

# HEATBASE Ltd FACTSHEET 41

## Aggressive Oil and Biofuel in Gas Oil

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Although at present Kerosene should not contain Biofuel, the fuel itself appears to be becoming more aggressive. Any aggressive fuel can attack copper fuel lines, non-compatible seals and components which leads increased likelihood of leakage and component failure. All Fuel pumps supplied now are fitted with Biofuel compatible seals up to a 10% blend.

Due to Government legislation, from January 2011 Gas Oil/Red Diesel will contain up to 7 % Biofuel.

Biofuel is aggressive and all components used should be biofuel compatible e.g. Isolation valves, fire valves, fuel filters, flexi oil lines, oil pumps and jack rams. In certain cases, older style plastic oil tanks may not be compatible. Failure to replace any items that are not compatible with Biofuels may lead to a leak or the ineffectiveness of isolation valves or fire valves to shut off when needed. Some items that may be required are not available with biofuel compatible seals.

Biofuel may contain small but problematic quantities of water, although it is hydrophobic (non-miscible with water molecules), it is also said to be hygroscopic (has the ability to attract and retain water molecules from the surrounding environment through either absorption or adsorption). Therefore, before using biofuels you must ensure your fuel tank is clear of water and sludge, and ensure that the tank is kept free of water whilst storing the fuel.

Biofuel also has a shorter shelf life than standard mineral oils and depending upon the blend should be stored in smaller quantities to ensure all of the fuel is used within the period of the fuels shelf life. The storage tank containing Biofuel should also be smaller than previous recommendations as any “empty” space within the tanks has the possibility to allow condensation to form within the tank, which may then be absorbed by the fuel.