

Certificado de batería

Datos de seguridad y transporte de la batería de su producto.



PARA EL PRODUCTO

Paiseec L5 – Scooter Eléctrico de Viaje

SKU: AFSE-L5-P1

✈ Apta para viajar en avión



Datos de la batería

252 Wh

Energía

25.2 V

Voltaje

10 Ah

Capacidad

Litio

Química

Sí

Batería removible

Aprobada

Prueba UN 38.3



APTA PARA AVIÓN • Clase 9 – batería de litio

252 Wh: dentro del límite IATA de 300 Wh por batería para ayudas de movilidad, pero requiere aprobación previa de la aerolínea. Avísele al reservar (idealmente 48 h antes).



¿Dudas sobre la batería? Escriba a María por WhatsApp

Le ayudamos con la carga, el cuidado, el servicio y sus viajes.
Escanee el código o escriba al:

WhatsApp 55 9990 2396

s.andafacil.com/wabateriaafsel5p1



Cómo viajar con su producto

1. Al reservar, avise que viaja con una silla eléctrica con batería de litio removible.
2. En el mostrador, retire la batería, proteja sus terminales (cinta o bolsa) y llévela en cabina.
3. La silla, apagada y plegada, viaja documentada o se entrega en la puerta del avión.
4. Muestre este certificado y los originales del fabricante si se los piden.



Consejo de Don Andy: avise a su aerolínea al reservar que viaja con una silla eléctrica y lleve este certificado impreso y en su celular.

Evidencia del fabricante

Documento	Detalle
Nombre de la mercancía (como aparece en el certificado)	Lithium Ion Battery
Modelo de batería	ADCN07040F32D
Fabricante	Guangdong BAK Benhoo Technology Co., Ltd.
Resumen de prueba UN 38.3	Report No. CMC251106023 · CMC Testing International (Shenzhen) Co., Ltd. · 2025.11.25
Hoja de datos de seguridad (MSDS)	Report No. CMC251121045M01 · CMC Testing International (Shenzhen) Co., Ltd. · 2026.01.01

Originales del fabricante (páginas siguientes): **2**

Cada aerolínea define sus propias reglas: confírmelas al reservar. ANDAFACIL identifica el producto; los datos técnicos provienen de los certificados originales que se adjuntan.

Battery certificate

Safety and transport data for your product's battery.



FOR THE PRODUCT

**Paiseec L5 – Premium
Travel Electric Scooter**

SKU: AFSE-L5-P1

✈️ **Approved for air travel**



Battery data

252 Wh

Energy

25.2 V

Voltage

10 Ah

Capacity

Lithium-ion

Chemistry

Yes

Removable
battery

Passed

UN 38.3 test



APPROVED FOR AIR TRAVEL • Class 9 – lithium battery

252 Wh: within the IATA 300 Wh per-battery limit for mobility aids, but it needs the airline's prior approval. Tell the airline when booking (ideally 48 h ahead).



Battery questions? Message Marla on WhatsApp

We help with charging, care, service and travel (Spanish and English).
Scan the code or write to:

WhatsApp 55 9990 2396

s.andafacil.com/wabateriaafsel5p1



How to travel with your product

1. When booking, tell the airline you travel with a power wheelchair with a removable lithium battery.
2. At check-in, remove the battery, protect its terminals (tape or bag) and carry it in the cabin.
3. The chair, switched off and folded, is checked in or handed over at the aircraft door.
4. Show this certificate and the manufacturer originals when asked.



Don Andy's tip: tell your airline when booking that you travel with a power wheelchair, and carry this certificate printed and on your phone.

Manufacturer evidence

Document	Detail
Goods name (as printed on the certificate)	Lithium Ion Battery
Battery model	ADCN07040F32D
Manufacturer	Guangdong BAK Benhoo Technology Co., Ltd.
UN 38.3 Test Summary	Report No. CMC251106023 · CMC Testing International (Shenzhen) Co., Ltd. · 2025.11.25
MSDS	Report No. CMC251121045M01 · CMC Testing International (Shenzhen) Co., Ltd. · 2026.01.01

Manufacturer originals (following pages): **2**

Each airline sets its own rules: confirm them when booking. ANDAFACIL identifies the product; the technical data comes from the original certificates attached.

UN38.3 TEST REPORT

UN38.3 检测报告

Report No.:

报告编号:

CMC251106023

Name of Goods:

物品名称:

Lithium Ion Battery

锂离子电池

Model:

型号:

ADCN07040F32D

Type:

规格:

25.2V 10Ah 252Wh

Client:

委托单位:

Guangdong BAK Benhoo Technology Co., Ltd.

广东比克奔虎新能源科技有限公司

Classification
of test:

检测类别:

Commission Test

委托测试

Tested by 主检人:

(Testing Engineer 测试工程师)

Meiko Ma 马方威

Meiko Ma 马方威

Approved by 批准人:

(Technical Director 技术总监)

Barry He 何清

Barry He 何清

Inspected by 审核人:

(Department Manager 部门经理)

Dylan Dou 窦明波

Dylan Dou 窦明波

Seal of CMC:

CMC 印章:



Date of Issue:

签发日期:

2025.11.25

CMC Testing International (Shenzhen) Co., Ltd.

众检检验认证(深圳)有限公司

TEST REPORT

检测报告

Name of Goods 物品名称	Lithium Ion Battery 锂离子电池		Model 型号	ADCN07040F32D	
Commissioner 委托单位	Guangdong BAK Benhoo Technology Co., Ltd. 广东比克奔虎新能源科技有限公司				
Commissioner's Address 委托单位地址	3F, Building A, Industrial Park, No. 55 Zengkeng Road, Zengkeng Team, Xintang Village, Qiuchang Sub-district, Huiyang District, Huizhou City, Guangdong Province, China 惠州市惠阳区秋长街道新塘村增坑小组增坑路 55 号工业园 A 栋 3 楼				
Manufacturer 制造商	Guangdong BAK Benhoo Technology Co., Ltd. 广东比克奔虎新能源科技有限公司				
Manufacturer's Address 制造商地址	3F, Building A, Industrial Park, No. 55 Zengkeng Road, Zengkeng Team, Xintang Village, Qiuchang Sub-district, Huiyang District, Huizhou City, Guangdong Province, China 惠州市惠阳区秋长街道新塘村增坑小组增坑路 55 号工业园 A 栋 3 楼				
Manufacturer's Contact Telephone 制造商联系电话	400-870-0267		E-mail 邮箱	liur@baknp.com	
			Web 网址	--	
Trade Mark/ identification 商标/识别码	--	Shape 形状	Cuboid 长方体	Size 尺寸 (L×W×T)	(210.0×188.2×48.5)mm
Nominal Voltage 标称电压	25.2V	Charge Voltage 充电电压	29.4V	Rated Capacity 额定容量	10Ah
Cell Model 电池型号	N18650CH	Cell Nominal Voltage 电池标称电压	3.6V	Cell Rated Capacity 电池额定容量	2.5Ah
Cells Number 电池数量	28PCS	Sample Receiving Date 样品接收日期	2025.11.06	Testing Date 测试日期	2025.11.06 - 2025.11.20
Test conclusion 检测结论	The sample has passed the test items of UNITED NATIONS “Manual of Tests and Criteria” ST/SG/AC.10/11/Rev.8 Subsection 38.3 经测试，该样品符合联合国《试验和标准手册》（第 8 修订版）38.3 标准要求。				

Test Standard 检测标准

UN "Manual of Tests and Criteria" ST/SG/AC.10/11/Rev.8 Subsection 38.3

联合国《试验和标准手册》(第8修订版) 38.3 节

Description and illustration of the sample: The sample's status is good.

