MD600179
M100 Battery MSDS and UN38.3 Report

REVISION HISTORY

Rev	Description	Originator	Date
A	Initial release	Rey Liu	11/28/2024

Contents

1. Material Safety Datasheet

NTEK 北测®

Report No./报告编号:
P23092800401

Material Safety Data Sheet

材料安全数据表

Name of Goods:	Rechargeable Li-ion Polymer Battery
物品名称:	可充式锂离子电池组
Model and Spec.: 型号规格:	M100P, 3.80V 8000mAh 30.4Wh
Applicant:	JIADE ENERGY TECHNOLOGY (ZHUHAI) CO LTD
委托单位:	珠海市嘉德电能科技有限公司
Effective date: 生效日期:	2023-10-10
Date of issue: 签发日期:	2023-10-10

Shenzhen NTEK New Energy Technology Co., Ltd.

深 圳 市 北 测 新 能 源 技 术 有 限 公 司

Shenzhen NTEK New Energy Technology Co., Ltd.
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RE-057 A/2

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION 化学品及企业标识	
Name of Products 产品名称	Rechargeable Li-ion Polymer Battery 可充式锂离子电池组
Model/Type 型号	M100P
Ratings 额定参数	3.80V 8000mAh 30.4Wh
Applicant 委托单位	JIADE ENERGY TECHNOLOGY (ZHUHAI) CO LTD 珠海市嘉德电能科技有限公司
Address of Applicant 委托单位地址	#1 Building No.9 The 7th Dingwan Road Sanzao Town Jinwan District Zhuhai, Guangdong 519040 CHINA 珠海市金湾区三灶镇定湾七路9号1#厂房
Manufacturer 生产厂商	JIADE ENERGY TECHNOLOGY (ZHUHAI) CO LTD 珠海市嘉德电能科技有限公司
Address of manufacturer 生产厂商地址	#1 Building No.9 The 7th Dingwan Road Sanzao Town Jinwan District Zhuhai, Guangdong 519040 CHINA 珠海市金湾区三灶镇定湾七路9号1#厂房
Emergency telephone call 应急电话	+86-756-8287186-8842
Prepared by 编制人	Jake Chen 陈嘉南 陈嘉南
Reviewed by 审核人	Bill Ye 叶志标 叶志标
Approved by 批准人	Jesse Zhang 张士杰 张士杰

报告单位（盖章）
Seal of NTEK

2. Hazards Identification 危险性概述	
Dangerous classification 物品危险分类	
Explosive risk 爆炸危险性	This article does not belong to the explosion dangerous goods 该物品不属于爆炸危险品
Flammable risk 易燃危险性	This article does not belong to the flammable material 该物品不属于易燃危险品
氧化危险性 Oxidation risk	This article does not belong to the oxidation of dangerous goods 该物品不属于氧化危险品
Toxic risk 毒害危险性	This article does not belong to the toxic dangerous goods 该物品不属于毒害危险品
Radioactive risk 放射危险性	This article does not belong to the radiation of dangerous goods 该物品不属于放射危险品
Mordant risk 腐蚀危险性	This article does not belong to the corrosion of dangerous goods 该物品不属于腐蚀危险品
Other risk 其他危险性	Lithium-ion batteries, The Watt-hour rating of the battery is 30.4Wh 锂离子电池，该电池额定瓦时为30.4Wh

3. COMPOSITION INFORMATION
成分/组成信息

Chemical Composition 化学成分	Chemical Formula 化学式	CAS No. CAS号	Weight (%) 重量百分比
Aluminum foil	Al	7429-90-5	9.42
Copper	Cu	7440-50-8	11.77
Styrene-Butadiene rubber 1500	$(C_8H_8.C_4H_6)_x$	9003-55-8	1.5
Polyvinylidene fluoride (PVDF)	$(C_2H_2F_2)_n$	24937-79-9	1.64
Lithium Cobalt Oxide ($LiCoO_2$)	$LiCoO_2$	12190-79-3	38.02
Graphite	$C_{24}X_{12}$	7782-42-5	22.01
Lithium hexafluorophosphate	$LiPF_6$	21324-40-3	2.02
Nickel	Ni	7440-02-0	1
Ethylene carbonate (EC)	$C_3H_4O_3$	96-49-1	4.27
Dimethyl carbonate	$C_3H_6O_3$	616-38-6	5.35
Ethyl methyl carbonate (EMC)	$C_4H_8O_3$	623-53-0	3

4. First aid measures
急救措施

Once battery shell rupture, content contact with the human body will produce harm, once contact, should take the following emergency measures:

电池外壳破裂，内容物接触人体会产生危害，一旦发生接触，应采取以下应急措施：

Eye:

Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

眼睛：

万一接触，立即用大量的清水冲洗至少15分钟，翻起上下眼睑，直到化学的残留物消失为止，迅速就医。

Skin:

Remove contaminated clothes and rinse skin with plenty of water or shower for 15 minutes. Get medical aid.

皮肤：

万一接触，用大量水冲洗至少15分钟，同时除去污染的衣物和鞋子，迅速就医。

Inhalation: Remove from exposure and move to fresh air immediately. Use oxygen if available.

吸入：

立即从暴露处移至空气清新处，如果呼吸困难给予输氧，立即就医。

Ingestion: Give at least 2 glasses of milk or water. Induce vomiting unless patient is unconscious. Call a physician

食入：

饮用两杯牛奶或水。如果当事人仍然清晰可以采取催吐的方法，并且立即就医。

5. Fire-fighting measures
消防措施

Flash Point: N/A.

燃点：不适用

Auto-Ignition Temperature: N/A.

自燃温度：不适用

Extinguishing Media: Water, CO_2.

灭火介质：大量水（降温），二氧化碳

Special Fire-Fighting Procedures: Self-contained breathing apparatus.

特殊灭火程序：自给式呼吸器

Unusual Fire and Explosion Hazards: Cell may vent when subjected to excessive heat-exposing battery contents.

异常火灾或爆炸：当电芯暴露于过热的环境中时，安全阀可能会打开。

Hazardous Combustion Products: Carbon monoxide, carbon dioxide, lithium oxide fumes.

燃烧产生的危险物品：一氧化碳，二氧化碳，锂氧化物烟气。

6. Accidental release measures
泄露应急处理

Steps to be Taken in case Material is Released or Spilled

If the battery material is released, remove personnel from area until fumes dissipate. Provide maximum ventilation to clear out hazardous gases. Wipe it up with a cloth, and dispose of it in a plastic bag and put into a steel can. The preferred response is to leave the area and allow the battery to cool and vapors to dissipate. Provide maximum ventilation. Avoid skin and eye contact or inhalation of vapors. Remove spilled liquid with absorbent and incinerate.

为防止电池材料泄露或释放采取的措施

如果电池内部材料泄露，试验人员应立刻撤离试验区直到烟气消散。将通风设备打开吹散危险性气体。用抹布擦净试验区，清除溢出的液体，将泄露电池放进塑料袋中，然后放进钢制容器。避免皮肤和眼睛接触或吸入有害气体。

Waste Disposal Method

It is recommended to discharge the battery to the end, to use up the metal lithium inside the battery, and to bury the discharged battery in soil.

