INSTITUTE NON-FERROUS METALS Department in Poznan

CENTRAL LABORATORY of BATTERIES and CELLS

61–362 Poznań, ul. Forteczna 12 Poland

Date 12.04.2012

Our ref 885/2012

601-21/TL

DECLARATION ABOUT RESULTS OF UN TESTS

We, hereby confirm that Lithium-Ion Battery Pack type:

- CGR18650K 4S2P+PCB Elinchrom– rated capacity – 3.3 Ah; nominal Voltage – 14.4 V; nominal Energy – 47.52 Wh

has successfully passed the following tests executed in the independent, accredited laboratory, according to document ST/SG/AC.10/11/Rev.5, UN Manual of Tests and Criteria, Part III, sub-section 38.3

No	Test Item	Criteria	Result
1	Altitude Simulation	No mass loss, leakage, venting, disassembly, rupture, and fire. OCV should not be less than 90% before testing	passed
2	Thermal Test	No mass loss, leakage, venting, disassembly, rupture, and fire. OCV should not be less than 90% before testing	passed
3	Vibration	No mass loss, leakage, venting, disassembly, rupture, and fire. OCV should not be less than 90% before testing	passed
4	Shock	No mass loss, leakage, venting, disassembly, rupture, and fire. OCV should not be less than 90% before testing	passed
5	External Short Circuit	External temperature should not exceed 170˚C. No disassembly, rupture, and fire within six hours of this test	passed
7	Overcharge	No disassembly, and fire within seven days of this test	passed

KIEROWNIK LABORATORIUM BADAŃ CHEMICZNYCH ŹRÓDEŁ PRĄDU

z up. *mgr inż. Maciej Lula*

INSTYTUT METALI NIEŻELAZNYCH
ODDZIAŁ W POZNANIU
DYREKTOR

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Piaseczno, 27.06.2014

DECLARATION OF UN TESTS RESULTS

We, as the manufacturer of the following lithium-ion battery pack type:

- 4S2P UR18650RX+ PCM – rated capacity – 4.1 Ah; nominal voltage – 14.4 V; nominal energy 59.04Wh;

hereby confirm that the battery pack has successfully passed the following tests executed in the independent, accredited laboratory, according to the document ST/SG/AC.10/11/Rev.5/Amend.1, UN Manual of Tests and Criteria, Part III, sub-section 38.3 Lithium metal and lithium ion batteries.

No	Test	Test method acc. to	Requirements acc. to	Result
1	T.1 Altitude Simulation	UN Section 38.3 clause 38.3.4.1.2	UN Section 38.3 clause 38.3.4.1.3 No mass loss, no leakage, no venting, no disassembly, no rupture, and no fire. OCV is not less than 90% of its voltage before testing.	passed
2	T.2 Thermal Test	UN Section 38.3 clause 38.3.4.2.2	UN Section 38.3 clause 38.3.4.2.3 No mass loss, no leakage, no venting, no disassembly, no rupture, and no fire. OCV is not less than 90% of its voltage before testing.	passed
3	T.3 Vibration	UN Section 38.3 clause 38.3.4.3.2	UN Section 38.3 clause 38.3.4.3.3 No mass loss, no leakage, no venting, no disassembly, no rupture, and no fire. OCV is not less than 90% of its voltage before testing.	passed
4	T.4 Shock	UN Section 38.3 clause 38.3.4.4.2	UN Section 38.3 clause 38.3.4.4.3 No mass loss, no leakage, no venting, no disassembly, no rupture, and no fire. OCV is not less than 90% of its voltage before testing.	passed
5	T.5 External Short Circuit	UN Section 38.3 clause 38.3.4.5.2	UN Section 38.3 clause 38.3.4.5.3 External temperature should not exceed 170˚C. No disassembly, no rupture, and no fire within six hours after this test	passed
6	T.7 Overcharge	UN Section 38.3 clause 38.3.4.7.2	UN Section 38.3 clause 38.3.4.7.3 No disassembly, and no fire within seven days after this test	passed

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