样品说明及描述: 样品状况良好。

Test item 检测项目	Sample No. 样品编号	State 状态	Remark 备注
T1,T2,T3,T4,T5	B001-B004	At first cycle, in fully charged states 第 1 个充电周期, 完全充电状态	--
T1,T2,T3,T4,T5	B005-B008	After 25 cycles ending in fully charged states 第 25 个充电周期, 完全充电状态	--
T6	C001-C005	At first cycle at 50% of the design rated capacity 第 1 个充放电周期 50%设计额定容量状态	--
T6	C006-C010	After 25 cycle at 50% of the design rated capacity 第 25 个充放电周期 50%设计额定容量状态	--
T7	B009-B012	At first cycle, in fully charged states 第 1 个充电周期, 完全充电状态	--
T7	B013-B016	After 25 cycles ending in fully charged states 第 25 个充电周期, 完全充电状态	--
T8	C011-C020	At first cycle in fully discharged states 第 1 个充放电周期, 完全放电状态	--
T8	C021-C030	After 25 cycles ending in fully discharged states 第 25 个充放电周期, 完全放电状态	--

CXXX is used as the sample number of cells SN251106023CXXX, "X" is 0~9.

CXXX 代表电芯样板编号 SN251106023CXXX, X=0~9。

BXXX is used as the sample number of batteries SN251106023BXXX, "X" is 0~9

BXXX 代表电池包样板编号 SN251106023BXXX, X=0~9。

Description of the deviation from the standard, if any:

检测结果不符合标准项的说明:

Test environment conditions: Ambient temperature: 25°C±5°C, Ambient humidity: 45%-75%

检测环境条件: 环境温度: 25°C±5°C; 环境湿度: 45%-75%

Remarks:

备注:

ST/SG/AC.10/11/Rev.8 Subsection 38.3

Clause 章节	Requirements 标准要求	Result 测试结果	Verdict 判定
38.3.4	Procedure 检测步骤		--
38.3.4.1	Test 1: Altitude simulation 检测 1: 高度模拟 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°C). 将电池和电池组在温度为 20±5°C, 大气压力为不大于 11.6kPa 的环境中贮存不少于 6 小时。 Requirements 标准要求: 1) Cells and batteries Mass loss limit reference: Table 38.3.1 样品质量损失限值参考: 表 38.3.1 2) Open circuit voltage not less than 90%, The requirement relating to voltage is not applicable to test cells and batteries at full discharged states. 样品试验后开路电压应不低于试验前开路电压的 90%,此要求不适用于完全放完电的电池或电池组。 3) No leakage, no venting, no disassembly, no rupture and no fire. 样品(电池)应无渗漏、无排气、无解体、无破裂以及无起火现象的发生。	Test Samples: No leakage, no venting, no disassembly, no rupture and no fire. 样品: 无渗漏、无排气、无解体、无破裂以及无起火现象。 The data is shown in Test Table T.1 数据见表 T.1	Pass 合格
38.3.4.2	Test 2: Thermal test 检测 2: 温度试验 Test cells and batteries are to be stored for 电池和电池组存储条件如下: 1) For small cells and batteries: one temperature cycle: 72±2°C (6h) ~ -40±2°C (6h) 对于小型电池和电池组: 一次温度循环为 72±2°C (6h) ~ -40±2°C (6h) For large cells and batteries: one temperature cycle: 72±2°C (12h) ~ -40±2°C (12h) 对于大型电池和电池组: 一次温度循环为 72±2°C (12h) ~ -40±2°C (12h) 2) The maximum time interval between test temperature extremes is 30minutes. 温度转换最大间隔时间为 30min。 3) This procedure is to be repeated 10 times. 重复 10 次循环。 4) after which all test cells and batteries are to be stored for 24 hours at ambient temperature (20±5°C). 循环结束后, 电池和电池组在 20±5°C 的条件下搁置 24 小时。 Requirement 标准要求: 1) Cells and batteries Mass loss limit reference: Table 38.3.1 样品质量损失限值参考: 表 38.3.1 2) Open circuit voltage not less than 90%, The requirement relating to voltage is not applicable to test cells and batteries at full discharged states. 样品试验后开路电压应不低于试验前开路电压的 90%,此要求不适用于完全放完电的电池和电池组。 3) No leakage, no venting, no disassembly, no rupture and no fire. 样品(电池)应无渗漏、无排气、无解体、无破裂以及无起火现象的发生。	Test Samples: No leakage, no venting, no disassembly, no rupture and no fire. 样品: 无渗漏、无排气、无解体、无破裂以及无起火现象。 The data is shown in Test Table T.2 数据见表 T.2	Pass 合格



ST/SG/AC.10/11/Rev.8 Subsection 38.3

Clause 章节	Requirements 标准要求	Result 测试结果	Verdict 判定
38.3.4.3	Test 3: Vibration 检测 3: 振动 1) Cells and batteries are firmly secured to the platform of the vibration machine. 电池和电池组牢固地安装在振动台（的台面）上。 2) The vibration: a sinusoidal waveform with a logarithmic sweep between 7Hz and 200Hz and back to 7Hz traversed in 15 minutes. 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。 3) For cells and small batteries: from 7Hz a peak acceleration of 1gn 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 8gn occurs (approximately 50Hz). A peak acceleration of 8gn is then maintained until the frequency is increased to 200Hz. 对于电池和小型电池：从 7Hz 开始，以 1gn 的峰值加速度保持不变，直到达到 18Hz。然后将振幅保持在 0.8mm（总偏移 1.6mm）并且频率增加直到出现 8gn 的峰值加速度（大约 50Hz）。然后保持 8gn 的峰值加速度，直到频率增加到 200Hz。 For large batteries: from 7Hz a peak acceleration of 1gn 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 2gn occurs (approximately 25Hz). A peak acceleration of 2gn is then maintained until the frequency is increased to 200Hz. 对于大型电池：从 7Hz 开始，以 1gn 的峰值加速度保持不变，直到达到 18Hz。然后将振幅保持在 0.8mm（总偏移 1.6mm）并且频率增加直到出现 2gn 的峰值加速度（大约 25Hz）。然后保持 2gn 的峰值加速度，直到频率增加到 200Hz。 4) This cycle repeated 12 times for a total of 3 hours for each of three mutually perpendicular mounting position of the cell. One of the directions of vibration must be perpendicular to the terminal face. 以振动的其中一个方向必须是垂直样品极性，对每个电池从三个互相垂直的方向上循环 12 次，每个方向 3 个小时，共 9 小时。 Requirements 标准要求: 1) Cells and batteries Mass loss limit reference: Table 38.3.1 样品质量损失限值参考：表 38.3.1 2) Open circuit voltage not less than 90%, The requirement relating to voltage is not applicable to test cells and batteries at full discharged states. 样品试验后开路电压应不低于试验前开路电压的 90%,此要求不适用于完全放完电的电池和电池组。 3) No leakage, no venting, no disassembly, no rupture and no fire. 样品（电池）应无渗漏、无排气、无解体、无破裂以及无起火现象的发生。	Test Samples: No leakage, no venting, no disassembly, no rupture and no fire. 样品：无渗漏、无排气、无解体、无破裂以及无起火现象。 The data is shown in Test Table T.3 数据见表 T.3	Pass 合格