废弃物处置方法

建议将电池完全放电，消耗电池内部的锂金属，并且深埋于土壤中。

7. Handling and storage
操作处置和储存

The battery should not be opened, destroyed or incinerate, since they may leak or rupture and release to the environment the ingredients that they contain in the hermetically sealed container. Do not short circuit terminals, or over charge the battery, forced over-discharge, throw to fire. Do not crush or puncture the battery, or immerse in liquids.

禁止打开、毁坏或焚烧电池，因为电池有可能在这些处理过程中发生爆炸、破裂或泄露等事故。禁止将电池短路、过充、强制放电或扔入火中。禁止挤压刺穿电池或将电池浸入溶液中。

Precautions to be taken in handling and storing

Avoid mechanical or electrical abuse. Storage preferably in cool, dry and ventilated area, which is subject to little temperature change. Storage at high temperatures should be avoided. Do not place the battery near heating equipment, nor expose to direct sunlight for long periods.

操作处置和储存中的防范措施

禁止物理或电滥用，禁止高温储存，最好将电池储存在阴凉、干燥、通风等温度变化较小的环境中。禁止将电池接触加热设备或将电池直接暴露与阳光中。

Other Precautions

The battery may explode or cause burns, if disassembled, crushed or exposed to fire or high temperatures. Do not short or install with incorrect polarity.

其他要注意的防范措施

拆解、挤压、直接放入火中或高温条件下，电池可能发生爆炸和燃烧。禁止短接或将电池正负极错误的安装在设备中。

8. Exposure controls/personal protection
接触控制/个人防护

Respiratory Protection: In case of battery venting, provide as much ventilation as possible. Avoid confined areas with venting cell cores. Respiratory Protection is not necessary under conditions of normal use.

呼吸防护：当电池排气阀打开时，应尽量使通风设备开至最大，避免将打开排气阀的电芯局限在某一狭窄空间内。正常操作条件下，呼吸保护是不必要的。

Ventilation: Not necessary under conditions of normal use.

通风条件：正常使用条件下不需要。

Protective Gloves: Not necessary under conditions of normal use.

防护手套：正常使用条件下不需要。

Other Protective Clothing or Equipment: Not necessary under conditions of normal use.

其他防护服装或设备：正常使用条件下不需要。

Personal Protection is recommended for venting battery: Respiratory Protection, Protective Gloves, Protective Clothing and safety glass with side shields.

电池开阀试验时应做好个人防护：呼吸防护，防护手套，防护服装和有护边的安全玻璃罩都是要准备的。

9. Physical and chemical properties
物理和化学特性

Appearance: Prismatic

外形：棱柱形

Odors: If leaking, smells of medical ether.

气味：泄漏时，有醚的气味。

PH: Not applicable as supplied.

酸碱度：不适用

Flash Point: Not applicable unless individual components exposed.

燃点：除单个电芯暴露试验外其他不适用。

Flammability: Not applicable unless individual components exposed.

可燃性：除单个电芯暴露试验外其他不适用。

Relative density: Not applicable unless individual components exposed.

相对密度：除单个电芯暴露试验外其他不适用。

Solubility (water): Not applicable unless individual components exposed.

溶解性（水溶性）：除单个电芯暴露试验外其他不适用。

Solubility (other): Not applicable unless individual components exposed.

溶解性（其他）：除单个电芯暴露试验外其他不适用。

10. Stability and reactivity
稳定性和反应活性

Stability: Product is stable under conditions described in Section 7.

稳定性：产品在第 7 节所述的条件下稳定。

Conditions to Avoid: Heat above 70°C or incinerate. Deform. Mutilate. Crush. Disassemble. Overcharge. Short circuit. Expose over a long period to humid conditions.

应避免的条件：加热 70°C 以上或焚烧。变形。毁坏。粉碎。拆卸。过充电。短路。长时间暴露在潮湿的条件下。

Materials to avoid: Oxidising agents, alkalis, water.

应避免的材料：氧化剂，碱，水。

Hazardous Decomposition Products: Toxic Fumes, and may form peroxides.

危险分解物：有毒烟雾，并可能形成过氧化物。

Hazardous Polymerization: N/A.

聚合危害：不适用

If leaked, forbidden to contact with strong oxidizers, mineral acids, strong alkalies, halogenated hydrocarbons.

如果发生泄露，避免与强氧化剂，无机酸，强碱，卤代烃接触。

11. Toxicological information
毒理学资料

Signs & symptoms: None, unless battery ruptures.

标志及症状：无，除非电池破裂。

In the event of exposure to internal contents, vapour fumes may be very irritating to the eyes and skin.

内部物质暴露的情况下，蒸汽烟雾可能对眼睛和皮肤的刺激性。

Inhalation: Lung irritant.

吸入：对肺有刺激性。

Skin contact: Skin irritant.

皮肤接触：对皮肤刺激性。

Eye contact: Eye irritant.

眼睛接触：对眼睛有刺激性。

Ingestion: Poisoning if swallowed.

食入：吞下中毒。

Medical conditions generally aggravated by exposure: In the event of exposure to internal contents, moderate to server irritation, burning and dryness of the skin may occur, Target organs nerves, liver and kidneys.

下列情况下健康状况会恶化：万一发生与电池内部材料接触的事故，轻微或严重的刺激，都可能使皮肤出现干燥和灼烧的感觉，并且损坏靶器官（肝脏，肾脏）的神经。

12. Ecological information
生态学资料

Mammalian effects: None known at present.
对哺乳动物的影响：目前未知。
Eco-toxicity: None known at present.
生态毒性：目前未知。
Bioaccumulation potential: Slowly Bio-degradable.
生物体内积累：慢慢地生物降解。
Environmental fate: None known environmental hazards at present.
环境危害：目前没有已知的环境危害。

13. Disposal consideration
废弃处置

Do not incinerate, or subject cells to temperature in excess of 70°C, Such abuse can result in loss of seal leakage, and/or cell explosion. Dispose of in accordance with appropriate local regulations.
不要焚烧，或使电池温度超过 70°C，这种滥用可导致泄漏和/或电池爆炸。按照相应的地方性法规处理。

14. Transport information
运输信息

UN No. and Shipping name:
UN 3480 Lithium ion batteries
UN 3481 Lithium ion batteries packed with equipment
UN 3481 Lithium ion batteries contained in equipment
UN编号及运输专有名称：
UN 3480 Lithium ion batteries
UN 3481 Lithium ion batteries packed with equipment
UN 3481 Lithium ion batteries contained in equipment
Label for conveyance: Lithium Battery Mark, class 9 lithium battery hazard label (Only for UN3480), Cargo Aircraft Only Label (Only for UN3480)
运输标签：锂电池标记，第 9 类锂电池危险品标签（只适用UN3480），仅限货机标签（只适用UN3480）
Packaging Group/包装等级：N/A/不适用
EmS No./EmS 编号：F-A, S-I
Marine pollutants/海洋污染物: No/否

