




检 查  
CNAS IB0011

# 货物运输条件鉴定报告书

Report for Safe Transport of Goods

Page 1 of 6 Pages

No.: UN2016-2039-4

 海运 By Sea	锂电池 (SP 188) Lithium batteries (SP 188)
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样 品 名 称 ..... 锂离子 电池组 (伴随 I SCRUB 21)  
 4ICR19/66-3 14,4V 6600mAh 95,04Wh

Sample Name ..... Li-ion Battery ( Packed With I SCRUB 21 )  
 4ICR19/66-3 14,4V 6600mAh 95,04Wh

委 托 单 位 ..... 东莞 硕能 塑胶 模具 有限 公司

Commissioner ..... DONGGUAN SOLID PLASTICS & MOLDING CO., LTD

威凯认证检测有限公司  
 (广州威凯认证检测有限公司)  
**Vkan Certification & Testing Co., Ltd.**



# 货物运输条件鉴定报告书

## Report for Safe Transport of Goods

Ref. No.: UN2016-2039-4

Page 2 of 6 Pages

<b>样品信息/ Sample information</b>		
样品名称 .....	锂离子电池组(伴随 I SCRUB 21)	
Sample name.....	Li-ion Battery (Packed With I SCRUB 21)	
电池类别/Battery Type .....	锂离子电池/ Lithium-ion batteries	
型号规格/Type.....	4ICR19/66-3 14,4V 6600mAh 95,04Wh	
外观颜色/ Appearance .....	蓝色/Blue	
<b>委托单位/ Commissioner information</b>		
委托单位 .....	东莞硕能塑胶模具有限公司	
Commissioned by .....	DONGGUAN SOLID PLASTICS & MOLDING CO., LTD	
<b>生产单位/Manufacturer information</b>		
生产单位: .....	深圳市德沃斯科技有限公司	
Manufacturer .....	SHENZHEN DVAUS TECHNOLOGY CO., LTD	
<b>包装件信息/Package information</b>		
包装件重量/Package quantity ..	4,6kg	
电池净重/ Battery net weight...	0,69kg	
电池个数/ Battery Number .....	1cs	
包装件尺寸/Package size .....	960mm×290mm×170mm	
设备信息/ Equipment info .....	名称/name	型号/model
	I SCRUB 21	ES2
<b>时间信息/ Date</b>		
鉴定日期/ Inspection date .....	2016-03-19 ~ 2016-04-19	
报告有效期 Period of validity...	2016-12-31	
<b>鉴定依据/Inspection refer to</b>		
国际海运危险货物运输规则 IMDG CODE (Amdt. 37-14) 2014 Edition		
<b>鉴定结论/ Certification</b>		
<b>1. 运输名称/Proper Shipping name:</b>		
— 安装在设备中的锂离子电池 (包括锂离子聚合物电池) / Lithium ion batteries contained in equipment (Including lithium ion polymer batteries)		
<b>2. 危险品识别/ Hazards identification :</b>		
— 无/None		
<b>3. 包装符合 IMDG CODE (Amdt. 37-14) 2014 版特殊规定 188 的要求</b>		
<b>Package complies with the special provision 188 of IMDG CODE (Amdt. 37-14) 2014 Edition</b>		
— 包装件毛重不超过 30kg。 / The gross weight of the package does not exceed 30kg.		
签发日期: 2016.4.19		
Issue Date:		

批准人:

Approved by:

刘同荣

审核人:

Reviewed by:

黄鲲

鉴定人:

Appraisal by:

张思强

检查结果及其他事项 Inspection results and other information	
1	<p>本报告所述锂电池已经通过联合国《关于危险品货物运输的建议书》第 38.3 节的相关测试要求。UN38.3 测试报告编号：RZUN2016-2039。</p> <p>The Lithium batteries listed in the report are of type proven to meet the requirements of each test in the UN Manual of Tests and Criteria Part III subsection 38.3. The UN38.3 test report No. for the Lithium batteries is RZUN2016-2039.</p> <p>本报告所述锂电池的包装箱能够承受 1,2 米跌落测试。1,2 米跌落报告编号：RZUN2016-2039-DT1。</p> <p>The package of Lithium batteries listed in the report is capable of withstood the 1,2m drop test. The 1,2m drop tes test report No. for the Lithium batteries is RZUN2016-2039-DT1.</p>
2	<p>本报告所述锂电池按照《国际海运危险货物运输规则》(37-14 版) 2.9.4 (5) 规定的质量管理体系进行制造。</p> <p>Lithium cells and batteries listed in this report were manufactured under the quality management programmer as described in IMDG CODE (Amdt. 37-14) 2014 Edition 2.9.4 (5) .</p>
3	<p>锂电池具有适当的防短路措施。 设备配备有适当的防意外启动的有效装置。 安装有锂电池的设备在外包装内有适当的防移位措施，有适当的打包以免发生误操作。</p> <p>Cells and batteries are properly protected so as to prevent short circuits. Equipments are properly equipped with an effective means of preventing accidental activation. The equipments are properly secured against movement within the outer packaging and are packed so as to prevent accidental operation.</p>
4	<p>包装件贴有锂电池操作标签。</p> <p>Package is labeled with a lithium battery handling label.</p>
5	<p>每件托运货物必须附带一份文件说明，包括以下内容： —包装件内装有锂离子电池芯或电池组。 —包装件必须小心轻放，若包装件损坏有着火的危险。 —包装件被损坏必须遵守特定程序，包括检查和必要时重新包装。同时还有 —了解其情况的电话号码</p> <p>Each consignment must be accompanied with a document with an indication that: —The package contains lithium ion cells or batteries; —The package must be handled with care and that a flammability hazard exists if the package is damaged; —Special procedures must be followed in the event the package is damaged, to include inspection and repacking if necessary; and —A telephone number for additional information.</p>
6	<p>本报告所述的电池或电池组不适用 IMDG CODE(Amdt. 37-14) 2014 中除特殊规定 188 外的其他规定。</p> <p>The Lithium cells/ batteries listed in the report are not subjected to other provision except for special provision 188 in IMDG CODE(Amdt. 37-14) 2014.</p>
<p><b>备注:</b> <b>Remarks:</b> 该报告中逗号用以代替小数点。 Throughout this report a comma is used as the decimal separator.</p>	

样品照片  
Photos of Samples

Battery/电池 (4ICR19/66-3 14,4V 6600mAh 95,04Wh )



包装照片  
Photos of Packages

包装箱/ Package



# 注 意 事 项

## Important Notice

1. 本鉴定报告书仅对送检样品有效。

**This report is valid for the tested samples only.**

2. 申请人提供的样品须与实际运输货物一致。

**The goods of transporting must be insured conformity with the testing samples.**

3. 本鉴定报告书无检验单位印章、骑封章无效。

**This report is invalid without the official stamp of CVC and Paging seal of CVC.**

4. 本鉴定报告书无批准人、审核人及鉴定人签名无效。

**This report is invalid without the signatures of Ratifier, Reviewer and Testing engineer.**

5. 本鉴定报告书涂改无效。

**This report is invalid if altered.**

6. 判定栏中“N/A”表示“不适用”，“P”表示“通过”，“F”表示“不通过”，“-”表示“无需判定”。

**As for the Verdict, “N/A” means “not applicable”, “P” means “pass”, “F” means “fail” and “-” means “no need for judgement”.**

7. 本鉴定报告仅原件有效，复印件、传真件及电子版均无效。

**The original copy of this report is the only valid version. Any other versions of this report, whatever it is in the form of photocopy, fax, or electronic media, or others, are considered to be invalid.**

8. 本鉴定报告书可以在网站 <http://www.cvc.org.cn> 上核实。

**This report can be verified from the website: <http://www.cvc.org.cn>.**

地 址：中国 广州市科学城开泰大道天泰一路 3 号

Address: No.3,Tiantaiyi Road, Kaitai Avenue, Science City, Guangzhou, P. R. China.

电 话(Tel): (020)32293888

传 真(FAX): (020)32293889

邮政编码(Post Code): 510663

E-mail: [office@cvc.org.cn](mailto:office@cvc.org.cn)

<http://www.cvc.org.cn>



# 材料安全数据表

## Material Safety Data Sheet

货物名称: 锂离子电池

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Name of Goods: Li-ion Battery

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委托单位: 东莞硕能塑胶模具有限公司

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Commissioner: DONGGUAN SOLID PLASTICS & MOLDING  
CO., LTD

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东莞市联鼎电子科技有限公司  
Dongguan UTL Electronic Technology Co., Ltd.



