Test Report

Applicant : Ningbo Jingrui Energy Technology Co.,Ltd

Address : NO.88-1,YINFENG ROAD ,YUELIN STREET，FENGHUA DISTRICT,NINGBO,ZHEJIANG, CHINA

The following sample(s) and sample information was/were submitted and identified by/on behalf of the client

Sample Name	:	Rechargeable Li-ion Battery
Sample Model	:	ICR-18650 3.7V 2000mAh
Sample Style	:	ICR-18650 3.7V 1200mAh ICR-18650 3.7V 1500mAh ICR-18650 3.7V 1800mAh ICR-18650 3.7V 2000mAh ICR-18650 3.7V 2200mAh ICR-18650 3.7V 2600mAh ICR-18650 3.7V 3000mAh ICR-16340 3.7V 500mAh ICR-16340 3.7V 700mAh ICR-14500 3.7V 500mAh ICR-14500 3.7V 600mAh ICR-14500 3.7V 800mAh ICR-10460 3.7V 320mAh ICR-10850 3.7V 750mAh
Sample Lot	:	/
Sample Received Date	:	Jun 21, 2022
Test Completed Date	:	Jun 23, 2022
Test Requested	:	As specified by client, with reference to Directive 2006/66/EC and its amended Directive 2013/56/EU to determine Lead(Pb), Cadmium(Cd), Mercury(Hg) contents in the submitted sample.
Test Method	:	Refer to the next page(s).
Test Results	:	Refer to the next page(s).
Test Conclusion	:	Based upon the performed tests by submitted samples, the test results comply with the limits of the Directive 2006/66/EC and its amended Directive 2013/56/EU

Reviewed by: Lab Senior Engineer

Authorized Signature: Technology Manager

In no circumstances shall the Company's responsibility extend beyond inspection, testing and reporting upon the samples actually drawn from the bulk and inspected, tested and surveyed by the Company and any inference to be drawn from the results of such inspection or survey or testing shall be entirely in the discretion and at the sole and exclusive responsibility of the Principal. This test report cannot be reproduced except in full.

FLION TESTING TECHNOLOGIES
Add :Gangzi Industrial Park,Furong Industrial Area, Xinqiao Village, Shajing Town, Bao'an District, Shenzhen City
Tel : 86-0755-2724 8885 Fax : 86-0755-2746 0090 Http://www.cnftt.com

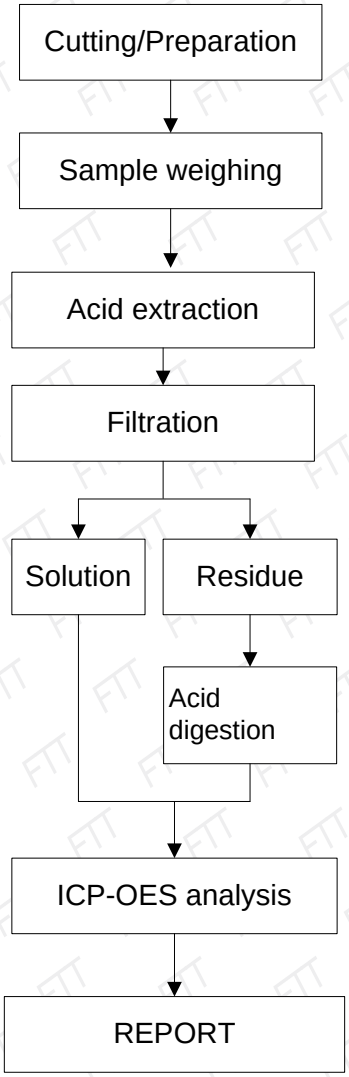
Test Results:

Test Item	Test method/Instrument	MDL (%)	Result (%)	Limit (%)
Lead(Pb)	EPA3050B&EPA3052/ICP-OES	0.0002	N.D.	--
Cadmium(Cd)	EPA3050B&EPA3052/ICP-OES	0.0002	N.D.	0.002
Mercury(Hg)	EPA3050B&EPA3052/ICP-OES	0.0002	N.D.	0.0005

Note:
(1) 1 mg/kg = 1 ppm = 0.0001%
(2) N.D. = Not Detected (less than MDL)
(3) MDL = Method Detection Limit
(4) "--" = Not Regulated
(5) Remark: According to the Article 21(3) of Directive 2006/66/EC, Battery, accumulator and button cell shall include the chemical symbol Mercury when containing morn than 0.0005% of Hg, the chemical symbol Cadmium when containing more than 0.002% of Cd and the chemical symbol Pb when containing more than 0.004% of Pb
Remark: The test report is only used for customer research, teaching, internal quality control, product development and other purposes, for internal reference only.

In no circumstances shall the Company's responsibility extend beyond inspection, testing and reporting upon the samples actually drawn from the bulk and inspected, tested and surveyed by the Company and any inference to be drawn from the results of such inspection or survey or testing shall be entirely in the discretion and at the sole and exclusive responsibility of the Principal. This test report cannot be reproduced except in full.

Testing Flow Chart:



In no circumstances shall the Company's responsibility extend beyond inspection, testing and reporting upon the samples actually drawn from the bulk and inspected, tested and surveyed by the Company and any inference to be drawn from the results of such inspection or survey or testing shall be entirely in the discretion and at the sole and exclusive responsibility of the Principal. This test report cannot be reproduced except in full.

Test Part Description: Battery

Sample Photo

Note: The results shown in this report refer only to the sample(s) tested.

* * * * * End of Report * * * * *

In no circumstances shall the Company's responsibility extend beyond inspection, testing and reporting upon the samples actually drawn from the bulk and inspected, tested and surveyed by the Company and any inference to be drawn from the results of such inspection or survey or testing shall be entirely in the discretion and at the sole and exclusive responsibility of the Principal. This test report cannot be reproduced except in full.

FLION TESTING TECHNOLOGIES

Add :Gangzi Industrial Park,Furong Industrial Area, Xinqiao Village, Shajing Town, Bao'an District, Shenzhen City

Tel : 86-0755-2724 8885 Fax : 86-0755-2746 0090 Http://www.cnftt.com

三帕认证

Safety Data Sheet

安全技术说明书

Product Name 产品名称:	Li-ion Battery 锂离子电池
Model 型号:	18650 2000mAh 3.7V 7.4Wh
Issue Date 签发日期:	2022.02.21
Report No.报告号:	NBJR20220218SDS01-XG01
Compiler 编制:	Jack Yang
Reviewer 审核:	Tracy Chen
Approver 批准:	Leo Zhi

广州三帕认证技术服务有限公司

Guangzhou CP-UP Certification Technology Service Co., Ltd.

Tel: 86-020 3112 7037 Email: info@cp-up.com Website: www.cp-up.com

Section 1 - Chemical and Company Identification 第一部分-化学品及企业标识		
Product Name 产品名称		Li-ion Battery 锂离子电池
Model/型号		18650 2000mAh 3.7V 7.4Wh
Ratings/额定参数		3.7V, 2000mAh, 7.4Wh
Applicant 申请商		Ningbo Jingrui Energy Technology Co.,Ltd 宁波景瑞能源科技有限公司
Applicant address 申请商地址		No. 61 Yuanfeng Road, Fenghua District, Ningbo City, Zhejiang Province, 315500, P. R. China 浙江省宁波市奉化区园峰路 61 号
Manufacturer 制造商		Ningbo Jingrui Energy Technology Co.,Ltd 宁波景瑞能源科技有限公司
Manufacturer Contact information 制造商联系信息	address 地址	No. 61 Yuanfeng Road, Fenghua District, Ningbo City, Zhejiang Province, 315500, P. R. China 浙江省宁波市奉化区园峰路 61 号
	Tel./应急电话	86-574-59553135
	Email/邮箱	Johnny_ydy@163.com

Section 2 - Hazards Identification
第二部分-危险性概述

Hazards Identification：危险性描述

Not dangerous with normal use. Do not dismantle, open or shred the battery ingredients contained within or their ingredients products could be harmful.

