Welcome to the biggest and most in-depth test of antifouling paints ever carried out by a magazine in the UK.

Previous tests have focused solely on one location, but as fouling conditions vary greatly between ports and harbours around the coast, we reasoned it would be of far more use to boat owners around the country if they could draw on some test results closer to home when choosing their antifouling paint from the bewildering range of options out there. We spent two weeks painting our plywood test panels, in the process consuming 350m of masking tape, 15lt of primer and 40 (cheap) paintbrushes, not to mention the 20 antifouling paints themselves. We applied the paints in strips, with an 11mm unpainted strip between each paint, acting as a control surface. We restricted the test to single-pot eroding paints in blue: these are the most popular antifoulings for cruising boats.

How we tested them

We primed our 26 test panels with International’s Interprotect Epoxy Primer before using a tie-coat primer where required and applying each of our antifoulings with the recommended number of coats (two, in most cases). We applied the paints in strips, with an 11mm unpainted strip between each paint, acting as a control surface. We restricted the test to single-pot eroding paints in blue: these are the most popular antifoulings for cruising boats.

With the paint dry, we loaded the boards into a trailer and drove them round the country, installing them facing the sun where possible and aligned with a modest tidal flow to simulate their normal usage as much as possible. We installed the boards in late March, returning in early October to remove them and inspect the results.

There were big differences between paints on the boards in terms of the amount of fouling they retained. What was telling was that even the worst-performing paints showed a massive improvement over the unprotected control surfaces – so even a cheap paint is better than nothing. However, the best performers were in a league of their own: read on to find out which paint you should choose.
Do you need antifouling?

We left the backs of our test boards as bare primer to act as a control. The good news is that without exception, every antifouling paint showed a marked improvement compared to the bare panels. Fouling differed in a big way between each of our 13 locations, from Dunstaffnage, which had minimal growth, to Hamble, which showed by far the worst. Lowestoft and Waldringfield, on the East Coast, were also bad. Whitby and Inverkip had very heavy slime, while Neyland and Caernarfon saw moderate shell and weed growth.

Port Edgar was moderate, with barnacles, weed and some sponges colonising the unprotected boards.

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Lowestoft and Waldringfield, on the East Coast, were also bad. Whitby and Inverkip had very heavy slime, while each of our 13 locations, from Dunstaffnage, which had minimal growth, to Hamble, which showed by far the worst. Antifouling paint showed a marked improvement compared to the bare panels.

Inverkip Despite the yard manager saying that there would be little fouling, Inverkip—enclosed, with a small entrance to the Clyde and with a fresh water feed—had thick growth, mainly mussels, but also some barnacles and brown weed.

Dunstaffnage, located near Oban, was our northernmost location, and had by far the lightest fouling. There were some small barnacles, minimal brown weed and very little slime. There was light green weed along the waterline.

Caernarfon had moderate fouling, consisting of light shell growth, green waterline weed and moderate brown weed elsewhere. There were a few sea squirts present.

Rhuddlan: The fouling at Rhuddlan consisted of heavy shell growth, with barnacles and worm casings, and brown weed, sea squirts and mussels lower down. There were crabs and some baby eels living in the weed.

Port Edgar: The fouling at Port Edgar was moderate, with barnacles, growth, weed and some sponges colonising the unprotected boards.

Hamble: The Hamble had the worst fouling of all the locations, despite the boards being located in fast-flowing water. There were fewer barnacles here, but sea squirts, brown weed, heavy slime and kelp had colonised the boards.

Chichester: Chichester had particularly heavy fouling, with an underlayer of shell growth and barnacles, overlaid with brown weed, sponges and sea squirts. A few mussels clung onto the edges of the boards. Green seaweed grew at the waterline.

Plymouth: Plymouth had heavy shell fouling, overlaid by sponges and thick brown weed. On the front of the boards there was green weed, and some mussels along the bottom edge of the board.

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Inverkip: Despite the yard manager saying that there would be little fouling, Inverkip—enclosed, with a small entrance to the Clyde and with a fresh water feed—had thick growth, mainly mussels, but also some barnacles and brown weed.

Whitby: The fouling at Whitby, a fast-flowing river, was mainly heavy, muddy slime. There was an even covering of small barnacles, with brown weed growth amid them. The bulk of the slime washed off relatively easily with movement.

Lowestoft: Lowestoft had probably the most unpleasant fouling of all the locations, consisting of barnacles, sea squirts, sponges and some wriggling red shrimp.

