



CUSTOMER ADVICE

FAME Content in Fuel



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In April 2018, the legally required percentage of fuels derived from renewable sources increased to 7.25% – then from 1 January 2019, it rose to 8.5%. This legislation stated that 8.5% of all Diesel, Gas 10ppm and unleaded fuels sold by suppliers must be made of biofuel in order to reduce CO2 emissions. “All suppliers are obligated to meet new targets but are free on just how they reach each target. There are different ways to achieve this, including the addition of FAME to SFGO, so we want to warn all users of NRMM (Non-road mobile machinery)” explains Tony Brown FPS Technical Manager.

FAME is a biodiesel mostly made from recycled cooking oils and plant based material. As a biofuel it is likely to hold a higher water content than petroleum based fuels. Which could lead to fuel contamination and much more serious complications if left untreated. Luckily most modern mobile machinery engines are compatible with fuel containing the levels of FAME set out in the regulations. However it is important that business owners and farmers who use older machinery, are aware of what this could mean for them.

Complications from contaminated Gas Oil

- Many common rubbers, plastics and surface coatings will degrade from contact with fuels containing FAME
- Clogged filters due to a build-up of larger particles in the contaminated fuel
- Water contamination due to the higher water content of biofuel. If untreated this could lead to microbial contamination in the form of mould, bacteria and algae growth
- Fuel may degrade over time causing damage to expensive machinery
- Higher fuel consumption rate caused by a less powerful fuel.

Preventing contamination of Gas Oil

- Limit storage time of blended fuels to reduce air which can draw moisture from the biofuel
- Thoroughly check your tank before or immediately after a delivery. Consider getting a specialist tank clean before your delivery
- Regularly check for signs of contamination, including; cracks or erosion to the tank, water droplets, dirt or mould inside the tank, or a change in the distinctive Diesel smell. Remedial action should be taken if any of these signs are found.
- Regularly examine filters, pipework and seals. It is recommended that you replace filters every 2-3 deliveries.
- Purchase your fuel from a reputable oil supplier, to ensure you receive a high quality fuel and will have someone on hand should you have experience any complications.

Preventative Products & Services

To assist our customer in the management of their fuel and to dramatically reduce the impact of the increasing FAME content in fuel we have the following products and services that have already helped many of our customers to combat these challenges.

Clearwinner AMAC MP Power Plus

An Agri-Gas Oil fuel treatment designed for application to all agricultural, forestry, plant and construction machinery.

Treatment rate: 1 litre AMAC MP POWER PLUS to 1,500 litres Diesel fuel.

Application of *CLEARWINNER AMAC MP POWER PLUS* to diesel fuel offers the following benefits:

- *POWER PLUS*: designed to boost engine power output and improve engine performance.
- Reduces fuel consumption.
- Improves cold weather starting.
- Protects and cleans fuel systems and injectors, ensuring optimum fuel atomisation.
- Stabilises Diesel fuel held in long term storage (seasonal machinery, e.g. combine harvesters).
- Adds "lubricity" to Diesel fuel, preventing excessive wear on fuel pumps and injectors.
- Counteracts manifestation of Diesel "bug" in storage tanks.

Clearwinner CFI (Cold Flow Improver)

CLEARWINNER CFI is formulated to maintain Diesel fuel cold flow properties in sub-zero temperatures.

Treatment rate: 1 litre CFI to 1,000 litres Diesel fuel

CLEARWINNER CFI offers the following benefits:

- Protects CFPP (Cold Filter Plug Point) of winter grade Diesel fuel to -24 degrees Centigrade
- Allows machinery / vehicles to operate in severe winter conditions
- CFI will protect fuel at temperatures down to -30 degrees Centigrade, by applying a stronger dose (1 : 500)

Clearwinner D-Bug

A Diesel fuel biocide, designed to eradicate manifestation of microbial growth (Diesel "bug") in fuel and fuel storage tanks

Treat rate: 1 litre D-BUG to 4,000 litres Diesel fuel

CLEARWINNER D-BUG offers the following benefits:

- Eliminates Diesel "Bug" manifestation within 24-48 hours of treatment
- Removes yeasts and moulds from storage tank walls
- May be applied to main storage tanks or directly into machinery / vehicle fuel tanks
- May also be used as a preventative maintenance product.

CLEARWINNER D-BUG should be dosed prior to the next fuel refill, to ensure a complete mix.



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