

Lithium cells or batteries test summary according to UN38.3

<p>Battery Manufacturer:</p> <p>Jauch Quartz GmbH In der Lache24 D-78056 Villingen-Schwenningen Germany +49 7720 945-0 www.jauch.com, info@jauch.com</p>	<p>UN38.3 Test Lab:</p> <p>Vkan Certification & Testing Co., Ltd., No.3, Tiantaiyi Road, Guangzhou, China www.cvc.org.cn office@cvc.org.cn</p>																																				
<p>Description of cell or battery:</p> <p>Cell/battery type: <input checked="" type="checkbox"/> Lithium metal <input type="checkbox"/> Lithium-ion Cell or battery: <input checked="" type="checkbox"/> cell <input type="checkbox"/> battery Model name: CR 2025 Opel part-no. 90493279 (J), 234000 CR 2032 Opel part-no. 90541381 (J), 247073 CR 1220 Opel part-no. 93182567, 233999 CR 2016 Opel part-no. 93182568, 234002 CR 1620 Opel part-no. 93195613, 234001</p> <p>Voltage: 3.0V Capacity: 40 - 240mAh Energy: n/a Lithium content: 0.012 – 0.065g Weight of cell/battery: 0.75 – 2.9g</p>	<p>Test report-no.: RZUN2018-4159 RZUN2018-4153 RZUN2018-4156 RZUN2018-4158 RZUN2018-4160</p> <p>Date of test reports: Jan. 08, 2019</p>																																				
<p>List of tests (result: pass/fail):</p> <table border="1" data-bbox="204 1420 1078 1709"> <thead> <tr> <th>Test number</th> <th>Test item</th> <th>Result</th> <th>Remarks</th> </tr> </thead> <tbody> <tr> <td>T-1</td> <td>Altitude</td> <td>pass</td> <td></td> </tr> <tr> <td>T-2</td> <td>Thermal cycling</td> <td>pass</td> <td></td> </tr> <tr> <td>T-3</td> <td>Vibration</td> <td>pass</td> <td></td> </tr> <tr> <td>T-4</td> <td>Shock</td> <td>pass</td> <td></td> </tr> <tr> <td>T-5</td> <td>External short circuit</td> <td>pass</td> <td></td> </tr> <tr> <td>T-6</td> <td>Impact /Crush</td> <td>pass</td> <td>for cell only</td> </tr> <tr> <td>T-7</td> <td>Overcharge</td> <td>N/A</td> <td></td> </tr> <tr> <td>T-8</td> <td>Forced Discharge</td> <td>pass</td> <td>for cell only</td> </tr> </tbody> </table>	Test number	Test item	Result	Remarks	T-1	Altitude	pass		T-2	Thermal cycling	pass		T-3	Vibration	pass		T-4	Shock	pass		T-5	External short circuit	pass		T-6	Impact /Crush	pass	for cell only	T-7	Overcharge	N/A		T-8	Forced Discharge	pass	for cell only	<p>For air transportation only:</p> <p>State of charge <input type="checkbox"/> max. 30% <input checked="" type="checkbox"/> not applicable</p>
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Test results in accordance with the UNITED NATIONS "Recommendations on the TRANSPORT OF DANGEROUS GOODS" Manual of Test and Criteria ST/SG/AC.10/11 Rev.6, Amend. 1, 38.3. Cell manufacturing as well as battery assembly is done under the quality assurance program of ISO9001:2008.

This document remains valid as long as no changes, modifications or additions are made to the model(s) described in this document. The model(s) has (have) been classified according to the applicable transport regulation and the UN Manual of Test and Criteria as of the date of the certification. The model(s) must be packed, labelled and documented according to country and other international regulations for transportation.

Name / Title of Signatory / Date

Sönke Zacher / Project Manager

Sept. 18, 2019
