

CONSUMER PRODUCT SAFETY OFFICE

Reference : CPSO-290721-01
Date : 29th July 2021
To : Registered Suppliers and Conformity Assessment Bodies
Subject : Clarification Regarding Testing and Certification Requirements For Water Dispensers

Dear Registered Suppliers ('RS') and Conformity Assessment Bodies ('CAB'),

The purpose of this circular is to provide clarification regarding the testing and certification requirements for water dispensers under the Consumer Protection (Safety Requirements) Regulations (CPSR).

A. Existing requirements in the CPSR information booklet

- I. The requirements for testing and certification of water dispensers under the CPSR currently stated in our information booklet are as follows:
 - a) Hot water dispenser which has below boiling temperature shall be tested to either IEC 60335-2-21 (for storage type) or IEC 60335-2-35 (for instantaneous type).
 - b) Testing to IEC 60335-2-24 shall be required if the water dispenser is incorporated with compressor for dispensing cold water.

B. Clarifications regarding the existing requirements

- I. The Consumer Product Safety Office (CPSO) is aware that there are misinterpretations regarding these requirements, and would like to clarify on the interpretations, in line with with decisions laid down by the International Electrotechnical Commission (IEC) regarding usage of the IEC standards.
- II. IEC's Committee of Testing Laboratories (CTL) decision sheet DSH 579 provides the following clarification on the use of IEC standards for testing and certification of water dispensers:

For water dispensers:

 - a) IEC 60335-2-15 shall apply if **hot water boils**
 - b) IEC 60335-2-21 shall apply if **hot water does not boil**
 - c) IEC 60335-2-35 shall apply if the water heater is instantaneous and the **water does not boil**
- III. IEC Technical Committee 61 (TC 61) has clarified in July 2021 that 'water boiling' as mentioned in DSH 579 refers to water reaching 100 °C at 1 atmosphere

IV. The requirements for testing and certification of water dispensers under the CPSR should therefore be interpreted as follows:

- a) Hot water dispensers which **can** heat water to 100 °C at 1 atmosphere shall be tested to IEC 60335-2-15
- b) Hot water dispensers which **cannot** heat water to 100 °C at 1 atmosphere shall be tested to IEC 60335-2-21 and/or IEC 60335-2-35
- c) In addition, testing to IEC 60335-2-24 shall be required if the water dispenser is incorporated with compressor for dispensing cold water.

C. Existing registered water dispensers

- I. A grace period will be extended until **1st Aug 2022** for renewal of hot water dispensers that were registered using a non-applicable IEC standard
- II. From **2nd Aug 2022** onwards, all currently registered hot water dispensers may only be renewed using the appropriate IEC standard.
 - a) Hot water dispensers which **can** heat water to 100 °C at 1 atmosphere may only be renewed upon providing valid IEC 60335-2-15 test report
 - b) Hot water dispensers which **cannot** heat water to 100 °C at 1 atmosphere may only be renewed upon providing valid IEC 60335-2-21 and/or IEC 60335-2-35 test report

D. New registrations of water dispensers

- I. CABs are reminded that the following requirements shall continue to be in effect for all new registrations:
 - a) Hot water dispensers which **can** heat water to 100 °C at 1 atmosphere shall be tested to IEC 60335-2-15. IEC 60335-2-21 and/or IEC 60335-2-35 shall not be applicable
 - b) Hot water dispensers which **cannot** heat water to 100 °C at 1 atmosphere shall be tested to IEC 60335-2-21 and/or IEC 60335-2-35. IEC 60335-2-15 shall not be applicable
- 2. Please refer to the appended Frequently Asked Questions for any questions that you may have. If your question is not answered there, please contact the CPSO at consumerproductsafety@enterprisesg.gov.sg.

Issued by:

The Consumer Product Safety Office

This is a computer-generated circular and no signature is required.

Frequently Asked Questions to Circular CPSO-290721-01

Q1. Will this regulatory update affect electric water heaters?

A1. This update should not affect electric water heaters (i.e. electrical appliances that are typically intended to heat up water for showering/bathing), which should already be tested and certified to the appropriate standards

Q2. Will there be a grace period provided for water dispensers which are currently applying for registration using an inappropriate IEC standard (e.g. IEC 60335-2-15 for hot water dispensers which cannot heat water to 100 °C at 1 atmosphere)

A2. No grace period will be provided; CPSO's requirements for hot water dispensers remain unchanged since they were originally communicated in 2013 (CPS Information booklet Revision 01). Registered suppliers should continue to ensure that their Controlled Goods are tested and certified to the appropriate standards.

Q3. Are there plans to change the CPSR requirements for hot water dispensers? (e.g. to allow usage of IEC 60335-2-15 for hot water dispensers which cannot heat water to 100 °C at 1 atmosphere or usage of IEC 60335-2-21 and/or IEC 60335-2-35 for hot water dispensers which can heat water to 100 °C at 1 atmosphere)

A3. There are currently no plans to change the requirements for hot water dispensers in a manner which will deviate from the decisions made by the International Electrotechnical Commission (IEC) regarding usage of IEC safety standards; such decisions are formulated as an international consensus in consultation with technical experts from multiple IEC member countries. CPSO will regularly review the IEC Decisions and will update the CPSR requirements accordingly.

Q4. Are there any avenues for Registered Suppliers to feedback to CPSO regarding this regulatory decision?

A4. Please write in to CPSO and furnish us with the details. Any such feedback/appeal will be evaluated on a case by case basis.

Q5. Can CAB (Certification) accept all IEC CB test certificates issued for water dispensers, with the assumption that the CBTL has already ensured that the water dispensers tested by them comply with the requirements stated in DSH 579 before issuing the CB test report

A5. CABs (Certification) shall review all test reports issued for water dispensers to ensure that the tests used to produce the test report are properly conducted in accordance with IEC requirements, including DSH 579.

Q6. How shall Conformity Assessment Bodies (CAB) determine if a water dispenser has the capability to heat water to 100 °C at 1 atmosphere during certification?

A6. CABs may wish to check the documentation that comes with the water dispenser (a non-exhaustive list of examples is provided below). Where necessary, the CAB may also verify with the RS and get them to obtain/ make appropriate declarations about their appliance.

- a) IEC Test report(s) – may indicate the performance of the dispenser directly, or contain specifications of safety components, e.g. thermal cut-out(s) rated to activate below/ above 100 °C, that provide an indication of the appliance's performance
- b) Rating label of the water dispenser
- c) Water dispenser user manual
- d) Declaration letter submitted by the water dispenser manufacturer/company that applied for the IEC test report;

For example, CAB (Certification) can check if the water dispenser has capability to heat water to 100 °C at 1 atmosphere by referring to the IEC test report or rating label of the water dispenser. If this information is not stated, the CAB (Certification) may refer to the user manual. As a last resort the CAB (certification) may request from the RS a declaration letter submitted by the water dispenser manufacturer; this must be accompanied by checking the test report to ascertain if there are thermal cut-outs that activate below 100 °C (i.e. if the water dispenser incorporates thermal cut-outs that activate below 100 °C it does not have capability to heat water to 100 °C at 1 atmosphere).

The above examples of documentation are non-exhaustive, and CAB(Certification) may make reference to other documents not within the list (e.g. Technical specification(s) provided by the water dispenser manufacturer/ company that applied for the IEC test report) as long as the CAB(Certification) can confidently ascertain if a given water dispenser model has the capability to heat water to 100 °C at 1 atmosphere.