# LITHIUM CELLS OR BATTERIES TEST SUMMARY

## IN ACCORDANCE WITH SUB-SECTION 38.3

## OF MANUAL OF TESTS AND CRITERIA

## TRANSPORTATION INFORMATION

<table>
<thead>
<tr>
<th>Name of cell, battery or product manufacturer, as applicable:</th>
<th>Cell, battery or product manufacturer’s contact information to include address, phone number, email address and website for more information:</th>
</tr>
</thead>
</table>
| ✓ Cell ☐ Battery ☐ Product | Renata SA  
Kreuzenstrasse 30  
4452 Itingen  
Switzerland  
+41 61 975 75 75 / logistics@renata.com  
www.renata.com |
| **Item Number/Name:** CR2450N-MFR | **Date of the test report:** 20-APR-2017 |
| **Item Description:** Primary Lithium Manganese Dioxide Cell (Li+MnO2 → LiMnO2) | **List of tests conducted and results (i.e., pass/fail):** |
| **Nominal Voltage:** 3V | 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 |

<table>
<thead>
<tr>
<th>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:</th>
<th>Testing additional comments:</th>
</tr>
</thead>
</table>
| **Cell / battery Type:** Lithium metal  
**Cell or Battery** Cell  
**Lithium contain:** 0.156 Grams  
**Battery Weight:** 6.0 Grams | |

| Reference to assembled battery testing requirements, if applicable (i.e., 38.3.3(1) and 38.3.3(g)): | Reference to the revised edition of the Manual of Tests and Criteria used and to amendments thereto, if any: |
| Not Applicable | ST/SG/AC. 10/11/Rev.5/Amd.1&Amd.2 38.3  
Not Applicable |

| UN Classification: | Proper Shipping Name: |
| UN 3090 | Lithium metal batteries |

| Signature with name and title of signatory as an indication of the validity of information provided: | 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. |
| Jürgen Ruther  
Head of Marketing & Sales  
Member of the Management Board | |

| Date document was generated: | 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: |
| 25-NOV-2019 | |

| http://www.ghs.cn  
+86-21-31015216 / xutingmsds@gmail.com  
China  
200062 Shanghai  
Room 101, Building 2  
No.345 East Yunling Road  
Testing Centre  
Shanghai Research Institute of Chemical Industry | |