正常使用没有危险，不能拆解、打开或分解电池，里面的材料或成分是有害的。

Primary Route (s) of Exposure: 接触途径

inhalation, ingestion, Skin contact and Eye contact.

吸入、食入、皮肤接触、眼睛接触。

Potential Health Effects: 潜在健康影响

inhalation： Vapors or mists from a ruptured battery may cause respiratory irritation.

吸入：破裂的电池散发出来的气雾会引起呼吸道刺激。

Ingestion： The battery ingredients contained within or their ingredients products can cause serious chemical burns of mouth, esophagus, and gastrointestinal tract.

食入：电池的组成成分或原料可以导致嘴，食道和胃肠道的严重化学烧伤。

Skin： Skin contact with contents of an open battery can cause severe irritation or burns to the skin.

皮肤：皮肤接触到电池的内部化学材料可能会导致严重的刺激或烧伤皮肤。

Eye： Eye contact with contents of an open battery can cause severe irritation or burns to the eye.

眼睛：眼睛接触到电池的内部化学材料可能会导致严重的刺激或烧伤眼睛。

Section 3- Composition/Information on Ingredients 第三部分-成分/组成信息		
Chemical Name 化学名称	**CAS Number** **CAS 号（化学文摘索引登记号）**	**Concentration or concentration ranges (%)** **浓度或浓度范围(%)**
Lithium manganese oxide	12057-17-9	21.81-23.89
Carbon	7440-44-0	15.3-17.31
Cobalt lithium manganese nickel oxide	346417-97-8	14.26-16.21
Copper	7440-50-8	6.11-6.8
Aluminum	7429-90-5	3.21-3.52
Lithium hexafluorophosphate	21324-40-3	1.51-1.72
Note: CAS number is Chemical Abstract Service Registry Number. 注意：CAS 号是化学文摘服务注册号。 N/A=Not apply. N/A=不适用		

Section 4- First Aid Measure 第四部分-急救措施	
Inhalation **吸入**	Remove source of contamination or move victim to fresh air. Obtain medical advice. 移除污染源或者将受害者移至新鲜空气处。寻求医生建议。
Ingestion **食入**	Please rinse mouth thoroughly with water, induce vomiting under the guidance of professional personage. Please seek medical treatment in time. 立即用清水漱口，在专业人士的指导下催吐，速就医。
Skin contact **皮肤接触**	Remove contaminated clothes and rinse skin with plenty of water or shower for 15 minutes. Get medical aid. 脱下已污染衣服，用大量的水冲洗至少 15 分钟，速就医。
Eye contact **眼睛接触**	Irrigate with flowing water for 15 minutes. If irritation persists, consult a physician. 用流动水冲洗 15 分钟，如刺激持续发生，请求助于医生。

Section 5- Fire Fighting Measures 第五部分-消防措施	
Characteristics of Hazard **危险特性**	Toxic fumes, gases or vapors may evolve on burning. 火灾时可释放有害浓烟、气体或者蒸汽。
Hazardous Combustion Products **燃烧产生的危险物品**	Carbon monoxide, carbon dioxide, lithium oxide fumes and so on. 一氧化碳，二氧化碳，锂氧化物烟气等。
Fire-extinguishing Methods and Extinguishing Media **灭火方法及灭火剂**	Please use water, dry sand and other proper fire extinguishing media. 请使用水，干沙等合适的灭火介质。
Attention in Fire-extinguishing	The firemen should put on antigas masks and full fire-fighting suits. 消防人员须佩戴防毒面具、穿全身消防服。

灭火注意事项	

Section 6- Accidental Release Measure 第六部分-泄漏应急处理	
Personal Precautions, protective equipment, and emergency procedures 个人预防措施、防护装备和应急程序	Restrict access to area until completion of clean-up. Do not touch the spilled material. Wear adequate personal protective equipment as indicated in Section 8. 限制区域，直到完成清理工作。请勿触摸泄漏的材料。穿戴适当的个人防护设备，如第 8 部分所示。
Environmental Precautions 环境保护措施	Prevent material from contaminating soil and from entering sewers or waterways. 防止物质污染土壤和进入下水道或水道。
Methods and materials for Containment 方法和材料控制	Stop the leak if safe to do so. Contain the spilled liquid with dry sand or earth. Clean up spills immediately. 出于安全，阻止泄漏，可以用干沙或沙土来遏制液体泄露，立即清理泄漏。
Methods and materials for cleaning up 清理的方法和材料	Absorb spilled material with an inert absorbent (dry sand or earth). Scoop contaminated absorbent into an acceptable waste container. Collect all contaminated absorbent and dispose of according to directions in Section 13. Scrub the area with detergent and water; collect all contaminated wash water for proper disposal. 用惰性吸收剂(干沙或沙土)吸收溢出的材料。污染物转移到可吸收废物的容器。收集所有受污染的吸收剂和根据第 13 部分的指令处置。用洗涤剂和水清洁污染区域,收集所有受污染的洗涤水进行适当处置。

Section 7- Handling and Storage 第七部分-操作处置与储存	
Handling 操作	Don't handing the batteries in manner that allows terminals to short circuit. Do not open, disassemble, crush or burn battery. 不要以让接头短路的方式对电池进行操作。不要打开，分解，挤压或燃烧电池。
Storage 储存	if the battery is subject to storage for such a long term as more than 3 months, it is recommended to recharge the battery periodically. 如果电池长期存放超过 3 个月，建议定期对电池充电。 Long period storage: 25±5°C, 60±25%R.H 长期存储：25±5°C,相对湿度 60±25% Do not storage the battery haphazardly in a box or drawer where they may short-circuit each other or be short-circuited by other metal objects. 不要将电池随意丢在盒子或抽屉里，以免电池之间或电池与其他金属物质发生短路。 Keep out of reach of children. 储存在小孩接触不到的地方。 Do not expose the battery to heat or fire. Avoid storage in direct sunlight. 不要将电池暴露在火源和热源附近，避免在阳光直射下存储。 Do not store together with oxidizing and acidic materials.

	不要与氧化和酸性物质存储在一起。

Section 8 - Exposure Controls/Personal Protection 第八部分-接触控制和个体防护	
Engineering Controls **工程控制**	No engineering controls are required for handling batteries that have not been damaged. Personal protective equipments for damaged batteries should include chemical resistant gloves and safety glasses. 操作未破损的电池，没有工程控制要求。对于破损的电池，个人防护用品应包括化学品防护手套和安全眼镜。
Personal Protective Equipment **个人防护设备**	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. Not necessary under conditions of normal use. 呼吸保护：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。正常使用条件下不必考虑。 Protective Gloves: Not necessary under conditions of normal use. 防护手套：正常使用条件下不必考虑。 Other Protective Clothing or Equipment: Not necessary under conditions of normal use. 其他防护服装或设备：正常使用条件下不必考虑。 Personal Protection is recommended for venting battery: Respiratory Protection, Protective Gloves, Protective Clothing and safety glass with side shields. 当电池排气阀打开时，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。

Section 9- Physical and Chemical Properties 第九部分-理化特性
Appearance: Blue **外观颜色：**蓝色
Physical state: Solid **物理状态：**固体
Form: Cylindrical **形状：**圆柱形
Melting Point ℃: >300℃ **熔点℃：**>300℃
Odor: Odorless **气味：**无气味
Solubility: Partial soluble in water **溶解度：**部分溶于水