# 材料安全数据表

## Material Safety Data Sheet

1. Identification of the product and supplier (产品和厂商信息)	
样品名称 Name of goods	锂离子电池组 Li-ion Battery
样品型号 Type/Mode	4ICR19/66-3
规格 Ratings	14.4V, 6600mAh, 95.04Wh
委托单位 Commissioned by	东莞硕能塑胶模具有限公司 DONGGUAN SOLID PLASTICS & MOLDING CO., LTD
委托单位地址 Commissioner address	广东省东莞市石碣镇新风西路99号 No.99, West Of Xinfeng Road, Shijie Town Dongguan City, Guangdong Province, China
制造商 Manufacturer	深圳市鹏诚新能源科技有限公司 Shenzhen PCHNE Technology Co., Ltd
制造商地址 Manufacturer address	中国广东省深圳市宝安区西乡街道富华社区航城工业区富鑫林工业园厂房C栋第三层 3/F, C Blog, FuXinLin Industry Park, Hangcheng Industrial Zone, Fuhua Community, XiXiang Street, Bao'An Dist., Shenzhen, Guangdong, China.
生产厂 Factory	深圳市鹏诚新能源科技有限公司 Shenzhen PCHNE Technology Co., Ltd
生产厂地址 Factory address	中国广东省深圳市宝安区西乡街道富华社区航城工业区富鑫林工业园厂房C栋第三层 3/F, C Blog, FuXinLin Industry Park, Hangcheng Industrial Zone, Fuhua Community, XiXiang Street, Bao'An Dist., Shenzhen, Guangdong, China.
鉴定依据 Inspection according to	EEC Directive 93/112/EC 联合国《关于危险品货物运输的建议书》 UN "Recommendations on the TRANSPORT OF DANGEROUS GOODS"
紧急联系电话 Emergency telephone call	+86-755 3661 0071
<div style="display: flex; justify-content: space-between;"> <span>接样日期 / Receiving date: 2017-03-14</span> <span>签发日期 / Issue date: 2017-04-05</span> </div>	

Approved by:

批准:



Reviewed by:

审核:

Tested by:

主检:

Dongguan UTL Electronic Technology Co., Ltd.

1F, Hengzheng Bldg, North Road of Station, Nancheng District, Dongguan, Guangdong, China

Tel:+86-769-3893 3228 Fax:+86-769-3893 3229 E-mail: sales@gdutl.com



<b>2. Composition/Information on Ingredient (成分/组成信息)</b>		
危险成分 (化学名称) Hazardous Ingredients (Chemical Name)	含量及含量百分比(%) Concentration or concentration ranges (%)	CAS编号 CAS Number
钴酸锂/ Lithium Cobalt Oxide	20-50	12190-79-3
石墨/ Graphite	10-30	7782-42-5
六氟磷酸锂/ Lithium Hexafluorophosphate	0.05-5	21324-40-3
碳酸乙烯酯/ Ethylene carbonate (EC)	5-20	96-49-1
碳酸二乙酯/ Diethyl carbonate (DEC)		105-58-8
碳酸丙烯酯/ Propylene carbonate (PC)		108-32-7
聚偏氟乙烯/ Polyvinylidene Fluoride (PVDF)	<1	24937-79-9
铜/ Copper (Cu)	3-15	7440-50-8
铝/ Aluminium (Al)	2-10	7429-90-5

<b>3. Hazards Identification (主要危险性鉴定)</b>	
爆炸危险性 Explosive risk	该物品不属于爆炸危险品 This article does not belong to the explosion dangerous goods
易燃危险性 Flammable risk	该物品不属于易燃危险品 This article does not belong to the flammable material
氧化危险性 Oxidation risk	该物品不属于氧化危险品 This article does not belong to the oxidation of dangerous goods
毒害危险性 Toxic risk	该物品不属于毒害危险品 This article does not belong to the toxic dangerous goods
放射危险性 Radioactive risk	该物品不属于放射危险品 This article does not belong to the radiation of dangerous goods
腐蚀危险性 Mordant risk	该物品不属于腐蚀危险品 This article does not belong to the corrosion of dangerous goods
其他危险性 other risk	该物品为锂离子电池，瓦时率为95.04Wh This article is Li-ion Battery, Watt hour rate 95.04Wh

## 4. First aid measures (急救措施)

### Eye

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

### Skin

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

### Inhalation

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

### Ingestion

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

## 5. Fire-fighting measures (消防措施)

**Flash Point:** N/A.

**Auto-Ignition Temperature:** N/A.

**Extinguishing Media:** Water, CO<sub>2</sub>.

### Special Fire-Fighting Procedures

Self-contained breathing apparatus.