ICAO/IATA	Shipped by air in accordance with International Civil Aviation Organization (ICAO), TI or International Air Transport Association (IATA), DRG Packing Instructions PI 965 IB, PI 966 II, PI 967 II 根据国际民用航空组织(ICAO), TI或者国际航空协会(IATA), DGR包装说明PI 965 IB, PI 966 II, PI 967 II相关规定进行空运	DGR 64th (2023) ICAO (2023-2024 edition)
IMDG CODE	Shipped by sea in accordance with International Maritime Dangerous Code (IMDG CODE) Special Provision 188 根据《国际海运危险货物规则》(IMDG CODE)特殊规定188条款相关规定运输	IMDG CODE (Amdt. 40-20)

15. Regulation information
法规信息

Law information 法律信息

《Dangerous Goods Regulations》
《危险品规则》
《Recommendations on the Transport of Dangerous Goods Model Regulations》
《关于危险货物运输的建议书 规章范本》
《International Maritime Dangerous Goods Code》
《国际海运危险货物规则》
《Technical Instructions for the Safe Transport of Dangerous Goods》
《危险品安全运输技术指令》

16. Other Information
其他信息

This file is only effective to the batteries (M100P) provided by commissioner (JIADE ENERGY TECHNOLOGY (ZHUHAI) CO LTD) which manufactured by JIADE ENERGY TECHNOLOGY (ZHUHAI) CO LTD The commissioner provides the composition information of batteries, and promises its integrity and accuracy. Users should read this file carefully, and use the batteries in correct method. Shenzhen NTEK New Energy Technology Co., Ltd. doesn't assume responsibility for any damage or loss because of misuse of batteries.

本文件仅对由委托方（珠海市嘉德电能科技有限公司）提供的，并由珠海市嘉德电能科技有限公司生产的电池（M100P）有效。该电池的成分信息由委托方提供并承诺其完整性和准确性。用户应仔细阅读此文件，并按照正确的方法使用电池，如因电池使用不当造成的损害或损失，深圳市北测新能源技术有限公司不承担任何责任。

--End of Material Safety Data Sheet 材料安全数据表结束--

2. UN38.3 Test Summary

UN38.3 试验概要
UN38.3 Test Summary

812400300611871

单位信息 Company information			
委托单位 Consignor	珠海市嘉德电能科技有限公司 Jiade Energy Technology（Zhuhai）Co., Ltd. 珠海市金湾区三灶镇定湾七路 9 号 1#厂房 #1 Building, No.9 The 7th Dingwan Road, Sanzao Town, Jinwan District, Zhuhai, China 0756-8287186 zhengju@blbattery.com www.blbattery.com		
生产单位 Manufacturer	珠海市嘉德电能科技有限公司 Jiade Energy Technology（Zhuhai）Co., Ltd. 珠海市金湾区三灶镇定湾七路 9 号 1#厂房 #1 Building, No.9 The 7th Dingwan Road, Sanzao Town, Jinwan District, Zhuhai, China 0756-8287186 zhengju@blbattery.com www.blbattery.com		
测试单位 Test lab	苏州 UL 美华认证有限公司广州分公司 UL-CCIC Company Limited Guangzhou Branch 广东省广州市黄埔区南云二路 8 号电子大楼 B 座 101、201、301、401 Rm101, 201, 301, 401, Block B, Electronic Building, No. 8 Nanyun Er Road Huangpu District, Guangzhou China 020-32131000 Robert.Cen@ul.com China.ul.com		
电池信息 Battery information			
名称 Name	二次聚合物锂离子电池组	品牌 Brand	/
型号 Type	EMC-M100	原始测试型号 Original tested type	M100P
标称电压(V) Nominal voltage	3.80	容量/能量 Capacity/energy	8000mAh/30.4Wh
描述 Description	可充电锂离子电池组 Rechargeab	锂含量(g)	/
质量(kg) Mass	0.142	Appearance	塑料薄膜外壳 Black plastic film shell
测试信息 Test information			
原报告编号 Original test report No.	4791000483-1	测试报告日期 Date of test report	2023-10-08
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&Amend.1
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	合格 Passed	T.8 强制放电 Forced discharge	合格 Passed
38.3.3 (f)	/	38.3.3 (g)	/

上海化工院检测有限公司 www.ghs.cn 1/2

UN38.3 试验概要
UN38.3 Test Summary

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样品图片 Sample Picture


结论 Conclusion	测试样品符合联合国《试验和标准手册》ST/SG/AC.10/11/Rev.7&Amend.1 38.3 标准要求。 The tested samples meet the requirements of test items of the UNITED NATIONS Manual of Tests and CriteriaST/SG/AC.10/11/Rev.7&Amend.1 38.3.		
备注 Remark	/		
签名 Signature 职务 Title	王寅 副总工程师 Vice chief engineer	签发日期 Issued date	2024-02-06

-验证码:328302-

报告结束

3. UN38.3 Test Report

 Report No.: 4791000483-1

Test Report issued under the responsibility of:
检测报告负责发行机构:

中国认可
检测
TESTING
CNAS L2065

UL Solutions

检 测 报 告
TEST REPORT

样品信息: SAMPLE INFORMATION:	二次聚合物锂离子电池组，型号 M100P, 3.80V, 8000mAh, 30.4Wh Rechargeable Li-ion Polymer Battery, Model M100P, 3.80V, 8000mAh, 30.4Wh
申请单位: APPLICANT:	珠海市嘉德电能科技有限公司 Jiade Energy Technology (Zhuhai) Co., Ltd.
检测类别: TYPE OF TEST:	商业委托检测 Commercial Inspection and Testing Services

