



Frequently Asked Questions

What is biodiesel?

Biodiesel is a clean burning diesel fuel produced from renewable resources which may be sourced domestically, such as animal fats, vegetable oils, canola, soy or palm oils. Biodiesel does not contain petroleum, but can be blended at any level with petroleum diesel. It is non toxic and biodegradable.

Why use biodiesel?

Biodiesel functions in the engine the same as petroleum diesel.

Competitive advantage: Federal, state and local authorities are putting a higher weighting in tendering processes on sustainable business practices of bidders. Social and environmental factors are becoming standard selection criteria.

Environmental benefits: Cleaner and renewable, biodiesel cuts exhaust emissions, minimising black smoke, odour, greenhouse gas emissions, air toxics, particulates and does not contribute to sulphur dioxide emissions (acid rain).

Pollution spill: Biodiesel is non-toxic and degrades approximately four times faster than diesel. Within 28 days, pure biodiesel (B100) degrades 85% to 88% in water.

Competitive cost: Costs the same as regular low sulphur diesel.

Easy to use: Biodiesel can be used with your current fuelling infrastructure and in all diesel vehicles with little or no engine modification. Biodiesel is totally miscible with diesel at any blending ratio – no fuel separation issues.

Flexible: Biodiesel is easy to phase in and out, so you can maintain flexibility in technology deployment. Literally diesel one day, biodiesel the next and then back to diesel.

Reliable engine performance: Biodiesel's high Cetane number and flash point and increased lubricity mean excellent engine performance, safety, and service interval and life.

Social benefits: Biodiesel replaces imported fuel with a locally produced product, leading to local employment, benefiting the domestic economy.

Health benefits: Compared to diesel exhaust, biodiesel use reduces the potential cancer causing compounds. All air toxic emissions from biodiesel are lower than equivalent diesel emissions except for acrolein and this increase is more than offset by a reduction in the levels of equally damaging aldehydes.

Biodiesel has a similar skin irritation effect to soapy water, therefore does not cause diesel dermatitis.

Improved safety: Biodiesel offers marked safety benefits over petroleum diesel because it is much less combustible, with a flashpoint greater than 150°C, compared to 77°C for petroleum diesel. Biodiesel is not classified as a dangerous good.

Arfuels warranty: Arfuels will produce biodiesel using the latest European technology to the highest international fuel standard. Arfuels warrants that the biodiesel it sells is certified to comply with the Australian Biodiesel Standard at the time of purchase.

Can I use biodiesel in my existing diesel engine?

Most diesel engines can use biodiesel without modifying the existing engine or fuel system, although older engines should have any natural rubber compounds in their fuel system changed to viton or other similar synthetic material. By ensuring that only fuel meeting the strict biodiesel specification is used, no problems should be experienced.

Potentially engine life can be expected to increase, as biodiesel works well with new technologies such as catalysts, particulate traps and exhaust gas recirculation and is a superior lubricant to low sulphur diesel.

BIODIESEL

FACT SHEET 1



Does biodiesel have the same power as diesel fuel?

Biodiesel can be used in existing engines and fuel injection equipment with little impact on operating performance, supplying similar power, torque, fuel consumption and haulage rates.

Does biodiesel still function in cold weather?

All fuels have a low temperature operating limit (the cloud point ("CP") or cold filter plugging point ("CFPP")) and biodiesel is no exception in this regard. Biodiesel manufactured and supplied by Arfuels is manufactured so that it is suitable for use under local conditions in Australia. If in doubt about a particular application, please consult Arfuels or your supplier.

Is special storage required?

The storage and handling procedures and equipment for petroleum diesel can be used for biodiesel on the proviso that no natural rubber components are involved. The fuel is best stored in a dark, dry and clean environment, in storage tanks, preferably steel, aluminium, teflon, fluorinated polyethylene or polypropylene. Materials which should be avoided include lead, copper, brass, tin and zinc.

Does biodiesel comply with the Federal Government's policies?

In its "Biofuels for a Cleaner Environment" policy statement, the Federal Government announced its intention to ensure that 350 million litres of biofuels (biodiesel and ethanol) are in Australia's transport fuel mix by 2010. Biodiesel will constitute an important and necessary part of this initiative to reduce Australia's greenhouse gas emissions and improve air quality.

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".