

STANDARD INFORMATION

Standard: UL 60335-2-8

Standard ID: Safety for Household and Similar Electrical Appliances, Part 2: Particular Requirements for Shavers, Hair Clippers, and Similar Appliances [UL 60335-2-8:2018 Ed.6+R:28Jun2021]

Previous Standard ID: Safety for Household and Similar Electrical Appliances, Part 2: Particular Requirements for Shavers, Hair Clippers, and Similar Appliances [UL 60335-2-8:2018 Ed.6+R:03Oct2018]

EFFECTIVE DATE OF NEW/REVISED REQUIREMENTS

Effective Date: **June 28, 2023**

IMPACT, OVERVIEW, AND ACTION REQUIRED

Impact Statement: Per our accreditation, Intertek is required to review reports against the standard revisions to confirm compliance. Once compliance is confirmed, the standard reference in the report is updated to show continued compliance to the technical requirements of the standard. Reports not updated to this version by the effective date above will be withdrawn.

Overview of Changes:

- Addition of requirements for clippers and epilators
- Addition of Abnormal Operation Test for USB Powered or Charged Appliances
- Additional requirements for the mechanical strength test

Specific details of new/revised requirements are found in table below.

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 – Please immediately identify any current Listing Reports or products that are no longer active and should be removed from our records.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 lined-out below.</i>
6	Info	Classification
		ANIMAL SHEARERS shall be CLASS I, CLASS II or CLASS III.
6.1		WASHABLE SHAVERS, WET SHAVERS, <u>WASHABLE CLIPPERS, WET CLIPPERS, WASHABLE EPILATORS and WET EPILATORS</u> shall be CLASS II or CLASS III. Other appliances having a RATED VOLTAGE not exceeding 150 V shall be of CLASS 0, CLASS I, CLASS II or CLASS III. Other appliances shall be CLASS II or CLASS III.
6.1DV.1		<u>WASHABLE SHAVERS, WET SHAVERS, WASHABLE CLIPPERS, WET CLIPPERS, WASHABLE EPILATORS and WET EPILATORS</u> shall be CLASS I, CLASS II or CLASS III.
6.2		<u>WASHABLE SHAVERS, WET SHAVERS, WASHABLE CLIPPERS, WET CLIPPERS, WASHABLE EPILATORS and WET EPILATORS</u> shall be at least IPX7. However, parts that are intended to be fixed, and transformers with pins for insertion into socket-outlets, shall be at least IPX4. This classification does not apply to parts of CLASS III CONSTRUCTION.
7	Info	Marking and instructions
7.1		Hand-held parts of WASHABLE SHAVERS, <u>WASHABLE CLIPPERS and WASHABLE EPILATORS</u> shall be marked with symbol IEC 60417-5574 (2002-10). Hand-held parts of WET SHAVERS, <u>WET CLIPPERS and WET EPILATORS</u> shall be marked with symbol IEC 60417-5582 (2002-10).
7.12		The instructions for ANIMAL CLIPPERS shall state that the appliance is intended for trimming purposes only. If ANIMAL CLIPPERS are intended for household use only, this shall be stated. The instructions for ANIMAL CLIPPERS for commercial use and ANIMAL SHEARERS shall include the substance of the following. WARNING: Cutting blades may become hot after prolonged use. If symbol IEC 60417-5574 (2002-10) or symbol IEC 60417-5582 (2002-10) is used, its meaning shall be explained.



