



# Standards Update Notice (SUN)

Issued: March 22, 2017

## Standard Information

**Standard Number:** UL 498A

**Standard Name:** Standard for Safety for Current Taps and Adapters,

**Standard Edition and Issue Date:** 2<sup>nd</sup> Edition Dated January 23, 2008

**Date of Revision:** June 10, 2016

**Date of Previous Revision of Standard:** 2<sup>nd</sup> Edition Revised September 28, 2015

## Effective Date of New/Revised Requirements

**Effective Date:** **October 24, 2018**

## Impact, Overview, Fees 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requests in writing that current requirements be used along with their understanding that their listings will be withdrawn on Effective Date noted above, unless the product is found to comply with new/revised requirements.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:** **Addition of requirements for child-appealing or toy-like features and Addition of requirements to address the perimeter of a current tap enclosure to prevent single-pole insertion.**  
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 – Please immediately identify any current Listing Reports or products that are no longer active and should be removed from our records.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.***



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## Description of New/Revised Technical Requirements

Clause	Verdict	Comment
3	Info	<b>Glossary</b>
3.3.1	Info	<p>CHILD-APPEALING OR TOY-LIKE FEATURES – Features that provide visual appeal and attraction to children fourteen years or less in age. Features include but are not limited to the following:</p> <p>a) Products formed in the shape of a person, character or animal, and also having one of the features in Items (b) or (c);</p> <p>b) Products with readily identifiable images or shapes of cartoon characters, similar characters, or faces;</p> <p>c) Bright colors, sparkling blinking or flashing bright lights intended for amusement or decorative purposes and unrelated to operational or cautionary indicators or to cautionary identification; or</p> <p>d) Products formed in the shape of a toy, sports equipment, or scale model.</p>
7.1.2		A current tap employing either a mechanical or an electrical-switching means to prevent single-pole insertion, as specified in Section 35A, shall not be marked with, or identified as, "TR" or "Tamper Resistant" unless the current tap additionally complies with the Tamper-Resistant Receptacle requirements, as specified in the Standard for Attachment Plugs and Receptacles, UL 498.
7.12	Info	<b>Current tap with child-appealing or toy-like features</b>
7.12.1	Info	General
7.12.1.1		A marking intended to inform the user of a risk of injury to persons shall be prefixed by the appropriate signal word such as "CAUTION." The marking shall be in letters not less than 3/32 inch (2.4 mm) high. The signal word shall be more prominent than other markings on the product.
7.12.2		On the carton or smallest unit shipping container
7.12.2.1		The carton or smallest unit container shall be marked "CAUTION – Not recommended for children under ____ years of age." The blank space is to be populated with the appropriate age grade identified by the manufacturer.
7.12.2.2		The marking of 7.12.2.1 shall additionally contain the statement "As with all electric products, precautions should be observed during handling and use to prevent electric shock.
8.7		<b>Current tap with child-appealing or toy-like features</b>
8.7.1		The instructions shall indicate that the product is not a toy.
8.7.2		The instructions shall state that the product is to be assembled, cleaned, and maintained by an adult.
8.7.3		A current tap that has child-appealing or toy-like features with internal parts operating at 30 volts rms or more shall be provided with the following or equivalent instruction: "Caution – This is an electrical product, not a toy. To avoid risk of electric shock, fire or injury, the product should not be used without adult supervision or placed where small children can reach it."

