What is Biodiesel:

Biodiesel is a clean burning alternative fuel, produced from domestic, renewable resources such as plant oils, animal fats, used cooking oil and even new sources such as algae. Biodiesel (ASTM D6751) contains no petroleum, but it can be blended at any level (2 to 20 percent) with #2 oil (ASTM D396) or diesel (ASTM D975) to create a biodiesel blend. Biodiesel is simple to use, biodegradable, nontoxic, and essentially free of sulfur and aromatics. Biodiesel is not raw vegetable oil, and is not the same as ethanol.

What is Bioheat®:

Bioheat® fuel is the industry accepted term for 2 to 5 percent blends of pure biodiesel blended with conventional high or low sulfur home heating oil. The heating oil must meet its specification, ASTM D396, and the biodiesel must meet its ASTM specification, ASTM D6751, before blending them together. Multiple closely managed pilot projects throughout the U.S. validated that even low level blends of 2 to 5 percent biodiesel with high or low sulfur heating oil offered improved performance and lower carbon emissions.

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NATIONAL BIODIESEL BOARD

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BIODIESEL MYTHS BUSTED

BIOHEAT®

Myth: Biodiesel and Bioheat® are experimental fuels and have not been thoroughly tested.
FACT: Biodiesel and blends of biodiesel with heating oil (Bioheat® fuel) are two of the most thoroughly tested alternative fuels on the market. A number of independent studies – performed by the U.S. Department of Energy, the U.S. Department of Agriculture, Brookhaven National Laboratory and the National Renewable Energy Lab – have shown that biodiesel and Bioheat® perform comparably to peer petroleum products but with greater benefits to the environment and human health.

Myth: No objective biodiesel fuel standard exists.
FACT: The biodiesel industry has been active in setting quality standards for biodiesel for more than 15 years. ASTM specifications exist for diesel fuel and biodiesel fuel blends from 6 to 20 percent (B6 – B20 (D7467-09)), biodiesel blends up to B5 to be used for on- and off-road diesel applications (D975-08a), and home heating and boiler applications (D396-08b). ASTM approved the original specification for pure B100 (D6751) in December 2001. These performance-based ASTM specifications apply regardless of the feedstock materials used to make the fuel. Copies of specifications are available from ASTM at www.astm.org.

Myth: Biodiesel does not perform as well as home heating oil or diesel.
FACT: One of the major advantages of biodiesel is the fact that it can be used in most existing engines and fuel injection equipment in blends up to 20 percent with little impact to operating performance. Underwriters Laboratories Inc. (UL) announced that products intended to use biodiesel blends up to B5 that are compliant with applicable ASTM International fuel standards will not require special investigation by UL. This is consistent with ASTM standards for heating oil and diesel fuel, which were recently updated to indicate that B5 blends may be considered the same as the conventional petroleum fuels under their scope.

Myth: Biodiesel and Bioheat® use voids manufacturers' warranty coverage.
FACT: All major U.S. automakers, engine manufacturers and heating equipment OEMs accept the use of up to at least B5, and many major engine companies have stated formally that the use of high quality biodiesel blends up to B20 will not void their parts and workmanship warranties. IMPORTANT: For a listing of specific statements from the engine companies, please visit the National Biodiesel Board Web site at: www.biodiesel.org/resources/oems.

Myth: Biodiesel does not have sufficient shelf life.
FACT: The current industry recommendation is that biodiesel be used within six months, or reanalyzed after six months to ensure the fuel meets ASTM specifications. Most fuel today is depleted long before six months, and many petroleum companies do not recommend storing home heating oil for more than six months. A longer shelf life is possible depending on the fuel composition and the use of storage stability additives.

Myth: Biodiesel has fuel quality problems.
FACT: A study released in 2008 by the National Renewable Energy Laboratory (NREL) shows the biodiesel industry has substantially met national fuel quality standards. The study demonstrated that plants certified under BQ-9000 consistently hit the quality mark. BQ-9000 is a voluntary fuel quality assurance program that couples the foundations of universally accepted quality management systems with the biodiesel product specification (ASTM D6751). The program covers storage, sampling, testing, blending, shipping, distribution and fuel management practices. Biodiesel production facilities certified as producers under the program cover nearly 80 percent of the U.S. biodiesel market volume.

Myth: Biodiesel doesn't work in cold weather.
FACT: Properly managed, high quality biodiesel blends including biodiesel heating blends are used successfully in the coldest of climates. Biodiesel will gel in very cold temperatures, just as common #2 diesel does. Although pure biodiesel has a higher cloud point than #2 diesel fuel, typical blends of 20 percent biodiesel are managed with similar management techniques as #2 diesel. Blends of 5 percent biodiesel and less have virtually no impact on cold weather operability. See www.biodiesel.org/cold for a cold weather guide.

Myth: Biodiesel increases greenhouse gases because it causes land to be cleared.
FACT: U.S. biodiesel reduces lifecycle carbon emissions by 60 to 80 percent, depending on the source, making it the best carbon reduction tool of any liquid fuel commercially available. Biodiesel is the first advanced biofuel to make it to market. It has the highest energy balance of any fuel, returning 4.5 units of energy for every unit of fossil energy needed to produce it. New cropland is not needed to make biodiesel because it is generally produced from co-products of crops already being grown. From 2004 to 2008, when U.S. biodiesel production climbed from 25 million to 700 million gallons, soybean acres here stayed virtually the same, and soybean acres in Brazil decreased. There are surplus stocks of U.S. fats and oils sufficient to meet near and medium term biodiesel target volumes.

Myth: Biodiesel contributes to rising food prices.
FACT: Produced from a variety of renewable resources, such as plant oils, fats, recycled grease, and even algae, biodiesel is the most diverse fuel on the planet. And soybean-based biodiesel actually has a positive impact on the world's food supply. Processing biodiesel from soybeans uses only the oil portion of the soybean, leaving all of the protein available to nourish livestock and humans. By creating a new market for soybean oil, we increase the availability of protein-rich meal for human and livestock consumption. The increased meal supply results in a more cost-effective food and feed source.

For more information on sustainable biodiesel, visit www.biodieselsustainability.com.