

STANDARD INFORMATION

Standard Number: UL 723

Standard Name: Test for Surface Burning Characteristics of Building Materials

Standard Edition and Issue Date: 11th Edition Dated April 19, 2018

Date of Revision: April 19, 2018

Date of Previous Revision of Standard: December 21, 2017

EFFECTIVE DATE OF NEW/REVISED REQUIREMENTS

Effective Date: **April 19, 2020**

IMPACT, OVERVIEW, AND ACTION REQUIRED

Impact Statement: A review of all Listing Reports is necessary to determine which products comply with new/revise requirements and which products will require re-evaluation. **NOTE:** Effective immediately, this revised standard will be exclusively used for evaluation of new products unless the Applicant requests in writing that current requirements be used along with their understanding that their listings will be withdrawn on Effective Date noted above, unless the product is found to comply with new/revise requirements.

Overview of Changes: This New Edition for the Standard for Safety for Test for Surface Burning Characteristics of Building Materials, UL 723, has been issued to include the Heptane Representative Curve. Specific details of new/revise requirements are found in table below.

If the applicable requirements noted in the table are not described in your report(s), these requirements will need to be confirmed as met and added to your report(s) such as markings, instructions, test results, etc. (as required).

Client Action:

Information – To assist our Engineer with review of your Listing Reports, please submit technical information in response to the new/revise paragraphs noted in the attached or explain why these new/revise requirements do not apply to your product (s).

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 – Please immediately identify any current Listing Reports or products that are no longer active and should be removed from our records.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 underlined and deletions are shown lined out below.</i>
5	Info	Calibration of Test Equipment <i>New clause added;</i>
5.13		As an optional calibration tests in addition to tests using red oak and fiber-cement board, a series of tests are permitted to be conducted using heptane, following the fiber-cement board test. The smoke density area generated by the heptane tests may be used in lieu of red oak smoke density areas to calculate the Smoke Developed Indices as described in 7.1.6. <i>New clause added;</i>
5.14		With the test equipment adjusted and conditioned as described in 5.2, 5.4, 5.5, and 5.7, a series of tests are to be made, using 295 g \pm 5 g of HPLC Grade, submicron filtered heptane ^a . The heptane is to be poured into a round, 16 gauge stainless steel pan with an inside diameter of 8.875 in. \pm 0.125 in. and an inside depth of 1.625 in. \pm 0.125 in. ^a Fisher Scientific Catalogue no. H 350-4 HPLC grade n-heptane has been found suitable for this purpose. <i>New clause added;</i>
5.15		The pan is to be placed on the furnace floor, 24 in. \pm 0.5 in. downstream from the centerline of the burners. The pan is to be covered with a piece of nominal 12 in. by 12 in. High Density Polyethylene (HDPE) plastic food wrap (cling wrap) to minimize evaporation while awaiting the calibration test to begin. <i>New clause added;</i>
5.16		With the tunnel lid closed in the test position, and the specified draft established, the test is to be initiated by ignition of the plastic food wrap (cling wrap) and heptane using a spark igniter or similar method. The standard gas burners are not energized for these tests. <i>New clause added;</i>
5.17		The heptane is to be allowed to burn until consumed, and the test terminated at 5:00 minutes. The photoelectric-cell output is to be recorded immediately prior to the test and at least every 2 s during the test.



CLAUSE	VERDICT	COMMENT
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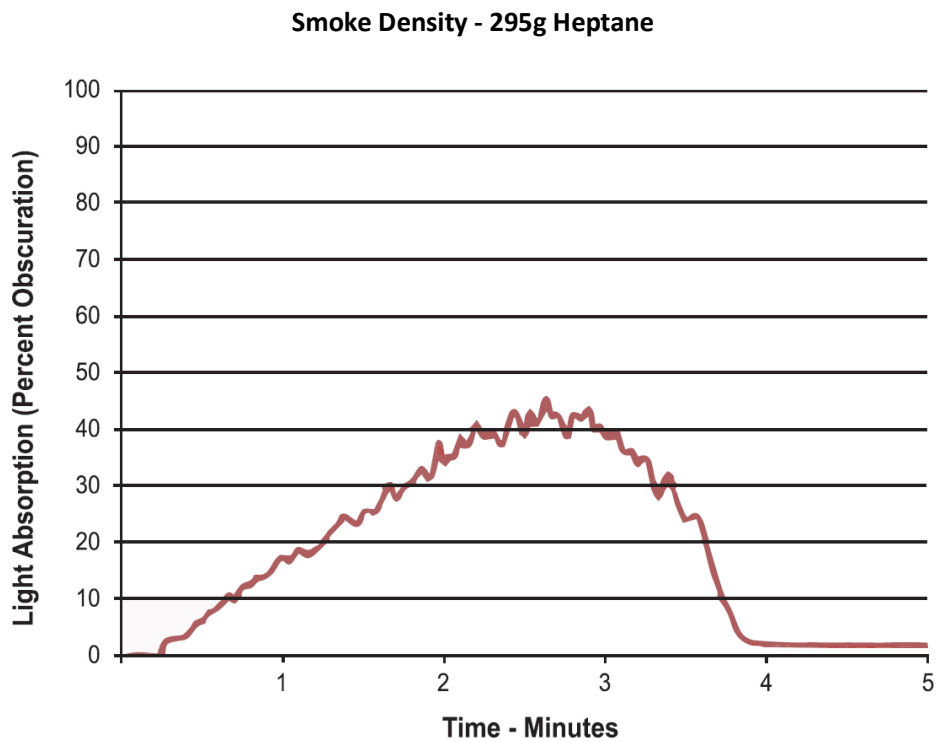
New clause added;

5.18

The temperature, duration of flaming and change in photoelectric-cell readings are to be recorded for the duration of the test. Figure 5.6 is a representative curve for the smoke density of 295 g of heptane.

New figure added;

Figure 5.6



New clause added;

5.19

Two tests are to be conducted for the series and the results averaged and reported.

New clause added;

5.20

A complete new calibration as described in Section 5 shall be performed after major repairs, such as re-bricking, have been made. If there have been no major repairs, a new calibration for both red oak and fiber-cement board shall be conducted after 200 tests, or every 12 months, whichever comes first.

New clause added;

5.21

Smoke-developed indices (SDI) of products under test may be calculated using red oak smoke density areas or heptane smoke density areas.



CLAUSE	VERDICT	COMMENT
		<i>New clause added;</i>
5.22		When using red oak to calculate SDI, add the data from the new red oak smoke calibration to a data set containing at least the last four calibrations in order to maintain a running average of at least five calibrations. When fewer than five calibrations have been performed on new equipment, average the available number of calibrations to achieve the running average.
7	Info	Classification
7.1	Info	General
7.1.6		The test results for smoke density are to be plotted and the area under the curve determined. The area is to be divided by the area under the curve determined for red oak or heptane, as described in Section 5 and multiplied by 100 to establish a numerical index by which the performance of the material is to be compared with that of fiber-cement board and select-grade red-oak flooring or heptane. <u>Fiber-cement board has been arbitrarily established as zero SDI and red oak flooring and heptane, arbitrarily established as 100 SDI.</u> In the unlikely event of particulate blockage of the photocell, the test shall be deemed invalid and re-conducted, or a qualifying notation shall be included in the test report.
CUSTOMERS PLEASE NOTE: This Table and column "Verdict" can be used in determining how your current or future production is or will be in compliance with new/revised requirements.		