

STANDARD INFORMATION

Standard: UL 982

Standard ID: Motor-Operated Household Food Preparing Machines [UL 982:2019 Ed.8+R:19Mar2021]

Previous Standard ID: Motor-Operated Household Food Preparing Machines [UL 982:2019 Ed.8+R:23Oct2020]

EFFECTIVE DATE OF NEW/REVISED REQUIREMENTS

Effective Date: **March 19, 2024**

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 Reports not updated to this version by the effective date above will be withdrawn.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:

- Blender Container Position Switch
- Intentionally Defeating Interlocks
- Universal Serial Bus (USB) and Automotive Adapter Powered Appliances
- Food Processor Fill Line Marking

Specific details of new/revise 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 – Please immediately identify any current Listing Reports or products that are no longer active and should be removed from our records.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>
	Info	CONSTRUCTION
5	Info	Generals
		<i>New clause added;</i>
		An appliance intended to be supplied by a Universal Serial Bus (USB) power source, whether the USB power supply is provided with the appliance or not, shall be considered as powered by a Class 2 power supply and shall be:
5.5		a) Provided with cable assemblies or wiring external to the unit, coiled or uncoiled, rated: 1) VW-1 or FT 1 or better in accordance with the Standard for Appliance Wire Material, UL 758, if not exceeding 3.05 m (10 ft) in length; or 2) CL2 or better in accordance with the Standard for Power-Limited Circuit Cables, UL 13, if longer than 3.05 m (10 ft) in length; b) Incapable of being supplied by other sources when powered from the USB source; c) Tested in accordance with 31.6 and 49.3; d) Rated and marked in accordance with 71.12 – 71.14; and e) Provided with user instructions in accordance with 76.33.
		<i>New clause added;</i>
		Appliances intended to be powered by an automotive adapter shall be:
5.6		a) Provided with a plug and cord complying with the Standard for Vehicle Battery Adapters, UL 2089; b) Incapable of being supplied by other sources when powered from the automotive adapter; and c) Tested in accordance with 31.7.
6	Info	Components
6.3	Info	Batteries and battery chargers
6.3.5		Class 2 battery charger shall comply with the Standard for Class 2 Power Units, UL 1310. <u>Limited Power Source (LPS) battery chargers shall comply with the Standard for Information Technology Equipment – Safety – Part 1: General Requirements, UL 60950-1 or the Standard for Audio/Video, Information and Communication Technology Equipment – Part 1: Safety Requirements, UL 62368-1.</u>




CLAUSE	VERDICT	COMMENT
6.13	Info	Power supplies <i>New clause added;</i>
6.13.3		Limited Power Source (LPS) power supplies shall comply with the Standard for Information Technology Equipment – Safety – Part 1: General Requirements, UL 60950-1 or the Standard for Audio/Video, Information and Communication Technology Equipment – Part 1: Safety Requirements, UL 62368-1.
27	Info	Switches, Controls, and Interlocks An interlock shall not be capable of being defeated:
27.10		a) Without damaging the appliance; b) Without making wiring connections or alterations; or c) By the probe indicated in Figure 7.1.
30	Info	Appliances
30.4	Info	Blenders
30.4.1	Info	Blade accessibility <i>New clause added;</i>
30.4.1.4		Unless the blender is marked in accordance with 72.3.3, unintentional operation of a blender with the blade assembly on the blender base without assembly to the container shall be prevented by a momentary contact position switch complying with 6.19.1 actuated by the container to allow the motor to start where the actuator is recessed or guarded to prevent actuation by applying the probe indicated in Figure 7.1 to the blade assembly or switch actuator. If more than one switch must be actuated for the blades to operate, each actuator is evaluated individually unless a single application of the probe can activate both switches simultaneously. If the switch is a part of an electronic control: a) The control shall be evaluated as an interlock and comply with Sections 6.5.3 and 27, or b) Two momentary contact position switches shall be required to be actuated in order to operate the blender and the control shall comply with Sections 6.5.2 and 27.
30.4.1.5		<i>New clause added;</i> For blenders where the blades are not removable from the blender base, unintentional operation of the blender without the container in place shall be prevented by an interlock switch complying with 6.19.3.



