



中国认可
国际互认
检测
TESTING
CNAS L0095

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No.: RZUN2017-3701-DT1

检测报告

TEST REPORT

1.2m 跌落
1.2m Drop Test

NAME OF SAMPLE: Package for Li-ion battery
产品名称: 锂离子电池组的包装件

CLIENT: Techtronic Industries (Dongguan) Co., Ltd.
委托单位: 东莞创机电业制品有限公司

CLASSIFICATION OF TEST: Commission Test
检测类别: 委托测试

威凯检测技术有限公司
Vkan Certification & Testing Co., Ltd.



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Name of samples: Package for Li-ion battery 样品名称: 锂离子电池组的包装件	Battery type/Model: 电池型号规格: R840085, L1815R 18V 27Wh 1,5Ah
Commissioned by: Techtronic Industries (Dongguan) Co., Ltd. 委托单位: 东莞创机电业制品有限公司	Manufacturer: Techtronic Industries (Dongguan) Co., Ltd. 生产单位: 东莞创机电业制品有限公司
Commissioner address: No.1, Chuang Ke Road, Houjie Town Industrial Park, Houjie Town, Dongguan Guangdong, China 委托单位地址: 广东省东莞市厚街镇工业城创科路1号	Manufacturer address: No.1, Chuang Ke Road, Houjie Town Industrial Park, Houjie Town, Dongguan Guangdong, China 生产单位地址: 广东省东莞市厚街镇工业城创科路1号
Classification of test: Commission Test 检测类别: 委托测试	Quantity of sample: 5 packages 样品数量: 5个包装
Tested according to: 测试标准: ST/SG/AC.10/1/Rev.20	Sample identification: 样品标识序号: p1#~p5#
Receiving date: 接样日期: 2017-11-06	Means of receiving: Submitted by commissioner 接样方式: 委托单位送样
Completing date: 完成日期: 2017-12-19	Test item: 1 item 测试项目: 1项

Test conclusion: 检测结论:

The 1,2m drop test of the packages for Li-ion battery submitted by Techtronic Industries (Dongguan) Co., Ltd. is tested according to the 20th Revised Edition of the Recommendations on the Transport of Dangerous Goods, Model Regulations (ST/SG/AC.10/1/Rev.20).

由东莞创机电业制品有限公司送检的锂离子电池组的包装件 1,2m 跌落测试依据《关于危险品货物运输的建议书》规章范本第 20 修订版进行检测。

The test results comply with the relevant requirements of ST/SG/AC.10/1/Rev.20.
试验结果符合《关于危险品货物运输的建议书》规章范本第 20 修订版相关要求。

Seal of CVC

CVC 印章

Date of issue: 2017.12.19

签发日期:

Approved by:

批准:

Reviewed by:

审核:

Tested by:

检测:

Description and illustration of the sample:
样品说明及描述:

The info of package 包装件信息	
Package No. 包装件编号	p1#~p5#
Package quantity 包装件重量	7,79kg
Battery net weight 电池净重	5,52kg
Battery Number 电池个数	12pcs
Package size 包装件尺寸	483mm×379mm×225mm
Type of transport 包装件适用运输方式	lithium ion battery(including lithium ion polymer battery) 锂离子电池（单独）运输(包括锂离子聚合物电池)
外包装材料 the material of outer packaging	
<input checked="" type="checkbox"/> Corrugated carton 硬板纸箱 <input type="checkbox"/> wood carton 木板箱 <input type="checkbox"/> 其他 other:	
能完全装入样品的内包装方式 the manner of inner packaging that can be completely enclose the samples	
<input type="checkbox"/> 泡沫材料 Foam material <input type="checkbox"/> 吸塑盘 Plastic disc <input checked="" type="checkbox"/> 纸板隔板 Paper divider <input type="checkbox"/> 塑料气泡与珍珠棉 Plastic bubble and pearl cotton <input type="checkbox"/> 单一封口塑料袋 Single sealing plastic bags <input type="checkbox"/> 塑料气垫 Plastic air cushion <input type="checkbox"/> 独立小包装 Independent packaging <input type="checkbox"/> 其他 other:	

Description of the sampling procedure:
取样程序的说明:

/

Description of the deviation from the standard, if any:
测试结果不符合标准项的说明:

/

Remarks:
备注:

Throughout this report a comma is used as the decimal separator.
本报告中以逗号代替小数点。

The model R840085,L1815R are the same batteries, only difference in labels.
型号 R840085,L1815R 为同种电池, 只是标签不同。

Photos of Samples and Labels/样品照片及标识

Battery/电池 R840085, L1815R 18V 27Wh 1,5Ah



Photos of Samples and Labels/样品照片及标识

包装箱/ Package



ST/SG/AC.10/1/Rev.20				
Clause 章节	Requirements 标准要求	Result 测试结果	Verdict 判定	
6.1.5.3	1.2m Drop test / 1.2 米跌落测试			P
	Test procedure / 测试步骤			-
	The package of batteries is dropped from 1,2m / 电池包装件从 1,2 米跌落			-
	<p>Drop orientation/跌落方向: Where more than one orientation is possible for a given drop, the orientation most likely to result in failure of the packing must be used. / 如在一次跌落试验中可能有一种以上的方向, 须选择最易使包装损坏的跌落方向。</p> <p>Drop orientation for a package which are in the shape of a box. / 箱状包装的跌落方向: First drop: flat on the bottom / 第一次: 以箱底平跌 Second drop: flat on the top / 第二次: 以箱顶平跌 Third drop: flat on the long side / 第三次: 以一长侧面平跌 Fourth drop: flat on the short side / 第四次: 以一短侧面平跌 Fifth drop: on a corner / 第五次: 以一个角跌落</p> <p>Drop Target / 跌落目标: The target must be a non-resilient horizontal surface and must be / 跌落目标须为坚硬、无弹性的水平表面且须: (a) integral and massive enough to be immovable / 足够完整、厚重以固定不动; (b) flat with a surface kept free from local defects capable of influencing the test results / 表面平坦, 无影响试验结果的局部缺陷; (c) rigid enough to be non-deformable under test conditions and not liable to become damaged by the tests / 有足够的刚性, 在试验条件下不会变形并不会被试验所损坏; (d) sufficiently large to ensure that the test package falls entirely upon the surface / 具有足够大的规格以便试验包装完全跌落在表面上.</p>	<p>The package is in the shape of a box. The package is subjected to five drops in different orientation. 此包装为箱状, 并经受五个方向的跌落。</p>	-	
	<p>The drop target is a concrete floor. 跌落目标为水泥地面。</p>			
3.3.1	Requirements/要求			P
special provision 188 (h)	<p>Each package is capable of withstanding a 1,2m drop test in any orientation without damage to cells or batteries contained therein, without shifting of the contents so as to allow battery to battery (or cell to cell) contact and without release of contents. 每个包件须能承受任何方向 1,2m 的跌落试验而容器内物品没有破损, 没有造成内容物移位, 没有出现内装物从内贮器或内容器中漏出。</p>	<p>Sample No. 样品号</p>	p1#~p5#	P
		<p>Status 跌落后状态</p>	<p>No damage to batteries; No battery to battery contact; No release of contents from the package. 电池无损坏; 无电池与电池接触; 无内容物从包装漏出。</p>	

注 意 事 项 Important

1. 本报告无检测单位印章、骑封章无效。
The test report is invalid without the official stamp of CVC and Paging seal of CVC.
2. 未经本实验室书面同意，不得部分地复制本报告。
Nobody is allowed to photocopy or partly photocopy this test report without written permission of CVC.
3. 本报告无批准人、审核人及鉴定人签名无效。
The test report is invalid without the signatures of Ratifier, Reviewer and Testing engineer.
4. 本报告涂改无效。
The test report is invalid if altered,
5. 对检测报告若有异议，应于收到报告之日起十五天内向检测单位提出。
Objections to the test report must be submitted to CVC within 15 days,
6. 本报告仅对送检样品负责。
The test report is valid for the tested samples only.
7. 判定栏中“-”表示“不需要判定”，“P”表示“通过”，“F”表示“不通过”，“N/A”表示“不适用”。
As for the Verdict, “-” means “no need for judgement”, “P” means “pass”, “F” means “fail” and “N/A” means “not applicable”.

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