苏州UL美华认证有限公司广州分公司
UL-CCIC Company Limited Guangzhou Branch

Form-ULID-002352 (DCS: 10-CA-F0867) 3.1

Date Issued: 2021-01-05
Date Revision: 2023-08-14

Test Summary 测试总览	
样品名称 Name of Samples	二次聚合物锂离子电池组 Rechargeable Li-ion Polymer Battery
型号规格 Type/ Model	电池型号 M100P, 3.80V, 8000mAh, 30.4Wh Battery Model M100P, 3.80V, 8000mAh, 30.4Wh
商标 Trade Mark	不适用 N/A
申请单位 Applicant	珠海市嘉德电能科技有限公司 Jiade Energy Technology (Zhuhai) Co., Ltd.
申请单位地址 Applicant Address	珠海市金湾区三灶镇定湾七路9号1#厂房 #1 Building, No.9 The 7th Dingwan Road, Sanzao Town, Jinwan, District, Zhuhai, China
生产单位 Manufacturer	珠海市嘉德电能科技有限公司 Jiade Energy Technology (Zhuhai) Co., Ltd.
生产单位地址 Manufacturer Address	珠海市金湾区三灶镇定湾七路9号1#厂房 #1 Building, No.9 The 7th Dingwan Road, Sanzao Town, Jinwan, District, Zhuhai, China
联系电话 Telephone: 电子邮箱 Email: 公司网址 Website:	郑菊, 0756-8287186 Zhengju@blbattery.com www.blbattery.com
样品外观颜色 Appearance	黑色 Black
样品数量 Quantity of Sample	电池组 Battery Pack: 16 pcs 电池 Battery Cell: 30 pcs
样品标识序号 Sample Identification	电池组 Battery Pack: 6437795-S1~6437795-S16 电池 Battery Cell: 6437798-S1~6437798-S30
测试标准 Testing Standard	联合国《试验和标准手册》第七修订版修正 1 (2021)，第38.3节：锂电池 United Nations: Manual of Tests and Criteria, Amendment 1 to Seventh Revised Edition, 2021 (ST/SG/AC.10/11/Rev.7/Amend.1), Section 38.3: Lithium Batteries
接样日期 Samples Received Date	2023-09-12
测试开始日期 Test Start Date	2023-09-14
测试完成日期 Test Completed Date	2023-09-28
备注 Remark: 二次聚合物锂离子电池组，型号 M100P, 3.80V, 8000mAh, 30.4Wh，由2个电芯（一串两并）组成，电芯型号为 425995PH，该电芯由东莞雄科电池有限公司制造。 The Rechargeable Li-ion Polymer Battery, Model M100P, 3.80V, 8000mAh, 30.4Wh, consists of 2 cells (1S-2P), Cell Model 425995PH, manufactured by Dongguan Veken Battery Co. LTD.	

Test Conclusion
测试结论

Clause 章节	Name of test 测试项目名称	Sample Condition 样品状态	Conclusion 结论	Remarks 备注
38.3.4.1	试验T.1 Altitude Simulation 高度模拟	First cycle in fully charged state/第一个交替充电放电周期完全充电 25th cycle ending in fully charged state/第二十五个交替充电放电周期完全充电	Pass 通过	--
38.3.4.2	试验T.2 Thermal Test 温度试验	First cycle in fully charged state/第一个交替充电放电周期完全充电 25th cycle ending in fully charged state/第二十五个交替充电放电周期完全充电	Pass 通过	--
38.3.4.3	试验T.3 Vibration 振动	First cycle in fully charged state/第一个交替充电放电周期完全充电 25th cycle ending in fully charged state/第二十五个交替充电放电周期完全充电	Pass 通过	--
38.3.4.4	试验T.4 Shock 冲击	First cycle in fully charged state/第一个交替充电放电周期完全充电 25th cycle ending in fully charged state/第二十五个交替充电放电周期完全充电	Pass 通过	--
38.3.4.5	试验T.5 External Short-Circuit 外部短路	First cycle in fully charged state/第一个交替充电放电周期完全充电 25th cycle ending in fully charged state/第二十五个交替充电放电周期完全充电	Pass 通过	--
38.3.4.6	试验T.6 ~~Impact~~/Crush ~~撞击~~/挤压	First cycle in 50% charged state / 第一个交替充电放电周期半充电 25th cycle ending in 50% charged state/第二十五个交替充电放电周期半充电	Pass 通过	Prismatic Pouch Cell 方形软包电芯
38.3.4.7	试验T.7 Overcharge 过度充电	First cycle in fully charged state/第一个交替充电放电周期完全充电 25th cycle ending in fully charged state/第二十五个交替充电放电周期完全充电	Pass 通过	--
38.3.4.8	试验T.8 Forced Discharge 强制放电	First cycle in fully discharged state/第一个交替充电放电周期完全放电 25th cycle ending in fully discharged state/第二十五个交替充电放电周期完全放电	Pass 通过	--

Test Conclusion/检验结论：

由珠海市嘉德电能科技有限公司送检的二次聚合物锂离子电池组。型号 M100P, 3.80V, 8000mAh, 30.4Wh，依据联合国《试验和标准手册》第七修订版修正 1(2021)，第38.3节：锂电池进行全项目测试。

当采用简单接受判定规则时，被测样品符合规范的要求。

The Rechargeable Li-ion Polymer Battery, Model M100P, 3.80V, 8000mAh, 30.4Wh submitted by Jiade Energy Technology (Zhuhai) Co., Ltd. is tested according to United Nations: Manual of Tests and Criteria, Amendment 1 to Seventh revised edition, 2021 (ST/SG/AC.10/11/Rev.7/Amend.1), Section 38.3: Lithium Batteries. The test items are full items.

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The sample received complies with Specification when Simple Acceptance decision rule is applied.

测试结果：通过。
The test results: Pass.

签发日期/Date of issue: 2023-10-08

Approved by: Simon Chen	Reviewed by: Simon Chen	Test Report Prepared by: Ade Su
批准：陈世明	审核：陈世明	检测：苏祥德
Title: Operations Leader	Title: Operations Leader	Title: Project Engineer
职衔：工程主管	职衔：工程主管	职衔：项目工程师

T.1 Altitude Simulation
高度模拟

Test Method 测试方法

The samples were stored for at least 6 hours at a pressure of 11.6 kPa (1.68 psi) or less and a temperature of 20 ± 5°C (68 ± 9°F). The samples were weighed before and after the exposure. The cell/battery voltage was also determined before and after the test. 将测试样品放在温度为20±5°C，大气压力为不大于11.6kpa的环境中贮存不少于6个小时。对样品在测试前后进行称重，并记录电压。

Test Results/测试结果

Sample No. 样品编号	Sample Condition 样品状态	Weight Before Test(g) 测试前质量（克）	Weight After Test(g) 测试后质量（克）	Percentage of Weight Loss 质量损失%	Voltage Before Test(V) 测试前电压（伏）	Voltage After Test(V) 测试后电压（伏）	Percentage of residual Voltage 残余电压%	Results 结果
6437795-S1	(C)	141.286	141.279	0.005	4.324	4.320	99.907	(6), (7)
6437795-S2	(C)	140.967	140.961	0.004	4.328	4.324	99.908	(6), (7)
6437795-S3	(C)	139.962	139.959	0.002	4.324	4.320	99.907	(6), (7)
6437795-S4	(C)	141.099	141.098	0.001	4.323	4.320	99.931	(6), (7)
6437795-S5	(D)	140.707	140.697	0.007	4.322	4.318	99.907	(6), (7)
6437795-S6	(D)	140.766	140.759	0.005	4.322	4.318	99.907	(6), (7)
6437795-S7	(D)	141.161	141.152	0.006	4.323	4.318	99.884	(6), (7)
6437795-S8	(D)	140.837	140.825	0.009	4.323	4.318	99.884	(6), (7)

Results/结果:
(1) Leakage/漏液.
(2) Venting/排气.
(3) Disassembly/解体.
(4) Rupture/破裂.
(5) Fire/着火.
(6) No leakage, no venting, no disassembly, no rupture, no fire/无漏液，无排气，无解体，无破裂，无着火.
(7) The open circuit voltage of each cell after testing was greater than 90%/开路电压不低于试验前开路电压的90%.

