



Questions & Answers

- **What is biodiesel?**

Bioheat[®] – the industry’s official registered name for the fuel blend – is a blend of ultra-low sulfur heating oil with renewable biodiesel made from organic and recycled products such as soybean oil, used cooking oils, inedible corn oil, canola, tallow, fats and algae. These renewable products are defined as “feedstocks” for producing biodiesel.

Blends of biodiesel in heating oil are designated in percentages. For example, a 5% blend of biodiesel is defined as B5. B10 refers to a 10% blend, while B20 is a 20% blend. The National Biodiesel Board has trademarked the term BIOHEAT which includes the following categories: Bioheat – blends up to 5%; Bioheat Plus – blends 6-20%; Bioheat Super Plus – blends 21-100%.

- **Is biofuel the same as biodiesel and BIOHEAT?**

No, the biodiesel blended into heating oil to create BIOHEAT 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, and raw vegetable oil known as RVO or LR100. Raw vegetable oil does not meet ASTM specifications, is not biodiesel or BIOHEAT and is not suitable for home heating oil use. The heating oil industry is committed to offering BIOHEAT that is only blended with feedstocks that meet the ASTM specifications.

- **What are the benefits of biodiesel/BIOHEAT?**

The environmental benefits of biodiesel (BIOHEAT) are significant. First, depending on the blend level, biodiesel lowers the carbon content of heating oil. Secondly, biodiesel is made from renewable, organic sources such as the oil from soy beans and used cooking oils. And 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 indicates that biodiesel/BIOHEAT reduces Greenhouse Gas emissions (sulfur oxide, nitrogen oxide and carbon dioxide) from 50% to 86% 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 is blended with biodiesel at 20% (B20), this BIOHEAT fuel significantly reduces Greenhouse Gas emissions making BIOHEAT cleaner than natural gas.

- **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 National Biodiesel Board, has set two standards for recommended percentage blends of biodiesel in heating oil. These percentage blend specifications are up-to B5 (5%) and B6 to B20 (6% to 20%). The heating oil industry along with the National Oilheat Research Alliance and the National Biodiesel Board 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.

- **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.

- **Do all retail heating oil companies sell BIOHEAT?**

As cited, because of the federal Renewable Fuel Standard (RFS) program, heating oil may contain a small amount of biodiesel. However, many heating oil companies in Massachusetts are offering their customers BIOHEAT that contains blends of biodiesel at B10 (10%) and B20 (20%)

- **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 price swings in the cost of the fuel.

- **Where does biodiesel come from?**

The feed stocks to produce biodiesel that meets ASTM specifications comes from soy bean farmers across the United States, from used cooking oils from restaurants and other establishments, and other operations that generate recycled, organic oils and fats.

- **Are there any tax incentives for a consumer using biodiesel in their heating oil?**

Currently in Massachusetts there are no tax incentives for homeowners or businesses using biodiesel/BIOHEAT.

- **Are there any tax or financial incentives for a retail heating oil company selling BIOHEAT to customers?**

In order to advance its environmental goals and encourage the use of biodiesel in heating oil, the Commonwealth of Massachusetts through the Department of Energy Resources implemented regulations in January of 2018 that enables retail heating oil dealers to receive alternative energy credits for selling heating oil that is blended with biodiesel at a minimum of B10 (10%.) The program is called the Alternative Portfolio Standard.

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

Heating oil companies that are registered with the Massachusetts Department of Energy Resources under the regulations for the Alternative Portfolio Standard program for selling biodiesel blends of B10 or higher must disclose the maximum percentage blend of biodiesel to their customers. Otherwise, heating oil companies are not required to disclose biodiesel blends to their customers, but many do so voluntarily in order to promote the environmental benefits of BIOHEAT.

- **Are there any state or federal laws mandating the use of biodiesel in heating oil?**

Massachusetts did enact a biodiesel mandate for heating oil and diesel fuel of B5 (5%) in 2008 but the law was never implemented by state government officials. Since that time the heating oil industry has voluntarily embraced BIOHEAT because the industry recognizes the fuel's benefits for both the environment and customers. There are mandates in New York and Rhode Island for biodiesel blends in heating oil.

- **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 blends of up to B20 (20%) will slightly lower the 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 Massachusetts is now ULS) the fuel burns much cleaner and more efficiently. This reduces heating system maintenance and improves energy efficiency.

- **Is there a list of retail heating oil companies that sell BIOHEAT?**

Contact the Massachusetts Energy Marketers Association for assistance. 781-365-0844.

- **As a customer, can I request that my heating oil company deliver or not deliver BIOHEAT 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 also discuss your individual needs.

- **What state agencies, if any, oversee the sale and distribution of biodiesel?**

The Massachusetts Department of Energy Resources oversees the Alternative Portfolio Standard program that provides alternative energy credits to retailers selling biodiesel at B10 (10%) or higher. The Massachusetts Division of Inspection – Weights & Measures ensures that heating oil deliveries are accurately metered into homes and businesses from heating oil delivery vehicles.



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