
Bio-Fuels and Waste-Bio Oils

Purpose

To provide details of EnergyLogic's (EL) experience burning cooking oils, bio-diesel and other bio-fuels.

Description

To date, UL has not approved used vegetable oil or other waste bio-oils as "listed" fuels. Consequently, EL is unable to officially approve burning used vegetable oil or bio-oils in our UL Listed equipment.

EL is currently endeavoring to obtain approval for bio-fuels and used vegetable oil through UL. As a result of that endeavor, EL has performed considerable testing with these alternative fuel sources.

Some interesting facts we have learned to date:

- *Bio-fuels and vegetable oil have slightly lower BTU/gallon content, but not enough to require any adjustment of EL's patented metering and combustion equipment.*
- *Bio-fuels burn cleaner and with fewer emissions than petroleum oils.*
- *Used cooking oil should be heated for several hours to between 120°F and 140°F to allow water and other large contaminants to settle out and be drained from the bottom of a settling tank.*
- *Used cooking oil should be stored at temperatures above 90°F for successful filtering and transfer to the combustion system.*
- *Bio-fuels have a slow, corrosive effect on yellow metals, such as copper and brass, and effect many types of rubber and adversely synthetic seals. Steel tubing and compatible seal material (i.e., Viton) will need to be used for extended exposure to the bio-fuels.*



NuEra

14409 NE 79th St, Vancouver, WA 98682

www.nueraheat.com

1-(800) 347-9575

