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UN38.3 报告 UN38.3 Test Report

样品名称: 锂离子电池组

Sample Name: Li-ion Battery

委托单位: 惠州比亚迪电池有限公司

Applicant: Huizhou BYD Battery Co., Ltd.



广东出入境检验检疫局检验检疫技术中心

Inspection & Quarantine Technology Center of Guangdong Entry-Exit Inspection &
Quarantine Bureau of the People's Republic of China

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检验证书 TEST REPORT

样品名称 Sample Name	锂离子蓄电池组 Li-ion Battery		型号 Model	GBSSB 25.6V 270Ah 6.90kWh	
委托单位 Applicant	惠州比亚迪电池有限公司 Huizhou BYD Battery Co., Ltd.				
委托单位地址 Applicant Address	广东省惠州市大亚湾西区响水河比亚迪工业园 Xiangshui River industry zone, Daya Bay west district, Huizhou, Guangdong, P.R.China				
生产单位 Manufacture	惠州比亚迪电池有限公司 Huizhou BYD Battery Co., Ltd.				
生产单位地址 Manufacture Address	广东省惠州市大亚湾西区响水河比亚迪工业园 Xiangshui River industry zone, Daya Bay west district, Huizhou, Guangdong, P.R.China				
标称电压 Nominal Voltage	25.6V	额定容量 Rated Capacity	270Ah	充电限制电压 Limited Charge Voltage	28.8V
标准充电电流 Standard Charge Current	48A	最大充电电流 Maximum Charge Current	230A	截止电流 Cut Off Current	--
标准放电电流 Standard discharge Current	48A	最大放电电流 Maximum Discharge Current	300A	放电截止电压 Discharge Cut-off Voltage	22.4V
电池中的电芯数量 Cell Number In Each Battery	8 PCS	电芯型号 Cell Model	C15	电芯容量 Cell Capacity	270Ah
电芯生产单位 Manufacturer of cell	比亚迪 BYD				
测试方法和判定标准 Test method and criterion	联合国《关于危险货物运输的建议书 试验和标准手册》Rev.6, 38.3 UNITED NATIONS "Recommendations on the TRANSPORT OF DANGEROUS GOODS", Manual of Tests and Criteria Rev.6, 38.3				
接样时间 Accepted date	2017-07-18		测试日期 Test date	2017-07-18~2017-08-13	
测试项目 Test items	高度模拟、温度试验、振动、冲击、外部短路、挤压、强制放电。 Altitude simulation, Thermal test, Vibration, Shock, External short circuit, Crush, Forced discharge.				
结论 Conclusion	经测试, 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》Rev.6, 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 Test and Criteria Rev.6, 38.3.				
备注 Remark	检测结果仅对样品有效。 The test results are only valid for the test samples submitted the applicant.				

批准

Approver:

审核

Checker:

主检

Appraiser:

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序号 No.	测试项目名称 Name of test	标准要求或标准条款号 Stand requirement or the clause number of standard	测试结果 Test result	本项结论 Test conclusion	备注 Remark	
1	高空模拟 Altitude simulation	联合国《关于危险货物运输的建议书 试验和标准手册》UN Manual of Tests and Criteria Rev.6, 38.3 试验 T.1 Test T.1	见附表 1 See Appendix 1	合格 Passed	/	
2	温度循环 Thermal test	联合国《关于危险货物运输的建议书 试验和标准手册》UN Manual of Tests and Criteria Rev.6, 38.3 试验 T.2 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》UN Manual of Tests and Criteria Rev.6, 38.3 试验 T.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》UN Manual of Tests and Criteria Rev.6, 38.3 试验 T.4 Test T.4	见附表 4 See Appendix 4	合格 Passed	/	
5	外部短路 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》UN Manual of Tests and Criteria Rev.6, 38.3 试验 T.5 Test T.5	见附表 5 See Appendix 5	合格 Passed	/	
6	挤压 Crush	联合国《关于危险货物运输的建议书 试验和标准手册》UN Manual of Tests and Criteria Rev.6, 38.3 试验 T.6 Test T.6	见附表 6 See Appendix 6	合格 Passed	/	
7	过度充电 Overcharge	联合国《关于危险货物运输的建议书 试验和标准手册》UN Manual of Tests and Criteria Rev.6, 38.3 试验 T.7 Test T.7	不适用 Not Applicable	/	/	
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》UN Manual of Tests and Criteria Rev.6, 38.3 试验 T.8 Test T.8	见附表 7 See Appendix 7	合格 Passed	/	
测试环境 Test environment condition		环境温度: 20°C-25°C; 环境湿度: 45%-75% Ambient temperature: 20°C-25°C, Ambient humidity: 45%-75%				
分包测试情况 Subcontracted test condition		测试项目 Test items	/			
		分包实验室 Subcontracted Laboratory	名称 Name	/	邮编 Post code	/
			地址 Address	/	电话 Tel	/

