paint, already mixed with the hardener, in a percentage from 4 to 5% by volume. Mix and stir thoroughly before and during application.

ANTISKID POWDER
Antiskid additive for enamels

CHARACTERISTICS
Odourless, plastic powder with selected particle size to be used as an antiskid additive for boat floorings and deck paints. Excellent resistance to abrasion and seawater.

APPLICATION DATA
Add to the paint, already mixed with the hardener, in a percentage from 4 to 5% by volume. Mix and stir thoroughly before and during application.

CHARACTERISTICS
Odourless, plastic powder with selected particle size to be used as an antiskid additive for boat floorings and deck paints. Excellent resistance to abrasion and seawater.

APPLICATION DATA
Add to the paint, already mixed with the hardener, in a percentage from 4 to 5% by volume. Mix and stir thoroughly before and during application.

MATTING PASTE
Matting additive for enamels

CHARACTERISTICS
This additive, when added to one-pack alkyd enamels or to two-pack polyurethane enamels, produces a semi-gloss or mat finish. For larger surfaces spray-application is recommended in order to obtain better uniformity of the required gloss. If applied on larger surfaces with brush or roller, spots with different gloss might occur.

APPLICATION DATA
Stir the paste thoroughly until homogeneous, before adding it to the paint. For the correct percentage to add refer to the technical data sheet.

For additional information on application procedures please consult the TECHNICAL DATA SHEET or the website WWW.VENEZIANIYACHT.IT
**TEAK 1**
Detergent and stain remover for teak

**CHARACTERISTICS**
Teak 1 removes all kinds of contamination from teak. The pH of Teak 1 is only slightly alkaline, therefore it cleans thoroughly removing soiled spots but leaving the oil content of the wood unaffected.

**TECHNICAL DATA**
- Specific weight: 1.01 +/- 0.02 kg/L
- Colour: clear
- Packaging: 0.50 L

**APPLICATION DATA**
Apply with: soft, natural fiber brush - sponge

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**TEAK 2**
Bleaching agent for teak

**CHARACTERISTICS**
Sunlight, salinity and pollution may affect the original appearance of teak resulting in a greyish colour. With Teak 2 the wood regains its original colour.

**TECHNICAL DATA**
- Specific weight: 0.99 +/- 0.02 kg/L
- Colour: clear
- Packaging: 0.50 L

**APPLICATION DATA**
Apply with: soft, natural fiber brush - sponge

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**TEAK 3**
Impregnating and protective agent for teak

**CHARACTERISTICS**
Teak 3 besides impregnating the wood and reducing the penetration of dirt, restores the natural oil content of the wood. Furthermore Teak 3 enhances the natural colour of teak and makes the surface softer when touched.

**TECHNICAL DATA**
- Specific weight: 0.80 +/- 0.02 kg/L
- Colour: clear, golden
- Packaging: 0.50 L/2.50 L

**APPLICATION DATA**
Apply with: brush
PAINTING YOUR BOAT

3

HIDDEN INTERIOR PLACES

BILGES, PEAKS, ICEBOXES AND GALLEYS

These are the hidden areas of the boat. Surfaces which are not "open to view", are always neglected and which are normally painted grey, simply to cover the GRP or to hide marks and rust.

In fact, it is important that these hidden areas are kept clean and even better if they are treated with a sealant to prevent water penetrating the GRP from inside the boat. Many forpeaks and storage areas are used for storing the sailbags but these areas are also used as galleys and it is advisable that food comes only into contact with clean surfaces and safe products.

For this reason, Veneziani has developed CERAMITE YACHTING, a solventless product (and therefore safe to apply in confined areas without solvent vapours) with a high coverage, a compact texture and which is completely impermeable. It is not affected by fuel or mineral oils and it can easily be cleaned with a simple liquid detergent or a bilge detergent since its surface is durable and shiny. Normally one coat is enough. In a new boat, it eliminates the strong, unpleasant smell during application and can be applied to GRP, wood, steel and aluminium. It is easy to apply and has excellent hiding power as well as levelling.