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		<p>The instructions for appliances, other than <u>WASHABLE SHAVERS</u>, <u>WET SHAVERS</u>, <u>WASHABLE CLIPPERS</u>, <u>WET CLIPPERS</u>, <u>WASHABLE EPILATORS</u> and <u>WET EPILATORS</u>, shall include the substance of the following.</p> <p style="text-align: center;">WARNING: Keep the appliance dry.</p> <p>The instructions for <u>WASHABLE SHAVERS</u>, <u>WASHABLE CLIPPERS</u> and <u>WASHABLE EPILATORS</u> with <u>DETACHABLE INTERCONNECTION CORDS</u> shall include the substance of the following:</p> <p style="text-align: center;">WARNING: Detach the hand-held part from the supply cord before cleaning it in water.</p>
7.12DV.1		<p>The instructions shall state whether the appliance is intended for household or commercial use.</p> <p>If the blade temperatures exceed the limit for handles held for short periods only in Table 3, the instructions for <u>ANIMAL CLIPPERS</u> for commercial use and <u>ANIMAL SHEARERS</u> shall include the substance of the following.</p> <p style="text-align: center;">WARNING: Cutting blades may become hot after prolonged use.</p> <p>If a symbol is used in place of required marking text, such as for the <u>OFF POSITION WET SHAVERS</u> or <u>WASHABLE SHAVERS</u> in 7.10DV, its meaning shall be explained.</p>
7.12DV.3.1		<p>The instructions shall include the substance of the items in the following list, as applicable, and any other instructions that the manufacturer requires for the appliance. The statement "Read all instructions before using" shall precede the list of items following the word "DANGER." The items are not required to be numbered.</p> <p style="text-align: center;">IMPORTANT SAFETY INSTRUCTIONS</p> <p>When using an electrical appliance, basic precautions are required to always be followed, including the following:</p> <p>Read all instructions before using (this appliance)</p> <p>DANGER – To reduce the risk of electric shock:</p> <ol style="list-style-type: none">1. Do not reach for an appliance that has fallen into water. Unplug immediately from receptacle. (This statement is not needed for a <u>WET SHAVER</u>, <u>WET CLIPPER</u> or <u>WET EPILATOR</u>.)2. Do not use while bathing or in a shower. (This statement is not needed for a <u>WET SHAVER</u>, <u>WET CLIPPER</u> or <u>WET EPILATOR</u>.)3. Do not place or store appliance where it is able to fall or be pulled into a tub or sink. Do not place in or drop into water or other liquid. (This statement is not needed for a <u>WET SHAVER</u>, <u>WET CLIPPER</u> or <u>WET EPILATOR</u>.)



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7.12.1		The installation instructions for WASHABLE SHAVERS, WET SHAVERS, <u>WASHABLE CLIPPERS, WET CLIPPERS, WASHABLE EPILATORS and WET EPILATORS</u> , other than those classified IPX7, shall state that the parts that have to be fixed must be installed so they cannot fall into water.
11	Info	Heating
11.8		The temperature rise of parts that are in contact with skin in normal use, or are held in the hand, shall not exceed the limits specified for handles which are continuously held in normal use. <u>The temperature rise of parts of hair clippers or trimmers that are in contact with hair in normal use, and may contact the skin for short periods, shall not exceed the limits specified for handles which in normal use are held for short periods only.</u> The temperature rise of cutting blades of ANIMAL CLIPPERS for commercial use and ANIMAL SHEARERS that may come in contact with the animal skin or hair in normal use is 50 K.
19	Info	Abnormal operation
19.102DV		<i>New section added;</i> Addition of 19.102DV.1 – 19.102DV.5 to the Part 2:
19.102DV.1		A CLASS III APPLIANCE or a CLASS III CONSTRUCTION part of an appliance supplied from a USB port, including any manufacturer supplied USB cable, shall be placed on a soft wood surface covered by two layers of tissue paper. The appliance shall be covered by one layer of untreated 100% cotton medical gauze or cheesecloth. The appliance shall be operated as specified in Clause 11 while supplied via the USB input from a power source with a voltage equal to 5 volts greater than the voltage specified in 5.8.2DV and with an available current of twice that specified in 5.8.2DV.
19.102DV.2		During the test, for battery-operated appliances, venting of cells is permitted and, for lithium-ion systems, each cell voltage shall be continuously monitored to determine if it has exceeded the upper limit charging voltage.
19.102DV.3		During the test, a) there shall be no explosion, b) there shall be no charring or burning of the medical gauze, cheesecloth or tissue paper, c) for lithium-ion systems, cells shall not have exceeded the upper limit charging voltage by more than 150 mV or, if they have, then they shall be permanently disabled from being recharged, and d) there shall be no venting through other than cell vents and no evidence of damage to a cell that obstructs a cell vent so as to defeat its operation if venting is relied upon for compliance with this standard.
19.102DV.4		The test shall be continued until: – a PROTECTIVE DEVICE operates, – the appliance temperatures return to within 5 K of the ambient temperature, or – twice the normal charge period, but at least 3 hours, has elapsed.