ST/SG/AC.10/11/Rev.8 Subsection 38.3

Clause 章节	Requirements 标准要求	Result 测试结果	Verdict 判定
38.3.4.4	Test 4: Shock 检测 4: 冲击 1) Test cells and batteries shall be secured to the testing machine. 以稳固的托架固定住每个电池和电池组样品的全部配件表面。 2) Each cell shall be subjected to a half-sine shock of peak acceleration of 150g_n and pulse duration of 6 milliseconds. Large cells may be subjected to a half-sine shock of peak acceleration of 50g_n and pulse duration of 11 milliseconds. 对每个电池以峰值为 150g_n 的半正弦的加速度撞击，脉冲持续 6ms，大型电池须经受最大加速度 50g_n 和脉冲持续时间 11ms 的半正弦波冲击。 Small batteries shall be subjected to a half-sine shock of peak acceleration of 150g_n (or Acceleration(g_n)=$\sqrt{\frac{100850}{mass}}$, which is smaller) acceleration of 50g_n (or Acceleration(g_n)=$\sqrt{\frac{30000}{mass}}$, which is smaller) and pulse duration of 6 milliseconds, large batteries shall be subjected to a half-sine of peak acceleration of 11 milliseconds. 对每个电池以峰值为 150g_n (或与 $\sqrt{\frac{100850}{mass}}$ 中较小值) 的半正弦的加速度撞击，脉冲持续 6ms，大型电池须经受最大加速度 50g_n (或与 $\sqrt{\frac{30000}{mass}}$ 中较小值) 和脉冲持续时间 11ms 的半正弦波冲击。 3) 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. 每个电池或电池组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。 Requirements 标准要求: 1) Cells and batteries Mass loss limit: ≤0.2%. 样品质量损失≤0.2% 2) Open circuit voltage not less than 90%, The requirement relating to voltage is not applicable to test cells and batteries at full discharged states. 样品试验后开路电压应不低于试验前开路电压的 90%,此要求不适用于完全放完电的电池或电池组。 3) No leakage, no venting, no disassembly, no rupture and no fire. 样品（电池）应无渗漏、无排气、无解体、无破裂以及无起火现象的发生。	Test Samples: No leakage, no venting, no disassembly, no rupture and no fire. 样品：无渗漏、无排气、无解体、无破裂以及无起火现象。 The data is shown in Test Table T.4 数据见表 T.4	Pass 合格



ST/SG/AC.10/11/Rev.8 Subsection 38.3

Clause 章节	Requirements 标准要求	Result 测试结果	Verdict 判定
38.3.4.5	Test 5: External Short Circuit 检测 5: 外部短路 1) The cell or battery to be tested shall be heated for a period of time necessary to reach a homogeneous stabilized temperature $57\pm4^{\circ}\text{C}$. 加热电池或电池组样品直到温度稳定在 $57\pm4^{\circ}\text{C}$ 2) The cell or battery shall be subjected to a short circuit condition with a total external resistance of less than 0.1 ohm at $57\pm4^{\circ}\text{C}$. This short circuit condition is continued for at least one hour after the cell or battery external case temperature has returned to $57\pm4^{\circ}\text{C}$. 将样品正负极用小于 0.1Ω 的总电阻回路进行短路, 样品的外表温度恢复到 $57\pm4^{\circ}\text{C}$ 之后保持短路状态 1 小时以上。 3) The cell or battery must be observed for a further six hours for the test to be concluded. 对电池或电池组必须进一步观察 6 个小时才能下结论。 Requirements 标准要求: 1) Cells external temperature not exceed 170°C. 电池的最高表面温度应不超过 170°C. 2) No disassembly, no rupture and no fire during the test and within six hours after the test. 测试中与测试后 6 小时内无解体、无破裂、无起火。	Test Samples: No leakage, no venting, no disassembly, no rupture and no fire. 样品: 无渗漏、无排气、无解体、无破裂以及无起火现象。 The data is shown in Test Table T.5 数据见表 T.5	Pass 合格
38.3.4.6	Test 6: Impact / Crush 检测 6: 撞击/挤压 Impact (applicable to cylindrical cells not less than 18mm in diameter) 撞击 (适用于直径不小于 18 毫米的圆柱形电池) 1) This test sample cell or component cell is to be placed on a flat smooth surface. 将试验样品用的电池或元件电池放在一个平坦光滑的平面上 2) A 15.8 mm diameter bar is to be placed across the center of the sample, A 9.1kg mass is to be dropped from a height of $61\pm2.5\text{cm}$ onto the sample. 将一直径为 15.8mm 的不锈钢圆棒横过电池中部放置后, 将一质量为 9.1kg 的物体从 $61\pm2.5\text{cm}$ 的高度落向样品。 3) The test sample is to be impacted with its longitudinal axis parallel to the flat surface and perpendicular to the longitudinal axis of the $15.8\text{mm} \pm 0.1\text{mm}$ diameter curved surface lying across the center of the test sample. Each sample is to be subjected to only a single impact. 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 ± 0.1 毫米弯曲表面的纵轴垂直。每一个试样只经受一次撞击。 Requirements 标准要求: 1) Cells external temperature not exceed 170°C. 电池的最高表面温度应不超过 170°C. 2) No disassembly, no rupture and no fire during the test and within six hours after the test. 测试中与测试后 6 小时内无解体、无破裂、无起火。	Test Samples: No leakage, no venting, no disassembly, no rupture and no fire. 样品: 无渗漏、无排气、无解体、无破裂以及无起火现象。 The data is shown in Test Table T.6 数据见表 T.6	Pass 合格



ST/SG/AC.10/11/Rev.8 Subsection 38.3

Clause 章节	Requirements 标准要求	Result 测试结果	Verdict 判定
	Crush (applicable to prismatic, pouch, coin/button cells and cylindrical cells less than 18mm 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）。 1) 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. 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 1.5 厘米/秒。挤压持续进行，直到出现以下三种情况之一： (a) The applied force reaches 13kN ± 0.78kN. 施加的力达到 13 千牛顿±0.78 千牛顿。 (b) The voltage of the cell drops by at least 100mV. 电池的电压下降至少 100 毫伏。 (c) The cell is deformed by 50% or more of its original thickness. 电池变形达原始厚度的 50%或以上。 2). A prismatic or pouch cell shall be crushed by applying the force to the widest side. A button/coin cell shall be crushed by applying the force on its flat surfaces. For cylindrical cells, the crush force shall be 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。圆柱形电池应从与纵轴垂直的方向施压。		N/A 不适用
	Requirements 标准要求： 1) Cells external temperature not exceed 170°C. 电池的最高表面温度应不超过 170°C。 2) No disassembly, no rupture and no fire during the test and within six hours after the test. 测试中与测试后 6 小时内无解体、无破裂、无起火。	--	