CERAMITE YACHTING

CHARACTERISTICS

A high-build, solvent-free, odourless epoxy paint designed for the sealing of internal and external surfaces of water tanks, galleys and iceboxes. CERAMITE YACHTING is also an excellent anti-osmosis coating for bilges, peaks and hidden interior surfaces. Suitable to be applied also to wood and steel, this product has a high chemical resistance to fresh and sea water, diesel, oil, acidic and alkaline solutions. The hard, glossy surface of CERAMITE YACHTING makes cleaning with ordinary liquid detergents easy.

APPLICATION DATA

Packaging: 0.75 L
Colour: grey
Solids by volume: 51%
Specific weight: 1.37 ± 0.02 kg/L
DFT per coat: 40 µ
Theoretical coverage per coat: 12.7 m²/L
Recropping time (20°C): 48 hours
Number of coats: 1-2

For additional information on application procedures please consult the TECHNICAL DATA SHEET or the website WWW.VENEZIANIYACHT.IT

In metal boats, carry out the required preparation and then finish with CERAMITE YACHTING.

In wooden boats, prepare the surface with 1 coat of FIBRODUR and then finish with 1 coat of CERAMITE YACHTING.

The same method can be used for water tanks and iceboxes.

For very confined bilges it is possible to use a one-pack, odourless product such as SENTIFLEX, which is a glossy topcoat formulated with special polymers conferring good chemical resistance against humidity, lubricating oils, fuels and detergents.

This product must be applied to clean, dry and oil free surfaces. If necessary sand prior to application.

New wood: impregnate first with FIBRODUR.

New gelcoat: Degrease with DETERSIL and apply the product.

New steel and aluminium: first apply one coat of EPOXY PRIMER.

Old, one-pack coatings: remove all loose paint scales by scraping. Stir the product until homogeneous. Usually no thinner is required. If necessary, add up to 5% THINNER 6470 by volume.

Apply an even coat with full coverage, wetting the surface thoroughly. For best results, apply at least 2 coats with a minimum drying interval of 8 hours at 20°C.

This product produces very little smell during application and can be applied to GRP, wood, steel and aluminium. It is easy to apply and has excellent hiding power as well as levelling.

SENTIFLEX

One-pack enamel for bilges

CHARACTERISTICS

Glossy topcoat for bilges formulated with special polymers conferring good chemical resistance against humidity, lubricating oils, fuels and detergents. This product produces very little smell during application and can be applied to GRP, wood, steel and aluminium. It is easy to apply and has excellent hiding power as well as levelling.

APPLICATION DATA

Apply with: brush - roller - conventional/airless spray
Drying time before use (20°C): 7 days
Pot life (20°C): 50 minutes
Mixing ratio by volume: 3:2
Mixing ratio by weight: 67:33
Thinner: 6470

Usually no thinner is required. If necessary, add up to 5% THINNER 6470 by volume.

Apply an even coat with full coverage, wetting the surface thoroughly. For best results, apply at least 2 coats with a minimum drying interval of 8 hours at 20°C.
YOU & SEA

Body gel and shampoo for sea water. YOU&SEA is a unique product specifically formulated for the hygiene of the body and the hair which can be used with sea water. It has a neutral pH and produces a moisturizing, emollient an perfumed foam. In order to remove the salt, rub your body dry with a clean sponge cloth.

THINNERS

Thinners are volatile liquids used to dissolve paint components, reduce the viscosity and aid paint application. Suitable film formation depends on proper thinner evaporation, therefore the correct use of thinners is very important in order to achieve good paint application. In the case of two-pack paints add thinner only after the mixing of the two components. Instructions indicated in technical data sheets and regarding the correct use of thinners for different application procedures (brush – roller- spray) should be followed precisely and the maximum recommended percentage should never be exceeded.

Diluente 5610, thinner for epoxy paints. Diluente 5610 is the recommended thinner for Adherpox, Epoxy Primer, Plastolite pro and Unikote Yachting, For Aquastop, Ceramite Yachting, Epomast, Epomast pro, Resina 2000, Subcoat, it is recommended only for the cleaning of the equipment.

