

## Why Consider Biodiesel?

There are many reasons to consider the use of biodiesel. Overall, combining biodiesel with diesel produces a cleaner-burning fuel. Biodiesel is one of the easiest fuels to immediately implement because it can be distributed via the existing fuel infrastructure. As an added benefit, biodiesel promotes growth of the U.S. agricultural sector. The reduced emissions of diesel-powered school buses alone can contribute significantly to the health of children in this country.

**There are more than 600 B20 fueling stations in the U.S.**

### Health Benefits of Biodiesel



- Biodiesel is biodegradable and nontoxic
- Exhaust does not smell as strong
- No threat to human health
- Reduces emissions that cause respiratory illness
- Only fuel in U.S. to complete EPA health effects testing under the Clean Air Act

### Environmental Benefits of Biodiesel



- Biodiesel is carbon-neutral, in that it does not add carbon to the environment; instead, it takes carbon that is already part of plant and animal matter and uses it as a fuel source
- Reduces particulate matter (soot), hydrocarbon, and carbon monoxide emissions

### Economic Benefits of Biodiesel



- Supports U.S. agriculture and rural communities
- According to National Biodiesel Board, the biodiesel industry is expected to create 74,000 jobs by 2015
- Potential to generate nearly \$7.3 billion in Gross Domestic Product (GDP)

### Energy Security Benefits of Biodiesel



- The U.S. is one of the greatest agricultural product exporters
- Biodiesel returns 3.2 units of energy for every one unit of energy used to create it; conventional diesel returns 0.83 units of energy for every one unit

### Renewable Benefits of Biodiesel



- Compared to other alternative fuels, biodiesel has an exceptionally high energy balance
- Much less fossil fuel is needed to produce, refine, and distribute biodiesel than is needed to produce other fuels

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## What Is Biodiesel?

Biodiesel is a nontoxic, domestically produced, renewable fuel manufactured from organic materials such as: soybean oil, new and used vegetable oils, animal fat, and recycled organic waste.

## Biodiesel as a Fuel

Biodiesel is used as a vehicle fuel in blends and used in many different concentrations. Biodiesel must meet the requirements of the American Society for Testing and Materials (ASTM) standard D6751.



Soybeans — a source for biodiesel



### Did You Know?

Biodiesel is a promising alternative fuel that is available today and can be used in most diesel engines, especially newer ones (model year 1994 and newer) with little or no modification.

The most common blend of biodiesel used in the United States is **B20** (20% biodiesel, 80% conventional diesel). Pure biodiesel is **B100**. Other blends include **B2**, and **B5**.

In 2010, more than 315 million gallons of biodiesel were produced in the U.S.

## What Vehicles Can Use Biodiesel?

Biodiesel can be used in most diesel engines, especially newer ones (model year 1994 and newer). Some manufacturers already warrant the use of blends up to B20 in their diesel engines.

Today, diesel engines power most of the heavy-duty trucks, buses, and industrial mobile equipment. Biodiesel blends are used in heavy-duty vehicles as well as in public transit, school buses, tractor trailers, SUVs, and farm equipment.



Heavy-duty biodiesel vehicle examples.

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