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11.5	Info	<b>Enclosure size</b>
11.5.1		The perimeter of a current tap enclosure shall obstruct single pole insertion of an ANSI/NEMA 1-15P attachment plug blade into the energized female line contacts (polarized and non-polarized) adjacent to the enclosure perimeter in an attempt to deflect the plug's other blade to the outside of enclosure during plug insertion. Compliance shall be determined by the test as described in Single Pole Insertion Test, Section 35A.
17D	Info	<b>Current Tap with Child-Appealing or Toy-Like Features</b>
17D.1	Info	<b>Accessibility</b>
17D.1.1		A current tap with child appealing or toy-like features shall employ outlet or outlet slots that comply with the construction and performance requirements for tamper-resistant receptacle requirements of the Standard for Attachment Plugs and Receptacles, UL498.
17D.2	Info	<b>Protection from electric shock</b>
17D.2.1		An accessible uninsulated live part shall not be greater than 30 V rms (42.4 V peak).
17D.2.2		A current tap with child appealing or toy-like features shall not be intended for use in water, in proximity to water, outdoors, or handling liquids.
17D.3	Info	<b>Enclosure of a current tap with child-appealing or toy-like features</b>
17D.3.1		The enclosure of a current tap with child-appealing or toy-like features shall comply with the Abuse Tests of the Standard for Electric Toys, UL 696.
17D.4	Info	<b>Current tap with child-appealing or toy-like features - protection from personal injury</b>
17D.4.1		Protection from thermal burns – Surfaces of products with child appealing or toy-like features shall comply with the requirements of Section 31A (Accessible Temperature Test).
17D.4.2		<p>Protection from ingestion or aspiration of small parts – Products with child appealing or toy-like features shall minimize the risk of ingestion or aspiration of small parts. Small parts shall not fit entirely into the small parts cylinder shown in Figure 17D.1. Small parts shall have each part individually tested for insertion into the small parts cylinder.</p> <p>Exception: Packaging; any separable parts that the user is specifically instructed to discard either prior to or upon completion of the installation shall not be subjected to the small parts cylinder test. Compliance is checked by review of the smallest unit packaging instruction.</p>
Figure 17D.1		<p>Added Note a</p> <p><sup>a</sup> Small parts cylinder described in Figure 1 of the Code of Federal Regulations 16 Part 1501, "Method for Identifying Toys and Other Articles for Use by Children Under 3 Years of Age Which Present Choking, Aspiration, or Other Ingestion Hazards Because of Small Parts"</p>
17D.4.3		Protection from ingestion of hazardous materials – An accessible coating on a product, such as paint, enamel, lacquer, ink, and the like, shall not contain compounds of antimony, arsenic, barium, cadmium, chromium, lead, mercury, or selenium exceeding amounts specified in the Standard Consumer Safety Specification for Toy Safety, ASTM F 963. Products shall not contain hazardous ingestible liquids, powders, magnets or similar materials that may be accessible to children. The determination of accessibility of such materials shall be made both under normal conditions and after abuse and other test conditions applicable to the product.



