

HYDRA FuelPlus



Fuel Biocide - Kills and Prevents Troublesome Re-occurrences of Bacteria, Fungi, Yeast and Mould, which Block Filters, Injectors, Fuel Lines etc.



Features & Advantages

- ◆ Kills harmful bacteria, fungi, yeast and mould in fuel fast.
- ◆ Effective in any hydrocarbon or bio fuel product.
- ◆ Dual-phase biocide effective in fuel and water phase as recommended by major engine manufacturers.
- ◆ Non-toxic, non-flammable, non-corrosive and fully combustible.
- ◆ Compatible with all engine materials.
- ◆ Prevents blocked fuel lines, filters and clogged injectors - helps prevent fuel system failures.
- ◆ Prevents excessive sludge accumulation.
- ◆ Prevents attack to metal components and fuel tank corrosion from organic acids created by microbial growth.
- ◆ Reduces expensive maintenance of diesel fuel and improves fuel economy.
- ◆ Maintenance dose rate 100ppm.

The Problem

All fuel tanks, including bulk fuel storage tanks that are used for storing **Diesel, Gas Oil, Ultra Low Sulphur Diesel (ULSD) and Residual Fuels** will contain some water.

After production by the oil refinery, as the newly refined fuel cools, water solubility decreases. Consequently, dissolved water begins to condense as fuel is cooling in refinery storage tanks. The cooling process continues during transport.

As water's specific gravity is greater than that of fuels, as dissolved water condenses, it tends to drop out of the fuel product, accumulating in tank bottoms and in pipeline low-points.

Fuel can be stored for a long time before sale and this fuel will contain a certain amount of water.

Biological Diesel (FAME) especially has a tendency to hold more water compared to conventional diesel fuel.

Water provides the ideal environment for microbial growth and contamination issues which have a serious



impact on fuel quality and consistency.

Thus, the bulk suppliers and operators both face technical challenges, since all fuels especially low sulfur can exhibit specific issues which cause problems in operation.

The stored fuel also absorbs moisture from the atmosphere, this water leads to microbial contamination and microbial fuel bug problem.

Fuel tanks can accumulate as much as 0.1% water (based on the type and volume of fuel) as a result of condensation during long-term storage.

In hot countries and during long term storage this can especially be the case.



During long term storage, the quality of fuel can be severely affected due to the growth of harmful microbes, moulds, fungi and bacteria.

This microbial attack leads to fuel degradation, reducing fuel lubricity as fuel additives are broken down by the harmful microbes.

Spring and summer are the smartest times to examine your fuel system as the hot days and cold nights cause a lot of condensation in the fuel tanks.

Contaminated fuel can result in loss of power from partially blocked fuel lines or plugged fuel filters, smoke emissions and even breakdowns from complete blockage of the fuel line.

Description

For Fuel Storage Hydra FuelPlus is the Practical Solution to Fuel Quality Issues!

For customers who want to protect their hefty fuel investment, many of these issues can be solved by **Hydra FuelPlus** which is an Excellent Fuel Biocide Additive! It has proven to be the economic solution for improving the quality of fuel and its properties.



Hydra FuelPlus knocks out harmful microbes in all fuels. Kills microbes completely within 24 hours and keeps protecting the treated fuel for over 6 months.

Hydra FuelPlus is based upon dual Isothiazolone chemistry and technology that has been proven to be highly effective against microbial growth for over 25 years. Isothiazolones are registered under the ECHA European Biocides Directive, REACH and by the EPA in the USA.

Hydra FuelPlus provides long term protection by preventing algae and fungi re-growth, which can also damage the fabric of the fuel tanks. Totally eradicates microbial growth in fuel systems.



Laboratory Tests

Laboratory tests of **Hydra FuelPlus** have been taken against micro-organisms isolated from contaminated fuels i.e. Pseudomonades, sulphate reducing bacteria and the main source of the problem, fungi of the genus *Candida*, *Cephalosporium*, *Penicillium* and in particular *Cladosporium res*.

These tests prove the effectiveness of **Hydra FuelPlus** at in use levels of only 100 ppm.



Summary

When dosed appropriately, **Hydra FuelPlus** is extremely effective for both the decontamination of heavily fouled fuel systems and the prevention of future microbial spoilage.

Biocide usage maintains the integrity of fuels at all points



during storage, distribution and usage.

Hydra FuelPlus, preserves your valuable fuel systems to prevent machine malfunction, engine failures, microbial induced corrosion and impaired water removal from storage tanks.

By preventing microbial growth, **Hydra FuelPlus** protects the fuel performance properties as well as specifications such as colour, heat of combustion, pour point and cloud point.

Also prevents fuel starvation damage to injectors and engines.

All of our products are manufactured to the highest specifications at our UK plant, which is accredited to **ISO 9001:2008, ISO 14001:2004 and OHSAS 18001:2007**,

Customer Reviews

★★★★★ I Always Use Hydra When I Refuel And I Have Not Had a Problem Since

By *Daren*

During winter my diesel motor home isn't used for about 6 months, we usually keep the diesel tank full to eliminate any problems with condensation.

Because diesel now contains a percentage of bio diesel, it had unknown to us been creating diesel bugs over the winter period, they caused us to breakdown in within 150 miles of setting off from the Scotland.

The mechanic advised us that we had a clogged primary filter. He replaced the filter and £275 later we were back on the road. He told me that the clog was due to algae that had grown in the tank and recommended I start using Hydra FuelPlus Biocide. So I bought some and put it in the tank. We travelled about another 150 miles and broke down again, I checked my primary fuel filter cartridge and it was almost clogged again.

I called Hydra's technical help line, their expert explained that my problem was a microbial growth problem and I would have to keep cleaning my primary filter until the dead sludge stopped coming through. He told me that it should soon all be gone and sure one more clean and the system was OK.

Since then I always use Hydra when I refuel and I have not had a problem since.

★★★★★ Highly Recommend This Product

By *Robert*

This is a great product. Always been skeptical of any additives to fuel/oils in the past but thought i would give this a try based on customer reviews and further Internet research.

It arrived well packaged and very quickly. Faster than the expected delivery date.

The first dose is slightly richer than the regular dose in order to clean the complete system.

As I have been using the product now for a little while I can definitely assure anybody its worth using.

Since the first dose and with the subsequent doses at fill ups the engine is definitely reving smoother, an increase in power on acceleration and a marked increase in fuel economy. I shall be using it for the foreseeable future and highly recommend this product.

★★★★★ Great Product

By *Bradley*

We have a diesel bus motorhome, since using Hydra we never worry about fungus and growth developing in our fuel system.

★★★★★ Great Price

By *John*

I've been using this for years and have never experienced any biologic growth in my boat fuel tank. When I replaced my old tank after 20 years, the interior was clean. Great price works very well.

★★★★★ Spot On

By *Chris*

I bought this to treat my farm vehicles, Land Rover, Tractors etc. It is highly effective, the delivery and everything else was spot on. Treats literally thousands of litres of diesel.

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