Section 10 - Stability and Reactivity 第十部分-稳定性和反应性

Stability 稳定性	Stable under normal temperatures and pressures. 常温常压下稳定。
Conditions to Avoid 应避免的条件	Heat above 70°C or Incinerate, Deform, Mutilate, Crush, Disassemble, Overcharge, Short circuit, Expose over a long period to humid conditions. 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。
Hazardous Decomposition Products 危害分解物	Toxic Fumes, and may form peroxides. 有毒烟雾，并可能形成过氧化物。
Possibility of Hazardous Reaction 危险反应的可能性	If leaked, forbidden to contact with strong oxidizers ,mineral acids ,strong alkalis, 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。

Section 11 - Toxicological Information
第十一部分-毒理学信息

Irritation 刺激	In the event of exposure to internal contents, vapor 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产生刺激性。
Sensitization 致敏	Not applicable. 不适用
Reproductive Toxicity 再生毒性	Not applicable. 不适用
Toxicologically Synergistic Materials 协同材料毒理学	Not applicable. 不适用

Section 12-Ecological Information
第十二部分-生态学信息

General note 通用信息	Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system. 不允许未稀释或大量的产品到达地下水、水道或污水系统。
Anticipated behavior of a chemical product in environment/possible environmental impact/ ecotoxicity 化学产品在环境/可能的环境预 期的行为的一种生态毒性	Not applicable. 不适用
Mobility in soil 土壤中移动性	Not applicable. 不适用
Persistence and Degradability 持久性和降解性	Not applicable. 不适用

Section 13 - Disposal Considerations
第十三部分-废弃处置

Waste Treatment **废弃处置方法**	Recycle or dispose of in accordance with government, state & local regulations. 建议遵照国家和地方法规处置或再利用。
Attention for Waste Treatment **废弃注意事项**	Deserted batteries couldn't be treated as ordinary trash. Couldn't be thrown into fire or placed in high temperature. Couldn't be dissected, pierced, crushed or treated similarly. Best way is recycling. 废电池不能被当做普通垃圾。不能扔进火中或置于高温下。不能解体， 刺穿，破碎或类似的处理。最好的办法是回收利用。

Section 14 - Transport Information
第十四部分-运输信息

The battery shall be passed the test items of the UNITED NATIONS “Recommendations on the Transport of Dangerous Goods, Manual of Tests and Criteria" section 38.3 and meet the requirements of UNITED NATIONS “Recommendations on the Transport of Dangerous Goods, model Regulations "
该电池必须通过联合国《关于危险货物运输的建议书 试验和标准手册》第 38.3 章节的测试项目和满足联合国《关于危险货物运输的建议书 规章范本》的要求。

The battery shall be protected so as to prevent short circuits. This includes protection against contact with conductive materials within the same packaging that could lead to short circuit;
该电池必须做好防短路保护。包括防止与同一封装内的导电材料接触可能导致的短路。

The packaging shall be adequate to avoid mechanical damage during transport, handling and stacking.
包装应足以避免在运输，处理和堆放期间的机械损坏。

The package must be handled with care and that a flammability hazard exists if the package is damaged. 包装必须小心处理，如果包装损坏，存在易燃危险。

With regard to transport, the following regulations are cited and considered:
关于运输，引用和考虑了以下法规：
-The international Civil Aviation Organization (ICAO) Technical Instructions.
-国际民用航空组织(ICAO)技术细则。
-The international Air transport Association (IATA) Dangerous Goods Regulations.
-国际航空运输协会(IATA)危险物品规则。
The battery can be shipped by air in according to PACKING INSTRUCTION 965 Section IB, or PACKING INSTRUCTION 966～967 Section II of the 2022 IATA Dangerous Goods regulations 63rd Edition.
该电池可以根据 2022 年 IATA 危险物品规则第 63 版包装指令 965 第 IB 部分或包装指令 966～967 第 II 部分运输。
UN number: UN3480 or UN3481;
UN 编号：UN3480 或 UN3481:
UN Proper shipping name/Description (technical name): Lithium ion batteries or Lithium ion batteries packed with equipment or Lithium ion batteries contained in equipment;
UN 合适的运输名称/描述(技术名称)：锂离子电池或锂离子电池与设备包装在一起或锂离子电池内置于设备中;
UN Classification (Transport hazard class): Class 9 (PI965 Section IB) or N/A (PI966～967 Section II)
UN 分类(运输危险类别): 9 类危险品(包装指令 965 第 IB 部分)或者不适用(包装指令 966～967 第 II 部分)
UN Packing Group: N/A

UN 包装类别：不适用

-The international Maritime Dangerous Goods (IMDG) Code.
-国际海运危险货物(IMDG)规则。
UN number: UN3480 or UN3481;
UN 编号：UN3480 或 UN3481；
UN Proper shipping name/Description (technical name): Lithium ion batteries or Lithium ion batteries packed with equipment or Lithium ion batteries contained in equipment;
UN 合适的运输名称/描述(技术名称)：锂离子电池或锂离子电池与设备包装在一起或锂离子电池内置于设备中;
UN Classification (Transport hazard class): N/A
UN 分类(运输危险类别)：不适用
UN Packing Group: N/A
UN 包装类别：不适用
The battery is not restricted according to IMO IMDG Code (inc. Amendment 40-20) Special Provision188.
海运按照国际海事组织《国际海运危险货物规则》(40-20 版)特殊规定 188 不受限制。

Section 15 - Regulatory Information
第十五部分-法规信息

International Civil Aviation Organization (ICAO) Technical Instructions
ICAO 国际民用航空组织(ICAO)技术细则:
1.Unless be exempted according to ICAO TI, the lithium ion cell/batteries (UN 3480，PI 965) and lithium metal cell/batteries (UN 3090，PI 968) are forbidden for carriage on passenger aircraft.
除非依据《技术细则》的相关要求取得豁免，单独包装的锂离子电池（芯）(UN 3480,PI 965）和锂金属电池（芯）（UN 3090，PI 968）货物禁止使用客机运输。
2.Unless be approved according to ICAO TI, Lithium ion cells/batteries (UN 3480，PI 965) must be offered for transport at a state of charge (SoC) not exceeding 30% of their rated design capacity.
除非依据《技术细则》的相关要求取得特别批准，按照包装说明 965 要求运输的锂离子电池（芯）货物，交运时锂离子电池（芯）的荷电状态不得超过其额定容量的 30%。

Section 16 - Additional Information
第十六部分-附加信息

Compile unit 编制单位：

Guangzhou CP-UP Certification Technology Service Co., Ltd.
广州三帕认证技术服务有限公司
Room C101, C102, C103, and C104, No 9, Hengji Road, Yunxing Zhukeng Village, Shiqiao Street, Panyu District, Guangzhou City, China
广州市番禺区市桥街云星珠坑村横基路 9 号 C101、C102、C103、C104 室
Tel./电话: 0086-20-31127037
Web/网址: www.cp-up.com
Email/邮箱: info@cp-up.com

Revision 修订: 0

Other Information 其他信息：

The information above is believed to be accurate and represents the best information currently available to us. However, we makes no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. Although reasonable precautions have

been taken in the preparation of the data contained herein, it is offered solely for your information, consideration and investigation. This safety data sheet provides guidelines for the safe handling and use of this product; it does not and cannot advise on all possible situations, therefore, your specific use of this product should be evaluated to determine if additional precautions are required.