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序号 No.	附表 1 Appendix 1	测试项目名称 Name of test	高空模拟 Altitude simulation				
标准要求 Requirement of Standard	<p>试验电池或电池组在压力等于或低于 11.6kPa 和环境温度 20±5℃ 下存放至少 6h。试验电池或电池组应无重量损失、无渗漏、无排气、无解体、无破裂和无燃烧，并且每个试验电池或电池组在试验后的开路电压不少于其在进行这一试验前电压的 90%（完全放电状态的试验电池或电池组除外）。</p> <p>Test cells and batteries shall be stored at a pressure of 11.6kPa or less for at least six hours at ambient temperature 20±5℃. Cells and batteries meet this requirement if there is no mass loss, no leakage, no venting, no disassembly, no rupture and no fire and if the open circuit voltage of each test cell or battery after testing is not less than 90% of its voltage immediately prior to this procedure. The requirement relating to voltage is not applicable to test cells and batteries at fully discharged states.</p>						
样品状态 Sample status	<p>b1#~b2#: 第一个循环完全充电的电池; b1#~b2#: first cycle in fully charged states; b3#~b4#: 第二十五个循环完全充电的电池。 b3#~b4#: after 25 cycles ending in fully charged states.</p>						
样品编号 Sample No.	测试前 Before		测试后 After		质量损失 Mass loss (%)	剩余电压 Residual OCV(%)	测试结果 Test result
	电池质量 m ₁ (Kg)	开路电压 v ₁ (v)	电池质量 m ₂ (Kg)	开路电压 v ₂ (v)			
b1#	55.85	26.97	55.85	26.96	0.00	99.96	O
b2#	55.95	26.98	55.95	26.97	0.00	99.96	O
b3#	55.87	26.93	55.87	26.91	0.00	99.93	O
b4#	55.91	26.94	55.91	26.92	0.00	99.93	O
<p>注: L-泄漏; V-排气; D-解体; R-破裂; F-起火; O-无泄漏、无排气、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.</p>							





序号 No.	附表 2 Appendix 2	测试项目名称 Name of test	温度循环 Thermal test				
标准要求 Requirement of Standard	<p>试验大型电池或电池组在试验温度等于 $72\pm 2^{\circ}\text{C}$ 下存放至少 12h, 接着在试验温度等于 $-40\pm 2^{\circ}\text{C}$ 下存放至少 12h。两个极端试验温度之间的最大时间间隔为 30min。重复 10 次, 再将所有试验电池或电池组在环境温度 $20\pm 5^{\circ}\text{C}$ 下存放 24h。试验电池或电池组应无重量损失、无渗漏、无排气、无解体、无破裂和无燃烧, 并且每个试验电池或电池组在试验后的开路电压不少于其在进行这一试验前电压的 90% (完全放电状态的试验电池或电池组除外)。</p> <p>Test large cells and batteries are to be stored for at least 12 hours at a test temperature equal to $72\pm 2^{\circ}\text{C}$, followed by storage for at least 12 hours at a test temperature equal to $-40\pm 2^{\circ}\text{C}$. The maximum time interval between test temperature extremes is 30 minutes. This procedure is to be repeated 10 times, after which all test cells and batteries are to be stored for 24 hours at ambient temperature ($20\pm 5^{\circ}\text{C}$). Cells and batteries meet this requirement if there is no mass loss, no leakage, no venting, no disassembly, no rupture and no fire and if the open circuit voltage of each test cell or battery after testing is not less than 90% of its voltage immediately prior to this procedure. The requirement relating to voltage is not applicable to test cells and batteries at fully discharged states.</p>						
样品状态 Sample status	<p>b1#~b2#: 第一个循环完全充电的电池; b1#~b2#: first cycle in fully charged states; b3#~b4#: 第二十五个循环完全充电的电池。 b3#~b4#: after 25 cycles ending in fully charged states.</p>						
样品编号 Sample No.	测试前 Before		测试后 After		质量损失 Mass loss (%)	剩余电压 Residual OCV(%)	测试结果 Test result
	电池质量 $m_1(\text{Kg})$	开路电压 $v_1(\text{V})$	电池质量 $m_2(\text{Kg})$	开路电压 $v_2(\text{V})$			
b1#	55.85	26.96	55.84	26.85	0.00	99.55	O
b2#	55.95	26.97	55.93	26.82	0.00	99.62	O
b3#	55.87	26.91	55.87	26.83	0.00	99.55	O
b4#	55.91	26.92	55.90	26.82	0.00	99.62	O
<p>注: L-泄漏; V-排气; D-解体; R-破裂; F-起火; O-无泄漏、无排气、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.</p>							



