STANDARDS UPDATE NOTICE (SUN)
ISSUED: November 28, 2018

STANDARD INFORMATION

Standard Number: CSA C22.2 No. 61010-2-010
Standard Name: Safety Requirements for Electrical Equipment for Measurement, Control and Laboratory Use — Part 2-010: Particular Requirements for Laboratory Equipment for the Heating of Materials
Standard Edition and Issue Date: 3rd Edition Dated July 1, 2015
Date of Revision: July 1, 2015
Date of Previous Revision of Standard: 2nd Edition Reaffirmed 2014

EFFECTIVE DATE OF NEW/REVISED REQUIREMENTS

Effective Date: **January 1, 2019**

IMPACT, OVERVIEW, 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requests in writing that current requirements be used along with their understanding that their listings will be withdrawn on Effective Date noted above, unless the product is found to comply with new/revised requirements.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:

- Added a requirement for instructions pertaining to ventilation
- Modified the requirements for humidity preconditioning
- Added requirements for equipment containing or using flammable liquids
- Added requirements for over-temperature protection devices

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 – Please immediately identify any current Listing Reports or products that are no longer active and should be removed from our records.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

STANDARD INFORMATION

CLAUSE	VERDICT	COMMENT
		Additions to existing requirements are underlined and deletions are shown lined out below.
5	Info	**Marking and documentation**
5.1	Info	**Marking**
Table 1		***New table added;*** **Symbols** **Number** | **Symbol** | **Publication** | **Description** 101 |  Background colour – yellow (optional, not green); symbol and outline – black (optional). | ISO 7010 – W021 | Warning; Flammable material
5.4.4		**Equipment operation** Addition at the end of item g): (see 5.4.4.101) Addition after item j): aa) specification of additional protection needed by the OPERATOR when HAZARDOUS LIVE parts are permitted to be ACCESSIBLE (see 6.1.2.101); bb) a warning about any possible HAZARDS of explosion, implosion, or the release of toxic or flammable gases arising from the materials being heated (also see 5.4.4 h); cc) specification of HEAT TRANSFER MEDIA which are suitable for use, for example liquids for use in a heating bath. dd) specific requirements for ventilation.
5.4.4.101		**Cleaning and decontamination** The instructions shall include recommendations for cleaning and, where necessary, decontamination, together with the recognized generic names of recommended materials for cleaning and decontamination, and an indication of any materials which could be likely to be used but which are incompatible with parts of the equipment or with material contained in it. Manufacturers should be aware of the internationally recognized “Laboratory Biosafety Manual”, published by the World Health Organization in Geneva, which

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		gives information on decontaminants, their use, dilutions, properties and potential applications. There are also national guidelines which cover these areas. Cleaning and decontamination may be necessary as a safeguard when laboratory heating equipment and any accessories are maintained, repaired, or transferred. Manufacturers should provide a format for the RESPONSIBLE BODY to certify that such treatment has been carried out.
6	Info	**Protection against electric shock**
6.1	Info	**General**
6.1.1		Addition after the conformity statement: If a drying-out process is specified (see 6.7.2.2.101), this is carried out in accordance with the operator manual (see 5.4.3.101) before making the measurements of 6.3. Drying-out is followed by a rest period of 2h, with the equipment de-energized, before the measurements are taken. Measurements are made with the equipment at ambient temperature. If there is doubt whether the permissible limits could be exceeded at maximum operating temperature, the relevant measurements are repeated at maximum operating temperature and the higher values are used.
6.7.2.2	Info	**Solid insulation**
6.7.2.2.101		***New clause added;*** **Drying Out Time** If the performance requirements of the equipment cannot be achieved without the use of hygroscopic heater insulation it is permissible for equipment to require a period of operation to dry out the insulation before meeting the requirements of 6.7.2.2, 6.3.1 and 6.8.2 providing the operator is made aware of this (see 5.4.3.101). Conformity is checked by performing the drying out process specified in the user manual (see 5.4.3.101) before conducting the tests of 6.3.1 and 6.8.2.
9	Info	**Protection against the spread of fire**
9.5		***New clause added;*** **Requirements for equipment containing or using flammable liquids** Replacement of item a) and Note 1: a) In NORMAL CONDITION and SINGLE FAULT CONDITION, the surface temperature of the flammable liquid shall not exceed the flash point of the liquid being exposed to the air. In NORMAL CONDITION and SINGLE FAULT CONDITION the surface

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		temperature of any heating element at the surface of the liquid and in contact with air shall not exceed (t - 25) °C , where t is the fire point of the liquid. It is not sufficient to limit the temperature of the surface of the liquid and parts in contact with the surface limited solely by the temperature control system. Over-temperature protection meeting requirements of 10.101 achieved by an independent, adjustable overtemperature device shall be used.
10	Info	**Equipment temperature limits and resistance to heat**
10.101		**Over-temperature protection** If a single fault in a temperature control system, heater, cooling means, circulating pump or fan, agitator, or other part could cause a HAZARD through over-heating of any part of equipment, a non-self-resetting over-temperature device or system meeting the requirements of 14.3 shall de-energize the heating means and any other parts which could cause a HAZARD. If a HAZARD could be caused by an inadequate quantity of HEAT-TRANSFER MEDIUM, a selfresetting or non-self-resetting liquid-level device shall de-energize the heating means and any other parts which could cause a HAZARD. The equipment as a whole, or the relevant parts, shall be de-energized by one of the following methods: a) for single-phase equipment, ~~a single pole device or system; fr parts controlled by a~~ the proposed circuit and physical construction shall be examined to identify possible single faults. The over-temperature device shall be placed in the pole of the supply that provides the better protection from single faults that could defeat the over-temperature protection in the event of a subsequent failure of the temperature control system. A device which isolates both phase and neutral conductors at the same time may provide double fault protection (depending on application) and should be considered if the residual risk is unacceptable.
11	Info	**Protection against HAZARDS from fluids**
11.2		***New clause added;*** **Cleaning** Addition after the first paragraph: If a manufacturer claims that a part of the equipment or an accessory can be decontaminated by steam sterilization, it shall be capable of withstanding steam sterilization under at least one of the time-temperature conditions given in Table 101.
Annex K	Info	**Insulation requirements not covered by 6.7**

CLAUSE	VERDICT	COMMENT
K.1.3	Info	**Solid insulation for MAINS CIRCUITS**
K.1.3.1		***New clause added;*** **General** Addition: If the performance requirements of the equipment cannot be achieved without the use of hygroscopic heater insulation it is permissible for equipment to require a period of operation to dry out the insulation before meeting the requirements of 6.3.1 and 6.8.3 providing the operator is made aware of this (see 5.4.3.101). Replacement of the conformity statement: Conformity is checked by both of the following tests: a) the a.c. test of 6.8.3.1 with a duration of at least 5 s or the peak impulse test of 6.8.3.3 using the applicable voltages from Tables K.5, K.6 or K.7; b) the a.c. test of 6.8.3.1 with a duration of at least 1 min, or for MAINS CIRCUITS stressed only by d.c. the 1 min d.c. test of 6.8.3.2 using the applicable voltages from Table K.8. If a drying-out process is specified conformity is checked by performing the drying out process specified in the user manual (see 5.4.3.101) before conducting the tests of a) and b) above

	CUSTOMERS PLEASE NOTE: 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.