在我们看来上面的信息是准确的，这是我们目前能提供的最佳的信息。但是，对于这些信息，我们不对商品的性能做任何明示的或者暗示的保证，我们也不对使用这些信息造成的后果担负任何责任。用户应当自己调查研究后决定这些信息是否适用于他们的特定用途。尽管在该文档里提出了合理的预警，但是这仅仅只是给您做参考、考量和调查。这份安全技术说明书提供了安全处理和使用该产品的指南，但是它没有，也不能对所有可能发生的情景提出建议，所以您需要根据您对该产品的特定使用情况来决定是否需要其他的预防措施。

--End of report--

--报告结束--

海 运
By Sea

NO.212200612134753

中国认可
检验
INSPECTION
CNAS IB0071

货物运输条件鉴定书

Certification for Safe Transport of Chemical Goods

锂电池类货物

样品名称： 圆柱型锂离子电池 18650 2000mAh 3.7V 7.4Wh

Sample name: Li-ion 18650 3.7V 7.4wh

委托单位： 宁波景瑞能源科技有限公司
NINGBO JINGRUI ENERGY TECHNOLOGY CO.,LTD

生产单位： 宁波景瑞能源科技有限公司
NINGBO JINGRUI ENERGY TECHNOLOGY CO.,LTD

上海化工院检测有限公司
检验检测专用章

Witness Better Life
SICIT 上海化工院检测有限公司
Shanghai Institute of Chemical Industry Testing Co., Ltd

海 运
By Sea

海 运
By Sea

声　明
Statement

1. 鉴定书无上海化工院检测有限公司检验检测专用章、二维码无效。
   The certification is invalid if it is not affixed the dedicated inspection and testing seal of Shanghai Institute of Chemical Industry Testing Co., Ltd.and QR Code on it.

2. 鉴定书复印件无效。
   Copies of the certification are invalid.

3. 鉴定书无主检、审核、批准签字无效。
   The certification is invalid without the signatures of appraiser, checker and approver.

4. 鉴定书涂改无效。
   The certification is invalid if it is forged or altered.

5. 委托单位必须保证送至本公司的样品及资料与真实的出运货物相一致，如有不符，所涉及的法律责任及其他后果均由委托单位自行承担。
   The client must guarantee that samples and documents provided for appraisal are consistent with the goods to be transported. Otherwise, the client shall bear all legal responsibilities and other consequences due to it.

6. 本鉴定书的鉴定结论仅适用于最终收到的样品。
   The conclusion of this certification only applies to the final sample as received.

7. 本鉴定书当年有效，铁路运输方式除外。特殊情况参见鉴定书备注。
   The certification is valid in the year subscribed on it except when transported by rail. Please refer to the comment of certification on special occasion.

8. 本鉴定书不考虑国家及经营人差异。
   The certification takes no account of the State and Operator Variations.

9. 货物的运输方式应与鉴定结论中的运输方式相一致。不同的运输方式，鉴定结果可能会有差异。
   The transportation mode of the goods shall be consistent with that in the appraisal conclusion. Different transportation modes may lead to different appraisal results.

10. 鉴定书真伪性可登入本公司网站 www.ghs.cn 或扫描鉴定书中二维码进行查询。
    The authenticity of the certification can be verified by our website(www.ghs.cn)or the QR code in the certification.

11. 送检申请可登入本公司网站 www.ghs.cn 进行网上委托。
    The application of the certification can be done via our website: www.ghs.cn.

地址：上海市光复西路2779号接待大厅
Address: Reception Hall, Shanghai Institute of Chemical Industry Co., Ltd, No.2779 West Guangfu Road, Shanghai, China.
邮编(Post code): 200062
电话(Tel):(008621)31765555
邮箱(Email): center@ghs.cn
网址(Website): www.ghs.cn

货物运输条件鉴定书

Certification for Safe Transport of Chemical Goods

NO. 212200612134753

样品名称 Sample Name	中文 Chinese	圆柱型锂离子电池 18650 2000mAh 3.7V 7.4Wh
	英文 English	Li-ion 18650 3.7V 7.4wh
委托单位 Consignor		宁波景瑞能源科技有限公司 NINGBO JINGRUI ENERGY TECHNOLOGY CO.,LTD
生产单位 Manufacturer		宁波景瑞能源科技有限公司 NINGBO JINGRUI ENERGY TECHNOLOGY CO.,LTD
检验方法、程序 Inspection method and procedure		国际海事组织《国际海运危险货物规则》(2020版) IMO International Maritime Dangerous Goods Code (2020 Edition)
样品外观 Sample appearance		蓝色圆柱型塑料薄膜外壳 Blue Cylinder plastics film shell
包装件信息 Package information		重量≤30kg。 weight≤30kg.

序号 NO.	电池种类 Battery type	型号 Model	容量Capacity /锂含量Li content	放置方式 Placement
1	可充电锂离子单电芯电池 Rechargeable Li-ion single cell battery	18650	2000mAh 7.4Wh	电池单独运输 Battery only

鉴定结论 IDENTIFICATION CONCLUSION

1. 危险性识别(Hazards identification)

锂离子电池。

Lithium ion battery.

2. 海运按照国际海事组织《国际海运危险货物规则》办理的类项(Suggestion according to IMO IMDG Code)

根据特殊规定188，该物品不受IMO IMDG Code其他条款限制。

The article is not subject to other provisions of IMO IMDG Code according to special provision 188.

3. 包装要求(Packaging requirements)

无。

None.

检验日期: Inspection Date: 2022-01-03　签发日期: Issue Date: 2022-01-04　生效日期: Effective Date: 2022-01-04

备注 Comment	/

批准 Approver: 王泉　审核 Checker: 董宗胜　主检 Appraiser: 孙倩

货物运输条件鉴定书

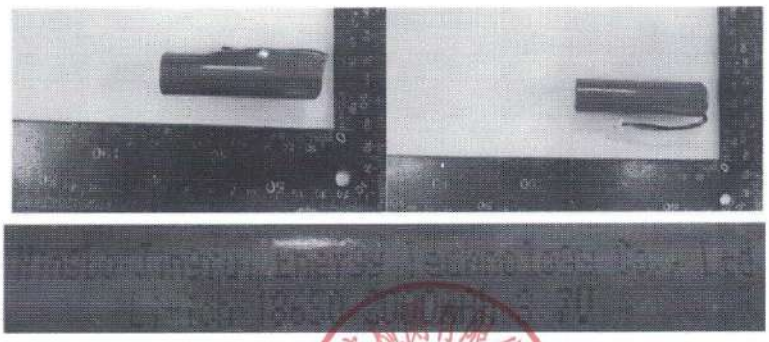
Certification for Safe Transport of Chemical Goods

序号 No.	检验结果及其他事项 Inspection results and other things
1	本报告所述锂电池按照《国际海运危险货物规则》(2020版) 2.9.4.5规定的质量管理体系进行制造。 Lithium cells and batteries listed in this report were manufactured under the quality management program described in IMDG CODE 2020 EDITION 2.9.4.5 .
2	本报告所述锂电池已通过《联合国试验和标准手册》第III部分38.3小节相应测试要求。 包装件能够承受1.2m跌落试验。 Lithium cells and batteries listed in this report are of the types proved to meet the requirements of each applicable test in the UN Manual of Tests and Criteria, Part III, sub-section 38.3. The package has passed the 1.2m drop test. UN38.3试验概要编号 The UN38.3 Test Summary No.(s) 812100200339856 详细信息请扫描右侧二维码。 Please scan the QR code on the right for more information.
3	锂电池完全封装在内包装内，位于坚固的外包装中。 Lithium cells and batteries are packed in inner packagings that completely enclose the cell or battery and placed in a strong outer packaging.
4	电池具有适当的防短路措施。 Cells and batteries are properly protected to prevent short circuits.
5	每个包装件必须标示恰当的锂电池标记。 装有锂电池的包装件，符合国际民航组织《危险物品安全航空运输技术细则》第4部分第11章的包装说明965或968第IB部分规定的，黏贴5.2.1.10(锂电池标记)和5.2.2.2所示的9A型标签，应视为符合本特殊规定188的规定。 Each package shall be marked with the appropriate lithium battery mark. Packages containing lithium batteries packed in conformity with the provisions of part 4, chapter 11, packing instructions 965 or 968, section IB of the ICAO Technical Instructions for the Safe Transport of Dangerous Goods by air that bear the mark as shown in 5.2.1.10(lithium battery mark) and the label shown 5.2.2.2, Model No.9A shall be deemed to meet the provisions of this special provision 188.
6	/
7	/

