

Gefahrgutinformation / Dangerous Goods Information

Artikelnummer/Article number: **7LF4521-0, 7LF4521-2, 7LF4522-0, 7LF4522-2
7LF4531-0, 7LF4532-0**
Digitale Zeitschaltuhr / Digital time switch

Das Produkt enthält

- 1 eingebaute Lithium-Metall-Knopfzelle, die die Voraussetzungen der Sondervorschrift 188 der „UN Recommendations on the Transport Of Dangerous Goods“ erfüllt, insbesondere:
 - Zelle \leq 1 g Lithiumgehalt
 - Zelle entspricht einem Typ, für den nachgewiesen wurde, dass er die Anforderungen jedes zum Testzeitpunkt anwendbaren Tests des UN Manual of Tests and Criteria, Teil III, Unterabschnitt 38.3, Revision 3 Amendment 1 oder einer nachfolgenden Revision und Amendment erfüllt.

(weitere Details s. auch Anlage Test Summary)

Das Produkt ist daher bei Lieferung für die nachfolgend angeführten Gefahrgutvorschriften wie angegeben klassifiziert und ist entsprechend den anwendbaren nationalen und internationalen Gefahrgutvorschriften für die genutzten Verkehrsträger zu befördern.

Bitte beachten Sie für weitere Beförderungen die fortlaufenden Änderungen der Gefahrgutvorschriften sowie ggf. Änderungen am Produkt nach Lieferung.

The product contains

- 1 installed lithium metal button cell meeting the preconditions of Special Provision 188 of the “UN Recommendations on the Transport of Dangerous Goods”, especially:
 - Cell \leq 1 g lithium content
 - Cell is of a type proved to meet the requirements of each applicable test in the UN Manual of Tests and Criteria, Part III, sub-section 38.3, Revision 3 Amendment 1 or any subsequent revision and amendment applicable at the date of the type testing (more details see attached Test Summary).

On delivery, the product is therefore classified according to the dangerous goods regulations as mentioned below and has to be transported according to the applicable national and international dangerous goods regulations for the modes of transport used.

Please consider for further transports the continuous changes of the dangerous goods regulations as well as applicable changes of the product after delivery.

Anlage / Attachment:

Test Summary according 38.3 UN Manual of Tests and Criteria

ADR/RID/ADN: UN 3091 Lithium-Metall-Batterien in Ausrüstungen, 9,
1 Knopfzelle pro Gerät, Voraussetzungen der Sondervorschrift 188 erfüllt
UN 3091 Lithium metal batteries contained in equipment, 9,
1 button cell per equipment, preconditions of Special Provision 188 met

ICAO-TI/IATA-DGR: UN 3091 Lithium metal batteries contained in equipment, 9,
1 button cell per equipment, preconditions of Section II PI 970 met

IMDG Code: UN 3091 Lithium metal batteries contained in equipment, 9,
1 button cell per equipment, preconditions of Special Provision 188 met

Batterie / battery: Typ, type: 1x Renata CR2477N oder/or 1x Panasonic CR2477
Hersteller, manufacturer: Renata oder/or Panasonic





