

Boating and red diesel – are you prepared this season?

Take action now to prevent diesel bug contamination, advises Gill Harman, boat owner and MD of Sirius Marine Services

IT'S that exciting time of the year when the new boating season is upon us. Many will have spent the rather soggy Easter break trying to start their engines and generally preparing for the season ahead. Did you have difficulty in starting? Do you think your engine sounds a little ropey? Surely it didn't sound like that at the end of last season. If it started, is it smoking more than usual? Well, all these things may have a simple, if frustrating common denominator and that is the diesel in your tank.

In January 2011, the EU issued a new directive changing the composition of red diesel. The sulphur content, which gives diesel its lubricity and natural biocidal action, was reduced dramatically and the allowable percentage of

biodiesel was increased to 7% from 5%. To some, this may not appear to be an issue, but most boaters may be completely unaware of the changes and the impact they will have on their boat and pocket.

With these two changes to red diesel composition, the EU has potentially created major problems in the marine and agricultural industries, particularly in the UK.

Biodiesel contains water and when this is present in red diesel it creates an attractive environment for a more prolific growth (15 times greater) of bacteria or the so-called 'diesel bug'. Without the advantage of sulphur lubricity, engine parts, fuel lines and pumps are more likely to become coked up and subject to greater 'wear and tear'. As a result fuel is burnt but less efficiently, increasing running costs.

There are many different approaches to dealing with the aftermath of 'diesel bug' contamination, most of which require a significant cost outlay to the boat owner. By far the most economical and proactive treatment is to ensure that the red diesel in the fuel tank is treated consistently and continuously throughout the boating year. The best way to achieve this protection is to use additives directly in to the fuel.

However, a word of caution here, the issues with red diesel in the UK are quite specific and unless the areas of concern are addressed in the additive blend, the additives may be less than effective, especially if developed outside of the UK marine environment. There have always been many types of additives available and they have their followers and detractors as to their necessity or efficiency and everyone has either a favourite brand or does not see the need for them.

Until recently most engine manufacturers tended to deny any need, as they seemed to think this was detrimental to their engine's reputation, but this is changing, as they realise that it is not their products at fault, but the fuel they are being made to try and burn. Many are now recommending additives as the only solution to expensive repair costs, improved environmental impact from reduced emissions, and reduced consumption of diesel. They often give a much smoother ride too.

When deciding which ones to choose, it should be said that, while many are well established, they may not have changed their blend or content in order to deal with the changes in the current red diesel. The changes are only affecting Europe, particularly the UK, as the USA, Australia

and Japan have their own diesel blend specifications, which are considerably different and hence products aligned to these markets may only address their diesel specification problems.

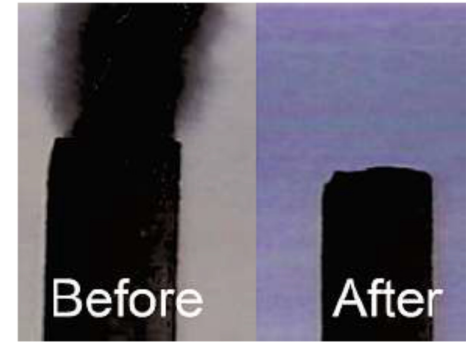
The specific changes to red diesel for UK boaters mean that the following key areas need to be addressed. First, the additive of choice must be up to the job and second, additional issues must not be created.

The ideal additive should improve power and performance and burn cleanly. It should also enhance lubricity – compensating for sulphur removal by lubricating internal parts, maximising working life.

When it comes to 'diesel bug' biocides, it is important to know whether your additive leaves a residue (sludge) after full kill. If it does, this can create new problems especially with clogged parts and filters. Some additive manufacturers claim that their product disperses the water content into the diesel, but remember, water does not burn, therefore this can reduce fuel efficiency and create further sites for regrowth



A sample of red diesel showing the formation of bacteria sludge.



Reducing smoke and emissions.

potential, if the conditions are environmentally favourable.

Furthermore, the composition of red diesel now is such that not one single additive can effectively resolve all the various potential issues. The boat owner must ensure that the various manufacturers' products are compatible as not all of them are.

Red diesel and the environmental conditions of your diesel in storage and within the fuel tank can now potentially cause expensive maintenance, repair or replacement costs that can quickly mount up. Prevention is always better than cure.

In the past, the jury has sat on the fence on the subject of diesel additives, as it seemed to be a personal choice. However, it must be said that, at the present time, additives are now becoming a necessity, rather than a personal preference.

My own boat was treated last autumn with a fuel store additive, which meant that I did not need to fill my tank to the brim and risk hundreds of pounds worth of diesel degrading. I also added a fuel conditioner when I launched my boat last week and was amazed that the engines started almost as soon as I looked at them let alone turn the keys. I could also happily say: smoke? What smoke? And this was on twin Perkins 175 turbos which are 40 years old this year.

Was I proud of this? Very much so, because our scientists developed these products especially for the marine industry to cope with the current changes to red diesel in the UK. We have such faith in them, we have now launched a complete range under the brand name OneShot. Many more details are available on our website and we will happily discuss any issues you may have if you want to call us. The most important thing though is to take some sort of action now and not leave it until damage has been done.

For more information visit www.siriusmarine.co.uk



Metal corrosion.