-验证码:325114-

货物运输条件鉴定书

Certification for Safe Transport of Chemical Goods



上海化工院检测有限公司
检验检测专用章
(35)

SRICI

公司章

报告结束

UN38.3 试验概要
UN38.3 Test Summary

812100200339856

单位信息 Company information			
委托单位 Consignor	宁波景瑞能源科技有限公司 NINGBO JINGRUI ENERGY TECHNOLOGY CO.,LTD 浙江省宁波市奉化区岳林街道银峰路 88-1 号 NO.88-1,YINFENG ROAD ,YUELIN STREET，FENGHUA DISTRICT,NINGBO,ZHEJIANG,CHINA 13567463585 2423083305@qq.com /		
生产单位 Manufacturer	宁波景瑞能源科技有限公司 NINGBO JINGRUI ENERGY TECHNOLOGY CO.,LTD 浙江省宁波市奉化区岳林街道银峰路 88-1 号 NO.88-1,YINFENG ROAD ,YUELIN STREET，FENGHUA DISTRICT,NINGBO,ZHEJIANG,CHINA 13567463585 2423083305@qq.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	锂离子圆柱型电池	品牌 Brand	/
型号 Type	18650	原始测试型号 Original tested type	/
标称电压(V) Nominal voltage	3.7	容量/能量 Capacity/energy	2000mAh
描述 Description	可充电锂离子单电芯电池 Rechargeable Li-ion single cell battery	锂含量(g) Li content	/
质量(kg) Mass	0.0471	外观 Appearance	蓝色圆柱型塑料薄膜外壳 blue cylinder plastics film shell
测试信息 Test information			
原报告编号 Original test report No.	1121040457	测试报告日期 Date of test report	2021-06-01
测试标准 Test standard	联合国《关于危险货物运输的建议书试验和标准手册》第 38.3 章 UNITEDNATIONS "Recommendations on the TRANSPORT OF DANGEROUS GOODS" Manual of Tests and Criteria 38.3		ST/SG/AC.10/11/Rev.6/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 撞击 Impact	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)	/

声　明

Statement

1.试验概要无本实验室公章（或检验检测专用章）无效。

The test summary is invalid if it is not affixed the official seal of the laboratory to it.

2.试验概要复印件无效。

Copies of the test summary are invalid.

3.试验概要无签字及签字者姓名和职务无效。

The test summary is invalid without the signature, name and title of the signatory.

4.试验概要涂改无效。

The test summary is invalid if it is blotted out.

5.未经本实验室书面批准，不得部分复制试验概要。

It is forbidden to copy the test summary partially without the written approval of the laboratory.

6.试验概要中描述的检测结果，仅对所测样品有效。

The conclusion of the test summary is only valid for the tested sample.

7.试验概要以中文为准，英文文本（如有）仅为译文，两者发生冲突时，应以中文文本为准。

The test summary has been drafted in Chinese and translated into English (if exist) for convenience only. In the event of discrepancy, the Chinese version shall prevail.

地址：上海市云岭东路 345 号　　Address: No. 345 East Yunling Road，Shanghai

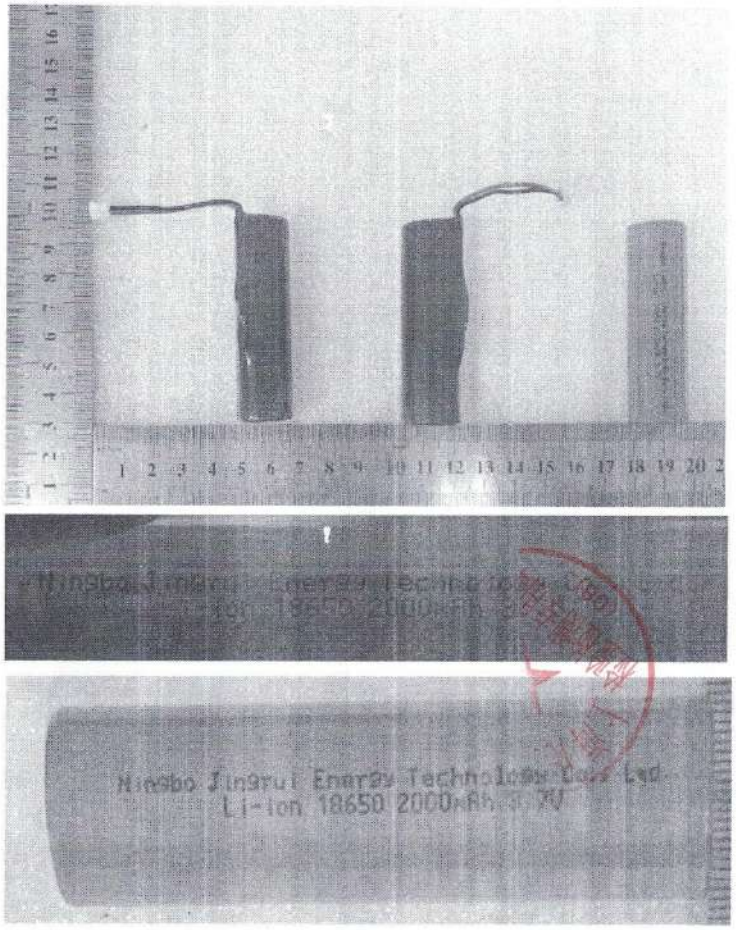
邮政编码(PostCode)：200062

电话(Tel)：（021）31765555　　传真(Fax)：（021）31015117

网址(website)：www.ghs.cn

电子信箱(E-mail)：battery@ghs.cn

样品图片 Sample Picture



结论 Conclusion	测试样品符合联合国《关于危险货物运输的建议书试验和标准手册》ST/SG/AC.10/11/Rev.6/Amend.1 38.3 标准要求。The tested samples meet the requirements of test items of the UNITED NATIONS "Recommendations on the TRANSPORT OF DANGEROUS GOODS" Manual of Tests and Criteria ST/SG/AC.10/11/Rev.6/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	2021-06-17

-验证码:097807-

报告结束

中国认可
检测
TESTING
CNAS L0748

170014233963

NO.1121040457

检 测 报 告

Test Report

样品名称： 锂离子圆柱型电池 18650 3.7V 2000mAh

Name of Sample: /

委托单位: 宁波景瑞能源科技有限公司

Consignor: /

上海化工院检测有限公司

Shanghai Institute of Chemical Industry Testing Co., Ltd.

声　明

Statement

1. 检测报告无本实验室公章（或检验检测专用章）无效。
   The test report is invalid if it is not affixed the official seal of the laboratory to it.
2. 复制检测报告未重新加盖本实验室公章（或检验检测专用章）无效。
   Copies of the test report without the official seal of the laboratory are invalid.
3. 检测报告无编制、审核、批准人签字无效。
   The test report is invalid without the signatures of compiler, checker and approver.
4. 检测报告涂改无效。
   The test report is invalid if it is blotted out.
5. 未经本实验室书面批准，不得部分复制检测报告。
   It is forbidden to copy the test report partially without the written approv al of the laboratory.
6. 送样委托检测结果，仅对所送样品有效。
   The conclusion of the consignation test is only valid for the provided sample.
7. 本检测报告以中文为准，英文文本（如有）仅为译文，两者发生冲突时，应以中文文本为准。
   The test report has been drafted in Chinese and translated into English (if exist) for convenience only. In the event of discrepancy, the Chinese version shall prevail.
8. 除另有说明，检测检验类别都是指委托分析。
   Unless noted otherwise, the test type is consignation test.