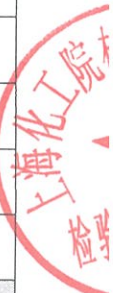
UN38.3 试验概要

UN38.3 Test Summary

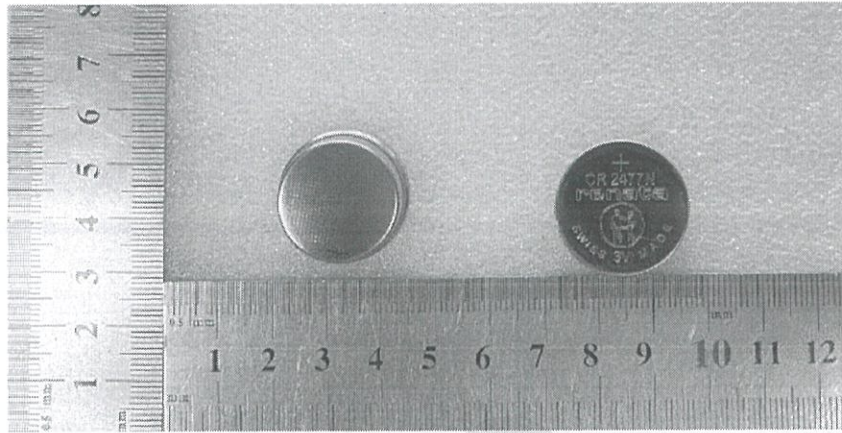


812200300201650

单位信息 Company information			
委托单位 Consignor	Renata SA Renata SA Itingen Switzerland Kreuzenstrasse 30 ,4452 Itingen 0041619757561 Juergen.Ruther@renata.com /		
生产单位 Manufacturer	Renata SA Renata SA Itingen Switzerland Kreuzenstrasse 30 ,4452 Itingen 0041619757561 Juergen.Ruther@renata.com /		
测试单位 Test lab	上海化工院检测有限公司 Shanghai Institute of Chemical Industry Testing Co., Ltd. 中国.上海.普陀区云岭东路 345 号, 200062 No.345 East Yunling Road, Putuo, Shanghai, China 200062 86-21-31765555 battery@ghs.cn www.ghs.cn		
电池信息 Battery information			
名称 Name	一次性锂电池芯 Primary Lithium Coin Cell	品牌 Brand	/
型号 Type	CR2477N	原始测试型号 Original tested type	/
标称电压(V) Nominal voltage	3	容量/能量 Capacity/energy	950mAh
描述 Description	不可充电锂金属电池芯 Primary Li-metal cell	锂含量(g) Li content	0.27
质量(kg) Mass	0.00831	外观 Appearance	银色钮扣状金属外壳 silvery button metal shell
测试信息 Test information			
原报告编号 Original test report No.	1121110627	测试报告日期 Date of test report	2021-12-28
测试标准 Test standard	联合国《试验和标准手册》第 38.3 章 UNITED NATIONS Manual of Tests and Criteria 38.3 ST/SG/AC.10/11/Rev.7		
T.1 高度模拟 Altitude simulation	合格 Passed	T.2 温度测试 Thermal test	合格 Passed
T.3 振动测试 Vibration	合格 Passed	T.4 冲击测试 Shock	合格 Passed
T.5 外部短路 External short circuit	合格 Passed	T.6 挤压 Crush	合格 Passed
T.7 过度充电 Overcharge	/	T.8 强制放电 Forced discharge	合格 Passed
38.3.3 (f)	/	38.3.3 (g)	/



样品图片 Sample Picture



<p>结论 Conclusion</p>	<p>测试样品符合联合国《试验和标准手册》ST/SG/AC.10/11/Rev.7 38.3 标准要求。The tested samples meet the requirements of test items of the UNITED NATIONS Manual of Tests and Criteria ST/SG/AC.10/11/Rev.7 38.3</p>		
<p>备注 Remark</p>	<p>/</p>		
<p>签名 Signature 职务 Title</p>	<p>王寅 副总工程师 Vice chief engineer</p>	<p>签发日期 Issued date</p>	<p>2022-01-06</p>

