



Fleet Service Recommendations

The purpose of this document is to provide service recommendations to Fleet Managers, Fleet Service Representatives and customers concerning the use of biodiesel either in pure (B100) or blended (B5, B20, and B35) form. The following procedures are recommended for vehicles operating on biodiesel:

1. Site Issues

The cleanliness of fuel tanks (both bulk storage and fuel vehicle tanks) can impact the necessary service schedule of biodiesel fuelled vehicles. Customers or their fuel vendors should be aware that the solvent properties of biodiesel may have a cleaning (de-waxing) effect on fuel tanks when first using biodiesel. Storage tanks should be monitored and the frequency of fuel dispenser filter changes may need to be increased in order to counter this effect until the pre-existing debris and material have been removed.

2. Vendor Issues

The quality of biodiesel can impact the successful use of the fuel. Arfuels biodiesel is to be manufactured to meet stringent quality standards in order to avoid inconvenient and possibly expensive adverse outcomes.

3. Monitor Vehicle Fuel Filters

During the first month of biodiesel use, vehicle fuel filters should be regularly inspected for the amount of debris contained within them. Biodiesel cleans the vehicle fuel system of waxes and other detritus that builds up over time when using petroleum diesel. These inspections will ensure that no debris has entered the fuel and that fuel filters are serviced before they become blocked with the waxes and detritus – leading to possibly costly unplanned downtime.

4. Provide Necessary Fuel Filter Changes

Provide fuel filter changes for biodiesel operated vehicles as needed, without creating a different service schedule for these vehicles. The frequency of fuel filter services for vehicles running on biodiesel depends on the quality of the site storage facilities, their age (time for waxes, etc to build up) and the length of time the particular vehicle has operated on diesel prior to conversion to biodiesel. There may be an initial increase in filter service frequency as a result of biodiesel use.

5. Conversion Kit for Older Vehicles

In vehicles older than 1996, because biodiesel, like Low Sulphur Diesel, acts as a solvent and can cause softening of natural rubber over a period of time (typically months), it is recommended to change any existing natural rubber parts in the fuel system (example, natural rubber hoses, fuel seals and fuel lines) to a synthetic equivalent such as viton. A sign that fuel lines are beginning to be affected is that they will weep or dust up.

Source of information for Fact Sheets

Arfuels has used a number of sources including its own internal data. However a number of references are from the document "Setting National Fuel Quality Standards, Paper 6, National Standard for Biodiesel – Discussion Paper, prepared by Environment Australia, March 2003".

3) *ASTM D 1160 shall be used to obtain the 10 %distillation residue.