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17D.4.4		Protection from sharp surfaces – A sharp edge, point, or projection that presents a risk of injury to persons shall be enclosed or guarded to reduce the risk of contact. Compliance shall be based upon inspection and, if necessary, compliance with sharp edge assessment in the Standard for Tests for Sharpness of Edges on Equipment, UL 1439.																																							
Table 18.1		<b>Summary of tests – Current taps and adapters</b> <b>Added sections 31A and 32</b> <b>Revised sections 33, and 35A</b>																																							
31A		<b>Accessible Temperature Test</b>																																							
31A.1		Accessible surfaces of a current tap with child appealing or toy-like features shall comply with the maximum temperature rises of Table 31A.1.																																							
31A.2		A surface of a current tap that has child-appealing or toy-like feature is determined to be accessible in accordance with paragraph 11.1.4.																																							
31A.3		The temperature testing method described in Section 31 shall be performed on an as received sample. Thermocouples shall be placed on locations as described in Table 31A.1.																																							
Table 31A.1		<p><b>Maximum temperature rises for surfaces of a current tap with child-appealing or toy-like features</b></p> <table border="1"> <thead> <tr> <th>Surface or part</th> <th>°C</th> <th>°F</th> </tr> </thead> <tbody> <tr> <td colspan="3">(A) Surfaces such as a handle or knob grasped by the hand or fingers for the purpose of carrying the product or lifting a separable lid, door, or cover.</td> </tr> <tr> <td>Metals</td> <td>25</td> <td>45</td> </tr> <tr> <td>Glass or ceramic</td> <td>30</td> <td>54</td> </tr> <tr> <td>Plastics/polymers</td> <td>35</td> <td>63</td> </tr> <tr> <td colspan="3">(B) Surfaces that are part of a handle, knob, or the like, but not usually grasped or contacted by the hand or fingers for carrying [including parts of a handle within 7/16 inch (11.1 mm) of the surface to which the handle is attached and parts of a finger knob within 1/4 inch (6.4 mm) of the surface to which the knob is attached, providing the remainder of the knob is large enough to be grasped]; or a handle, knob, or other part that may be touched but which is not required to be grasped for carrying the product or lifting a lid, door, or cover.</td> </tr> <tr> <td>Metals</td> <td>30</td> <td>54</td> </tr> <tr> <td>Glass or ceramic</td> <td>40</td> <td>72</td> </tr> <tr> <td>Plastics/polymers</td> <td>50</td> <td>90</td> </tr> <tr> <td colspan="3">(C) Other accessible parts or surfaces</td> </tr> <tr> <td>Metals</td> <td>30</td> <td>54</td> </tr> <tr> <td>Glass or ceramic</td> <td>45</td> <td>81</td> </tr> <tr> <td>Plastics/polymers</td> <td>55</td> <td>99</td> </tr> </tbody> </table>	Surface or part	°C	°F	(A) Surfaces such as a handle or knob grasped by the hand or fingers for the purpose of carrying the product or lifting a separable lid, door, or cover.			Metals	25	45	Glass or ceramic	30	54	Plastics/polymers	35	63	(B) Surfaces that are part of a handle, knob, or the like, but not usually grasped or contacted by the hand or fingers for carrying [including parts of a handle within 7/16 inch (11.1 mm) of the surface to which the handle is attached and parts of a finger knob within 1/4 inch (6.4 mm) of the surface to which the knob is attached, providing the remainder of the knob is large enough to be grasped]; or a handle, knob, or other part that may be touched but which is not required to be grasped for carrying the product or lifting a lid, door, or cover.			Metals	30	54	Glass or ceramic	40	72	Plastics/polymers	50	90	(C) Other accessible parts or surfaces			Metals	30	54	Glass or ceramic	45	81	Plastics/polymers	55	99
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35A	Info	<b>Single-Pole Insertion Test</b>
35A.1		A current tap shall not permit energized contact to be made between a standard ANSI/NEMA 1-15P non-polarized attachment plug and the female line contacts located adjacent to the current tap enclosure perimeter when tested as described in this section.
35A.2		One previously untested device is to be used for this test. Both the polarized and non-polarized female line contacts of the current tap shall be tested.
35A.3		The current tap under test shall be rigidly supported. The test gauge shown in Figure 35A.1 with the grounding pin removed shall be improperly inserted into each of the female line contact openings (polarized and non-polarized female line contacts) with a force of 35 lbf (156 N) in an attempt to bypass the enclosure obstruction. A suitable indicating device (such as an ohmmeter, battery-and-buzzer combination, or similar device) is to be connected between the attachment plug and the corresponding terminal (blade) of the current tap's female line contact being tested to determine whether electrical contact is made. The attachment plug is to be inserted in the outlet slot for multiple outlet devices in any orientation that may permit access to live parts within the outlet device. The force is to be maintained for one minute.
Figure 35A.1	Info	<b>Single pole insertion plug</b>
35A.3		A current tap employing either a mechanical or an electrical-switching means to prevent single-pole insertion shall be conditioned by insertion and withdrawal of a mating attachment plug 50 times. Current taps employing mechanical interlocking must also comply with the 35 lbf (156 N) improper insertion and absence-of-electrical-contact test of 35A.3 before and after conditioning. Current taps employing electrically-switched interlocking must comply with the absence-of-electrical-contact test of 35A.3 before and after conditioning. See paragraph 7.1.2.
		<b>CUSTOMERS PLEASE NOTE:</b> 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.