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序号 No.	附表 3 Appendix 3	测试项目名称 Name of test	振动 Vibration				
标准要求 Requirement of Standard	<p>将大型电池或电池组直接安装或通过夹具安装在振动台的台面上, 用正弦波, 从 7Hz 开始, 保持 $1g_0$ 的最大加速度, 直到 18Hz。然后将振幅保持在 0.8mm (总偏移 1.6mm), 并增加频率直到最大加速度达到 $2g_0$ (频率约为 25Hz)。将最大加速度保持在 $2g_0$ 直到频率增加到 200Hz。对三个互相垂直的电池或电池组安装方向的每个方向重复进行 12 次, 一共振动 3h。试验电池或电池组应无重量损失、无渗漏、无排气、无解体、无破裂和无燃烧, 并且每个试验电池或电池组在试验后的开路电压不少于其在进行这一试验前电压的 90% (完全放电状态的试验电池或电池组除外)。</p> <p>The large Cells and batteries are 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 shall be a sinusoidal waveform with a logarithmic sweep from 7Hz to a peak acceleration of $1g_n$ is maintained until 18Hz is reached. The amplitude is then maintained at 0.8mm (1.6mm total excursion) and the frequency increased until a peak acceleration of $2g_n$ occurs (approximately 25Hz). A peak acceleration of $2g_n$ is then maintained until the frequency is increased to 200Hz. This cycle shall be 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 must be perpendicular to the terminal face. Cells and batteries meet this requirement if there is no mass loss, no leakage, no venting, no disassembly, no rupture and no fire and if the open circuit voltage of each test cell or battery after testing is not less than 90% of its voltage immediately prior to this procedure. The requirement relating to voltage is not applicable to test cells and batteries at fully discharged states.</p>						
样品状态 Sample status	<p>b1#~b2#: 第一个循环完全充电的电池; b1#~b2#: first cycle in fully charged states; b3#~b4#: 第二十五个循环完全充电的电池。 b3#~b4#: after 25 cycles ending in fully charged states.</p>						
样品编号 Sample No.	测试前 Before		测试后 After		质量损失 Mass loss (%)	剩余电压 Residual OCV(%)	测试结果 Test result
	电池质量 m_1 (Kg)	开路电压 v_1 (v)	电池质量 m_2 (Kg)	开路电压 v_2 (v)			
b1#	55.84	26.85	55.84	26.84	0.00	99.96	O
b2#	55.93	26.82	55.92	26.83	0.02	100.04	O
b3#	55.87	26.83	55.86	26.83	0.02	100.00	O
b4#	55.90	26.82	55.88	26.81	0.04	99.96	O
<p>注: L-泄漏; V-排气; D-解体; R-破裂; F-起火; O-无泄漏、无排气、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.</p>							

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序号 No.	附表 4 Appendix 4	测试项目名称 Name of test	冲击 Shock				
标准要求 Requirement of Standard	<p>将电池或电池组用坚硬支架紧固在试验装置上, 对于大型电池组, 以加速度为 50g_n 或 $g_n = \sqrt{(30000 / mass)}$ 中较小者的正弦波冲击, 脉冲持续时间 11ms, 按三个相互垂直的轴向分别对其正负极各冲击 3 次, 共冲击 18 次。各试验电池或电池组应无重量损失、无渗漏、无排气、无解体、无破裂和无燃烧, 并且每个试验电池或电池组在试验后的开路电压不少于其在进行这一试验前电压的 90% (完全放电状态的试验电池或电池组除外)。</p> <p>Test cells and batteries shall be secured to the testing machine by means of a rigid mount which will support all mounting surfaces of each test battery. Each Large batteries shall be subjected to a half-sine shock of peak acceleration of 50g_n or acceleration (g_n) = $\sqrt{(30000 / mass)}$ and pulse duration of 11 milliseconds. Each cell or battery shall be 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 or battery for a total of 18 shocks. Cells and batteries meet this requirement if there is no mass loss, no leakage, no venting, no disassembly, no rupture and no fire and if the open circuit voltage of each test cell or battery after testing is not less than 90% of its voltage immediately prior to this procedure. The requirement relating to voltage is not applicable to test cells and batteries at fully discharged states. (NOTE: Mass is express in kilograms)</p>						
样品状态 Sample status	<p>b1#~b2#: 第一个循环完全充电的电池; b1#~b2#: first cycle in fully charged states; b3#~b4#: 第二十五个循环完全充电的电池。 b3#~b4#: after 25 cycles ending in fully charged states.</p>						
样品编号 Sample No.	测试前 Before		测试后 After		质量损失 Mass loss (%)	剩余电压 Residual OCV(%)	测试结果 Test result
	电池质量 m ₁ (Kg)	开路电压 v ₁ (v)	电池质量 m ₂ (Kg)	开路电压 v ₂ (v)			
b1#	55.84	26.84	55.84	26.84	0.00	100.00	O
b2#	55.92	26.83	55.92	26.83	0.00	100.00	O
b3#	55.86	26.83	55.86	26.83	0.00	100.00	O
b4#	55.88	26.81	55.88	26.80	0.00	100.00	O
<p>注: L-泄漏; V-排气; D-解体; R-破裂; F-起火; O-无泄漏、无排气、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.</p>							