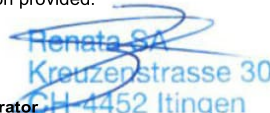


-验证码:982837-

报告结束

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

TRANSPORTATION INFORMATION

<p>Name of cell, battery or product manufacturer, as applicable:</p> <p><input checked="" type="checkbox"/> Cell <input type="checkbox"/> Battery <input type="checkbox"/> Product</p> <p>Item Number/Name: CR2477N</p> <p>Item Description: Primary Lithium Manganese Dioxide Cell (Li+MnO₂ → LiMnO₂)</p> <p>Nominal Voltage: 3V</p>	<p>Cell, battery or product manufacturer's contact information to include address, phone number, email address and website for more information:</p> <p>Renata SA Kreuzenstrasse 30 4452 Itingen Switzerland</p> <p>+41 61 715 75 75 / logistics@renata.com www.renata.com</p>																		
<p>Name of the test laboratory to include address, phone number, email address and website for more information:</p> <p>SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd. Testing Center E&E Safety Laboratory No. 588 West Jindu Road, Songjiang District Shanghai 201612 China</p> <p>+86 21 61915678 sgs.china@sgs.com</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 60%;">A unique test report identification number: SHES170300148501</td> <td style="width: 40%;">Date of the test report: 12-JUN-2017</td> </tr> </table> <p>List of tests conducted and results (i.e., pass/fail):</p> <table style="width: 100%;"> <tr><td>Test T.1: Altitude Simulation</td><td style="text-align: right;">Pass</td></tr> <tr><td>Test T.2: Thermal Test</td><td style="text-align: right;">Pass</td></tr> <tr><td>Test T.3: Vibration</td><td style="text-align: right;">Pass</td></tr> <tr><td>Test T.4: Shock</td><td style="text-align: right;">Pass</td></tr> <tr><td>Test T.5: External short circuit</td><td style="text-align: right;">Pass</td></tr> <tr><td>Test T.6: Impact/Crush</td><td style="text-align: right;">Pass</td></tr> <tr><td>Test T.7: Overcharge</td><td style="text-align: right;">Not applicable</td></tr> <tr><td>Test T.8: Forced discharge</td><td style="text-align: right;">Pass</td></tr> </table> <p>Testing additional comments:</p>	A unique test report identification number: SHES170300148501	Date of the test report: 12-JUN-2017	Test T.1: Altitude Simulation	Pass	Test T.2: Thermal Test	Pass	Test T.3: Vibration	Pass	Test T.4: Shock	Pass	Test T.5: External short circuit	Pass	Test T.6: Impact/Crush	Pass	Test T.7: Overcharge	Not applicable	Test T.8: Forced discharge	Pass
A unique test report identification number: SHES170300148501	Date of the test report: 12-JUN-2017																		
Test T.1: Altitude Simulation	Pass																		
Test T.2: Thermal Test	Pass																		
Test T.3: Vibration	Pass																		
Test T.4: Shock	Pass																		
Test T.5: External short circuit	Pass																		
Test T.6: Impact/Crush	Pass																		
Test T.7: Overcharge	Not applicable																		
Test T.8: Forced discharge	Pass																		
<p>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:</p> <p>Cell / battery Type: Lithium metal</p> <p>Cell or Battery: Cell</p> <p>Lithium contain: 0.27 Grams</p> <p>Battery Weight: 8.3 Grams</p>	<p>Reference to assembled battery testing requirements, if applicable (i.e., 38.3.3(1) and 38.3.3;(g)):</p> <p>Not Applicable</p>	<p>Reference to the revised edition of the Manual of Tests and Criteria used and to amendments thereto, if any:</p> <p>ST/SG/AC.10/11/Rev.6 /Section 38.3</p>	<p>For air transport only: Does the cell or battery comply with the 30% State of Charge?</p> <p>Not Applicable</p>																
<p>Signature with name and title of signatory as an indication of the validity of information provided:</p> <p> Belen Weise Shipping Administrator</p>	<p>This document remains valid as long as no changes, modifications, or additions are made to the model(s) described in this document.</p> <p>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.</p>																		
<p>Date document was generated:</p> <p>07.FEB.2020</p> <p><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></p>																			

Lithium Battery Test Summary / UN38.3 試験結果要約

Product manufacturer	Panasonic Corporation
Address/住所	1-1 Matsushita-cho, Moriguchi City, Osaka 570-8511, Japan
Telephone/電話番号	+81-80-9932-3190 (JST Working hours)
e-mail	un38.3_microbattery@ml.jp.panasonic.com
URL	https://www.panasonic.com/global/home.html
Test laboratory	Panasonic Corporation
Address/住所	1-1 Matsushita-cho, Moriguchi City, Osaka 570-8511, Japan
Telephone/電話番号	+81-80-9932-3190 (JST Working hours)
e-mail	un38.3_microbattery@ml.jp.panasonic.com
URL	https://www.panasonic.com/global/home.html