ST/SG/AC.10/11/Rev.8 Subsection 38.3

Clause 章节	Requirements 标准要求	Result 测试结果	Verdict 判定
38.3.4.7	Test 7: Overcharge 检测 7: 过度充电 1) The charge current shall be twice the manufacturer's recommended maximum continuous charge current. 以制造商建议的最大持续充电电流的两倍对样品充电。 2) The minimum voltage of the test shall be as follows: 试验的最小电压如下: a) When the manufacturer's recommended charge voltage is not more than 18V, the minimum voltage of the test shall be the lesser of two times the maximum charge voltage of the battery or 22V. 制造商建议的充电电压不大于 18V 时, 试验的最小电压应是电池组最大充电电压的两倍或 22V 两者中的较小者。 b) when the manufacturer's recommended charge voltage is more than 18V, the minimum voltage of the test shall be 1.2 times the maximum charge voltage. 制造商建议的充电电压大于 18V 时, 试验的最小电压应为最大充电电压的 1.2 倍。 3) Tests are to be conducted at ambient temperature $20\pm5^{\circ}\text{C}$, The duration of the test shall be 24 hours. 试验应在环境温度 ($20\pm5^{\circ}\text{C}$) 下进行。进行试验的时间应为 24 小时。 Requirements 标准要求: No disassembly and no fire during the test and within seven days after the test. 试验过程中和试验后 7 天内无解体, 无起火。	Test Samples: No leakage, no venting, no disassembly, no rupture and no fire. 样品: 无渗漏、无排气、无解体、无破裂以及无起火现象。 The data is shown in Test Table T.7 数据见表 T.7	Pass 合格
38.3.4.8	Test 8: Forced discharge 检测 8: 强制放电 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. 每个电池应在环境温度 ($20\pm5^{\circ}\text{C}$) 下与 12V 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。 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). 将适当大小和额定值的电阻负荷与试验电池串联, 计算得出给定的放电电流。对每个电池进行强制放电, 放电时间(小时)应等于其额定容量除以初始试验电流(安培)。 Requirements 标准要求: No disassembly and no fire during the test and within seven days after the test. 试验过程中和试验后 7 天内无解体, 无起火。	Test Samples: No leakage, no venting, no disassembly, no rupture and no fire. 样品: 无渗漏、无排气、无解体、无破裂以及无起火现象。 The data is shown in Test Table T.8 数据见表 T.8	Pass 合格

ST/SG/AC.10/11/Rev.8 Subsection 38.3

General terms and definitions 一般术语与定义

Table 38.3.1: Mass loss limit

表 38.3.1: 质量损失限值

Mass M of cell or battery 电池或电池组质量 M	Mass loss limit 质量损失限值
$M < 1 \text{ g}$	0.5%
$1 \text{ g} \leq M \leq 75 \text{ g}$	0.2%
$M > 75 \text{ g}$	0.1%

In order to quantify the mass loss, the following procedure is provided:

$$\text{Mass loss (\%)} = (M_1 - M_2)/M_1 \times 100$$

质量损失的量化值，可用以下公式计算：

$$\text{质量损失(\%)} = (M_1 - M_2)/M_1 \times 100$$

Where M1 is the mass before the test and M2 is the mass after the test. When mass loss does not exceed the values in Table 38.3.1, it shall be considered as "no mass loss".

式中：M1 是试验前的质量，M2 是试验后的质量。如果质量损失不超过表 38.3.1 所列的数值，应视为“无质量损失”。

Leakage means the visible escape of electrolyte or other material from a cell or battery or the loss of material (except battery casing, handling devices or labels) from a cell or battery such that the loss of mass exceeds the values in Table 38.3.1.

渗漏是指可以看到的电解液或者其他物质从电池或电池组中漏出，或电池或电池组中的物质损失（不包括电池外壳、搬运装置、或标签），质量损失超过表 38.3.1 所列的数值。

Venting means the release of excessive internal pressure from a cell or battery in a manner intended by design to preclude rupture or disassembly.

排气是指按设计方式释放电池或电池组内部过高的压力，防止其破裂或解体。

Disassembly means a vent or rupture where solid matter from any part of a cell or battery penetrates a wire mesh screen (annealed aluminium wire with a diameter of 0.25 mm and grid density of 6 to 7 wires per cm) placed 25 cm away from the cell or battery.

解体是指排气或破裂使电池或电池组任何部分的固体物质穿过放在离电池或电池 25 cm 处的丝网筛（直径 0.25 mm 的软铝丝，网格密度每厘米 6 至 7 条铝丝）。

Rupture means the mechanical failure of a cell container or battery case induced by an internal or external cause, resulting in exposure or spillage but not ejection of solid materials.

破裂是指内部或外部原因引起的电池容器或电池组外壳机械损坏，造成内装物暴露或溢出，但无固体喷射。

Fire means that flames are emitted from the test cell or battery.

起火是指试验电池或电池组有火焰冒出。

Test Data 检测数据

Table T.1 Altitude simulation (表 T.1) 高度模拟

Sample No. 样品编号	Before Mass 测试前 样品质量 (g)	Before Voltage 测试前 开路电压 (V)	After Mass 测试后 样品质量 (g)	After Voltage 测试后 开路电压 (V)	Mass Loss 质量损失 (%)	Residual OCV 剩余电压 (%)	Test Result 测试结果
B001	1820.66	29.21	1820.65	29.16	0.001	99.83	Pass/合格
B002	1824.15	29.29	1824.15	29.24	0.000	99.83	Pass/合格
B003	1822.64	29.25	1822.58	29.25	0.003	100.00	Pass/合格
B004	1823.86	29.23	1823.86	29.20	0.000	99.90	Pass/合格
B005	1824.52	29.27	1824.52	29.27	0.000	100.00	Pass/合格
B006	1826.12	29.31	1826.02	29.27	0.005	99.86	Pass/合格
B007	1823.78	29.18	1823.78	29.18	0.000	100.00	Pass/合格
B008	1825.97	29.26	1825.92	29.23	0.003	99.90	Pass/合格

Notes 注释:

After the test, there is no leakage, no venting, no disassembly, no rupture and no fire. And change ratio is not less than 90 %. 检测后, 样品无渗漏、无排气、无解体、无破裂和无起火。电压比不小于 90 %。

