



# BioDiesel Fact Sheet

*Biodiesel is a clean, renewable diesel fuel suitable for all diesel engines.*

**What is biodiesel?** Biodiesel is a clean, renewable fuel made from vegetable oils chemically altered into fuel. As its name implies, biodiesel functions like regular diesel, except that it's organically produced. Biodiesel is safe for the environment, biodegradable, and emits significantly less air pollution than diesel fuel. And it smells better than diesel fuel- like french fries cooking.

**Can I use Biodiesel in my vehicle, boat or generator?** You can use 100% biodiesel in the same engines that use diesel fuel, except during cold weather. During cold weather, biodiesel thickens and gels more than diesel fuel. However, blending 20% biodiesel with 80% diesel (called B20) solves this problem- additives in the petro-diesel keep the biodiesel flowing smoothly. Some engines made before 1993 may have rubber seals in the fuel systems and pumps that could fail if 100% biodiesel (B100) is used- though these can be replaced with Viton (a synthetic rubber) seals. Just as with cold weather, however, using B20 will not affect seals even in older engines. Biodiesel mixes well with diesel, and stays blended even during cold snaps.

Diesel fuel blends with biodiesel have superior lubricity, which is better for your injection pump and engine in general. Biodiesel is also a good solvent, and will clean your fuel system. This is good for your fuel injectors, but may clog your fuel filter with crud washed out of the fuel lines or tank. Carry a spare fuel filter for the first few weeks you start using 100% biodiesel .

**Is biodiesel safe?** Yes! Biodiesel is made from cooking oils and alcohol, so if you spill it on the ground, it will quickly degrade into natural organic residues. We don't recommend you drink it, however. After all, you probably wouldn't want to drink a cup of cooking oil, because it will "lubricate" your digestive tract. Biodiesel is as toxic as table salt, and safe to handle. Many people use biodiesel in machinery

for work in near rivers, wetlands, and riparian areas, because the fumes and spills degrade quickly.

**Do I have to modify my engine to use biodiesel? No.** Any modern diesel engine can safely use B100 in above freezing weather; B20 can be used in colder weather. In fact, several manufacturers have publicly come out and said that B20 is better for their engines, given the poor lubricity of new Ultra Low Sulfur (petro)Diesel (ULSD). Biodiesel is significantly better for Injection Pumps over ULSD.

**Does it reduce air pollution and greenhouse gases?** Yes. Biodiesel reduces nearly all forms of air pollution. Most importantly, it reduces toxic emissions and carcinogenic compounds. There is no sulfur in pure biodiesel, so it won't cause acid rain. B20 has 20% of the benefits of pure biodiesel. B20 can also reduce the soot and smell of diesel exhaust.

Even more importantly, biodiesel doesn't contribute to global warming. Each year, soybean and other plants that produce oils used to make biodiesel pull CO2 from the air to use in their stems. Leaves, roots, and seeds (which is where the oil used to make biodiesel comes from). After harvest, the oilseeds

## Engine Manufacturers

Many diesel engine manufacturers recommend using a particular biodiesel blend in their engines. Oftentimes, higher biodiesel blends may be used as well.

Cummins	B20
Ford	B5
International Harvester	B5 - B100, dep. equip.
Caterpillar:	B30 for most engines
New Holland	B20
GMC	B5
Kubota	B5
VW	B5

are used to make biodiesel, and the rest of the plant decomposes, releasing carbon dioxide back into the atmosphere. Burning the biodiesel releases CO2 back into the atmosphere as well, where it can be absorbed by next years crops.

### **Where can I buy biodiesel or biodiesel blends?**

Right now, in Southwestern Montana biodiesel is available in Belgrade, MT, at the Pacific Pride fueling station; from Story Distributing in Bozeman ( which sells in barrels, or delivers); and the next closest places are in Powell, Wyoming, Missoula, MT, and Jackson, WY. Part of Park County Biofuels Co-op mission is to promote a larger distribution network in and around Livingston.

### **Why aren't more people using biodiesel?**

Biodiesel is new. Up until a few years ago, low petroleum prices kept demand for biodiesel low. More recently, demand has rocketed, but facilities producing biodiesel haven't been built as quickly, also keeping prices high. However, increases in petroleum fuel costs sparked by geopolitical uncertainty and Ultra Low Sulfur Diesel requirements make the cost now nearly equal. In addition, the development of biodiesel plants within the state will bring the cost down.

### **Are there fuel standards for biodiesel?** Yes.

Make sure any biodiesel you get meets ASTM D6751 standard. The producer can provide that information. You can inspect the fuel yourself, and if you have any doubts, send a sample to a laboratory for testing. The National Biodiesel Board can recommend an appropriate laboratory.

### **How long can I store biodiesel?** About the same

length of time as diesel fuel, in most cases. We don't recommend storing biodiesel longer than 6 months without additives.

### **Where can I learn more?**

[www.biodiesel.infopop.cc](http://www.biodiesel.infopop.cc) -

[www.journeytoforever.com/biofuel.html](http://www.journeytoforever.com/biofuel.html)

**National Biodiesel Board's Official website.**

[www.biodiesel.org](http://www.biodiesel.org)

**Park County Biofuels website:**

[www.parkbiofuels.net](http://www.parkbiofuels.net)



## **Park County Biofuels Cooperative**

Park County Biofuels Cooperative distributes, educates, and produces biofuels for the benefit of our communities and the environment.