Description of Product / 製品情報

Model Number/品番	CR2477
Type/タイプ	Lithium metal cell
Physical description/物理特性	Non-rechargeable, Coin
Mass/質量	10.5 g
Lithium content/リチウム含有量	0.29 g
Watt-hour rating/ワット時定格値	Not applicable
Nominal Voltage/公称電圧	3.0 V
Nominal Capacity/公称容量	1000 mAh


Test Results / 結果

Identification number/番号	CP0020-8
Date of test report/レポート発行日	2021/09/07
Reference edition/参照	UN Manual of Tests and Criteria, Revision 7

UN Manual of Tests and Criteria 国連勧告テスト判定基準	Results 結果	Remarks 備考
T1 : Altitude simulation / 高度シミュレーション	Pass / 合格	
T2 : Thermal Test / 温度試験	Pass / 合格	
T3 : Vibration / 振動	Pass / 合格	
T4 : Shock / 衝撃	Pass / 合格	
T5 : External short circuit / 外部短絡	Pass / 合格	
T6 : Impact / 衝突, Crush / 圧壊	Pass / 合格	Crush / 圧壊
T7 : Overcharge / 過充電	-	for rechargeable batteries only / 充電式電池のみ
T8 : Forced discharge / 強制放電	Pass / 合格	

Hereby we certify that this model of Lithium battery meets the requirements of each test in the UN Manual of Tests and Criteria Part III, sub-section 38.3.

上記テストは国連勧告テスト(Manual of Tests and Criteria, Part III, sub-section 38.3.)に従い確認された結果であることを証明致します。

Signature: 

Name and Title: Kazuyuki Amano / Manager
Energy Device Business Division

Lithium Battery Test Summary / UN38.3 試験結果要約

Product manufacturer	Panasonic Corporation
Address/住所	1-1 Matsushita-cho, Moriguchi City, Osaka 570-8511, Japan
Telephone/電話番号	+81-6-6994-4560
e-mail	un38.3_microbattery@ml.jp.panasonic.com
URL	https://www.panasonic.com/global/home.html
Test laboratory	Panasonic Corporation
Address/住所	1-1 Matsushita-cho, Moriguchi City, Osaka 570-8511, Japan
Telephone/電話番号	+81-6-6994-4560
e-mail	un38.3_microbattery@ml.jp.panasonic.com
URL	https://www.panasonic.com/global/home.html

Description of Product / 製品情報

Model Number/品番	CR2477
Type/タイプ	Lithium metal cell
Physical description/物理特性	Non-rechargeable, Coin
Mass/質量	10.5 g
Lithium content/リチウム含有量	0.29 g
Watt-hour rating/ワット時定格値	Not applicable
Nominal Voltage/公称電圧	3.0 V
Nominal Capacity/公称容量	1000 mAh


Test Results / 結果

Identification number/番号	CP0020-7
Date of test report/レポート発行日	2009/01/09
Reference edition/参照	UN Manual of Tests and Criteria, Rev.4 with Amd. 1 and Amd.2

UN Manual of Tests and Criteria 国連勧告テスト判定基準	Results 結果	Remarks 備考
T1 : Altitude simulation / 高度シミュレーション	Pass / 合格	
T2 : Thermal Test / 温度試験	Pass / 合格	
T3 : Vibration / 振動	Pass / 合格	
T4 : Shock / 衝撃	Pass / 合格	
T5 : External short circuit / 外部短絡	Pass / 合格	
T6 : Impact / 衝突, Crush / 圧壊	Pass / 合格	Impact / 衝突
T7 : Overcharge / 過充電	-	for rechargeable batteries only / 充電式電池のみ
T8 : Forced discharge / 強制放電	Pass / 合格	

Hereby we certify that this model of Lithium battery meets the requirements of each test in the UN Manual of Tests and Criteria Part III, sub-section 38.3.

上記テストは国連勧告テスト(Manual of Tests and Criteria, Part III, sub-section 38.3.)に従い確認された結果であることを証明致します。

Signature: 

Name and Title: Kazuyuki Amano / Manager
Energy Device Business Division