

## STANDARD INFORMATION

**If the project requires any changes to the Certification Data Report outside of Section 1, then this SUN applies.**

**Standard:** UL 727

**Standard ID:** Oil-Fired Central Furnaces [UL 727:2018 Ed.10+R:20May2024]

**Previous Standard ID:** Oil-Fired Central Furnaces [UL 727:2018 Ed.10]

## EFFECTIVE DATE OF NEW/REVISED REQUIREMENTS

**Effective Date:** **May 20, 2026**

## IMPACT, OVERVIEW, AND ACTION REQUIRED

**Impact Statement:** No action is required for currently certified products. If modifications to the product after the effective date require an evaluation and/or testing, then the product must undergo re-evaluation to the new requirements.

**Overview of Changes:** Adds B100 biodiesel fuel requirements. Specific details of new/revise requirements are found in table below.

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***Current Listings Not Active? – Please immediately identify any current Listing Reports or products that are no longer active and should be removed from our records. We will do this at no charge as long as Intertek is notified in writing prior to the review of your reports.***



## STANDARD INFORMATION

CLAUSE	VERDICT	COMMENT
		<i>Additions to existing requirements are <u>underlined</u> and deletions are shown <del>lined-out</del> below.</i>
3	Info	<b>Glossary</b> <i><b>New clause added;</b></i>
3.6A	Info	BIODIESEL – Any biodiesel blend stock as defined by Standard Specification for Biodiesel Fuel Blend Stock (B100) for Middle Distillate Fuels, ASTM D6751-20a, intended to be utilized as a complete fuel source (B100) or blended with a distillate fuel oil. <i><b>New clause added;</b></i>
3.20A	Info	FUEL OIL/BIODIESEL BLEND – Blended fuels consisting of a No. 2 or lighter fuel oil component and a biodiesel component. The biodiesel component shall meet the Standard Specification for Biodiesel Fuel Blend Stock (B100) for Middle Distillate Fuels, ASTM D6751. The numerical value corresponding to the biodiesel component determines the blend rating (such as B20 for 20 % biodiesel, 80 % fuel oil). <b>PERFORMANCE</b>
37	Info	<b>General</b> <i><b>New clause added;</b></i>
37.8		When a furnace assembly is intended to fire a fuel oil/biodiesel blend comprised of greater than twenty percent (i.e., > B20 biodiesel), the furnace assembly shall be tested in accordance with this standard with No. 2 fuel oil. In addition, the Range of Fuels test described in Section 42A shall be conducted immediately following the Combustion Test – Burner and Furnace as described in Section 42. <i><b>New section added;</b></i>
42A		<b>Range of Fuels Test – Burner and Furnace</b>
42A.1		In accordance with 37.8, this test shall be conducted on a furnace assembly intended to fire a fuel oil/biodiesel blend comprised of greater than twenty percent biodiesel (i.e. >B20 biodiesel) or biodiesel (B100).
42A.2		The furnace assembly is to be set up as defined in the Combustion Test – Burner and Furnace in Section 42, as applicable.



CLAUSE	VERDICT	COMMENT
42A.3		The furnace assembly shall be fired with the highest percentage fuel oil/biodiesel blend (minimum B21) or B100, the burner excess air, flue gas CO <sub>2</sub> , or flue gas oxygen shall be adjusted to a level specified by the manufacturer in their instructions shipped with the burner for the manufacturer's rated fuel oil/biodiesel blend. If the manufacturer's instructions do not specify an excess, flue gas CO <sub>2</sub> , or flue gas oxygen level when operating with the rated fuel oil/biodiesel blend, the burner air/fuel ratio shall be adjusted to provide 11.5 % flue gas CO <sub>2</sub> .
42A.4		Without any other adjustment to the burner the fuel supply shall be changed from the rated fuel oil/biodiesel blend or B100 to No. 2 fuel oil. When operating at steady state, in accordance with 42.2, with No. 2 fuel oil, the furnace assembly shall meet all requirements of the Combustion Test – Burner and Furnace described in Section 42.
	Info	<b>MARKING</b>
60	Info	<b>General</b>
		The following information shall appear on each furnace:  a) The manufacturer's or private labeler's name or trademark and a distinctive type, model or catalog designation. b) The voltage rating, frequency, and total current in amperes of the furnace. If a furnace includes more than one circuit to be supplied by individual external supply circuits, the current of each circuit shall be indicated. c) The firing rate of the furnace expressed to the nearest 0.1 gallons per hour (0.5 liters per hour) and the grade of fuel. <del>Assume Nos. 1 and 2 fuel oils have calorific values of 138,500 and 140,000 Btu per gallon (38.6 and 39.1 MJ per liter), respectively.</del> <u>the fuels have calorific values as shown in the following:</u>  <u>1) No. 1 Fuel Oil (Kerosene): calorific value of 135,000 Btu per gallon (37.6 MJ/L);</u> <u>2) No. 2 Fuel Oil: calorific value of 137,380 Btu per gallon (38.3 MJ/L);</u> <u>3) B6-B20 Fuel Oil: calorific value of 135,423 Btu per gallon (37.7 MJ/L);</u> <u>4) B100: calorific value of 127,595 Btu per gallon (35.6 MJ/L).</u>