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19.102DV.5		The test is then repeated while increasing the USB input voltage at 5 volt increments up to 60 V d. c or until a PROTECTIVE DEVICE operates, whichever occurs first.
20	Info	Stability and mechanical hazards <i>New clause added;</i> Appliances, other than FIXED APPLIANCES and HAND-HELD APPLIANCES without a charging stand, intended to be used on a surface such as the floor or a table, shall have adequate stability. Compliance is checked by the following test, appliances incorporating an appliance inlet being fitted with an appropriate connector and flexible cord. HAND-HELD APPLIANCES with a charging stand are subjected to the test while placed on their charging stand. The appliance, not connected to the supply mains, is placed in any normal position of use on a plane inclined at an angle of 10° to the horizontal, the SUPPLY CORD resting on the inclined plane in the most unfavourable position. However, if part of an appliance comes into contact with the horizontal supporting surface when the appliance is tilted through an angle of 10°, the appliance is placed on a horizontal support and tilted in the most unfavourable direction through an angle of 10°. NOTE 101 The test on the horizontal support can be necessary for appliances provided with rollers, castors or feet. In this case, castors or wheels can be blocked to prevent the appliance from rolling. Appliances intended to be filled with liquid by the user in normal use are tested empty or filled with the most unfavourable quantity of water up to the capacity indicated in the instructions. The appliance shall not overturn unless the appliance or the part of the appliance which overturns complies with all of the following: <ul style="list-style-type: none">– it only contains circuits operating at SELV according to 8.1.4;– it only contains low power circuits according to 19.11.1;– it is dropped from a height of 700 mm on a rigidly supported hard wood board 5 times, the appliance being held in different positions likely to occur. After the drops, the appliance or part of the appliance as relevant shall maintain compliance with 15.1 and 20.2;– if the weight is more than 200 g, it does not have sharp edges when ready for use. An edge with a radius of 1 mm or more is not considered a sharp edge.
20.1		



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		<p>The test is repeated on appliances with heating elements with the angle of inclination increased to 15°. If the appliance overturns in one or more positions, it is subjected to the tests of Clause 11 in each of these overturned positions.</p> <p>During this test, temperature rises shall not exceed the values shown in Table 9.</p>
21	Info	<p>Mechanical strength</p> <p><i>New clause added;</i></p> <p>Hand-held parts of appliances shall have adequate mechanical strength and be constructed to withstand such rough handling that may be expected in normal use.</p> <p>Compliance is checked by the following test.</p> <p>The hand-held part of the appliance is placed in a sling that is constructed by tying together the four corners of a single layer of cheese cloth. The lowest point of the sling is suspended at a height of 700 mm for ANIMAL CLIPPERS and ANIMAL SHEARERS above a rigidly supported hardwood board surface and at a height 900 mm above a concrete or similar hard surface for other appliances.</p> <p>The hand-held part of the appliance in the sling is dropped from a stationary position. The test is carried out a total of five times with the hand-held part of the appliance being positioned so that it falls onto the surface in five different orientations.</p> <p>The appliance shall not be damaged to such an extent that compliance with 8.1 and Clause 29 is impaired.</p>
21.101		
22	Info	<p>Construction</p> <p>Hand-held parts of WASHABLE SHAVERS, <u>WASHABLE CLIPPERS</u> and <u>WASHABLE EPILATORS</u> shall be CLASS III CONSTRUCTION having a WORKING VOLTAGE not exceeding 24 V.</p> <p>Hand-held parts of WET SHAVERS, <u>WET CLIPPERS</u> and <u>WET EPILATORS</u> shall be CLASS III CONSTRUCTION having a WORKING VOLTAGE not exceeding 12 V, except when they are being charged when the WORKING VOLTAGE shall not exceed 24 V.</p> <p>Compliance is checked by inspection and by measurement.</p> <p>Hand-held parts shall be CLASS II CONSTRUCTION or CLASS III CONSTRUCTION.</p> <p>For appliances having a RATED VOLTAGE not exceeding 150 V, hand-held parts except those of WASHABLE SHAVERS, WET SHAVERS, <u>WASHABLE CLIPPERS</u>, <u>WET CLIPPERS</u>, <u>WASHABLE EPILATORS</u>, and <u>WET EPILATORS</u> may be of CLASS 0 CONSTRUCTION.</p>
22.26		
22.36		



CLAUSE	VERDICT	COMMENT
22.103		WASHABLE SHAVERS, <u>WET SHAVERS</u> , <u>WASHABLE CLIPPERS</u> , <u>WET CLIPPERS</u> , <u>WASHABLE EPILATORS</u> and <u>WET EPILATORS</u> , other than those classified IPX7, shall be constructed so that parts that are intended to be fixed can be fixed securely. Compliance is checked by inspection.
25	Info	Supply connection and external flexible cords
25.24		TERCONNECTION CORDS of WASHABLE SHAVERS, <u>WASHABLE CLIPPERS</u> and <u>WASHABLE EPILATORS</u> shall be detachable. <u>WET SHAVERS</u> , <u>WET CLIPPERS</u> and <u>WET EPILATORS</u> shall not have an INTERCONNECTION CORD unless they cannot be operated when connected to the supply mains.