



FAQ's

What is biodiesel?

Made from an increasingly diverse mix of resources such as recycled cooking oil, soybean oil and animal fats. Biodiesel is renewable, clean-burning diesel and heating oil replacement that can be used in existing diesel engines and home heating systems without modification. It is the nation's first domestically produced, commercially available advanced biofuel.

What is Bioheat® fuel?

Bioheat® fuel is a blend of biodiesel and ultra-low sulfur heating fuel. An eco-friendlier alternative to both traditional heating fuel and natural gas, Bioheat® fuel can be used in existing home heating fuel systems. Bioheat® fuel is available right now and is currently offered in three tiers based on how much biodiesel is in the fuel, blends ranging from 2% to 5% biodiesel (B2–B5) are referred to as Bioheat® fuel. Blends ranging from 5% to 20% biodiesel (B5–B20) are referred to as Bioheat Plus® fuel. Blends with 20% biodiesel and above (B20+) are referred to as Bioheat Super Plus® fuel.

Is biofuel the same as biodiesel and Bioheat® fuel?

No, the biodiesel blended into heating oil to create Bioheat® fuel must meet rigid specifications set by the American Society of Testing & Materials (ASTM). These specifications are ASTM D396 Standard Specifications for Fuel Oils and ASTM 6751 – Standard Specification for Biodiesel Fuel Blend Stock (B100) for Middle Distillate Fuels.

Biofuel is a broad term that can include various products including biodiesel, ethanol, renewable hydrocarbon diesel, ethyl levulinate (or EL made from woody feedstocks) and raw vegetable oil known as RVO or LR100. Raw vegetable oil does not meet ASTM specifications, is not biodiesel or Bioheat® fuel and is not suitable for home heating oil use. The heating oil industry is committed to offering Bioheat® fuel that is only blended with feedstocks that meet the ASTM specifications.

What are the benefits of biodiesel/Bioheat® fuel?

The environmental benefits of biodiesel are immediate and significant. First, biodiesel lowers the carbon footprint of heating oil at all blend levels, with higher blends of biodiesel providing greater carbon reductions. Secondly, biodiesel is made from renewable, organic sources such as used cooking oil, inedible corn oil, rendered animal tallow, and the surplus byproduct oil from the processing of soybeans and canola.

Research conducted by leading authorities such as the U.S. Environmental Protection Agency, the U.S. Department of Agriculture and the California Air Resource Board indicate that biodiesel reduces Greenhouse Gas emissions by up to 69 to 88% compared to traditional heating oil or diesel fuel.

Additionally, research conducted by the National Oilheat Research Alliance (NORA) indicates that when ultra-low sulfur heating oil is blended with biodiesel at 20% (B20), this BIOHEAT fuel significantly reduces Greenhouse Gas emissions making BIOHEAT cleaner than natural gas.

Again, higher blends of biodiesel would provide even greater GHG reductions.

Is there an acceptable blend level of biodiesel in heating oil?

Following extensive testing and research, ASTM, with support from the heating oil industry and the Clean Fuels Alliance America, has set two standards for percentage blends of biodiesel in heating oil. These percentage blend specifications are up-to B5 (5%) and B6 to B20 (6% to 20%) and serve to formally define the properties of these blends. The heating oil industry along with the National Oilheat Research Alliance and the Clean Fuels Alliance America are committed to introducing higher blends of biodiesel into the heating oil marketplace and these organization are conducting ongoing research on higher percentage blends of biodiesel in heating oil. In addition, all the major oil burner manufacturers are currently working to develop products rated up to B100.

Does every gallon of heating oil contain a blend of biodiesel?

Under the federal government's Renewable Fuel Standard (RFS), which encourages the blending of renewable biodiesel in home heating oil and diesel fuel throughout the United

States, heating oil may contain small amounts of biodiesel. Under ASTM specification 396, every gallon of heating oil may contain up to 5% biodiesel and this blend is effectively equivalent to conventional heating oil.

Do all retail heating oil companies sell Bioheat® fuel?

Yes. Connecticut law requires that beginning on July 1, 2022 that the industry sell a 5% blend of biodiesel or other advanced biofuels under the federal Renewable Fuel Standard Program (RFS), requiring a 50% reduction in lifecycle greenhouse gas emissions.

However, many heating oil companies are offering their customers Bioheat® fuel that contains blends of biodiesel at B10 (10%) and B20 (20%) and higher.

In time the law requires higher blends – see below:

5% in July 1, 2022
10% in July 1, 2025
15% in July 1, 2030
20% in July 1, 2034
50% in July 1, 2035

New York and Rhode Island also have similar blending requirements.

Does biodiesel make heating oil more expensive?

The cost of a traditional gallon of heating oil versus a gallon of heating oil that is blended with biodiesel is comparable in price at this time. Blending biodiesel in heating oil has not resulted in significant impacts on the cost of the fuel.

Where does biodiesel come from, and does it compromise the food supply chain?

Feedstocks to produce biodiesel that meets ASTM specifications come from soybean farmers across the United States, from used cooking oils from restaurants and other establishments, and other operations that generate recycled, organic oils and fats. These feedstocks are all products that were formerly discarded. Unlike ethanol, which is produced from corn, biodiesel feedstocks do not impact the nations' food supply. In fact, they result in additional sources of revenue for farmers, restaurants, and other feedstock providers.

Are retail heating oil companies required to disclose to customers how much biodiesel is contained in heating oil?

Connecticut requires disclosure of biodiesel content on delivery tickets. It is highly recommended that all suppliers denote a designation of biodiesel content or a “contains up to” value, example “May Contain Up To 10%”.

Will biodiesel blends in heating oil reduce the overall heating capabilities of the fuel or heating oil equipment such as burners, boilers, or furnaces?

Bioheat® fuel blends of up to B20 (20%) is comparable in BTU (British Thermal Unit) capacity of a gallon of heating oil, but when Bioheat® fuel is comprised of ultra-low sulfur (ULS) heating oil every gallon of heating oil sold in Connecticut will burn much cleaner and more efficiently. This reduces heating system maintenance and improves energy efficiency.

As a customer, can I request that my heating oil company deliver or not deliver Bioheat® fuel to my home or business?

Your local heating oil retailer takes pride in providing outstanding customer service. Talk directly with your heating oil company to determine if they are selling Bioheat® fuel and discuss your individual needs, but there is no opting out of the blending requirements that are required by law.

What do I tell my customers who are concerned about climate change?

Every gallon of heating oil blended with biodiesel immediately reduces greenhouse gas emissions on average by 79%, thus providing immediate carbon reductions. In addition, the carbon that is emitted through the combustion of biodiesel is recycled carbon, carbon that is reabsorbed by the plants that produce the biodiesel feedstocks. Petroleum based carbon is new carbon that, once emitted, will stay in the atmosphere for decades. The United Nations climate panel says we must begin reducing emissions immediately to have a profound effect on the generations to come-using biodiesel is one way of doing that today.

When biodiesel replaces traditional heating oil by 50% it will save 2.8 million tons CO₂ annually, replacing 5% will save 280,000 tons of CO₂ annually.

How do I know how much biodiesel is blended in heating oil?

Often you will hear that the fuel that is being sold is a B5 or a B20 – the B represents biodiesel and the number represents the percentage of biodiesel blended with the heating oil. For example, a B15 indicates that there is 15% biodiesel and 85% heating oil.

Where can I get more information about Bioheat® fuel?

The central database of fact-based information on Bioheat® fuel and biodiesel can be found at

www.mybioheat.com and www.cleanfuels.org. CEMA maintains a consumer website at www.bioheatnow.com.