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序号 No.	附表 5 Appendix 5	测试项目名称 Name of test	外部短路 External short circuit
标准要求 Requirement of Standard	<p>待试验电池或电池组的外壳温度稳定在 $57\pm 4^{\circ}\text{C}$ 后, 在 $57\pm 4^{\circ}\text{C}$ 下使电池或电池组经受总外电阻小于 0.1Ω 的短路条件, 当电池或电池组外壳温度回到 $57\pm 4^{\circ}\text{C}$ 后继续至少 1h, 然后短路断开, 再观察电池或电池组 6h 才结束试验。电池或电池组的外壳温度应不超过 170°C, 并且试验后 6h 内应无解体、无破裂和无燃烧。</p> <p>The cell or battery to be tested shall be temperature stabilized so that its external case temperature reaches $57\pm 4^{\circ}\text{C}$ and then the cell or battery shall be subjected to a short circuit condition with a total external resistance of less than 0.1 ohm at $57\pm 4^{\circ}\text{C}$. This short circuit condition is continued for at least one hour after the cell or battery external case temperature has returned to $57\pm 4^{\circ}\text{C}$. The cell or battery must be observed for a further six hours for the test to be concluded. Cells and batteries meet this requirement if their external temperature does not exceed 170°C and there is no disassembly, no rupture and no fire within six hours of this test.</p>		
样品状态 Sample status	<p>b1#~b2#: 第一个循环完全充电的电池; b1#~b2#: first cycle in fully charged states; b3#~b4#: 第二十五个循环完全充电的电池。 b3#~b4#: after 25 cycles ending in fully charged states.</p>		
样品编号 Sample No.	样品表面最高温度 Max External Temperature($^{\circ}\text{C}$)	测试结果 Test result	备注 Remark
b1#	55.4	O	/
b2#	55.7	O	/
b3#	55.8	O	/
b4#	55.9	O	/
<p>注: D-解体; R-破裂; F-起火; O-无解体、无破裂、无起火。 Note: D-Disassembly, R-Rupture, F-Fire, O-No Disassembly, No Rupture & No Fire.</p>			



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序号 No.	附表 6 Appendix 6	测试项目名称 Name of test	挤压 Crush
标准要求 Requirement of Standard	<p>(适用于棱柱形、袋装、硬币/纽扣电池和直径小于 18mm 的圆柱形电池)： 将电池或元件电池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 1.5cm/s。挤压持续进行，直到出现以下三种情况之一即解除压力： (a)施加的力量达到 13±0.78kN； (b)电池的电压下降至少 100 毫伏；或 (c)电池变形量达原始厚度的 50%或以上。 棱柱形或袋装电池应从最宽的一面施压。纽扣/硬币电池应从其平坦表面施压。圆柱形电池应从与纵轴垂直的方向施压。每个电池只做一次挤压试验。 试验电池或电池组的组成电芯外部温度不超过 170℃，并且在试验过程中和试验后 6 小时内应无解体、无破裂、无起火。 Crush (applicable to prismatic, pouch, coin/button cells and cylindrical cells not more than 18 in diameter): A cell or component cell is to be crushed between two flat surfaces. The crushing is to be gradual with a speed of approximately 1.5cm/s at the first point of contact. The crushing is to be continued until the first of the three options below is reached. (a)The applied force reaches 13±0.78kN; (b)The voltage of the cell drops by at least 100mV;or (c)The cell is deformed by 50% or more of its original thickness. Once the maximum pressure has been obtained, the voltage drops by at least 100mV or more, or the cell is deformed by at least 50% of its original thickness, the pressure shall be released. Each test cell or component cell is to be subjected to one crush only. Cells and component cells meet this requirement if their external temperature does not exceed 170℃ and there is no disassembly and no fire during the test and within six hours after this test.</p>		
样品状态 Sample status	C1#~C5#: 第一个循环 50%的额定容量的电芯。 C1#~C5#: first cycle at 50% of the design rated capacity of cell.		
样品编号 Sample No.	样品表面最高温度 Max External Temperature(℃)	测试结果 Test result	备注 Remark
C1#	23.1	O	/
C2#	22.4	O	/
C3#	22.8	O	/
C4#	22.7	O	/
C5#	23.4	O	/
<p>注: D-解体; R-破裂; F-起火; O-无解体、无破裂、无起火。 Note: D-Disassembly, R-Rupture, F-Fire, O-No Disassembly, No Rupture & No Fire.</p>			