Diluente 5780, thinner for polyurethane paints. Diluente 5780 is the recommended thinner for Polyrex pro, Wood Gloss, Wood Mat, Gel Gloss pro. For Adherglass and Fibrodur it is recommended only for the cleaning of the equipment.

Diluente 6380, thinner for the Gummi paint range. Thinner 6380, when added to Gummi paint and Gummi A/F enables spray application, but is also suitable for brush application.

Diluente 6470, thinner for antifoulings/one-pack paints. Diluente 6470 is the recommended thinner for all antifoulings from Veneziani as well as for all one-pack paints such as Eurogel, Propeller Primer, Sentiflex, Ticoprene Yachting, Timber Gloss, Unigloss. For Stucco Velox it is recommended only for the cleaning of the equipment.

Diluente 6700, thinner for Gel Gloss pro. Diluente 6700 is the specific thinner for the enamel Gel Gloss pro. For brush application add a maximum of 5 - 10%, for spray application add a maximum of 25 - 30%.
HIGH SOLID POLYACRYLIC TOPCOAT.

New brilliance to your boat.

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High solid polyacrylic topcoat, non yellowing, elastic, high resistance to marine atmospheric conditions. Suitable for spray application, buffable, good filling quality, excellent coverage capacity and high thickness without risk of sagging. Custom tintrometric system colors available on request. Product in accordance to VOC rules:

- **COMMANDER** < 420 g/L
- **COMMANDER M** < 840 g/L
When, less than 150 years ago, Michnes in England and Gioachino Veneziani in Trieste invented the first really effective antifouling paint, this already had self-cleaning, eroding and controlled leaching characteristics. In fact, all antifoulings in order to be effective must release into the water substances which will inhibit, repel or delay the attack and development of fouling, which can be an animal (mollusks) or vegetable (weed) encrustation. Antifoulings have to be, through various means, partially soluble in order to leach. At first, the antifouling was a kind of soap, combining natural resins (like rosin) and greases (like Marseille soap). Then the leaching was controlled by mixing various natural, soluble resins with synthetic, insoluble resins (olefin resin, vinyls, chlorinated rubber, acrylics, etc.). In the 1970s, the leaching method was perfected by the use of acrylic resin copolymers and tin organic compounds and this is when the selfleaching definition was coined. Today, tin can no longer be used for environmental reasons - it is legally banned - and therefore these copolymers can no longer be used. The term self-leaching can rightfully also be used by all paints which have various means of controlled leaching. The terms self-leaching, eroding, controlled solubility, progressive leaching, self-cleaning and self-polishing are now in fact synonymous. Only hard antifoulings are an exception to this rule.

**Hard Antifoulings**

Insoluble antifoulings or antifoulings with low solubility or erodibility are normally used on high-powered boats (35-50 knots) on propellers, shafts, flaps, motor bodies, hydrofoil and stabilising fins, waterlines and generally all submerged parts subject to extreme wear or abrasion. These are hard antifoulings. In these products, leaching of the agents which inhibit attack by the fouling does not occur by means related to the solubility of the binder but, for example, through the high concentration of biocides, whose particles are leached by contact (“contact leaching”). These products are also used for boats which are used on a daily basis. Hard or semi-hard antifoulings should also be used in brackish or soft waters or in ports with strong currents.

**Viscometer**

An instrument used to measure the viscosity of a product. It works by measuring (in seconds) the time taken by 100 cc of a product to pass through a calibrated hole into a cup.

**Drying**

When a paint product is drying two moments are distinguished relating to the quantity of evaporated solvent and/or the degree of cross-linking. In this way the values “powder” dry and “touch” dry can be identified. A product is “powder” dry when any powder deposited on the film is not absorbed. However, the product is “touch” dry when it can be handled without the film being marked. The paint only achieves its maximum performance when the drying-time has completely elapsed (drying time before use). You must always follow the overcoating times given in the technical instructions.