Table T.2 Thermal test (表 T.2) 温度试验

Sample No. 样品编号	Before Mass 测试前 样品质量 (g)	Before Voltage 测试前 开路电压 (V)	After Mass 测试后 样品质量 (g)	After Voltage 测试后 开路电压 (V)	Mass Loss 质量损失 (%)	Residual OCV 剩余电压 (%)	Test Result 测试结果
B001	1820.65	29.16	1820.13	28.89	0.029	99.07	Pass/合格
B002	1824.15	29.24	1823.66	28.99	0.027	99.15	Pass/合格
B003	1822.58	29.25	1822.24	28.91	0.019	98.84	Pass/合格
B004	1823.86	29.20	1823.55	28.93	0.017	99.08	Pass/合格
B005	1824.52	29.27	1824.16	28.97	0.020	98.98	Pass/合格
B006	1826.02	29.27	1825.76	29.01	0.014	99.11	Pass/合格
B007	1823.78	29.18	1823.37	28.94	0.022	99.18	Pass/合格
B008	1825.92	29.23	1825.44	28.88	0.026	98.80	Pass/合格

Notes 注释:

After the test, there is no leakage, no venting, no disassembly, no rupture and no fire. And change ratio is not less than 90 %. 检测后, 样品无渗漏、无排气、无解体、无破裂和无起火。电压比不小于 90 %。

Table T.3 Vibration (表 T.3) 振动

Sample No. 样品编号	Before Mass 测试前 样品质量 (g)	Before Voltage 测试前 开路电压 (V)	After Mass 测试后 样品质量 (g)	After Voltage 测试后 开路电压 (V)	Mass Loss 质量损失 (%)	Residual OCV 剩余电压 (%)	Test Result 测试结果
B001	1820.13	28.89	1820.13	28.89	0.000	100.00	Pass/合格
B002	1823.66	28.99	1823.66	28.93	0.000	99.79	Pass/合格
B003	1822.24	28.91	1822.13	28.87	0.006	99.86	Pass/合格
B004	1823.55	28.93	1823.55	28.93	0.000	100.00	Pass/合格
B005	1824.16	28.97	1824.10	28.97	0.003	100.00	Pass/合格
B006	1825.76	29.01	1825.76	28.98	0.000	99.90	Pass/合格
B007	1823.37	28.94	1823.33	28.94	0.002	100.00	Pass/合格
B008	1825.44	28.88	1825.27	28.84	0.009	99.86	Pass/合格

Notes 注释:

After the test, there is no leakage, no venting, no disassembly, no rupture and no fire. And change ratio is not less than 90 %. 检测后, 样品无渗漏、无排气、无解体、无破裂和无起火。电压比不小于 90 %。

Table T.4 Shock (表 T.4) 冲击

Sample No. 样品编号	Before Mass 测试前 样品质量 (g)	Before Voltage 测试前 开路电压 (V)	After Mass 测试后 样品质量 (g)	After Voltage 测试后 开路电压 (V)	Mass Loss 质量损失 (%)	Residual OCV 剩余电压 (%)	Test Result 测试结果
B001	1820.13	28.89	1820.06	28.84	0.004	99.83	Pass/合格
B002	1823.66	28.93	1823.66	28.93	0.000	100.00	Pass/合格
B003	1822.13	28.87	1822.02	28.87	0.006	100.00	Pass/合格
B004	1823.55	28.93	1823.55	28.91	0.000	99.93	Pass/合格
B005	1824.10	28.97	1824.05	28.94	0.003	99.90	Pass/合格
B006	1825.76	28.98	1825.64	28.98	0.007	100.00	Pass/合格
B007	1823.33	28.94	1823.33	28.90	0.000	99.86	Pass/合格
B008	1825.27	28.84	1825.21	28.84	0.003	100.00	Pass/合格

Notes 注释:

After the test, there is no leakage, no venting, no disassembly, no rupture and no fire. And change ratio is not less than 90 %. 检测后, 样品无渗漏、无排气、无解体、无破裂和无起火。电压比不小于 90 %。

Table T.5 External short circuit (表 T.5) 外部短路

Sample No. 样品编号	Max. External Temperature 样品表面最高温度(°C)	Test Result 测试结果
B001	57.6	Pass/合格
B002	57.8	Pass/合格
B003	57.6	Pass/合格
B004	57.5	Pass/合格
B005	57.9	Pass/合格
B006	57.7	Pass/合格
B007	57.5	Pass/合格
B008	57.8	Pass/合格

Notes 注释:

Test sample external temperature does not exceed 170°C and there is no disassembly, no rupture and no fire during the test and within six hours after the test.

检测样品表面温度不超过 170 °C，检测中与检测后 6 小时内无解体、无破裂、无起火。

Table T.6 Impact (表 T.6) 撞击

Sample No. 样品编号	Max. External Temperature 样品表面最高温度(°C)	Test Result 测试结果
C001	95.4	Pass/合格
C002	92.3	Pass/合格
C003	89.7	Pass/合格
C004	92.7	Pass/合格
C005	94.9	Pass/合格
C006	96.9	Pass/合格
C007	87.5	Pass/合格
C008	89.4	Pass/合格
C009	97.8	Pass/合格
C010	93.2	Pass/合格

Notes 注释:

Test sample external temperature does not exceed 170°C and there is no disassembly, no rupture and no fire during the test and within six hours after the test.

检测样品表面温度不超过 170 °C，检测中与检测后 6 小时内无解体、无破裂、无起火。

Table T.7 Overcharge (表 T.7) 过度充电

Sample No. 样品编号	Test Result 测试结果
B009	Pass/合格
B010	Pass/合格
B011	Pass/合格
B012	Pass/合格
B013	Pass/合格
B014	Pass/合格
B015	Pass/合格
B016	Pass/合格

Notes 注释:

There is no disassembly and no fire during the test and within seven days after the test.
样品在检测中和检测后 7 天内无解体、无起火。

