



U.S. DEPARTMENT  
of ENERGY

Office of Critical Minerals  
and Energy Innovation

## Biodiesel and Fueling Infrastructure

**Find research-based information  
on the Alternative Fuels Data  
Center website**

Learn about biodiesel blends and fueling infrastructure, explore the benefits and considerations of using biodiesel to power vehicles, and access tools and datasets.



[AFDC.ENERGY.GOV/FUELS/BIODIESEL](http://AFDC.ENERGY.GOV/FUELS/BIODIESEL)

# Considering Using Biodiesel as a Vehicle Fuel?

Biodiesel is a domestically produced, renewable fuel that can be manufactured from vegetable oils, animal fats, and recycled restaurant grease. Biodiesel's physical properties are similar to those of petroleum diesel. It provides safety benefits and can contribute to a more secure transportation system.

Biodiesel can be blended with petroleum diesel at many blend levels, such as B20

(20% biodiesel, 80% petroleum diesel), which is a common biodiesel blend in the United States. Currently, every diesel vehicle manufacturer approves blends up to B5 in their vehicles. Nearly 80% approve blends up to B20 in some or all of their diesel vehicles, and some approve use of B100 in certain types of farm equipment. It should be noted that renewable diesel and biodiesel are not the same fuel.

Engines operating on B20 exhibit similar fuel efficiency, horsepower, and torque as engines running on conventional diesel. With a higher cetane number and higher lubricity than conventional diesel, biodiesel combusts easier and lubricates the fuel system better.

## Dive Into the Details: What You'll Find on the AFDC

- Basics of biodiesel blends, production and distribution, and specifications
- Considerations such as engine operation, safety, and energy security
- Infrastructure locations, equipment options and installation, and codes and standards
- Vehicle availability
- Laws and incentives related to biodiesel in your area