地址：上海市云岭东路 345 号　　Address: No.345 East Yunling Road, Shanghai
邮政编码(Post Code)：200062
电话(Tel)：（021）31765555　　传真(Fax)：（021）31015117
网址（web site）：www.ghs.cn
电子信箱(E-mail)：zmh@ghs.cn

上海化工院检测有限公司
检 测 报 告

Shanghai Institute of Chemical Industry
Testing Co., Ltd. Test Report

NO. 1121040457

样品名称 Name of Sample	中文 Chinese	锂离子圆柱型电池 18650 3.7V 2000mAh		
	英文 English	/		
样品编号 Sample No.	1121040457			
委托单位 Consignor	宁波景瑞能源科技有限公司 /			
生产单位 Manufacturer	宁波景瑞能源科技有限公司 /			
检测方法 Test method	联合国《关于危险货物运输的建议书 试验和标准手册》 ST/SG/AC.10/11/Rev.6 Amend.1 38.3 UNITED NATIONS "Recommendations on the TRANSPORT OF DANGEROUS GOODS" Manual of Tests and Criteria ST/SG/AC.10/11/Rev.6 Amend.1 Section 38.3			
判定标准 Criterion	联合国《关于危险货物运输的建议书 试验和标准手册》 ST/SG/AC.10/11/Rev.6 Amend.1 38.3 UNITED NATIONS "Recommendations on the TRANSPORT OF DANGEROUS GOODS" Manual of Tests and Criteria ST/SG/AC.10/11/Rev.6 Amend.1 Section 38.3			
样品外观 Appearance	蓝色 圆柱型塑料薄膜外壳 Blue Cylinder plastics film shell			
样品接受日期 Accepted Date	2021-04-21	检测起迄日期 Test Date	2021-05-06 ～ 2021-06-01	
检测项目 Test Items	高度模拟;热测试;振动;冲击;外短路;撞击;过充电;强制放电 Altitude simulation, Thermal test, Vibration, Shock, External short circuit, Impact, Overcharge, Forced discharge			
检测结论 Conclusion	经检测，该样品符合联合国《关于危险货物运输的建议书 试验和标准手册》ST/SG/AC.10/11/Rev.6 Amend.1 38.3标准要求。 The sample has passed the test items of UNITED NATIONS "Recommendations on the TRANSPORT OF DANGEROUS GOODS" Manual of Tests and Criteria ST/SG/AC.10/11/Rev.6 Amend.1 38.3 生效日期(Date): 2021-06-01			
备注 Comment	可充电单电芯电池Rechargeable Single Cell Battery./			
委托单位地址 Consignor Address	/		邮政编码 Post Code	315500

批准 Approver: 王京　　审核 Checker: 陆建峰　　编制 Compiler: 傅俊

职务 Title: 副总工程师(Vice chief engineer)

上海化工院检测有限公司
检 测 报 告

Shanghai Institute of Chemical Industry Testing Co., Ltd. Test Report

NO. 1121040457

序号 No.	检测项目名称 Name of Test Items	标准要求或标准条款号 Standard requirement or The Clause Number of Standard	检测结果 Test Result	本项结论 Conclusion	备注 Remark
1	高度模拟 Altitude simulation	联合国《关于危险货物运输的建议书 试验和标准手册》ST/SG/AC.10/11/Rev.6 Amend.1 38.3 试验T.1 UN Manual of Tests and Criteria ST/SG/AC.10/11/Rev.6 Amend.1 Section 38.3 Test T.1	见附表 1 See Appendix 1	合格 Passed	/
2	热测试 Thermal test	联合国《关于危险货物运输的建议书 试验和标准手册》ST/SG/AC.10/11/Rev.6 Amend.1 38.3 试验T.2 UN Manual of Tests and Criteria ST/SG/AC.10/11/Rev.6 Amend.1 Section 38.3 Test T.2	见附表 2 See Appendix 2	合格 Passed	/
3	振动 Vibration	联合国《关于危险货物运输的建议书 试验和标准手册》ST/SG/AC.10/11/Rev.6 Amend.1 38.3 试验T.3 UN Manual of Tests and Criteria ST/SG/AC.10/11/Rev.6 Amend.1 Section 38.3 Test T.3	见附表 3 See Appendix 3	合格 Passed	/
4	冲击 Shock	联合国《关于危险货物运输的建议书 试验和标准手册》ST/SG/AC.10/11/Rev.6 Amend.1 38.3 试验T.4 UN Manual of Tests and Criteria ST/SG/AC.10/11/Rev.6 Amend.1 Section 38.3 Test T.4	见附表 4 See Appendix 4	合格 Passed	/
5	外短路 External short circuit	联合国《关于危险货物运输的建议书 试验和标准手册》ST/SG/AC.10/11/Rev.6 Amend.1 38.3 试验T.5 UN Manual of Tests and Criteria ST/SG/AC.10/11/Rev.6 Amend.1 Section 38.3 Test T.5	见附表 5 See Appendix 5	合格 Passed	/
6	撞击 Impact	联合国《关于危险货物运输的建议书 试验和标准手册》ST/SG/AC.10/11/Rev.6 Amend.1 38.3 试验T.6 UN Manual of Tests and Criteria ST/SG/AC.10/11/Rev.6 Amend.1 Section 38.3 Test T.6	见附表 6 See Appendix 6	合格 Passed	/
7	过充电 Overcharge	联合国《关于危险货物运输的建议书 试验和标准手册》ST/SG/AC.10/11/Rev.6 Amend.1 38.3 试验T.7 UN Manual of Tests and Criteria ST/SG/AC.10/11/Rev.6 Amend.1 Section 38.3 Test T.7	见附表 7 See Appendix 7	合格 Passed	/
8	强制放电 Forced discharge	联合国《关于危险货物运输的建议书 试验和标准手册》ST/SG/AC.10/11/Rev.6 Amend.1 38.3 试验T.8 UN Manual of Tests and Criteria ST/SG/AC.10/11/Rev.6 Amend.1 Section 38.3 Test T.8	见附表 8 See Appendix 8	合格 Passed	/

检测环境条件 Test Environment Condition	环境温度:22℃-23℃;环境湿度:/% Ambient temperature:22℃-23℃;Ambient humidity:/%				
分包检验情况 Subcontracted Test Condition	检测项目 Test Item	/			
	分包实验室 Subcontracted Laboratory	名称 Name	/	邮编 Post Code	/
		地址 Address	/	电话 Tel	/

上海化工院检测有限公司
检 测 报 告－附表1

Shanghai Institute of Chemical Industry
Testing Co., Ltd. Test Report—Appendix 1

NO. 1121040457

序号 No.	1	检测项目名称 Name of Test Items		高度模拟 Altitude simulation				
样品编号 Sample No.	样品状态 Sample Status	试验前 Before		试验后 After		质量损失 Mass Loss /%	剩余电压 Residual OCV /%	其他现象 Other Event
		质量 Mass /g	开路电压 OCV /V	质量 Mass /g	开路电压 OCV /V			
001	1CYC完全充电 1CYC Fully charged	47.0306	4.18	47.0322	4.18	0.00	100.00	O
002	1CYC完全充电 1CYC Fully charged	46.5722	4.18	46.5732	4.18	0.00	100.00	O
003	1CYC完全充电 1CYC Fully charged	46.8282	4.18	46.8281	4.18	0.00	100.00	O
004	1CYC完全充电 1CYC Fully charged	46.4336	4.18	46.4337	4.18	0.00	100.00	O
005	1CYC完全充电 1CYC Fully charged	46.2527	4.18	46.2544	4.18	0.00	100.00	O
006	25CYC完全充电 25CYC Fully charged	46.2140	4.18	46.2160	4.18	0.00	100.00	O
007	25CYC完全充电 25CYC Fully charged	46.6206	4.18	46.6220	4.18	0.00	100.00	O
008	25CYC完全充电 25CYC Fully charged	46.9099	4.18	46.9116	4.18	0.00	100.00	O
009	25CYC完全充电 25CYC Fully charged	46.8263	4.18	46.8277	4.18	0.00	100.00	O
010	25CYC完全充电 25CYC Fully charged	46.8128	4.18	46.8144	4.18	0.00	100.00	O
以下空白	This space intentionally left blank							

备注：L-泄漏 V-漏气 D-解体 R-破裂 F-起火 O-无泄漏、无漏气、无解体、无破裂、无起火。
Note: L-Leakage V-Venting D-Disassembly R-Rupture F-Fire O-No Leakage,No Venting, No Disassembly,No Rupture & No Fire.