Samples Condition note for T1 to T8 / 试验T1至T8的样品状态备注：
(A) Fully discharged state (for Primary Cells and Batteries) / 完全放电状态（针对原电池和原电池组）。
(B) Undischarged state (for Primary Cells and Batteries) / 未放电状态（针对原电池和原电池组）。
(C) At First cycle in fully charged state / 第一个充放电周期完全充电状态。
(D) After 25 cycles ending in fully charged state / 25个充放电周期后完全充电状态。
(E) At First cycle at 50% of the design rated capacity / 第一个充放电周期50%设计额定容量状态。
(F) After 25 cycles ending at 50% of the design rated capacity / 25个充放电周期后50%设计额定容量状态。
(G) At First cycle in fully discharged state / 第一个充放电周期完全放电状态。
(H) After 25 cycles ending in fully discharged state / 25个充放电周期后完全放电状态。

T.2 Thermal Test
温度试验

Test Method 测试方法

The samples were subjected to temperature cycling consisting of the following.
The samples were weighed before and after the exposure. The cell/battery voltage was also determined before and after the test. 测试样品将进行如下温度循环测试。样品测试前后进行称重，并记录电压。

Samples In/ 样品进箱	The chamber temperature was raised to 72 ± 2°C (162 ± 4°F) within 30 minutes and maintained at this temperature for X* hours. 烤箱温度在30分钟内上升到72 ± 2°C，并维持此温度X*小时。
	The chamber temperature was reduced to -40 ± 2°C (-40 ± 4°F) within 30 minutes and maintained at this temperature for X* hours. 烤箱温度在30分钟内降低到-40 ± 2°C，并维持此温度X*小时。
	Repeat the sequence for 9 additional cycles (total of 10 cycles). 重复此顺序测试额外9个循环（总共10个循环）。
Samples Out/样品出箱	After the 10th cycle, store the batteries at ambient temperature 20 ± 5°C (68 ± 9°F) for 24 hours prior to examination. 在第10个循环后，于20 ± 5°C环境下储存24小时，然后检查其状态。

Note: The duration of exposure to the test temperature extremes(X*) was determined as below:
注：样品承受极端温度的持续时间（X*）按如下确定：
[X] Small cells and small batteries: 6 hours; 小电芯和小电池为6小时;
[ ] Large cells and large batteries: 12 hours. 大电芯和大电池为12小时。

Tst Results/测试结果

Sample No. 样品编号	Sample Condition 样品状态	Weight Before Test(g) 测试前质量（克）	Weight After Test(g) 测试后质量（克）	Percentage of Weight Loss 质量损失%	Voltage Before Test(V) 测试前电压（伏）	Voltage After Test(V) 测试后电压（伏）	Percentage of residual Voltage 残余电压%	Results 结果
6437795-S1	(C)	141.279	141.216	0.045	4.320	4.242	98.194	(6), (7)
6437795-S2	(C)	140.961	140.892	0.049	4.324	4.247	98.219	(6), (7)
6437795-S3	(C)	139.959	139.883	0.054	4.320	4.245	98.264	(6), (7)
6437795-S4	(C)	141.098	141.020	0.055	4.320	4.243	98.218	(6), (7)
6437795-S5	(D)	140.697	140.641	0.040	4.318	4.243	98.263	(6), (7)
6437795-S6	(D)	140.759	140.693	0.047	4.318	4.242	98.240	(6), (7)
6437795-S7	(D)	141.152	141.085	0.047	4.318	4.240	98.194	(6), (7)
6437795-S8	(D)	140.825	140.756	0.049	4.318	4.241	98.217	(6), (7)

Results/结果:
(1) Leakage/漏液.
(2) Venting/排气.
(3) Disassembly/解体.
(4) Rupture/破裂.
(5) Fire/着火.
(6) No leakage, no venting, no disassembly, no rupture, no fire/无漏液，无排气，无解体，无破裂，无着火.
(7) The open circuit voltage of each cell after testing was greater than 90%/开路电压不低于试验前开路电压的90%.

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T.3 Vibration
振动

Test Method 测试方法

The samples were subjected to vibration tests consisting of the following. The samples were weighed before and after the exposure. The cell/battery voltage was also determined before and after the test. 测试样品将进行如下振动测试。样品测试前后进行称重，并记录电压。

The samples were firmly secured to the platform of the vibration machine without distorting the cells in such a manner as to faithfully transmit the vibration. The vibration was a sinusoidal waveform with a logarithmic sweep between 7 Hz and 200 Hz and back to 7 Hz traversed in 15 minutes. This cycle was repeated 12 times for a total of 3 hours for each of three mutually perpendicular mounting positions of the cell. One of the directions of vibration was perpendicular to the terminal face. 电芯和电池牢固地安装在振动台上。振动以正弦波形式，以7Hz增加至200Hz，然后在减少回到7Hz为一个循环，一个循环持续15分钟的对数前移传送。以振动的其中一个方向必须是垂直样品极性，对每个电芯从三个互相垂直的方向上循环12次，每个方向3个小时。

The logarithmic frequency sweep was as follows/对数扫频如下:

[X] For cells and small batteries: From 7 Hz a peak acceleration of 1 gn was maintained until 18 Hz is reached. The amplitude was then maintained at 0.8 mm (1.6 mm total excursion) and the frequency increased until a peak acceleration of 8 gn occurred (approximately 50 Hz). A peak acceleration of 8 gn was then maintained until the frequency was increase to 200 Hz. 对于电芯和小电池：7赫兹开始保持1 gn的最大加速度直到频率为18赫兹，然后将振幅保持在0.8毫米（总偏移1.6毫米）并增加频率直到最大加速度达到8 gn（频率约为50赫兹），将最大加速度保持在8 gn直到频率增加到200赫兹。

[ ] For large batteries: From 7 Hz a peak acceleration of 1 gn was maintained until 18 Hz is reached. The amplitude was then maintained at 0.8 mm (1.6 mm total excursion) and the frequency increased until a peak acceleration of 2 gn occurred (approximately 25 Hz). A peak acceleration of 2 gn was then maintained until the frequency was increase to 200 Hz. 对于大电池： 7赫兹开始保持1 gn的最大加速度直到频率为18赫兹，然后将振幅保持在0.8毫米（总偏移1.6毫米）并增加频率直到最大加速度达到2 gn（频率约为25赫兹），将最大加速度保持在2 gn直到频率增加到200赫兹。

Test Results/测试結果

Sample No. 样品编号	Sample Condition 样品状态	Weight Before Test(g) 测试前质量（克）	Weight After Test(g) 测试后质量（克）	Percentage of Weight Loss 质量损失%	Voltage Before Test(V) 测试前电压（伏）	Voltage After Test(V) 测试后电压（伏）	Percentage of residual Voltage 残余电压%	Results 結果
6437795-S1	(C)	141.216	141.243	0.000	4.242	4.240	99.953	(6), (7)
6437795-S2	(C)	140.892	140.926	0.000	4.247	4.245	99.953	(6), (7)
6437795-S3	(C)	139.883	139.926	0.000	4.245	4.243	99.953	(6), (7)
6437795-S4	(C)	141.020	141.052	0.000	4.243	4.241	99.953	(6), (7)
6437795-S5	(D)	140.641	140.674	0.000	4.243	4.242	99.976	(6), (7)
6437795-S6	(D)	140.693	140.730	0.000	4.242	4.240	99.953	(6), (7)
6437795-S7	(D)	141.085	141.112	0.000	4.240	4.239	99.976	(6), (7)
6437795-S8	(D)	140.756	140.790	0.000	4.241	4.240	99.976	(6), (7)

Results/結果:
(1) Leakage/漏液.
(2) Venting/排气.
(3) Disassembly/解体.
(4) Rupture/破裂.
(5) Fire/着火.
(6) No leakage, no venting, no disassembly, no rupture, no fire/无漏液，无排气，无解体，无破裂，无着火.
(7) The open circuit voltage of each cell after testing was greater than 90%/开路电压不低于试验前开路电压的90%.

