

STANDARD INFORMATION

Standard Number: UL 2271 / ULC 2271

Standard Name: Batteries for Use in Light Electric Vehicle (LEV) Applications

Standard Edition and Issue Date: 2nd Edition Dated September 7, 2018

Date of Revision: September 7, 2018

Date of Previous Revision of Standard: 1st Edition Dated December 11, 2013

EFFECTIVE DATE OF NEW/REVISED REQUIREMENTS

Effective Date: **September 7, 2020**

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requests in writing that current requirements be used along with their understanding that their listings will be withdrawn on Effective Date noted above, unless the product is found to comply with new/revised requirements.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

- Revision of Cell Criteria and Tolerance Information
- Revision of marking and instruction requirements for EESAs that are not removed when charging
- Addition of Production Quality Control Criteria

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:

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 – Please immediately identify any current Listing Reports or products that are no longer active and should be removed from our records.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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CLAUSE	VERDICT	COMMENT
<p>Additions to existing requirements are <u>underlined</u> and deletions are shown lined out below.</p>		
10	Info	<p>Wiring and Terminals</p> <p><i>New clause added;</i></p>
10.3		<p>Connections to the cells shall be made in a manner that does not result in damage to the cells or protection assembly. For example, connections made using high heat processes, such as solder, shall not be used on direct connections to the cell terminals without proper processes and controls as this could result in damage to the cell as a result of heat transfer during soldering. To prevent damage to cells or protective devices, connections between cells and electronic protective devices should be made using the connection sequences recommended by the protective device manufacturer.</p>
16	Info	<p>Cells and Electrochemical Capacitors</p>
16.2		<p>Lithium ion and other lithium based cells shall comply with the requirements for secondary lithium cells in the Standard for Lithium Batteries, UL 1642 <u>Batteries for Use In Electric Vehicles, UL 2580/ULC-S2580.</u></p>
16.3		<p>Nickel metal hydride cells and other nickel based cells shall comply with the nickel cell requirements of the Standard for Household and Commercial Batteries, UL 2054 <u>Batteries for Use In Electric Vehicles, UL 2580/ULC-S2580.</u></p>
17	Info	<p>Manufacturing and Production Line Testing</p> <p><i>New clause added;</i></p>
17.4		<p>Manufacturers of EESAs shall have documented production process controls in place that continually monitor and record the following key elements of the manufacturing process that can affect safety, and shall include measured parametric limits enabling corrective/preventative action to address defects (out of limit parameters) found affecting these key elements:</p> <p>a) Supply chain control; and b) Assembly processes.</p>
	Info	<p>MARKINGS</p>
42	Info	<p>General</p>
42.5		<p>EESAs shall be marked with charging instructions. An example of such a marking where a specific charger is required to be used, would be the following or equivalent "Use Only (<u> </u>) Charger". <u>The marking shall be visible to the user, including after installation, if the EESA is not removed for charging. If applicable,</u></p>



CLAUSE	VERDICT	COMMENT
		<u>the installation instructions shall indicate the need to include this charging marking on the external surface of the vehicle near the exposed charging connection. See 43.3. Additional markings are not required on the EESAs if the charger plugs and receptacles are uniquely keyed, and for vehicles that use communications between vehicle and charger or other methods to prevent charging by non-approved chargers.</u>
	Info	INSTRUCTIONS
43	Info	General
		<i>New clause added;</i>
43.3		For EESAs that are not removed from the vehicle for charging and are intended to be used with a specific charger per 42.5, installation instructions shall indicate that a marking per 42.5 be located near the accessible charging port of the vehicle where the marking will be visible to the user charging the vehicle.
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.		