### Unusual Fire and Explosion Hazards

Cell may vent when subjected to excessive heat-exposing battery contents.

### Hazardous Combustion Products

Carbon monoxide, carbon dioxide, lithium oxide fumes.

## 6. Accidental release measures (泄漏应急处理)

### 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.

### 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.

## 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.

### 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.

### 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.

## 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.

### Ventilation

Not necessary under conditions of normal use.

### Other Protective Clothing or Equipment

Not necessary under conditions of normal use.

### Personal Protection is recommended for venting battery

Respiratory Protection, Protective Gloves, Protective Clothing and safety glass with side shields.

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

**Appearance:** Quadrate shape

**Ref. No.:** 17PNS03076 01001

**Odour:** If leaking, smells of medical ether.

**pH:** Not applicable as supplied.

**Flash Point:** Not applicable unless individual components exposed.

**Flammability:** Not applicable unless individual components exposed.

**Relative density:** Not applicable unless individual components exposed.

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

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

## 10. Stability and reactivity (稳定性和反应活性)

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

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

**Materials to avoid:** Oxidising agents, alkalis, water.

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

**Hazardous Polymerization:** N/A.

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

## 11. Toxicological information (毒理性资料)

**Signs & symptoms:** None, unless battery ruptures.

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

**Inhalation:** Lung irritant.

**Skin contact:** Skin irritant

**Eye contact:** Eye irritant

**Ingestion:** Poisoning if swallowed

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.

## 12. Ecological information (生态学资料)

**Mammalian effects:** None known at present.

**Eco-toxicity:** None known at present.

**Bioaccumulation potential:** Slowly Bio-degradable.

**Environmental fate:** None known environmental hazards at present.

## 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.

## 14. Transport information (运输信息)

**Label for conveyance:** Lithium Battery Label.

**UN Number:** UN3480 or UN3481

**Packing Group:** N/A

**EmS No:** F-A, S-I

**Marine pollutant: No**

**Proper Shipping name:** 1) Lithium ion batteries; 2) Lithium ion batteries packed with equipment; 3) Lithium ion batteries contained in equipment. (including Lithium ion polymer batteries)

**Hazard Classification:** The goods shall be complied with the requirements of Section II (or Section IB) of Packing Instructions 965~967 of 58th DGR Manual of IATA (2017 edition), including the passing of the UN38.3 test. And also complies with the Special Provision 188 of IMDG CODE (Amdt.37-14) 2014 Edition.

## 15. Regulation information (法规信息)

**Law information**

- 《Dangerous Goods Regulations》
- 《Recommendations on the Transport of Dangerous Goods Model Regulations》
- 《International Maritime Dangerous Goods》
- 《Technical Instructions for the Safe Transport of Dangerous Goods》
- 《Classification and code of dangerous goods》
- 《Occupational Safety and Health Act》 (OSHA)
- 《Toxic Substance Control Act》 (TSCA)
- 《Consumer Product Safety Act》 (CPSA)
- 《Federal Environmental Pollution Control Act》 (FEPCA)
- 《The Oil Pollution Act》 (OPA)
- 《Superfund Amendments and Reauthorization Act TitleIII (302/311/312/313)》 (SARA)
- 《Resource Conservation and Recovery Act》 (RCRA)
- 《Safety Drinking Water Act》 (CWA)
- 《California Proposition 65》
- 《Code of Federal Regulations》 (CFR)

In accordance with all Federal, State and local laws.

## 16. Other information (其他信息)

This information is not effective to all the batteries manufactured by Shenzhen PCHNE Technology Co., Ltd. This information comes from reliable sources, but no warranty is made to the completeness and accuracy of information contained. Dongguan UTL Electronic Technology Co., Ltd. doesn't assume responsibility for any damage or loss because of misuse of batteries. User's should grasp the correct use method and be responsible for the use of batteries.

Photos



Fig.1 General view 1 of battery



Fig.2 General view 2 of battery



Photos



Fig.3 Internal view of battery



Fig.4 Overall view of cell