

# ANTIFOULING

## FACTS AND FICTION EXPOSED

Do you keep your boat permanently in the water? If yes, then you probably take your boat out of the water on a regular basis to be antifouled. When I talk to boat owners I find that very little is known about the products, other than "I have to do it every year".

It is tempting to think about antifouling as paint but it is more than that. It is actually a very clever piece of chemistry. A lot can be written on this subject so it may be easier to deal with it on a Q&A basis.

### What is Antifouling?

Antifouling primarily consists of resin, binder, pigment, biocide and solvent. It is a product designed to keep marine organisms from settling on the underwater hull of boats.

### How does it work?

It is made of a soluble resin, designed to dissolve in water at a controlled rate so that we can release the biocides to the surface of the boat over a period of 12-18 months. This process is called saponification, and works just like soap. The product starts out quite hard but once immersed in water the outer layer starts to soften and washes away then the next layer is softened, and so on until the antifouling is exhausted.

### How do I get the best result?

To get the best performance you need a combination of surface preparation, application, volume of product suitable for your size boat and level of activity and maintenance during the year.

Surface preparation is extremely important. Start by removing any weed, shell or slime from the surface with high pressure fresh water wash and scraping. This must be thorough as leaving any of this behind will affect the adhesion of the new antifouling coats. The wash also removes the soapy layer of the antifouling back to a hard surface.

Although antifouling is designed to be applied over a thoroughly fresh water washed surface, (think of 260m long ships where sanding is impractical), on small vessels that slip every 12-18 months, abrading with sand paper or a doodlebug is always best as it ensures the surface is thoroughly cleaned and also helps reduce the buildup of yearly antifouling coats.

Application methods vary from place to place but the key factor is the surface profile or texture. The smoother the surface, the better the antifouling performance will be. A spray painted surface creates less drag and makes it more difficult for marine growth to attach where as a rolled finish is quite textured and rough. This is important for racing yachts or power boats wanting to get up on the plane and use less fuel.

### How much antifoul should be applied?

The amount of antifouling you apply is also very important. If the product is designed to dissolve and erode away then a thin coat will

not last very long. There is a quick, easy formula that will give you a good indication of the size of your underwater hull to calculate how much antifoul you require:

Waterline x (beam + draft)

Eg. A vessel with a waterline of 12m, beam 3m and draft 2m.

12m x (3m + 2m)

= 12m x 5m

= 60m squared.

You should apply antifouling at the rate of about 6 sq metres per litre so this vessel will need 10trs per coat, always apply 2 coats of antifoul.

### What maintenance is required?

Once the boat is back in the water keep checking the hull and remove any slime that might build up. Slime will grow on antifouling and if left alone can get thick enough to cause drag or stop the antifouling from working properly. A light wipe with a sponge is usually enough. Don't use a hard broom or brush as you could remove excess amounts of the antifouling and cause premature failure.

### What if I want to change my antifouling brands, can I apply one over the other without removing the existing antifoul or applying tie coats?

Yes. Most antifouling is made from similar technology and materials and are governed by the local authorities as to which biocides can be used. Check with the manufacturer before proceeding.

### My antifouling usually performs very well but some years I get growth on the hull early. Why is that?

There are a lot of factors that can influence the performance of the antifouling:

- Contamination in the yard before the boat was launched;
- Change in water temperatures in your bay, harbour or river;
- Excessive rain fall bringing fertilizers or nutrients into the water;
- Pollution from spills or storm water;
- Changed use of the boat, more frequent or longer trips;
- Over cleaning; or
- Tidal flow.

### Just remember, the way to get the best out of your antifouling is:

- Good preparation of your hull;
- Correct application. Smooth is best;
- The right amount of antifoul (2 coats);
- Maintenance of you vessel.

If you need more information on antifouling your vessel then contact your local distributor for great advice and service.

Happy boating!

David Harvey, ANZ Marine Manager, PPF Protective & Marine Coatings.



**PPG Protective & Marine Coatings**  
Bringing innovation to the surface.™

WHITE BAY

6



# Antifouling Maintenance

Even though you slip your boat every 12 months, just like your engine, you need to check your antifouling every now and then to make sure everything is operating properly.

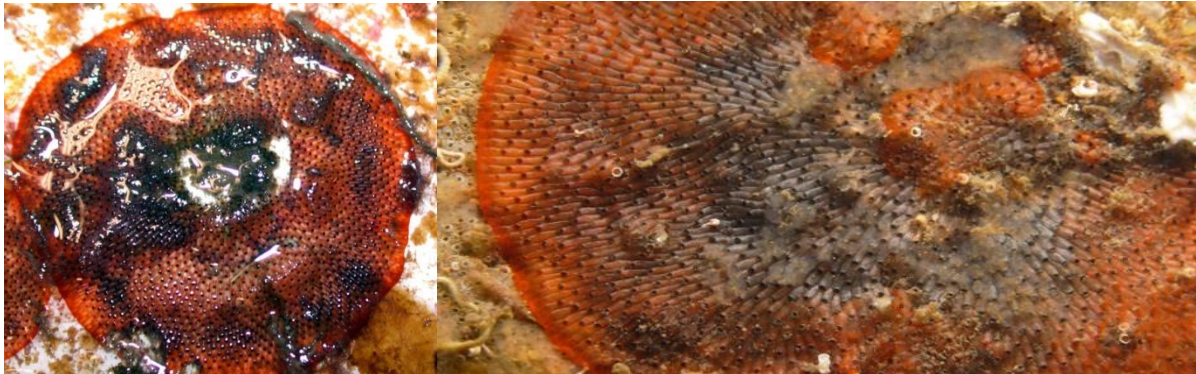
## Hints and tips

- Check the hull occasionally for slime. It is normal for this to occur and is easily wiped off.
- It is a good thing to give the hull a wipe occasionally but not with a stiff broom or brush. Use a soft sponge or cloth and don't press too hard as you may remove the antifouling and shorten its life.
- Check for any growth that looks like a flat, red, round disk. It will settle on antifouling and is easily removed but will cause problems if left alone. You may never see this but it can turn up unexpectedly in any waterways around Australia, it is called watersipora.
- If you do need to slip the boat early for any reason like repairs to the prop or hull, ensure the boat yard gives the underwater hull a light, fresh water wash to remove any slime or salt. If left, this will dry hard on the surface and inhibit the antifouling performance when she is relaunched.

The PPG antifouling is a good choice for your antifouling, Ecofleet 290, ABC3 or Ecofleet Alloy, it is chosen for its antifouling performance and for the support provided by the manufacturer, and distributors. It is considered the best option for boat owners so it is advisable to continue using this antifouling at all subsequent slipping's

## What is "WATERSIPORA"?

Watersipora is a fouling organism that are bright orange to red with variable amounts of black and may be flat or foliose. Watersipora is tolerant to copper based antifouling biocides so it facilitates the spread of other invasives by providing a non-toxic surface. It is important to follow the hints and tips as a preventative measure. Should you recognise watersipora on your vessel it is simply a process of wiping off. We have provided some photos to help you identify the species.



## Who to contact?

If you would like more information on the "12 MONTH ANTIFOUL WARRANTY", or wish to discuss maintenance of your vessel please do not hesitate to contact White Bay 6 Marine Park, PPG Protective & Marine Coatings Approved Applicator.



## White Bay 6 Marine Park – Approved Applicator:

Addr: Sydney Harbour, Robert St, Balmain. NSW. 2041.

Ph: (02) 8090 4311

Email: [service@whitebay6.com.au](mailto:service@whitebay6.com.au)

Web: [www.whitebay6.com.au](http://www.whitebay6.com.au)