上海化工院检测有限公司
检 测 报 告－附表2

Shanghai Institute of Chemical Industry
Testing Co., Ltd. Test Report—Appendix 2

NO. 1121040457

序号 No.	2	检测项目名称 Name of Test Items		热测试 Thermal test				
样品编号 Sample No.	样品状态 Sample Status	试验前 Before		试验后 After		质量损失 Mass Loss /%	剩余电压 Residual OCV /%	其他现象 Other Event
		质量 Mass /g	开路电压 OCV /V	质量 Mass /g	开路电压 OCV /V			
001	1CYC完全充电 1CYC Fully charged	47.0322	4.18	47.0190	4.10	0.03	98.09	O
002	1CYC完全充电 1CYC Fully charged	46.5732	4.18	46.5575	4.09	0.03	97.85	O
003	1CYC完全充电 1CYC Fully charged	46.8281	4.18	46.8165	4.10	0.02	98.09	O
004	1CYC完全充电 1CYC Fully charged	46.4337	4.18	46.4235	4.10	0.02	98.09	O
005	1CYC完全充电 1CYC Fully charged	46.2544	4.18	46.2418	4.09	0.03	97.85	O
006	25CYC完全充电 25CYC Fully charged	46.2160	4.18	46.2037	4.10	0.03	98.09	O
007	25CYC完全充电 25CYC Fully charged	46.6220	4.18	46.6086	4.10	0.03	98.09	O
008	25CYC完全充电 25CYC Fully charged	46.9116	4.18	46.8984	4.10	0.03	98.09	O
009	25CYC完全充电 25CYC Fully charged	46.8277	4.18	46.8162	4.10	0.02	98.09	O
010	25CYC完全充电 25CYC Fully charged	46.8144	4.18	46.8009	4.10	0.03	98.09	O
以下空白	This space intentionally left blank							

备注：L-泄漏 V-漏气 D-解体 R-破裂 F-起火 O-无泄漏、无漏气、无解体、无破裂、无起火。
Note: L-Leakage V-Venting D-Disassembly R-Rupture F-Fire O-No Leakage,No Venting, No Disassembly,No Rupture & No Fire.

上海化工院检测有限公司
检 测 报 告－附表3

Shanghai Institute of Chemical Industry
Testing Co., Ltd. Test Report—Appendix 3

NO. 1121040457

序号 No.	3	检测项目名称 Name of Test Items		振动 Vibration				
样品编号 Sample No.	样品状态 Sample Status	试验前 Before		试验后 After		质量损失 Mass Loss /%	剩余电压 Residual OCV /%	其他现象 Other Event
		质量 Mass /g	开路电压 OCV /V	质量 Mass /g	开路电压 OCV /V			
001	1CYC完全充电 1CYC Fully charged	47.0190	4.10	47.0264	4.09	0.00	99.76	O
002	1CYC完全充电 1CYC Fully charged	46.5575	4.09	46.5644	4.09	0.00	100.00	O
003	1CYC完全充电 1CYC Fully charged	46.8165	4.10	46.8224	4.09	0.00	99.76	O
004	1CYC完全充电 1CYC Fully charged	46.4235	4.10	46.4298	4.09	0.00	99.76	O
005	1CYC完全充电 1CYC Fully charged	46.2418	4.09	46.2483	4.09	0.00	100.00	O
006	25CYC完全充电 25CYC Fully charged	46.2037	4.10	46.2103	4.09	0.00	99.76	O
007	25CYC完全充电 25CYC Fully charged	46.6086	4.10	46.6149	4.09	0.00	99.76	O
008	25CYC完全充电 25CYC Fully charged	46.8984	4.10	46.9048	4.09	0.00	99.76	O
009	25CYC完全充电 25CYC Fully charged	46.8162	4.10	46.8218	4.09	0.00	99.76	O
010	25CYC完全充电 25CYC Fully charged	46.8009	4.10	46.8064	4.09	0.00	99.76	O
以下空白	This space intentionally left blank							

备注：L-泄漏 V-漏气 D-解体 R-破裂 F-起火 O-无泄漏、无漏气、无解体、无破裂、无起火。
Note: L-Leakage V-Venting D-Disassembly R-Rupture F-Fire O-No Leakage,No Venting, No Disassembly,No Rupture & No Fire.

上海化工院检测有限公司
检 测 报 告－附表4

Shanghai Institute of Chemical Industry
Testing Co., Ltd. Test Report—Appendix 4

NO. 1121040457

序号 No.	4	检测项目名称 Name of Test Items		冲击 Shock				
样品编号 Sample No.	样品状态 Sample Status	试验前 Before		试验后 After		质量损失 Mass Loss /%	剩余电压 Residual OCV /%	其他现象 Other Event
		质量 Mass /g	开路电压 OCV /V	质量 Mass /g	开路电压 OCV /V			
001	1CYC完全充电 1CYC Fully charged	47.0264	4.09	47.0273	4.09	0.00	100.00	O
002	1CYC完全充电 1CYC Fully charged	46.5644	4.09	46.5654	4.09	0.00	100.00	O
003	1CYC完全充电 1CYC Fully charged	46.8224	4.09	46.8234	4.09	0.00	100.00	O
004	1CYC完全充电 1CYC Fully charged	46.4298	4.09	46.4319	4.09	0.00	100.00	O
005	1CYC完全充电 1CYC Fully charged	46.2483	4.09	46.2494	4.09	0.00	100.00	O
006	25CYC完全充电 25CYC Fully charged	46.2103	4.09	46.2129	4.09	0.00	100.00	O
007	25CYC完全充电 25CYC Fully charged	46.6149	4.09	46.6170	4.09	0.00	100.00	O
008	25CYC完全充电 25CYC Fully charged	46.9048	4.09	46.9070	4.09	0.00	100.00	O
009	25CYC完全充电 25CYC Fully charged	46.8218	4.09	46.8239	4.09	0.00	100.00	O
010	25CYC完全充电 25CYC Fully charged	46.8064	4.09	46.8076	4.09	0.00	100.00	O
以下空白	This space intentionally left blank							

备注：L-泄漏 V-漏气 D-解体 R-破裂 F-起火 O-无泄漏、无漏气、无解体、无破裂、无起火。
Note: L-Leakage V-Venting D-Disassembly R-Rupture F-Fire O-No Leakage,No Venting, No Disassembly,No Rupture & No Fire.

上海化工院检测有限公司
检 测 报 告－附表5
Shanghai Institute of Chemical Industry
Testing Co., Ltd. Test Report—Appendix 5

NO. 1121040457

序号 No.	5	检测项目名称 Name of Test Items	外短路 External short circuit
样品编号 Sample No.	样品状态 Sample Status	样品表面最高温度 Max. External Temperature /℃	其他现象 Other Event
001	1CYC完全充电 1CYC Fully charged	54.2	O
002	1CYC完全充电 1CYC Fully charged	54.5	O
003	1CYC完全充电 1CYC Fully charged	54.8	O
004	1CYC完全充电 1CYC Fully charged	54.6	O
005	1CYC完全充电 1CYC Fully charged	54.1	O
006	25CYC完全充电 25CYC Fully charged	55.1	O
007	25CYC完全充电 25CYC Fully charged	57.1	O
008	25CYC完全充电 25CYC Fully charged	57.6	O
009	25CYC完全充电 25CYC Fully charged	59.1	O
010	25CYC完全充电 25CYC Fully charged	56.9	O
以下空白	This space intentionally left blank		

备注：D-解体 R-破裂 F-起火 O-无解体、无起火、无破裂。
Note: D-Disassembly R-Ruptur F-Fire O-No Disassembly,No Fire & No Rupture.