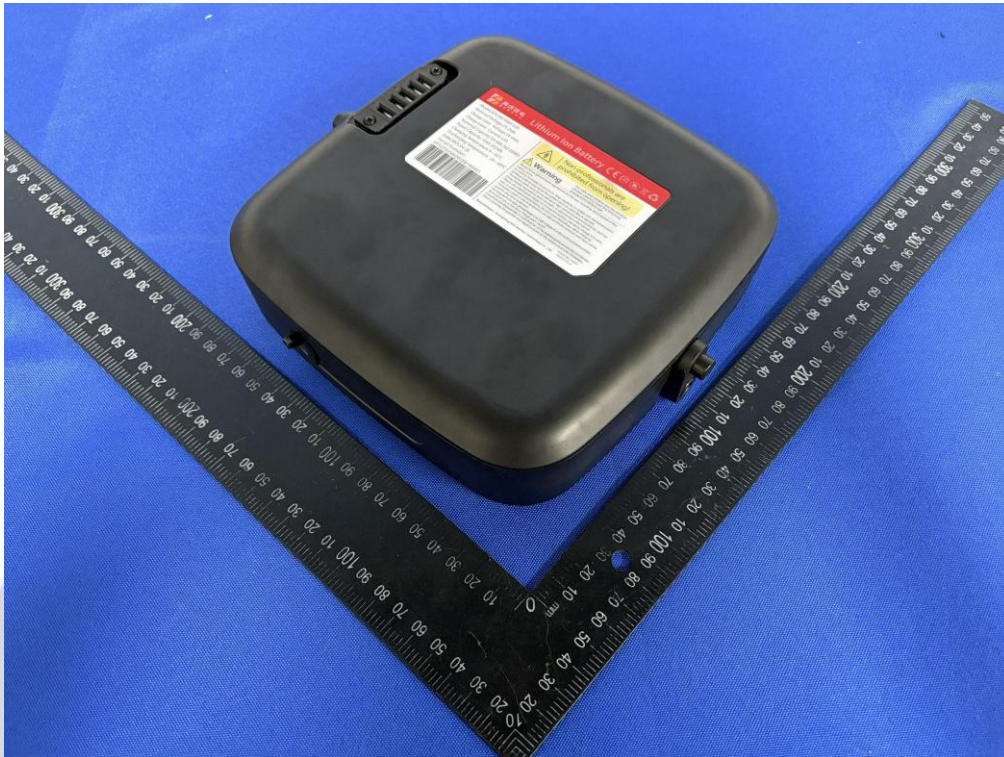
Table T.8 Forced discharge (表 T.8) 强制放电

Sample No. 样品编号	Test Result 测试结果	Sample No. 样品编号	Test Result 测试结果
C011	Pass/合格	C021	Pass/合格
C012	Pass/合格	C022	Pass/合格
C013	Pass/合格	C023	Pass/合格
C014	Pass/合格	C024	Pass/合格
C015	Pass/合格	C025	Pass/合格
C016	Pass/合格	C026	Pass/合格
C017	Pass/合格	C027	Pass/合格
C018	Pass/合格	C028	Pass/合格
C019	Pass/合格	C029	Pass/合格
C020	Pass/合格	C030	Pass/合格

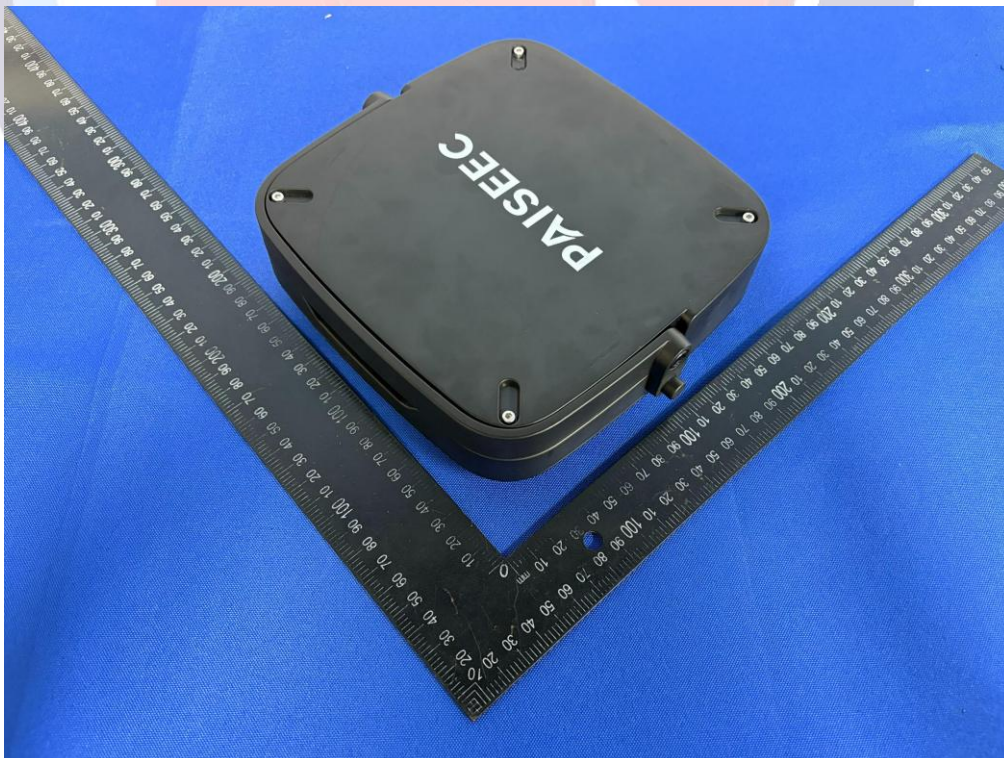
Notes 注释:

There is no disassembly and no fire during the test and within seven days after the test.
样品在检测中和检测后 7 天内无解体、无起火。

Photos of Samples 样品照片



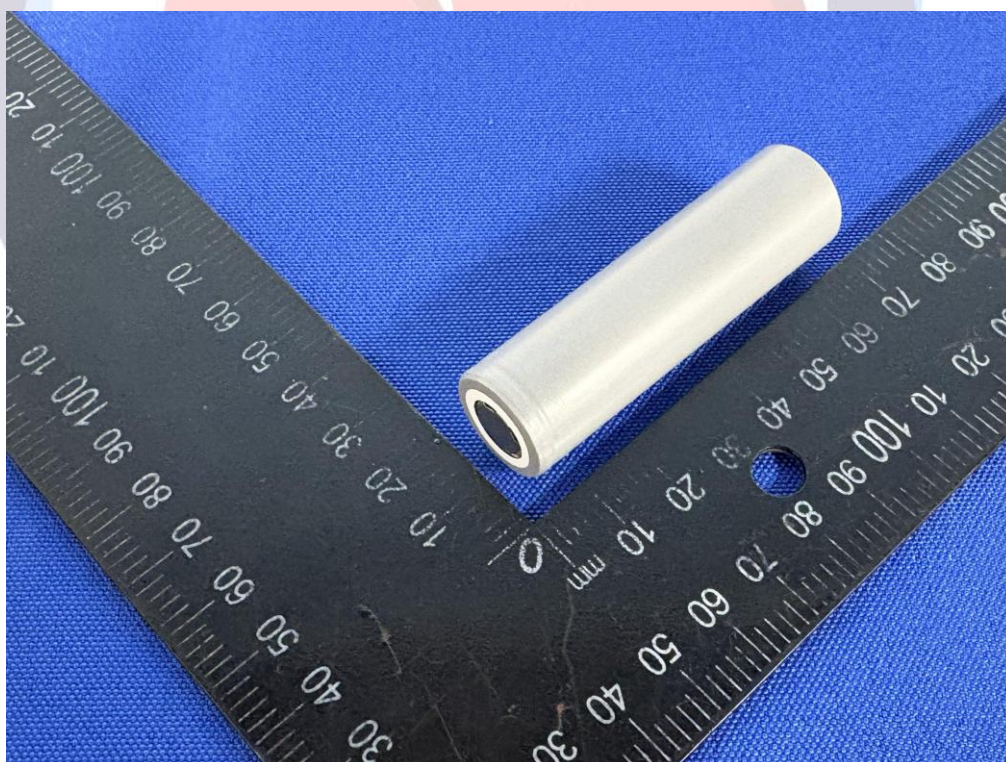
Picture 1. Front view of battery
图片 1. 电池组前视图