**Hydrophilic**

This is the opposite of hydrophobic. A hydrophobic surface repels water and does not become wet. A gloss enamel, glass, a surface treated with silicon or Teflon based products are all hydrophobic. However, a hydrophilic surface is easily wetted and incorporates or retains a layer of water. Hydrophilic antifouling, by retaining a layer of water, reduces the friction of the hull. The friction between the layer of water retained and the seawater is less than that between seawater and a hydrophobic surface. By repelling water, the hydrophobic surface creates greater friction. The hydrophilic antifouling RAFFAELLO easily carries out its repellent action against fouling, due to the improved leaching of its active components which are in continuous and constant contact with water.

**Humidity Gauge**

This instrument is used to measure moisture levels in the substrate (fibreglass or wood) of a hull. Moisture levels are particularly important in the treatment of osmosis. After removing the gel coat, check that the hull “dries out” properly. Drying can be natural or accelerated (using various heating and dehumidification systems, either directly or indirectly). The moisture level must be reduced to below 10%. This can be checked with an instrument such as the SOVEREIGN humidity gauge which is used by all the AQUASTOP osmosis treatment centres.

**Mixing Ratio**

This is the mixing ratio between the base (component A) and the setting agent (component B) in two-pack products. The mixing ratio is...
expressed both in weight and in volume in the technical instructions for each product. You must pay careful attention to this information since these amounts must not be arbitrarily varied. Remember that extra setting agent will not only not dry the paint quicker but will also leads to a highly reticulated structure. This is why two-pack products are normally stronger than one-pack products.

**POLYMERISATION**

A polymer is a compound consisting of a high number of single molecules called monomers. Polymerisation is the process in which two or more molecules combine to form a new molecule. Plastics are typical polymers: polyester, polypropylene, etc. In the case of varnishes, the polymerisation process can be natural. In oils (linseed oil, tung oil, etc.) for example, it happens by oxidation because of the oxygen in the air. However, the polymerisation of a paint can be controlled, as with two-pack paints, where the base and the setting agent interact rapidly to form a new polymer, following a precise chemical process which

Theoretical Coverage

The theoretical coverage indicated in the technical data sheets refers to the product theoretical coverage. When applying a paint, the covered surface is less than that indicated in the theoretical coverage, since there is always some loss of material (15 to 30%); the amount of loss is due to the surface’s conditions, applications methods, or environmental ambient conditions.
1863
In Trieste, Giuseppe Moravia founded one of the first antifouling paint factories in the world and entrusted to his son-in-law, Gioachino Veneziani, his secret formula for “the plaster for protecting the hulls of ships”.

1880
All the hulls of Lloyd Austriaco’s ships were treated with Veneziani antifouling.

1890
In Malta, Lord Muskerry admired Lloyd Austriaco’s treated hulls and used Veneziani paint for his yacht “Rita”. He was soon copied by the Archdukes Ludovico Salvatore and Carlo Stefano for their yachts “Nihe” and “Watus”, and by the King of Italy, by His Majesty the Sultan, by Sir Thomas Lipton for his Shamrocks, and by many other yacht owners of the Edwardian age. Gioachino Veneziani was awarded the gold medal at the Vienna Universal Exhibition. Veneziani also won awards at the Exhibitions of Trieste, Milan and Treviso.

1903
Veneziani founded the first antifouling factory outside Italy at Chathan in England. The work was directed by the son-in-law of the founder, Ettore Schmitz, better known in the literary world by his pseudonym Italo Svevo.

1900-1915
Up to this period, antifouling paint had been applied hot so that the compounds would combine. Veneziani developed the first effective cold antifouling paint using compounds which he researched himself and which were produced in the factories of Trieste and Dolina. For the first time Veneziani published detailed manuals to improve the application of the antifouling.

1918
In the Murano factory (Venice), Veneziani started to produce enamels and varnishes for use above the waterline.

1932
The American Navy ordered a large quantity of antifouling paint from Veneziani in order to study and to copy what was considered to be “the best underwater paint in the world”.

1936
Veneziani launched RAFFAELLO, the first antifouling specifically for yachts.

1970
GRP boats dominated the market and GEL GLOSS was created to clean, colour and protect the gel coat.

1976
From the new Veneziani laboratories in the Trieste industrial estate came EVEN, the first self-leaching antifouling.