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No: 01051700004919-1(E)
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序号 No.	附表 7 Appendix 7	测试项目名称 Name of test		强制放电 Forced discharge	
标准要求 Requirement of Standard	<p>试验原电池或可再充电电池在环境温度下与 12V 的直流电源串联, 在起始电流等于制造商给定的最大放电电流的条件下强制放电。原电池或可再充电电池在试验后 7 天内应无解体和无燃烧。</p> <p>Each cell shall be forced discharged at ambient temperature by connecting it in series with a 12V D.C. power supply at an initial current equal to the maximum discharge current specified by the manufacturer. The specified discharge current is to be obtained by connecting a resistive load of the appropriate size and rating in series with the test cell. Each cell shall be forced discharged for a time interval (in hours) equal to its rated capacity divided by the initial test current (in Ampere). Primary or rechargeable cells meet this requirement if there is no disassembly and no fire within seven days of the test.</p>				
样品状态 Sample status	<p>C6#~C15#: 第一个循环完全放电的电芯; C6#~C15#: first cycle in fully discharged states; C16#~C25#: 第五十个循环完全放电的电芯。 C16#~C25#: after 50 cycles in fully discharged states.</p>				
样品编号 Sample No.	测试结果 Test result	备注 Remark	样品编号 Sample No.	测试结果 Test result	备注 Remark
C6#	O	/	C16#	O	/
C7#	O	/	C17#	O	/
C8#	O	/	C18#	O	/
C9#	O	/	C19#	O	/
C10#	O	/	C20#	O	/
C11#	O	/	C21#	O	/
C12#	O	/	C22#	O	/
C13#	O	/	C23#	O	/
C14#	O	/	C24#	O	/
C15#	O	/	C25#	O	/
<p>注: D-解体; R-破裂; F-起火; O-无解体、无破裂、无起火。 Note: D-Disassembly, R-Rupture, F-Fire, O-No Disassembly, No Rupture & No Fire.</p>					

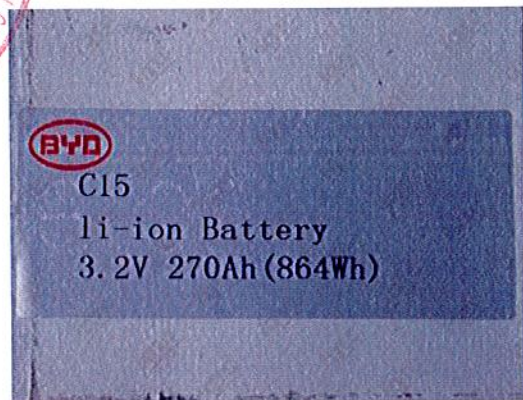
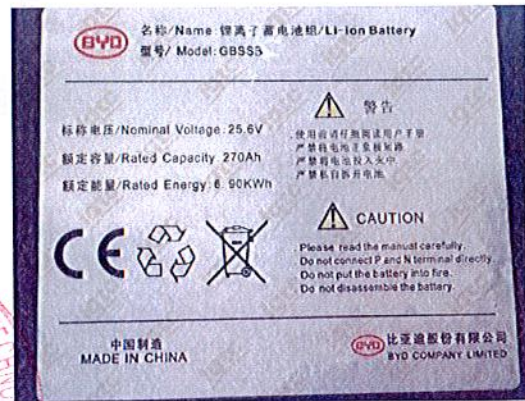
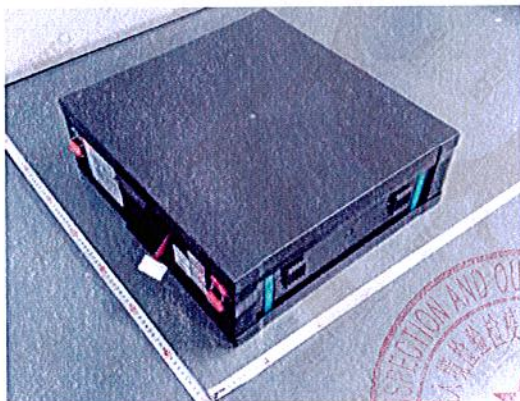
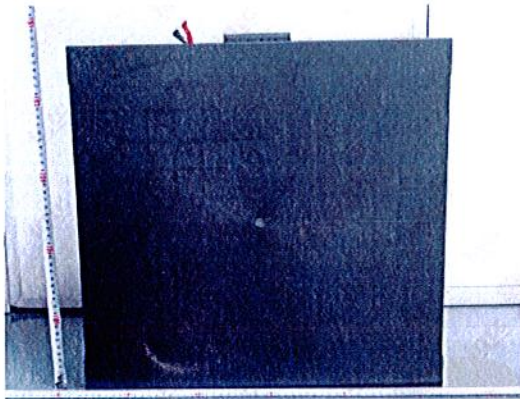
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样品图片
Photo of the sample

电池与电芯/Battery and Cell



* * * * *

1. 本报告结果仅对测试样品负责。The results in this report are relevant only to the sample(s) tested.
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3. 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, Checker and Appraiser.

