

FACT SHEET

Fuel type DIESEL-B



Fuel blend 100 percent biodiesel

Biodiesel is correctly called FAME (Fatty Acid Methyl Esters). The requirements for Biodiesel is covered in the EN14214 standard.

A fuel made of 100% biodiesel is called Biodiesel B100. This is the type of biodiesel Volvo recommends.

As biodiesel according to EN14214 has in average 8% lower energy content than standard diesel, performance and driveability might be reduced and fuel consumption might increase.

EN14214 is the minimum quality level allowed. Volvo Truck Corporation only accepts usage of biodiesels fulfilling this standard preferably or better. No warranty will be accepted in case of damage when using other biodiesel qualities.

DIESEL-B

The reason for the requirement of a specific biodiesel variant (DIESEL-B) is due to that biodiesel has different characteristics which affects emissions and regeneration in the DPF (Diesel Particulate Filter) included in the Euro 6 muffler. Furthermore, the Euro 6 emission legislation requires a separate certification towards every fuel type not fulfilling EN590 (Diesel standard).

The DIESEL-B variant includes an updated engine software adapted to run the engines on both EN590 (Standard diesel) and EN14214 (Biodiesel).

For Volvo FM / Volvo FMX / Volvo FH EU6 DIESEL-B includes a switch in the dashboard for manual DPF Regeneration (only for starting DPF regeneration).

For Volvo FL / Volvo FE EU6 DIESEL-B includes a fuel quality sensor, which controls the fuel mixture in the tank.

The use of biodiesel fuel can increase the need, and thus the frequency, of DPF regeneration.

SPECIFICATION

B100/RME must meet the requirements in EN14214 and:

Monoglyceride	Max 0.3 %
Ester	Min 98 %
Water (if the fuel comes from the supplier)	Max 300 ppm
Phosphorus	Max 1 ppm
Total contaminants	Max 10 mg/l

Note: The fuel shall be filtered and suitable for 100% use.

FEATURES AND BENEFITS

- Biodiesel is a non-fossil fuel and reduces climate impact.
- Lower fuel cost for biodiesel than on standard diesel in some countries.

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Maintenance adaptations for biodiesel

Service interval for biodiesel engines are at half the normal mileage compared to standard diesel engines according to VOSP (Volvo Operational Service Plan). This means an improvement of the maintenance need compared to Euro 5 conditions (where intervals were 25 % of standard mileage).

Conditions:

- Biodiesel fuel must comply with EN14214, quality of the fuel affects the DPF-filter life time.
- Oil quality VDS-4 with viscosity 15W-40 must be used.

At every oil drain interval the following is required:

- Engine oil change
- Engine oil filter change
- Fuel, pre-filter change
- Fuel, main filter change

At every second oil drain interval:

- CCV (Closed Crankcase Ventilation) filter to be exchanged

Biodiesel will increase the need for ash cleaning of the DPF. Cleaning intervals will be specified in VOSP depending on driving cycle.

Engine After Treatment System

The life time of the EATS (Engine After Treatment System) muffler when running on biodiesel (EN14214) is expected to 200 000 km.

If biodiesel with lower sulphur, phosphorus and monoglycerides levels can be used, a muffler life time increase is expected. Some driving cycles may shorten the life time, check with VOSP.

Operating in cold conditions

Operating in colder conditions than -15 degree Celsius will require the truck to operate on normal diesel. Fuel heater is a recommended option for cold markets. Please consult with your fuel supplier regarding your specific fuel's CFFT, Clogged Fuel Filter Temperature as variations may occur.



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