

Biodiesel Blends: A Fuel for Any Season

As a fuel distributor, ensuring high quality fuel for your customers is a top priority. You need to be confident that your product will perform well year-round, in any climate. Biodiesel blends (B20 and below) can help you meet that goal.

Biodiesel blends have proven to stand up to even the coldest temperatures. Like regular diesel fuel, biodiesel can gel at very low temperatures. But, with good fuel management and fuel that meets the national specification, ASTM D 6751, you can ensure that you're providing biodiesel blends that users can count on throughout the winter months—even in the coldest climates. For detailed information, and technical guidance on using B20 in cold weather, visit www.biodiesel.org/cold. Some highlights are outlined below.



Background

The composition and cold flow properties of diesel fuels vary widely across the country. These characteristics are influenced by a number of factors, including the crude oil source, how it's refined and if it's blended to improve performance during cold weather.

Similarly, the cold flow properties of B20 or higher biodiesel blends can vary appreciably based on the feedstock from which they are made. In addition, the better the cold flow characteristics of the base diesel fuel, the greater the effect of blending biodiesel on its cold flow properties.

How to Ensure a Problem-Free Winter

Proper fuel management and a clear understanding of your fuel's cold flow characteristics are the keys to a trouble-free winter:

- Make sure your fuel meets the national standard, ASTM D 6751. A fact sheet can be downloaded at www.biodiesel.org/resources/fuelfactsheets. Quality fuel is absolutely critical to successful cold flow operation.
- Cold flow properties can be improved by blending biodiesel with kerosene (#1-D), which has excellent cold flow properties. It is often blended with #2-D in the winter months to improve and/or ensure operability. Cloud and pour points and cold filter plugging point (CFPP) of some #1-D can be well below -30° F.
- A number of additives are available for improving the low temperature operability of diesel fuels. These additives include pour point depressants, filterability or flow improvers that lower CFPP, and wax anti-settling additives. The effectiveness of the additives depends on the properties of the fuel. So, you must first understand what your base diesel cold weather specifications are (cloud point, pour point and cold filter plugging point). All additives must be introduced into the diesel fuel before the fuel reaches its cloud point, and must be properly blended.
- Block and filter heaters and indoor vehicle storage can also help ensure smooth winter operation. However, regardless of your approach, cold weather management plans should be in place well before the cold weather sets in.
- Procure fuel from a biodiesel producer who is certified under the BQ-9000 program. See www.bq-9000.org for participating companies and more details.