4. 客户必须如实提供样品及资料, 并保证申报品名和样品以及运输货物相同, 否则本检测单位不承担任何相关责任。

The client should provide samples and relevant data, at the same time, they should guarantee the consistence of the product's name they declared, the samples they provided and the goods to be transported. Otherwise we will not bear any relevant responsibilities.

5. 本报告涂改无效。

The test report is invalid if altered.

6. 对检验报告若有异议, 应于收到报告之日起十五日内向检验单位提出。

Objection to the test report must be submitted to IQTC within 15 days.

7. 本报告仅对送检样品负责。

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二维码: FP0WKCFZNN
编号: 01051700004919-2
日期: 2017年08月13日
页码: 共3页, 第1页

危险特性分类鉴别报告

申报品名	锂离子蓄电池组		
产品型号	GBSSB 25.6V 270Ah 6.90kWh		
委托单位	惠州比亚迪电池有限公司		
生产单位	惠州比亚迪电池有限公司		
样品外观与性状	黑色外壳(内含锂离子电池)		
测试方法和判定标准	《联合国关于危险货物运输的建议书 规章范本》(第十九版)		
鉴定结论	危险品		
主要危险性	杂项危险物品		
次要危险性	无		
正确运输名称	锂离子电池组	危险性类别	9
联合国编号	UN3480	包装类别	II
接样时间	2017年07月18日	测试日期	2017年07月18日 ~2017年08月13日
备注	1、本证书有效期为签发日起壹年。 2、检验结果仅对样品有效。		
 实验室主任: 			

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日期: 2017年08月13日
页码: 共3页, 第2页

标准条款	标准要求	鉴定结果
a	对于锂金属电池或锂合金电池, 锂含量不超过1克, 对于锂离子电池, 瓦特-小时的额定值不超过20Wh。	不适用
b	对于锂金属电池或锂合金电池组, 合计锂含量不超过2克, 对于锂离子电池组, 瓦特-小时的额定值不超过100Wh。受本规定限制的锂离子电池组, 须在外壳上标明瓦特-小时的额定值。 (备注: 充电电流: 48A, 充电限制电压: 28.8V; 放电电流: 48A, 放电终止电压: 22.4V。)	6873.2Wh
c	每个电池或电池组都是经证明符合《试验和标准手册》第三部分第38.3节中的每项试验的要求的型号。	详细结果见 UN38.3 检测证书