Picture 2. Back view of battery
图片 2. 电池组后视图



Picture 3. Front view of cell
图片 3. 电池前视图



Picture 4. Back view of cell
图片 4. 电池后视图



Picture 5. Label view

图片 5. 标签视图

Important 注意事项

1. The test report is invalid if it is not affixed the official seal of the laboratory to it.
检测报告无本实验室公章（或检验检测专用章）无效。
2. Copies of the test report without the official seal of the laboratory are invalid.
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。
3. It is forbidden to copy the test report partially without the written approval of the laboratory.
未经本实验室书面批准不得部分复制检测报告。
4. The test report is invalid without the signatures of Approver, Reviewer and Testing engineer.
检测报告无检测、审核、批准人签名无效。
5. The test report is invalid if it is blotted out.
检测报告涂改无效。
6. Objections to the test report must be submitted to CMC Testing International (Shenzhen) Co., Ltd. within 15 days.
对检测报告若有异议，应于收到报告之日起十五天内向众检检验认证（深圳）有限公司提出。
7. This report is only responsible for the test results of the tested samples, and the test results and related judgment conclusions only reflect the evaluation of the tested samples. For the report and the content can not be used for commercial advertising, the use of direct or indirect losses and all legal consequences, the company does not assume any economic and legal responsibility.
本报告仅对所测样品的检测结果负责，检测结果及其相关判定结论仅反映对所测样品的评价。对于报告及所载内容不能进行商业广告宣传使用，使用所产生的直接或间接损失及一切法律后果，本单位不承担任何经济和法律后果。
8. As for the Verdict, "--" means "no need for judgment", "P" means "pass", "F" means "fail" and "N/A" means "not applicable".
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"。

*** End of Report ***
*** 报告结束 ***

Testing laboratory: CMC Testing International (Shenzhen) Co., Ltd.

检测单位: 众检检验认证（深圳）有限公司

Address: 1-3/F., Building 7, He'er Hongben Industrial Zone, Dawangshan Community, Shajing Subdistrict, Baoan District, Shenzhen, Guangdong, China

地址: 广东省深圳市宝安区沙井街道大王山社区和二鸿奔工业区 7 栋一层二层三层

Tel (电话): 400-1668-320

Email: info@cmczj-lab.com

<http://www.cmczj-lab.com>

18 / 18

Material Safety Data Sheet 材料安全数据表

Report No.:

报告编号:

CMC251121045M01

Name of sample:

样品名称:

Lithium Ion Battery

锂离子电池

Model:

型号:

ADCN07040F32D

Type:

规格:

25.2V 10Ah 252Wh

Client:

委托单位:

Guangdong BAK Benhoo Technology Co., Ltd.

广东比克奔虎新能源科技有限公司

Address:

地址:

3F, Building A, Industrial Park, No. 55 Zengkeng Road,
Zengkeng Team, Xintang Village, Qiuchang Sub-district,
Huiyang District, Huizhou City, Guangdong Province, China
惠州市惠阳区秋长街道新塘村增坑小组增坑路 55 号工业园 A
栋 3 楼

Tested by 主检人:

(Testing Engineer 测试工程师)

Meiko Ma 马方威

Meiko Ma 马方威

Approved by 批准人:

(Technical Director 技术总监)

Barry He 何清

Barry He 何清

Inspected by 审核人:

(Department Manager 部门经理)

Dylan Dou 窦明波

Dylan Dou 窦明波

Seal of CMC:

CMC 印章:



Date of Issue:

签发日期:

2026.01.01

CMC Testing International (Shenzhen) Co., Ltd.

众检检验认证(深圳)有限公司

Material Safety Data Sheet
材料安全数据表

Section 1- Identification of the Substance/Preparation and of the Company/Undertaking

第一部分 物质及企业标识

Name of Sample 样品名称	Lithium Ion Battery 锂离子电池	Weight 重量	1826.1g
		Size 尺寸 (L×W×T)	(210.0×188.2×48.5)mm
Model 型号	ADCN07040F32D		
Manufacturer 制造商	Guangdong BAK Benhoo Technology Co., Ltd. 广东比克奔虎新能源科技有限公司		
Manufacturer Address 制造商地址	3F, Building A, Industrial Park, No. 55 Zengkeng Road, Zengkeng Team, Xintang Village, Qiuchang Sub-district, Huiyang District, Huizhou City, Guangdong Province, China 惠州市惠阳区秋长街道新塘村增坑小组增坑路 55 号工业园 A 栋 3 楼		
Contact Person 联系人	Mr. Liu 刘先生		
E-mail 邮箱	liur@baknp.com		
Fax 传真	--		
24h Emergency Phone No. 24h 紧急联络电话	400-870-0267		

Section 2- Hazards Identification

第二部分 危险性概述

Classification of Danger 危险性类别	See section 14. 见第十四部分。
Primary Route(s) of Exposure 浸入途径	Eye, skin contact, ingestion. 眼睛，皮肤接触，摄入。
Health Hazard 健康危害	The batteries are not hazardous when used according to the instructions of manufacturer under normal conditions. In case of abuse, there's Hazard of rupture, fire, heat, leakage of internal components, which could cause casualty loss. Abuses including but not limited to the following cases: charged for long time, short circuited, put into fire, whacked with hard object, punctured with acute object, crushed, and broken. 正常条件下根据制造商的说明使用电池不会产生危害。使用不当的情况下，有破裂、起火、发烫、内部成分泄漏的危险，并可能造成意外损失。使用不当的行为包括但不限于下列情况：长时间充电、短路、投入火中、硬物撞击、尖物刺破、破碎，和破裂。

Section 3- Composition/Information on Ingredients

第三部分 成分/组成信息

Chemical Name 化学名称	Concentration or concentration ranges (%) 浓度或浓度范围(%)	CAS Number CAS 号(化学文摘索引登记号)
Cobalt lithium manganese nickel oxide 镍钴锰酸锂	39.5	182442-95-1
Carbon Black 炭黑	1.44	1333-86-4
Polyvinylidene Fluoride (PVDF) 聚偏氟乙烯	0.7	24937-79-9
Graphite 石墨	20.6	7782-42-5
Carboxymethyl cellulose 羧甲基纤维素	0.39	9004-32-4
Styrene-Butadiene Rubber (SBR) 丁苯橡胶	0.49	9003-55-8
Polyethylene 聚乙烯	2.24	9002-88-4
Lithium hexafluorophosphate 六氟磷酸锂	14.38	21324-40-3
Copper 铜	9.34	7440-50-8
Aluminium 铝	3.39	7429-90-5
Nickel 镍	0.43	7440-02-0
Fe 铁	7.1	7439-89-6

Labeling according to EC directives.

标签根据 EC 指令。

No symbol and Hazard phrase are required.

不需要象形符号和危险短语。

Note: CAS number is Chemical Abstract Service Registry Number.

注意: CAS 号是化学文摘服务注册号码。

N/A=Not apply.