1991
Veneziani presented the first water-based stripper for hulls: AQUASTRIP.

1992
AQUASTOP Centres were created to prevent and treat osmosis.
Veneziani launched RESINA 2000 for use in the construction, repair and protection of new and vintage wooden boats.

White is back! Veneziani launched the first tin-free white antifouling: RAFFAELLO BIANCA RACING (for racing yachts and cruising sailboats and motorboats) and BLANC SPRINT (for high-speed powerboats).

The research goes on. At Veneziani Nautica, 30% of the employers are involved in research and technical assistance. Products are becoming more and more environmentally friendly, much to the delight of all sea-lovers.

Veneziani launches EVEN EXTREME, developed from the famous EVEN, that now uses the Biomatrix™ technology.

Veneziani launches the new two-pack antifouling: EVEN EXTREME 2 and SPEEDY CARBON.

Veneziani improves the spray application properties of GEL GLOSS PRO in order to obtain better levelling and shine with an outstanding aesthetic appearance.

RAFFAELLO: success is back again. Hydrophilic antifouling with carbon compound.

The new paint range for wood with the products FIBRODUR, TIMBER GLOSS, WOOD GLOSS, WOOD MAT is the result of newest technologies as well as of 140 years of experience in painting boats. Each product has been designed to satisfy the specific requirements of maintenance and protection of all types of wood.

Inflatable boats prefer GUMMIPAIN, designed to protect and maintain the beauty of all materials used for inflatables, both above and below the waterline: neoprene, rubber fabric, PVC and Hypalon.

The epoxy system RESINA 2000 is renewed and improved with the introduction of the new thickening additive MICROSILICE, the new winter additive ADDITIVO 2000 LT as well as with the introduction of reinforcing fiberglass and carbon fabrics. The new epoxy primer for antifouling ADHERPOX is also introduced. The Veneziani range of epoxy fillers is widened with a new, fast drying product: EPOMAST RAPIDO.

Speedy Carbonium, the first antifouling with carbon technology, is now available with the new colours Blue Toned and Black together with the already existing gray.

New water-based antifouling SEVENTY. Effective antifouling protection holding the environment in high respect. A water-based antifouling providing the necessary protection without harming the environment and offering a safer product for the user.
If you would like to receive further information about specific subjects, here below are additional brochures by Veneziani. You may request them by using the form below or connecting to the internet site www.venezianiyacht.it

AQUASTOP BY VENEZIANI
An effective cure against osmosis.
Aquastop provides protection for boat hulls, both as preventive treatment on new boats and as restoration treatment of boats already damaged by osmosis.

THE EPOXY SYSTEM RESINA 2000
How to protect, repair and build wooden parts of your boat.

LISTINO NAUTICA
All Veneziani products, divided into categories, with indication of colours, codes, packaging and prices.

Please photocopy, complete and fax to 0039-0403783906 or send by mail to Veneziani Yachting - Piazza Tommaseo, 4 - 34121 Trieste - Italy

Please send the following Veneziani brochures
(mark the requested brochure):

☐ AQUASTOP BY VENEZIANI
☐ THE EPOXY SYSTEM RESINA 2000
☐ LISTINO NAUTICA

Name ____________________________________________________________
Surname _________________________________________________________
Address _________________________________________________________
Town/City __________ Post Code ___________________________ Country __________
Phone __________________ Fax __________________ e-mail ___________________

☐ Herewith I authorize the treatment of my personal data and the their use according to the decree n.196/2003 for commercial, promotional and marketing purposes regarding Veneziani Yachting products.
When performing a painting job with Veneziani products, take note of the main data on the sheet below. This memorial will help you not only to remember the different steps of the job, but also make the application of products during future jobs easier.

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<thead>
<tr>
<th>Name</th>
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<tbody>
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<td>Make</td>
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<td>Lenght</td>
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<td>Year of manufacture</td>
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<td>Displacement</td>
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<tr>
<th>Task</th>
<th>Product</th>
<th>Batch No.</th>
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