

Standards Update Notice (SUN)

Issued: March 22, 2017

Standard Information

Standard Number: UL 923

Standard Name: Microwave Cooking Appliances

Standard Edition and Issue Date: 7th Edition Dated May 1, 2013

Date of Revision: November 18, 2015

Date of Previous Revision of Standard: 7th Edition Dated June 24, 2015

Effective Date of New/Revised Requirements

Effective Date: June 5, 2019

Impact, Overview, and Action Required

Impact Statement: A review of all Listing Reports is necessary to determine which products comply with new/revised 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requests in writing that current requirements be used along with their understanding that their listings will be withdrawn on Effective Date noted above, unless the product is found to comply with new/revised requirements.

Overview of Changes: The revisions dated November 18, 2015, were issued to add requirements for Polymeric Materials and make editorial changes. Specific details of new/revised 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 Required:

Information – To assist our Engineer with review of your Listing Reports, please submit technical information in response to the new/revised paragraphs noted in the attached or explain why these new/revised 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 – Please immediately identify any current Listing Reports or products that are no longer active and should be removed from our records.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.

Reference: UL's Announcement Letter Dated February 24, 2017



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Description of New/Revised Technical Requirements

| Clause | Verdict | Comment |
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| 2.14.1, 2.15.1, 2.21.1, 2.33 - 2.35, 12.5, 12.7, 12.8.1- 12.8.4, 16.1.2.1, 30.6, Section 64A.6 | | Changes to Requirements for Polymeric Materials Specifications and New Nichrome Wire Evaluation on Internal Wiring Terminations for Microwave Ovens. Wiring in microwave ovens has shown that when ignition occurs, the insulation can ignite and propagate flames. |
| | | The intent of this revision requires polymeric materials in the vicinity of electrical connections to meet certain flammability requirements or pass the Nichrome Wire Ignition test. In addition, the intent of this revision is to reduce the risk of flame propagation from overheated electrical connections. Electrical connections that carry less than 60 watts are at low risk of overheating because of the limited power available at the connection. |
| | | Therefore, it shall be verified that all electrical connections of a household microwave oven where the total circuit load is greater than 60 W during normal operation shall have suitable wiring and polymeric materials within 3 mm's of an electrical connection and within a 20 mm diameter envelope of a vertical cylinder; or the connection shall be evaluated to the Nichrome Wire Test. |
| | | This revision also requires all microwave cooking appliances to be considered as unattended, stationary appliances when determining the Polymeric enclosure requirements. |
| | | This revision also provides the guidelines for electrical spacings, including Pollution Degree and Material Group, when using the Standard for Insulation Coordination Including Clearances and Creepage Distances for Electrical Equipment, UL 840. |
| Section 64A.3 | | Adds Waveguide and stirrer fire containment test which was developed to address the contamination in the waveguide due to food debris and oils built up that potentially could ignite. This serves to address the Magnetron waveguide as a potential ignition source. |
| Section 64A.4 | | Adds Popcorn fire containment to address any exhaust opening in the oven cavity as a potential ignition source. |
| Section 64A.5 | | Adds thermally protected AC fan motor ignition test to address high voltage or line voltage open coils/windings as a potential ignition source. The risk of ignition exists if there is an internal short within the motor with the possibility that the motor may locally heat up in an area that is away from the thermal protector. The intent of this revision is to address the risk of overheating caused by wiring insulation breakdown in an open motor design. In the unlikely event that the winding insulation would breakdown, the risk of overheating is increased. The insulation of motor windings can breakdown due to conditions such as environment, manufacturing variation, extreme wear, abuse, or abnormal conditions. The "Thermally protected AC fan motor ignition test" was developed to mitigate these risks. |
| | | 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. |