CLAUSE	VERDICT	COMMENT
	Info	PERFORMANCE
31	Info	General
		<i>New clause added;</i>
31.6		Unless otherwise specified, an appliance intended to be supplied by a Universal Serial Bus (USB) shall be tested with the appliance connected to a continuous independent DC source of supply with a voltage of 1.05 times the rated voltage and a current capacity of 8 A.
		<i>New clause added;</i>
31.7		An appliance intended to be supplied by an automotive adapter shall be tested with the appliance connected to a continuous independent source of supply of 12 V dc.
49	Info	Abnormal Operation Test
		<i>New section added;</i>
49.3		Overvoltage of appliances Intended to be supplied by Universal Serial Bus (USB)
		Appliances intended to be supplied by a Universal Serial Bus (USB), shall be placed on a white tissue paper covered soft wood surface, draped loosely with a single layer of cheesecloth and subjected to the following conditions:
49.3.1		a) Apply sinusoidal input AC voltage to the USB connection from 5 – 30V in 5V increments starting at the rated voltage; and b) Apply DC voltage with less than 10% ripple to the USB connection from 10 – 60V in 10V increments starting at the rated voltage.
49.3.2		For appliances operated via the USB connection, each increment shall be maintained for 5 minutes unless the appliance achieves ultimate results. For appliances charged via the USB connection, each increment shall be started with a fully discharged battery and shall be continued for 7 hours or until twice the normal charging period has elapsed, whichever is greater, unless the appliance achieves ultimate results or returns to room temperature.
		The test shall not result in:
49.3.3		a) Exposure of moving parts capable of causing injury, b) Explosion or ignition of the cells, c) Ignition of the tissue paper, supporting surface, or cheesecloth, and d) For USB charging of lithium ion cells, the upper limit charging voltage of each cell shall not be exceeded by more than 150 mV unless the cell is permanently prevented from being recharged.



CLAUSE	VERDICT	COMMENT
	Info	MARKINGS
71	Info	General
		<i>New clause added;</i>
71.12		Unless the appliance is intended to be connected to a USB configuration rated at 5 V, the input of an appliance intended to be supplied by Universal Serial Bus (USB) shall have a marked voltage rating corresponding to its intended USB configuration.
		<i>New clause added;</i>
71.13		An appliance intended to be supplied by a Universal Serial Bus (USB) shall be marked in proximity to the connection point either the USB symbol "  " or the abbreviation "USB".
		<i>New clause added;</i>
71.14		An appliance intended to be supplied by a Universal Serial Bus (USB) shall be permanently marked on the product with the following or equivalent: "Use only with Listed/Certified Information Technology (Computer) Equipment" or, "Use only with Listed/Certified ITE Power Supply" or "Listed Class 2 Power Unit", as applicable. The markings may be combined. Exception: This marking is not required if included in the Important Safeguard section of the instruction manual.
72	Info	Cautionary
72.3	Info	Blending mixer
72.3.3		When <u>unintentional operation of</u> a blender with the blade assembly itself on a blender base prior to its assembly to a container <u>is not prevented in accordance with 30.4.1.4</u> , the blender shall be marked "Never place blade assembly on base unless assembled to jar." This marking shall be located on the blender base near the blade drive and shall be visible with and without the blade assembly in place. If the marking is not visible with the jar collar in place, the marking shall also be on the jar collar.
72.22	Info	Appliances with interlocks
		<i>New clause added;</i>
72.22.1		Appliance with interlocks relied upon for compliance with this standard shall be marked with Item 5 of Table 72.1 unless it is marked with "Do not attempt to defeat the interlock". This marking may be located on the bottom of the appliance.
75	Info	All Appliances



CLAUSE	VERDICT	COMMENT
		The following shall be included in the instruction manual for all appliances: IMPORTANT SAFEGUARDS
75.1		When using electrical appliances, basic safety precautions should always be followed including the following: e) Avoid contacting moving parts. <u>Do not attempt to defeat any safety interlock mechanisms. (The second sentence may be omitted if the appliance does not have any interlocks.)</u>
76	Info	Specific Appliances
76.19	Info	Food processors
		The following shall be included in the instruction manual for food processors in addition to any other safety instructions required by the standard:
76.19.1		g) "Do not fill the bowl above the (<u>top edge of the bowl</u>) (marked maximum fill line) (or rated <u>maximum marked</u> capacity) to avoid risk of injury due to damage to the cover or bowl." (See 30.5.3)
76.33	Info	Appliance intended to be supplied by a Universal Serial Bus (USB) <i>New clause added;</i>
76.33.1		In accordance with the exception to 71.13, the important safeguard instructions of an appliance intended to be supplied by a Universal Serial Bus (USB) shall be provided with instructions that indicate the proper USB supply connection and warn against using unapproved sources.