Neyland: Neyland, situated at the mouth of a river with some freshwater flow, had a base layer of barnacles, with some sea squirts, sponges and heavy brown weed.

North Fambridge: Fambridge Yacht Haven, situated in a mud basin, had a few barnacles, but heavy muddy slime and some juicy sea squirts.

Waldringfield: Waldringfield was among the worst fouled places in the test. It had significant barnacle growth, covered in thick slime and brown, stringy weed. There was a heavy crop of mussels with a few sea squirts.

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<table>
<thead>
<tr>
<th>No.</th>
<th>Antifouling Brand</th>
<th>Antifouling Type</th>
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<td>Debron</td>
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# Gear test: The great UK antifouling showdown

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<td>Jotun Mare Nostrum Antifouling</td>
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<td>18</td>
<td>Precision Performance Antifouling</td>
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<td>Seago High Performance Antifouling</td>
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<td>20</td>
<td>Jotun NonStop Antifouling</td>
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Boards were submerged during the summer months

Fouling:

North East England – Whitby

Fouling: Moderate

In Whitby, Seajet’s 033 shed nearly all fouling as it was pulled out of the water, handing it best prize here, Hempel Cruising Performer, Nautix A3, and Seajet’s High Performance paints also did well.

North Wales – Caernarfon

Fouling: Moderate

In Caernarfon the better paints had only light slime, while the worst performing had heavier slime and some brown weed growth. There was no shell growth on any of the paints.

South Wales – Neyland

Fouling: Moderate

Neyland had some heavy slime which had been visited by some local mullet, leaving their distinctive smear marks – also a useful test of how well the fouling was attached.

Scotland – Inverkip

Fouling: Moderate

Inverkip’s boards showed thick slime, but none of the paints had green weed or shell growth, unlike the unsubmersed boards. Some differences were evident, with Seajet’s High Performance best.

Scotland – Dunstaffnage

Fouling: Light

Dunstaffnage had the coldest water of all our locations and the least slime. There was no weed or shell growth on the painted panels, and some differences between most and least effective paints.

Scotland – Port Edgar

Fouling: Light-Moderate

Growth in Port Edgar was relatively light on the better-performing paints. Seajet’s 033 was best here, with International Cruiser Uno. Teamac’s ‘D’ and Micron Extra also doing well.

North East England – Whitby

Fouling: Heavy Slime

Fouling in Whitby consisted of heavy slime. Seajet’s 033 performed best at Plymouth Yacht Haven, with 038 also doing well. Micron Extra was also a strong performer, with the same company’s Cruiser Uno and Jotun’s NonStop also doing well.

South Coast – Chichester

Fouling: Moderate

In Chichester, Seajet’s 033 was by far the cleanest, coming out almost slime-free. Micron Extra was a close second. Seajet 038 and Teamac’s ‘D’ were next best, with Precision Premium also doing well.

South Coast – Hamble

Fouling: Moderate

Seajet’s 033 performed best at Plymouth Yacht Haven, with 038 also doing well. Micron Extra was also a strong performer, with the same company’s Cruiser Uno and Jotun’s NonStop also doing well.

South West – Plymouth

Fouling: Moderate

Seajet’s 033 performed best in the fast flowing mouth of the Hamble, with their 033 product not far behind. Micron Extra was relatively clean, as was Teamac’s ‘D’, with Jotun NonStop also moderately successful.

The great UK antifouling showdown

This is the biggest test we’ve ever carried out at PBO, with a significant investment of time, money and effort involved in buying, priming, painting, delivering and installing the test boards.

We were careful to install the panels as similarly as possible in orientation, location and tidal characteristics as possible – facing the sun, and aligned to the tide to simulate a boat’s mooring and occasional use. We were fortunate that only one set of panels suffered damage (in Port Edgar, where a tyre fender was tied in front of the board, damaging the paint and removing the fouling from a few of the panels). Our host locations kindly monitored the boards and their growth throughout the year. When we took them out, in early October, the water was at its warmest and the fouling greatest. Any later and the fouling would have begun to drop off as the water cooled.

Of course, our static panels represent a ‘worst-case’ scenario – that your boat doesn’t move all year. The more you use her, the better your antifouling will perform, and the less the fouling will adhere.

Some interesting results

With the results in, the 26 panels, 20 paints and eight of our areas, with the company’s 038, products, 038 and 033

PBO verdict

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