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T.4 Shock
冲击

Test Method 测试方法

The samples were subjected to shock. The samples were weighed before and after the exposure. The cell/battery voltage was also determined before and after the test. The sample cell was secured to the testing machine by means of a rigid mount, which supports all mounting surfaces of the sample. Each sample was subjected to a half-sine shock as below: 样品将进行如下冲击测试。对样品在测试前后进行称重，并记录电压。以稳固的托架固定住每个电芯和电池样品的全部配件表面。每个样品将进行如下半正弦冲击测试：

[ ] For cells: Peak acceleration of 150 gn and pulse duration of 6 milliseconds. 小电芯：峰值为150 gn，脉冲持续6毫秒。

[ ] For large cells: Peak acceleration of 50 gn and pulse duration of 11 milliseconds. 大电芯：峰值为50 gn，脉冲持续11毫秒。

[X] For small batteries: Peak acceleration of the smaller of the following, and pulse duration of 6 milliseconds: 小电池：取如下较小值为峰值，脉冲持续6毫秒。

- 150 gn.
- √(100850 / mass of the battery in kg)

[ ] For large batteries: Peak acceleration of the smaller of the following, and pulse duration of 11 milliseconds: 大电池：取如下较小值为峰值，脉冲持续11毫秒。

- 50 gn.
- √(30000 / mass of the battery in kg)

Each sample was subjected to three shocks in the positive direction followed by three shocks in the negative direction of three mutually perpendicular mounting positions of the cell for a total of 18 shocks. 每个测试样品须在三个互相垂直的电池安装方位的正方向经受三次冲击，接着在反方向经受三次冲击，总共经受18次冲击。

Test Results/测试结果

Sample No. 样品编号	Sample Condition 样品状态	Weight Before Test(g) 测试前质量（克）	Weight After Test(g) 测试后质量（克）	Percentage of Weight Loss 质量损失 %	Voltage Before Test(V) 测试前电压（伏）	Voltage After Test(V) 测试后电压（伏）	Percentage of residual Voltage 残余电压 %	Results 结果
6437795-S1	(C)	141.243	141.249	0.000	4.240	4.240	100.000	(6), (7)
6437795-S2	(C)	140.926	140.929	0.000	4.245	4.245	100.000	(6), (7)
6437795-S3	(C)	139.926	139.935	0.000	4.243	4.243	100.000	(6), (7)
6437795-S4	(C)	141.052	141.062	0.000	4.241	4.241	100.000	(6), (7)
6437795-S5	(D)	140.674	140.678	0.000	4.242	4.242	100.000	(6), (7)
6437795-S6	(D)	140.730	140.730	0.000	4.240	4.240	100.000	(6), (7)
6437795-S7	(D)	141.112	141.121	0.000	4.239	4.239	100.000	(6), (7)
6437795-S8	(D)	140.790	140.795	0.000	4.240	4.240	100.000	(6), (7)

Results/结果:
(1) Leakage/漏液.
(2) Venting/排气.
(3) Disassembly/解体.
(4) Rupture/破裂.
(5) Fire/着火.
(6) No leakage, no venting, no disassembly, no rupture, no fire/无漏液，无排气，无解体，无破裂，无着火.
(7) The open circuit voltage of each cell after testing was greater than 90%/开路电压不低于试验前开路电压的90％.

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T.5 External Short-Circuit
外部短路

Test Method 测试方法

The samples were shall be heated for a period of time noted below, to reach a homogeneous stabilized temperature of 57 ± 4 °C, measured on the external case: 为使样品达到均匀稳定的初始温度：57 ± 4 °C，样品需在此环境下暴露一段时间。

- Small cells and small batteries: 6 hours. 小电芯和小电池至少暴露6小时。
- Large cells and large batteries: 12 hours. 大电芯和大电池至少暴露12小时。
- **[X]** __1__ hours, assessed depended on the size and design of the sample. __1__ 小时，根据样品尺寸设计评估所得。

The samples were then subjected to a short circuit condition with a total external resistance of less than 0.1 ohm, until: 然后将样品正负极用小于0.1欧姆的总电阻回路进行短路，直到：

- Small cells, small batteries and large cells: 1 hour after the external case temperature of sample has returned to 57 ± 4 °C.
  小电芯，小电池和大电芯： 样品外表温度恢复到57 ± 4 °C之后保持短路状态1小时以上。
- Large batteries: After the external case temperature of sample has decreased by half of the maximum temperature increase observed during the test and remains below that value.
  大电池：样品表面温度下降所测最大温升的一半，并保持低于该数值。

Test Results/测试结果

Sample No. 样品编号	Sample Condition 样品状态	Voltage Before Test(V) 测试前电压（伏）	External resistance (mohm) 总外部电阻（毫欧）	Maximum Temperature, °C 最高温度（°C）	Results 结果
6437795-S1	(C)	4.240	83.9	57.4	(4), (5)
6437795-S2	(C)	4.245	79.4	57.5	(4), (5)
6437795-S3	(C)	4.243	90.2	57.2	(4), (5)
6437795-S4	(C)	4.241	88.0	57.4	(4), (5)
6437795-S5	(D)	4.242	78.1	57.2	(4), (5)
6437795-S6	(D)	4.240	79.3	57.3	(4), (5)
6437795-S7	(D)	4.239	84.5	57.2	(4), (5)
6437795-S8	(D)	4.240	86.2	57.5	(4), (5)

Results/结果:
(1) Disassembly/解体.
(2) Rupture/破裂.
(3) Fire/着火.
(4) No disassembly, no rupture, no fire within 6 hours after the test/测试后6小时内无解体，无破裂，无着火.
(5) The maximum temperature did not exceed 170°C/最高温度不超过170摄氏度.

