

Standard Information

ADDENDUM: This SUN replaces the one previously issued for these new/revised requirements with the only change being the SDO extended the Effective Date.

Standard Name: Dehumidifiers

Standard Number: UL 474

Standard Edition and Issue Date: 9th Edition, dated July 8, 2009

Date of Revisions: July 20 and 25, 2012

Date of Previous Revisions to Standard: November 13, 2009

Effective Date of New/Revised Requirements

Effective Date: February 06, 2017

Impact, Fees, Overview, and Action Required

Impact Statement: A review of all Listing Reports is necessary to determine which products comply with the new/revised requirements and which products will require re-evaluation and test. **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requests in writing that current requirements be used along with their understanding that their listings will be withdrawn on the Effective Date of February 6, 2015, unless product is found to comply with the new/revised requirements.

Fees: So that production of your products bearing the Listing Mark will not be interrupted, at some point between 5 –10 months before the Effective Date, our Engineers will begin reviewing your Listing Report (s) for compliance with these new/revised requirements. Either the Listing Report (s) will be revised to show compliance or a Findings Letter will be prepared and sent to your attention along with a quote for necessary re-evaluation and testing. This initial review of your Listing Report (s) will be covered by a direct billing project and will be invoiced at not more than \$1000 per

Overview: Section 6 of UL 474 has been revised. These revisions will upgrade the flammability requirements of non-metallic materials. The primary revision is to clause 6.4, which now indicates a dehumidifier is to be considered a stationary appliance when applying the enclosure requirements of UL 746C. In general, enclosures will now be required to be rated 5V. Clause 6.6 was also revised to require other non-metallic materials within the dehumidifier to be rated V-0. This is likely to require a partial re-design of equipment, and therefore a re-evaluation of certified products.

Additionally, a new requirement requires Arc Fault Circuit Interrupter (AFCI) protection to be added to all cord-connected dehumidifiers. Specific details of the new/revised clauses of the standard are found in the table below.

Action Required:

Information and Samples – Please submit the following information to assist with determining compliance: If your equipment has a polymeric enclosure made of other than 5VA rated material, representative samples of each product or family will need to be re-evaluated. Additionally, information on the AFCI device to be added must be provided. A quotation will need to be issued for re-evaluation, and samples will need to be provided.

Current Listings – Please immediately identify any current Listing Reports or products that are no longer active and should be removed from our records.

Standards Update Notice

Updated and Issued September 11, 2014

Description of New/Revised Technical Requirements

Clause	Verdict	Comment	NC#
6		Polymeric Materials – Application	
6.3		<p>A polymeric material enclosure of electrical parts ignition sources shall comply with the requirements in the Standard for Polymeric Materials – Use in Electrical Equipment Evaluations, UL 746C, as applicable to polymeric enclosures.</p> <p>Exception No. 1: A minimum impact of 5 foot-pounds (6.8 J) shall apply to all dehumidifiers when determining the impact resistance of a polymeric material enclosure of live parts.</p> <p>Exception No. 2: A minimum impact of 1.5 foot-pounds (2.0 J) shall apply to all dehumidifiers when determining the impact resistance of a polymeric material enclosure of hazardous moving parts.</p> <p>Exception No. 3: An enclosure of Class 2 circuits shall be treated as a decorative part. See 6.5.</p>	
6.4		<p>When determining compliance with the enclosure requirements of the Standard for Polymeric Materials – Use in Electrical Equipment Evaluations, UL 746C:</p> <p>a) A dehumidifier is to be considered an unattended appliance.</p> <p>b) The portable enclosure requirements shall apply to all cord-connected dehumidifiers not intended to be fastened to the building structure or other equipment. A <u>dehumidifier is to be considered a stationary appliance.</u></p> <p>c) A dehumidifier shall be considered subject to normal room temperature environmental conditions.</p>	
6.6		<p>Except where superseded by other requirements in this standard or UL 746C, polymeric materials shall have a flammability classification of HB <u>V-0</u> minimum, when tested in accordance with the Standard for Tests for Flammability of Plastic Materials for Parts in Devices or Appliances, UL 94.</p> <p>Exception No. 1: A higher level of flammability may be required due to the alternate path of enclosure requirements in Section 5 of UL 746C.</p> <p>Exception No. 2: Parts of a portable dehumidifier are not required to be made of a material classed HB <u>V-0</u>, minimum, provided the part does not occupy a volume greater than 0.122 in³ (2 cm³), does not have any dimension greater than 2.4 in (60.1 mm), and is located so it cannot propagate flame from one area to another or bridge between a possible source of ignition and other ignitable parts.</p>	

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6.8		<u>Ignitions sources within the unit are considered to be:</u> a) High voltage un-insulated terminals; b) High voltage printed circuit board traces; c) High voltage open coils/windings; d) High voltage open contacts; and e) High voltage wiring not employing VW-1 insulation.	
7.2.1		<u>A cord-connected single phase dehumidifier shall be provided with a factory installed AFCI protection to reduce the risk of fire due to arcing faults in the power-supply cord. The AFCI shall be installed as an integral part of the attachment plug or located in the supply cord within 12 in. (300 mm) of the attachment plug.</u>	
		CUSTOMERS PLEASE NOTE: This Table and column "Verdict" can be used by you to assist in determining how current or future production of the product is or will be in compliance with the new/revised requirements by the Effective Date.	