

# Diesel is not immune and FAME has it's drawbacks

Over the last few years, the Helpline has seen petrol go through some changes, and diesel fuel is not immune to new formulations. These changes are required for fuel supplies to meet the governmental renewable obligations, and to reduce the environment pollution limits.

Biodiesel has been at our pumps for some time and contains Fatty Acid Methyl Esters, commonly known as FAME. Currently the maximum allowable FAME content in the EU is 7%, but this may rise to 12% by 2030.

FAME is manufactured from plant oil and waste cooking oil and animal fats. It is tested and produced to a standard before being added to traditional diesel fuel. This can reduce



**Some examples of the build-up of fatty acids in the fuel filter**

production costs, and reduce the environmental impact.

But FAME comes with some drawbacks. It has been found that FAME reacts with diesel fuel to create carboxylic acid. And as occurs in plants, it oxidises and degrades over time. This is why diesel should not be stored for longer than six months, as the formation of a soap like content and carboxylic acid will sink to bottom of the fuel tank. This can then stop an engine and damage the fuel system.

Finally, FAME is highly hygroscopic (attracts and absorbs water) and readily absorbs moisture from the air, so keeping your tank filled to eliminate condensation forming is beneficial.