T.6 ~~Impact~~ / Crush
~~撞击~~ / 挤压

Test Method 测试方法

[ ] Impact (for cylindrical cells not less than 18 mm in diameter)/ 撞击（适用于直径不小于18毫米的圆柱形电池）

A test sample was placed on a flat surface. A 15.8 mm ± 0.1 mm diameter, at least 6 cm long, or the longest dimension of the cell, whichever is greater, Type 316 stainless steel bar was placed across the center of the sample. A 9.1 kg ± 0.1 kg mass was dropped from a height of 61 ± 2.5 cm at the intersection of the bar and sample in a controlled manner, using a near frictionless, vertical sliding track or channel with minimal drag on the falling mass. The vertical track or channel used to guide the falling mass was oriented 90 degrees from the horizontal supporting surface. 将试验样品放在一个平坦光滑的平面上。将一条316型不锈钢棒，其直径为15.8 mm ± 0.1 mm，长度为至少6 cm，或电芯的最长边长度（两者中较大者），放置在样品中心。将一质量为9.1 kg ± 0.1 kg的物体于61 ± 2.5 cm的高度，无摩擦地从垂直滑轨落向样品。垂直滑轨与横向支承面互相垂直，保持90度。

The test sample was impacted with its longitudinal axis parallel to the flat surface and perpendicular to the longitudinal axis of a 15.8 mm ± 0.1 mm diameter curved surface lying across the center of the test sample. Separate samples were used for each test. 接受撞击的试样，纵轴应与平坦的表面平行并与横放在试样中心的直径15.8 mm ± 0.1 mm弯曲表面的纵轴垂直。每一个试样只经受一次撞击。

[X] Crush (for prismatic, pouch, coin/button cells and cylindrical cells less than 18 mm in diameter)/挤压（适用于棱柱形、袋装、硬币/纽扣电池和直径小于18毫米的圆柱形电池）

A sample was crushed between two flat surfaces. The crushing was gradual with a speed of approximately 1.5 cm/s at the first point of contact. The crushing was continued until the first of the three options below has reached/将样品放在两个平面之间挤压。挤压力度逐渐加大，在第一个接触点上的速度大约为1.5厘米/秒。挤压持续进行，直到出现以下三种情况之一：

- The applied force reaches 13 kN ± 0.78 kN/施加的力达到13 kN ± 0.78 kN;
- The voltage of the cell drops by at least 100 mV; or/电池的电压下降至少100毫伏，或者
- The cell is deformed by 50% or more of its original thickness/电池变形达原始厚度的50%以上。

A prismatic or pouch cell was crushed by applying the force to the widest side. A button/coin cell was crushed by applying the force on its flat surfaces. For cylindrical cells, the crush force was applied perpendicular to the longitudinal axis/棱柱形或袋装电池应从最宽的一面施压。纽扣/硬币形电池应从其平坦表面施压。圆柱形应从与纵轴垂直的方向施压。

The test sample was observed for a further 6 hours. Separate samples that have not previously been subjected to other tests were used for each test/测试样品进一步观察6小时。未进行过其他测试的样品用于此测试。

Test Results/测试结果

Sample No. 样品编号	Sample Condition 样品状态	Voltage Before Test(V) 测试前电压（伏）	Maximum Temperature, °C 最高温度（°C）	Results 结果
6437798-S1	(E)	3.852	23.9	(3), (4)
6437798-S2	(E)	3.853	23.8	(3), (4)
6437798-S3	(E)	3.853	24.9	(3), (4)
6437798-S4	(E)	3.852	23.4	(3), (4)
6437798-S5	(E)	3.851	24.5	(3), (4)
6437798-S6	(F)	3.861	24.4	(3), (4)
6437798-S7	(F)	3.854	25.0	(3), (4)
6437798-S8	(F)	3.855	24.1	(3), (4)
6437798-S9	(F)	3.853	24.3	(3), (4)
6437798-S10	(F)	3.848	24.3	(3), (4)

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Results/结果:
(1) Disassembly/解体.
(2) Fire/着火.
(3) No disassembly, no fire within 6 hours after the test/测试后6小时内无解体，无着火.
(4) The maximum temperature did not exceed 170°C/最高温度不超过170摄氏度.

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T.7 Overcharge
过度充电

Test Method 测试方法

Batteries were subjected to a charge current of twice the manufacturer's recommended maximum continuous charge current. 2倍制造厂推荐的最大持续充电电流对样品充电。

The minimum voltage of the test was as follows/最小的测试电压由按如下决定：

- When the manufacturer's recommended charge voltage is not more than 18 V, the minimum voltage of the test was the lesser of 2 times the maximum charge voltage of the battery or 22 V. 如果厂家推荐的充电电压不超过18V，本测试的最小充电电压应是厂家标定最大充电电压的两倍或者是22V之中的较小者。
- When the manufacturer's recommended charge voltage is more than 18 V, the minimum voltage of the test was 1.2 times the maximum charge voltage. 如果厂家推荐的充电电压超过18V，本测试的最小充电电压应是厂家标定最大充电电压的1.2倍。

Tests were conducted at ambient temperature 20 ± 5°C. The duration of the test was 24 hours. 测试在20 ± 5°C的环境温度下进行，试验持续24小时。

Overcharge Current/过充电流	16000mA
Overcharge Voltage/过充电压	8.7V

Test Results/测试结果

Sample No. 样品编号	Sample Condition 样品状态	Voltage Before Test, V 测试前电压（伏）	Measured Overcharge Current, mA 测量的过充电流（毫安）	Results 结果
6437795-S9	(C)	4.322	0	(3)
6437795-S10	(C)	4.321	0	(3)
6437795-S11	(C)	4.322	0	(3)
6437795-S12	(C)	4.322	0	(3)
6437795-S13	(D)	4.323	0	(3)
6437795-S14	(D)	4.321	0	(3)
6437795-S15	(D)	4.321	0	(3)
6437795-S16	(D)	4.322	0	(3)

Results/结果:
(1) Disassembly/解体.
(2) Fire/着火.
(3) No disassembly, no fire within seven days after the test/测试后7天内无解体，无着火.

T.8 Forced Discharge
强制放电

Test Method 测试方法

Each cell was forced discharged at ambient temperature by connecting it in series with a 12 V DC power supply at an initial current equal to the maximum discharge current specified by the manufacturer. 在常温环境下，将单个电芯连接在12V的直流电源上进行强制放电，此直流电源提供给每个电芯初始电流为制造厂指定的最大放电电流。

The specified discharge current was obtained by connecting a resistive load of the appropriate size and rating in series with the test cell. Each cell was forced discharged for a time interval (in hours) equal to its rated capacity divided by the initial test current (in amperes). 指定的放电电流通过串联在测试电芯上的合适大小和功率的负载来获得，每个电芯的强制放电时间（小时）为额定容量除以初始电流（安培）。

Test Results/测试结果

Sample No. 样品编号	Condition 样品状态	Initial Discharge Current, mA 初始放电电流（毫安）	Voltage of Discharged Cell Before Test(V) 测试前电压（伏）	Voltage After Test(V) 测试后电压（伏）	Results 结果
6437798-S11	(G)	4017	3.316	0	(3)
6437798-S12	(G)	4016	3.320	0	(3)
6437798-S13	(G)	4016	3.316	0	(3)
6437798-S14	(G)	4012	3.324	0	(3)
6437798-S15	(G)	4014	3.313	0	(3)
6437798-S16	(G)	4010	3.316	0	(3)
6437798-S17	(G)	4010	3.324	0	(3)
6437798-S18	(G)	4014	3.320	0	(3)
6437798-S19	(G)	4017	3.320	0	(3)
6437798-S20	(G)	4016	3.323	0	(3)
6437798-S21	(H)	4018	3.317	0	(3)
6437798-S22	(H)	4017	3.319	0	(3)
6437798-S23	(H)	4014	3.316	0	(3)
6437798-S24	(H)	4013	3.324	0	(3)
6437798-S25	(H)	4016	3.319	0	(3)
6437798-S26	(H)	4018	3.319	0	(3)
6437798-S27	(H)	4010	3.320	0	(3)
6437798-S28	(H)	4016	3.323	0	(3)
6437798-S29	(H)	4016	3.319	0	(3)
6437798-S30	(H)	4018	3.320	0	(3)

Results/结果:
(1) Disassembly/解体.
(2) Fire/着火.
(3) No disassembly, no fire within seven days after the test/测试后七天内无解体、无着火.

