

**LITHIUM CELLS OR BATTERIES TEST SUMMARY
IN ACCORDANCE WITH SUB-SECTION 38.3
OF MANUAL OF TESTS AND CRITERIA**

TRANSPORTATION INFORMATION

Name of cell, battery or product manufacturer, as applicable: <input checked="" type="checkbox"/> Cell <input type="checkbox"/> Battery <input type="checkbox"/> Product Item Number/Name: CR2450N Item Description: Primary Lithium Manganese Dioxide Cell (Li+MnO₂ → LiMnO₂) Nominal Voltage: 3V		Cell, battery or product manufacturer's contact information to include address, phone number, email address and website for more information: Renata SA Kreuzenstrasse 30 4452 Itingen Switzerland +41 61 975 75 75 / logistics@renata.com www.renata.com	
Name of the test laboratory to include address, phone number, email address and website for more information: Shanghai Research Institute of Chemical Industry Testing Centre No.345 East Yunling Road 200062 Shanghai China +86-21-31765555 / battery@ghs.cn http://www.ghs.cn		A unique test report identification number: 1121110161	Date of the test report: 13-DEC-2021
Description of cell or battery to include at a minimum: Lithium ion or Lithium metal cell or battery; Mass; Watt-hour rating, or lithium content; Physical description of the cell/battery: Cell / battery Type: Lithium metal Cell or Battery: Cell Lithium contain: 0.16 Grams Battery Weight: 6 Grams		List of tests conducted and results (i.e., pass/fail): Test T.1: Altitude Simulation Passed Test T.2: Thermal Test Passed Test T.3: Vibration Passed Test T.4: Shock Passed Test T.5: External short circuit Passed Test T.6: Impact/Crush Passed Test T.7: Overcharge Not applicable Test T.8: Forced discharge Passed Testing additional comments:	
Reference to assembled battery testing requirements, if applicable (i.e., 38.3.3(1) and 38.3.3;(g)): Not Applicable	Reference to the revised edition of the Manual of Tests and Criteria used and to amendments thereto, if any: ST/SG/AC. 10/11/Rev.7 38.3	For air transport only: Does the cell or battery comply with the 30% State of Charge? Not Applicable	
PRODUCT CLASSIFICATION FOR TRANSPORT (According to UN - DGP)			
UN Classification: UN 3090	Proper Shipping Name: Lithium metal batteries		
Signature with name and title of signatory as an indication of the validity of information provided: Jürgen Ruther Head of Marketing & Sales Member of the Management Board <small>CH-4452 Itingen</small>		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 regulations and the UN Manual of Tests and Criteria as of the date of the certification. The model(s) must be packaged, labeled, and documented according to country and other international regulations for transportation.	
Date document was generated: 04-FEB-2022 <small>Important! The above signatory / signatories affirm that this document is a true and correct summary of the original individual tests and test data. The original test data is confidential information available to competent State Authorities with valid identification and only upon their formal request. Disclosure of the original test data to any other entity upon its request will be considered by Renata SA and, should Renata SA consider this request is with merit, may be subject to the prior execution of a nondisclosure agreement.</small>			

UN38.3 Test Summary Report

Lithium cell or battery test summary in accordance with section 2.9.4 UN Model Regulations and sub-section 38.3 of Manual of Tests and Criteria, Part III, subsection 38.3.5

<p>[a] <input type="checkbox"/> Cell <input checked="" type="checkbox"/> Battery <input type="checkbox"/> Produkt</p> <p><input checked="" type="checkbox"/> Tested Type Part #: PA-L3037.R004</p> <p><input type="checkbox"/> Same Type Part #: as listed below</p>	<p>[d] Unique report ID: UN.PB.PA-L3037.R004, UN38.3, Rev.7</p> <p>[e] Date of test report: 2021-07-07</p>
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<p>[b] Manufacturer Fey Elektronik GmbH Storchenweg 3 21217 Seevetal Germany T. +49 40 703 8888-0 info@feyelektronik.de www.feyelektronik.de</p>	<p>[c] Test Laboratory Fey Elektronik GmbH Storchenweg 3 21217 Seevetal Germany T. +49 40 703 8888-0 info@feyelektronik.de www.feyelektronik.de</p>
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Same Type Part Numbers # (all):

[f] (i) Lithium-ion Lithium-metal Cell Battery

[f] (ii) Mass: approx. 252 g

[f] (iii) Watt-hour rating: 30.24 Wh or Lithium content: g

[f] (v) Model number(s): 837630-A

[f] (iv) Physical description: Secondary (rechargeable) Hardcase-Pack with three cells in a serial configuration and protective device.
Nominal voltage: 10.8V, Nominal capacity: 2.8Ah typical
Used and UN38.3-tested cell type: Molicel, INR-18650-P28A

Our batteries/products are manufactured according to a Quality-Management-System.
For further information visit our website.

[g] List of Tests Conducted	Result (Pass / Fail / N.A.)	Remark
38.3.4.1 Test T.1: Altitude simulation	Pass	
38.3.4.2 Test T.2: Thermal test	Pass	
38.3.4.3 Test T.3: Vibration	Pass	
38.3.4.4 Test T.4: Shock	Pass	
38.3.4.5 Test T.5: External short circuit	Pass	
38.3.4.6 Test T.6: Impact/Crush	N.A.	for cell testing only
38.3.4.7 Test T.7: Overcharge	Pass	
38.3.4.8 Test T.8: Forced discharge	N.A.	for cell testing only

[h] Battery assembly: Not Applicable. UN38.3.3 (f) UN38.3.3 (g)

[i] Test Reference: UN Manual of Tests and Criteria, Part III, sub-section 38.3, ST/SG/AC.10/11/Rev.7

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[j] Signatory	Date: 2022-04-05
Name: Michael Witte	
Title: General Manager	
Signature:	

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