序号 No.	6	检测项目名称 Name of Test Items	撞击 Impact
样品编号 Sample No.	样品状态 Sample Status	样品表面最高温度 Max. External Temperature /℃	其他现象 Other Event
011	1CYC 50%容量 1CYC 50% Capacity	128.0	O
012	1CYC 50%容量 1CYC 50% Capacity	117.2	O
013	1CYC 50%容量 1CYC 50% Capacity	117.4	O
014	1CYC 50%容量 1CYC 50% Capacity	127.8	O
015	1CYC 50%容量 1CYC 50% Capacity	104.0	O
016	25CYC 50%容量 25CYC 50% Capacity	120.7	O
017	25CYC 50%容量 25CYC 50% Capacity	125.3	O
018	25CYC 50%容量 25CYC 50% Capacity	114.3	O
019	25CYC 50%容量 25CYC 50% Capacity	114.9	O
020	25CYC 50%容量 25CYC 50% Capacity	101.7	O
以下空白	This space intentionally left blank		

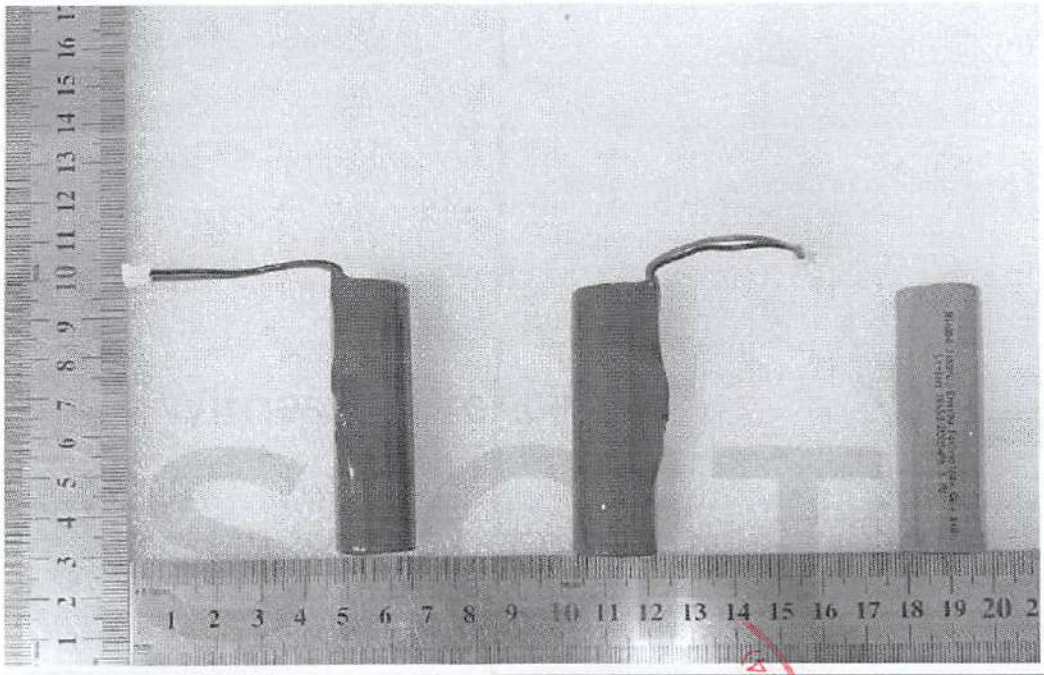
备注：D-解体 F-起火 O-无解体、无起火。
Note: D-Disassembly F-Fire O-No Disassembly & No Fire.

序号 No.	7	检测项目名称 Name of Test Items	过充电 Overcharge
样品编号 Sample No.	样品状态 Sample Status	其他现象 Other Event	
021	1CYC完全充电 1CYC Fully charged	O	
022	1CYC完全充电 1CYC Fully charged	O	
023	1CYC完全充电 1CYC Fully charged	O	
024	1CYC完全充电 1CYC Fully charged	O	
025	25CYC完全充电 25CYC Fully charged	O	
026	25CYC完全充电 25CYC Fully charged	O	
027	25CYC完全充电 25CYC Fully charged	O	
028	25CYC完全充电 25CYC Fully charged	O	
以下空白	This space intentionally left blank		

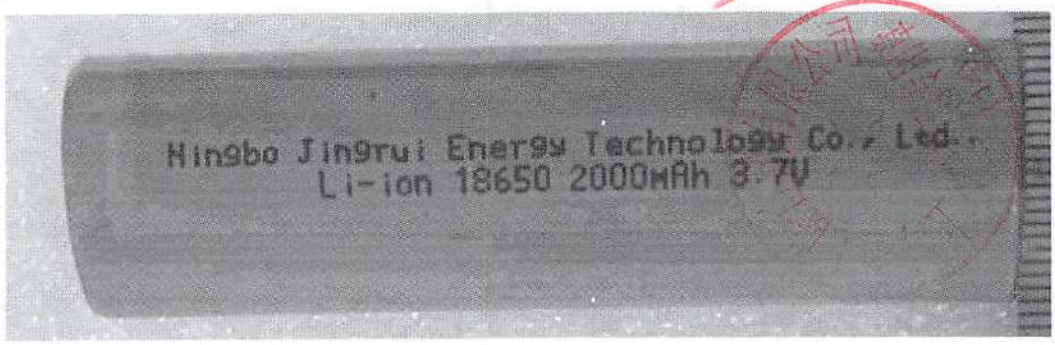
备注：D-解体 F-起火 O-无解体、无起火。
Note: D-Disassembly F-Fire O-No Disassembly & No Fire.

序号 No.	8	检测项目名称 Name of Test Items	强制放电 Forced discharge
样品编号 Sample No.	样品状态 Sample Status	其他现象 Other Event	
029	1CYC完全放电 1CYC Fully discharged	O	
030	1CYC完全放电 1CYC Fully discharged	O	
031	1CYC完全放电 1CYC Fully discharged	O	
032	1CYC完全放电 1CYC Fully discharged	O	
033	1CYC完全放电 1CYC Fully discharged	O	
034	1CYC完全放电 1CYC Fully discharged	O	
035	1CYC完全放电 1CYC Fully discharged	O	
036	1CYC完全放电 1CYC Fully discharged	O	
037	1CYC完全放电 1CYC Fully discharged	O	
038	1CYC完全放电 1CYC Fully discharged	O	
039	25CYC完全放电 25CYC Fully discharged	O	
040	25CYC完全放电 25CYC Fully discharged	O	
041	25CYC完全放电 25CYC Fully discharged	O	
042	25CYC完全放电 25CYC Fully discharged	O	
043	25CYC完全放电 25CYC Fully discharged	O	
044	25CYC完全放电 25CYC Fully discharged	O	
045	25CYC完全放电 25CYC Fully discharged	O	
046	25CYC完全放电 25CYC Fully discharged	O	
047	25CYC完全放电 25CYC Fully discharged	O	
048	25CYC完全放电 25CYC Fully discharged	O	

备注：D-解体 F-起火 O-无解体、无起火。
Note: D-Disassembly F-Fire O-No Disassembly & No Fire.



Ningbo Jingrui Energy Technology Co., Ltd.
Li-ion 18650 2000mAh 3.7V


Ningbo Jingrui Energy Technology Co., Ltd.
Li-ion 18650 2000mAh 3.7V

报告结束