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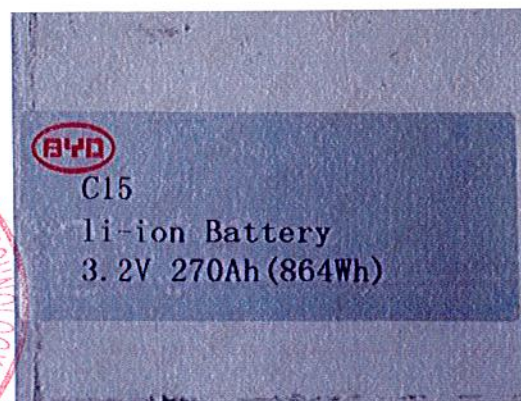
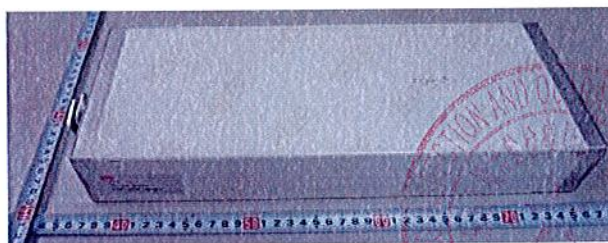
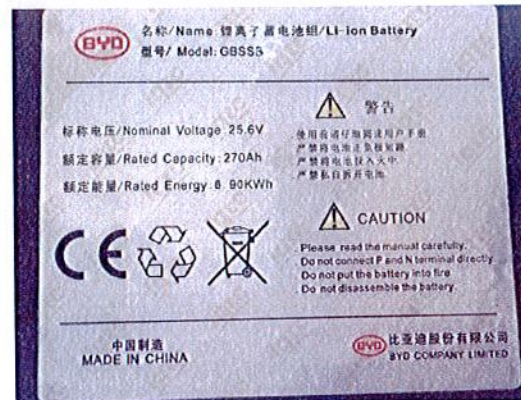
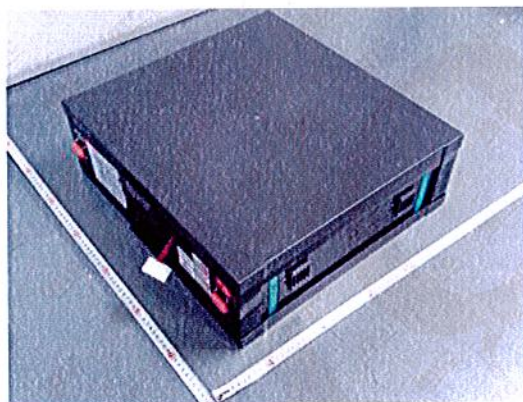
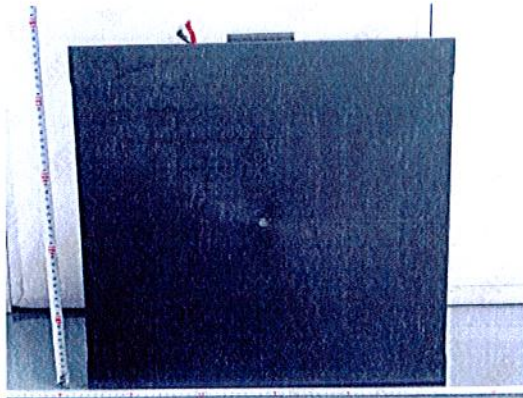
编号: 01051700004919-2

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样品图片



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1. 本报告结果仅对测试样品负责。The results in this report are relevant only to the sample(s) tested.
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编号: 01051700004919-3
日期: 2017年08月13日
页码: 共1页, 第1页



审核报告 (安全数据单)

申请人: 惠州比亚迪电池有限公司

地址: 惠州市大亚湾西区响水河比亚迪工业园

样品名称: 锂离子蓄电池组

接样日期: 2017年07月18日

型号: GBSSB 25.6V 270Ah 6.90kWh

GB/T 16483-2008

审核依据: 联合国《关于危险货物运输的建议书·规章范本》(第十九版)
《全球化学品统一分类和标签制度》(第六修订版)

审核结果: 根据 GB/T 16483-2008 的格式, 申请人提交的安全数据单 (MSDS) 符合要求。

备注: 1. 本报告须与危险特性分类鉴别报告 (证书编号: 01051700004919-2) 和审核后的安全数据单同时使用时才有效。
2. 申请人需对提供的安全数据单和样品成分说明的数据准确性和真实性负责, 承担因信息错误造成的一切可能后果。



实验室主任:

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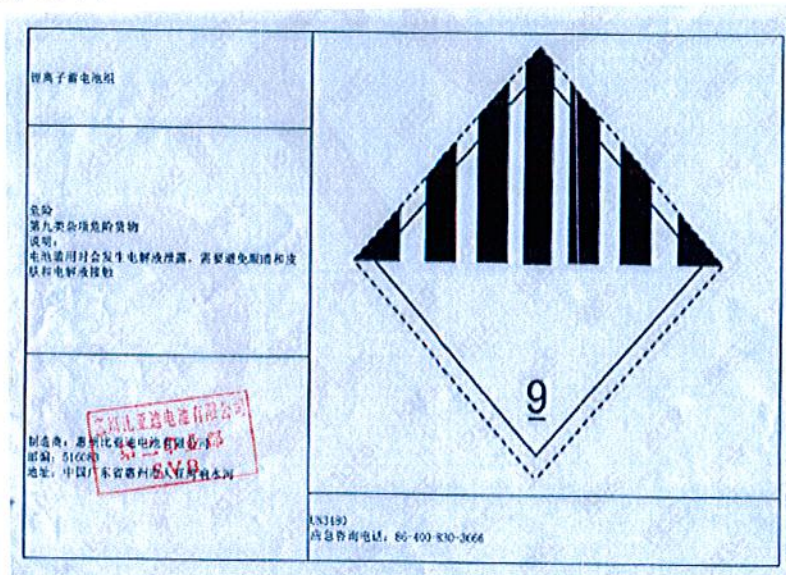
二维码: FP0WKCFZNN
编号: 01051700004919-4
日期: 2017年08月13日
页码: 共1页, 第1页



审核报告 (危险信息公示标签)

申请人: 惠州比亚迪电池有限公司
地址: 惠州市大亚湾西区响水河比亚迪工业园
样品名称: 锂离子蓄电池组
型号: GBSSB 25.6V 270Ah 6.90kWh
接样日期: 2017年07月18日

