



*Everyday
Environmental
Stewardship*

Buying Biodiesel
Andrew Siliski

Key issue:
Reducing Pollution from Heating Oil

Stewardship Opportunity
Buying Biodiesel

Biodiesel is a clean, cost effective alternative to No. 2 heating fuel. It requires no additional installations and is approximately the same price as regular No. 2 heating fuel. This fuel is made from either vegetable or animal fat and contains no petroleum products. However it can be mixed with regular fuel. Biodiesel comes in different mixtures. B100 is 100% biodiesel while B20 is 20% biodiesel and 80% petroleum fuels. B20 is common for heating fuels.

Biodiesel is much healthier than regular No. 2 heating fuel. B100 is the only non-toxic fuel and is milder on hands than soap and water. It also smells better than petroleum fuel. Biodiesel contains almost no sulfur which is the main cause of maintenance problems in oil boilers and furnaces. It also extends the life to a home heating system because of its natural cleaning and lubricating properties.

Compatibility with Existing Oil Systems

All tanks and storage systems are compatible with B20 or less. All gaskets, seals, hoses and O-rings are compatible with blends of less than 20% biodiesel.

For blends higher than B20, tank materials are limited to steel, aluminum, fluorinated polyethylene, fluorinated polypropylene, and fiberglass. Tanks made out of brass, bronze, copper, lead, tin, and galvanized zinc may cause heavy sediment formation and clog the filters. Make sure you know what your oil tank is made out of before putting in biodiesel greater than 20%.

For higher concentrations of biodiesel, fluorinated polyethylene, fluorinated polypropylene, Teflon, Teflon lined, or Viton components are recommended. Use of other types of materials B20 and greater such as nitrile, natural rubber, or Buna-N type rubbers

may cause leaks, plugged filters and eventually complete gasket, seal, hose or O ring failure.

Biodiesel in Your Oil Tank and Boiler

Biodiesel fuel is homogenous with no. 2 heating fuel. It can stay in a storage tank for extended periods of time and will not separate with the petroleum products. It is recommended that you use biodiesel within six months of its delivery.

Biodiesel acts as a cleaning agent and dissolves sediment deposited in your tank, hoses, and boiler. The effectiveness of this cleaning depends on how old your existing heating system is and what blend of biodiesel you choose to use. Be careful of clogging if you are using an old heating system and are also switching to a high concentration of biodiesel.

Cost

Biodiesel varies in price. It is the addition of the variable price of oil and the fixed premium price of the biofuel. B2 can cost 3-5C extra while B20 can cost 20-30C extra. There is currently legislation in congress proposing to provide incentives for biodiesel use. This will lower the prices. Today's average price for B20 is \$2.45 per gallon. Even though biodiesel is commonly more expensive than petroleum heating fuel, it is expected that it will be less expensive in the future as oil prices rise and the bio components drop in price as manufacturing capacity increases.

Getting Biodiesel delivered to your Home

Contact your existing heating oil supplier to determine if they are familiar with biodiesel. If they are not, refer them to the National Biodiesel Board web site at biodiesel.org and the Massachusetts Oil Heat Council massoilheat.org. Make sure that you buy biodiesel from a reputable source.

Biodiesel Suppliers

Massachusetts Energy Consumers Alliance (*MassEnergy*) sells B20. MIP&L member congregations and their congregants can join the *MassEnergy* oil buying cooperative, and receive favorable prices. Enter your zip code to find availability of biodiesel in your area. *MassEnergy* will add biodiesel dealers in the north and south shore soon.

http://www.massenergy.com/MECA_BIOIL/check_bio_zip.html

MassBiofuel offers B20 and B10. Their service area begins at the MassPike extension and extends into the South Shore. Phone: 781-407-0088

<http://www.massbiofuel.com/>

Links

Go to www.BioDiesel.org for FAQs, dealers, news, newsletters, and more. This is a great site for all things biodiesel.