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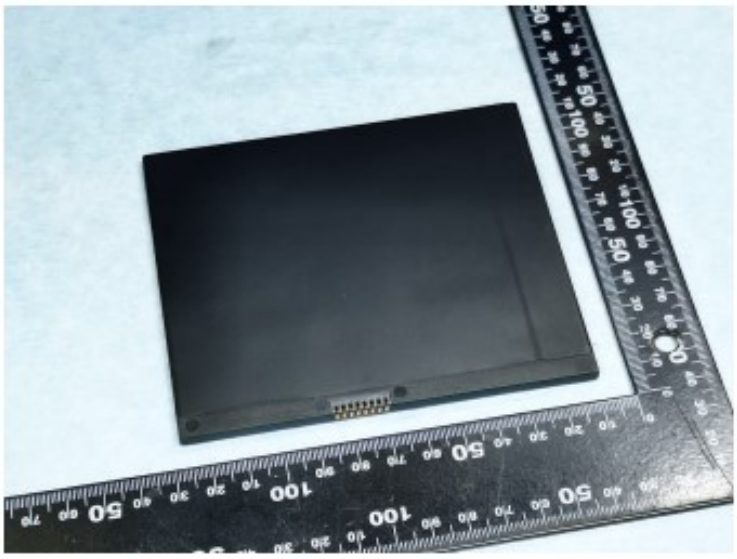
Photos of Test Samples
测试样品照片

Rechargeable Li-ion Polymer Battery, Model M100P, 3.80V, 8000mAh, 30.4Wh
二次聚合物锂离子电池组，型号 M100P, 3.80V, 8000mAh, 30.4Wh



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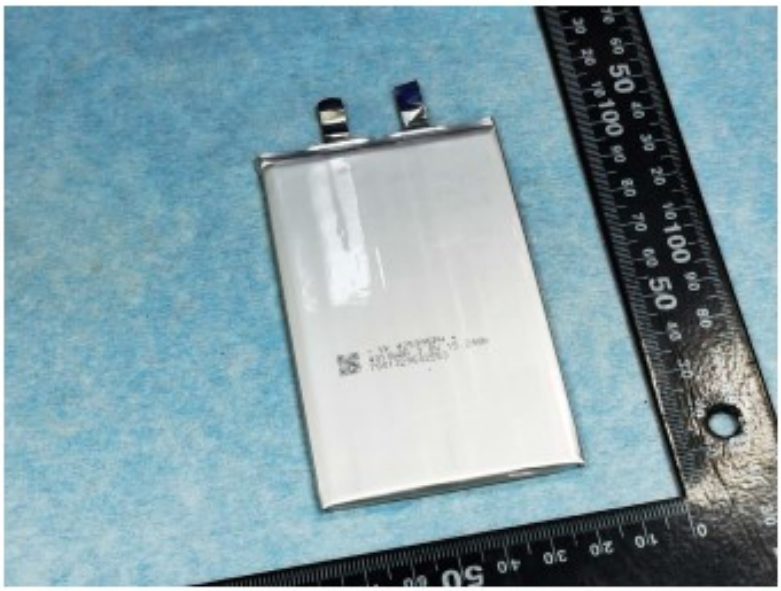
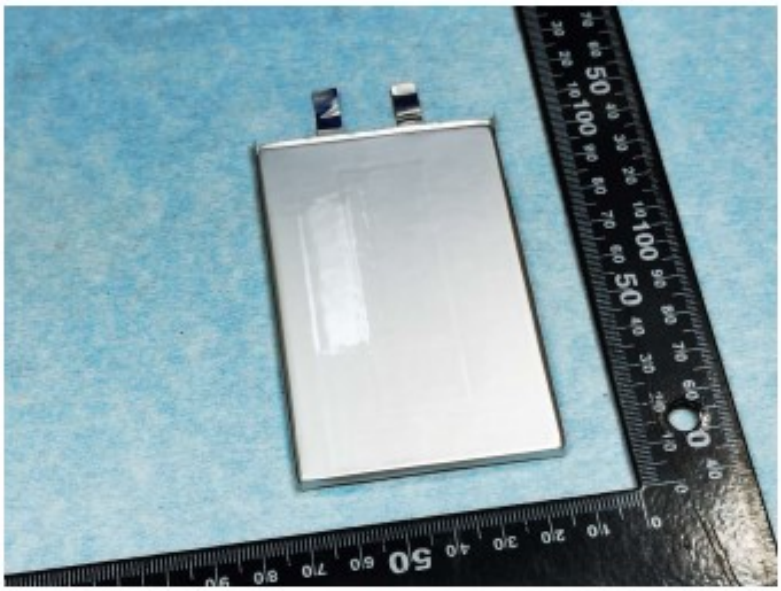
Photos of Test Samples
测试样品照片

Inner Cell, Model 425995PH, 3.8V, 4010mAh, 15.24Wh, manufactured by Dongguan Veken Battery Co. LTD.
内部电芯，型号 425995PH, 3.8V, 4010mAh, 15.24Wh，由东莞维科电池有限公司制造。





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Sample Label
样品标签

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注 意 事 项
Important

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   Nobody is allowed to photocopy or partly photocopy this test report without written permission of UL.

2. 本报告无批准人、审核人及主检人签名无效。
   The test report is invalid without the signatures of Approver, Reviewer and Report Prepare Person.

3. 本报告涂改无效。
   The test report is invalid if altered.

4. 对检验报告若有异议，应于收到报告之日起十五天内向检验单位提出。
   Objections to the test report must be submitted to UL within 15 days.

5. 本报告中以点号代替小数点。
   Throughout this report a point is used as the decimal separator.

6. 本报告仅对送检样品负责。
   The test report is valid for the tested samples only.

7. 本报告并未授权许可申请单位使用UL任何UL的名称、商标、标识等。
   The test report does not grant applicant the use of UL name, trademark or label.

8. 任何情况下检测单位的赔偿责任都不会超过检测单位就本次检测所收取的检测费用。
   UL's liability under no circumstance will exceed the testing fee received from applicant for test conducted hereof this testing report.

9. 检测数据和结果不具备社会证明性作用。
   The test data and results do not have social proof function.

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*** 报告结束 ***
*** Report End ***

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