样品图片:



GB/T 15258-2009

审核依据: 联合国《关于危险货物运输的建议书·规章范本》(第十九版)
《全球化学品统一分类和标签制度》(第六修订版)

审核结果: 经审核, 申请人提供的危险信息公示标签符合规定要求。

备注: 本报告须与危险特性分类鉴别报告(证书编号: 01051700004919-2)和审核后的危险信息公示标签同时使用时才有效。



实验室主任:



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Date: 2017-08-13
Page: 1 of 5

货物运输条件鉴定书

Certification for Safe Transport of Goods

第九类危险品 Dangerous Goods Class 9

样品名称: 锂离子蓄电池组

Sample Name: Li-ion Battery

送检单位: 惠州比亚迪电池有限公司

Applicant: Huizhou BYD Battery Co., Ltd.



广东出入境检验检疫局检验检疫技术中心
Inspection & Quarantine Technology Center of Guangdong Entry-Exit
Inspection & Quarantine Bureau of The People's Republic of China

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No: 01051700004919-5(E)
Date: 2017-08-13
Page: 2 of 5

货物运输条件鉴定书 Certification for Safe Transport of Goods

货物名称 Goods name		锂离子蓄电池组 Li-ion Battery					
型号 Model		GBSSB 25.6V 270Ah 6.90kWh					
委托单位 Applicant		惠州比亚迪电池有限公司 Huizhou BYD Battery Co., Ltd.					
生产单位 Manufacturer		惠州比亚迪电池有限公司 Huizhou BYD Battery Co., Ltd.					
检查方法、程序 Inspection method and procedure		《国际海运危险货物规则》(37-14 版 IMO IMDG code) IMO IMDG CODE (37-14 Edition)					
样品外观 Sample Appearance		黑色塑料外壳 Black plastic shell					
包装件信息 Package information		电池数量 Quantity	2 个 2 pieces	包装件重量 Package Weight	139Kg	尺寸 Size	588mm(L)*538mm(W)*535mm(H)
电池信息 Battery information	序号 No.	类型 Type	型号 Model		额定瓦时值 Watt-hour Rating	放置方式 Placement	
	1	锂离子蓄电池组 Li-ion Battery	GBSSB 25.6V 270Ah 6.90kWh		6.90kWh	只有电池 Battery only	
鉴定结论 Identification Conclusion		<p>1. 危险性识别(Hazards identification): 第 9 类杂项危险物质/ class or division is 9.</p> <p>2. 按照联合国《国际海运危险货物规则》办理类项(Suggestion according to IMDG) 按危险货物条件办理。According to the conditions of Dangerous cargo handled. 运输专用名称: 锂离子蓄电池组。 Proper shipping name: Lithium ion batteries. UN NO.: 3480. 危险类别: 第 9 类 Class or division is 9. 包装类别: II UN Packing group: II .</p> <p>3. 包装要求(Packaging requirements): 按 IMDG 危险品包装要求和锂电池包装要求办理。 The goods are packaged according to the IMDG packaging requirement of dangerous goods and Lithium ion battery.</p> <p>检查日期(Inspection date): 2017-07-18~2017-08-13 签发日期(Valid date): 2017-08-13 报告有效期(Period of validity): 2017-12-31</p>					
备注 Comment		/					

批准
Approver:

审核
Checker:

主检
Appraiser:

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货物运输条件鉴定书 Certification for Safe Transport of Goods

图片/Photo

<p>包装件与 电池 Package & Battery</p>		

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No: 01051700004919-5(E)
Date: 2017-08-13
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货物运输条件鉴定书 Certification for Safe Transport of Goods

序号 No.	检查结果及其他事项 Inspection results and other things
1	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。 Lithium cells and batteries listed in this report are of the types proven to meet the requirements of each applicable test in the UN Manual of Tests and Criteria, Part III, sub-section 38.3.
2	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。 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).
3	锂电池具有适当的防短路措施。 Cells and batteries are properly protected so as to prevent short circuits.
4	锂电池有适当的保护措施防止其在包装件内移位。 Cells and batteries are properly protected so as to secure against moment within the outer package.
备注 Remark	适用于海运。 Be applicable to transport by sea



* * *



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4. 客户必须如实提供样品及资料, 并保证申报品名和样品以及运输货物相同, 否则本检测单位不承担任何相关责任。

The client should provide samples and relevant data, at the same time, they should guarantee the consistence of the product's name they declared, the samples they provided and the goods to be transported. Otherwise we will not bear any relevant responsibilities.

5. 本报告涂改无效。

The test report is invalid if altered.

6. 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。

Objection to the test report must be submitted to IQTC within 15 days.

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