N / A =不适用。

Section 4- First Aid Measures

第四部分-急救措施

Eye 眼睛	Flush eyes with plenty of water for least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid. 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 皮肤	Remove contaminated clothes and rinse skin with plenty of water or shower for 15 minutes. Get medical aid. 万一接触，用大量的水冲洗至少 15 分钟，同时除去污染的衣物和鞋子，迅速就医。
Inhalation 吸入	Remove from exposure and move to fresh air immediately. Use oxygen if available. 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 食入	Induce vomiting unless patient is unconscious. Call a physician. 如果当事人仍然清醒可以采取催吐的方法，并且立即就医。

Section 5- Fire Fighting Measures

第五部分-消防措施

Characteristics of Hazard 危险特性	The product causes burns of eyes, skin and mucous membranes. Thermal decomposition can lead to release of irritating gases and vapors. 该产品会导致眼睛，皮肤和粘膜灼伤。热分解可能导致释放刺激性气体和蒸汽。
Hazardous Combustion Products 燃烧产生的危险物品	Carbon dioxide. 二氧化碳。
Fire-extinguishing Methods and Extinguishing Media 灭火方法及灭火剂	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. 使用适合当地情况和周围环境的灭火措施。
Attention in Fire-extinguishing 灭火注意事项	Wear self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. 因为压强关系，要穿戴可呼吸式全身防护装备，MSHA/NIOSH（经认证或等效的），以及佩戴全套防护装置。

Section 6- Accidental Release Measures

第六部分-泄露应急处理

Personal Precautions, protective equipment, and emergency procedures 个人预防措施、防护装备和应急程序	In case of rupture. Attention! Corrosive material. Avoid contact with skin, eyes and clothing. Ensure adequate ventilation. Use personal protective equipment as required. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Refer to protective measures listed in Sections 7 and 8. 万一破裂。注意！腐蚀性物质。避免接触皮肤，眼睛或衣服。确保空气流通。根据需要使用个人防护装备。将人员撤离到安全区域。让人们远离溢出/泄漏处和处于逆风。参考第七部分和第八部分中列出的防护措施。
Environmental Precautions 环境保护措施	Prevent product from contaminating soil and from entering sewers or waterways. 防止产品污染土壤和进入下水道或水道。
Methods and materials for Containment containment	Stop the leak if safe to do so. Contain the spilled liquid with dry sand or earth. Clean up spills immediately.

方法和材料控制	出于安全，阻止泄漏，可以用干砂或泥土来遏制液体溢出，立即清理溢出物。
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(干砂或泥土)吸收溢出的材料。污染物转移到可接受的废物容器中。收集所有受污染的吸收剂，按照第十三部分的说明进行处理。用洗涤剂和水清洁污染区域，收集所有受污染的洗涤水，妥善处理。

Section 7- Handling and Storage

第七部分-操作处置和储存

Handling 操作处置	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. 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。禁止短路或将电池正负极错误的安装在设备中。
Storage 储存	Store in a cool, dry, well-ventilated area away from incompatible substances. Store locked up. Keep out of the reach of children. 储藏于阴凉，干燥，通风处，远离接触会发生反应的材料。存储锁定。放在儿童无法接触的地方。
Other Precautions 其他要注意的防范措施	In case of rupture. Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Use personal protection equipment. 万一破裂。按照良好的工业卫生和安全规范进行操作。避免接触皮肤，眼睛或衣服。使用个人防护设备。

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	Use adequate ventilation to keep airborne concentrations low. If used under conditions that generate particulates, the ACGIH TLV-TWA of 3mg/m ³ respirable fraction (10mg/m ³ total) should be observed. 保证空气流通使空气密度保持在低水平。如果在会生成微粒的情况下使用，应仔细观察 3mg/m ³ ACGIH TLV-TWA 3 的吸入量（总量为 10mg/m ³ ）。
Personal Protective Equipment 个人防护设备	Eye and Face Protection: None required for consumer use. If there is a Hazard of contact: Tight sealing safety goggles. Face protection shield. 眼睛和脸部保护：消费者无需使用。如果有接触危险：密封安全护目镜。面部防护罩。 Skin and Body Protection: None required for consumer use. If there is a Hazard of contact: Wear protective gloves and protective clothing. 皮肤和身体防护：消费者无需使用。如果有接触危险：穿戴防护手套和防护服。 Respiratory Protection: No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required. 呼吸系统防护：正常使用条件下不需要防护设备。如果超过暴露限值或发生刺激，可能需要通风和疏散。

Section 9- Physical and Chemical Properties
第九部分 理化特性

Physical State 物理状态	Appearance: Cuboid 外形: 长方体
	Color: Black 颜色: 黑色
	Odour: If leaking, smells of medical ether. 气味: 泄漏时, 医用乙醚的气味。
Change in condition: 变化的条件:	
pH 酸碱度	Not applicable as supplied. 不适用。
Flash Point 闪点	Not applicable unless individual components exposed. 除非单个的组件暴露, 否则不适用。
Flammability 易燃度	Not applicable unless individual components exposed. 除非单个的组件暴露, 否则不适用。
Relative density: 相对密度	Not applicable unless individual components exposed. 除非单个的组件暴露, 否则不适用。
Solubility (water) 溶解性 (水溶性)	Not applicable unless individual components exposed. 除非单个的组件暴露, 否则不适用。
Solubility (other) 溶解性 (其他)	Not applicable unless individual components exposed. 除非单个的组件暴露, 否则不适用。

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

Chemical Stability 化学稳定性	Stable under recommended storage conditions. 在推荐的储存条件下可以保持稳定。
Possibility of Hazardous Reactions 危险反应的可能性	None under normal processing. 正常处理下没有。
Conditions to Avoid 应避免的条件	Exposure to air or moisture over prolonged periods. 暴露在空气中或长时间受潮。
Incompatible materials 不相容材料	Acids, Oxidizing agents, Bases. 酸, 氧化剂, 碱。
Hazardous Decomposition Products 有危害分解物	Carbon oxides. 二氧化碳。

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, 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。
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接触地下水、水道或污水处理系统。
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

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 shouldn't be treated as ordinary trash. Shouldn't be thrown into fire or placed in high temperature. Shouldn't be dissected, pierced, crushed or treated similarly. Best disposal method is recycling. 废电池不能被当作普通垃圾。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。最好的处理办法是回收利用。

Section 14 – Transport Information

第十四部分-运输信息

ICAO / IATA: 国际民间航空组织/国际航空运输协会:	Can be shipped by air in accordance with International Civil Aviation Organization (ICAO), TI or International Air Transport Association (IATA), DGR Packing Instructions (PI) 965 Section IA, PI 966 Section I and PI 967 Section I appropriate of IATA DGR 67th (2026 Edition) for transportation. 货物可根据民用航空组织 (ICAO), TI 或国际航空运输协会 (IATA), DGR 67th (2026 版) 包装说明(PI)965 Section IA, PI 966 Section I 和 PI 967 Section I 相关规定进行空运。		
UN number 联合国货物编号 (UN 编号)	UN3480/UN3481		
Proper Shipping Name 运输专用名称	Lithium ion batteries / 锂离子电池 Lithium ion batteries packed with equipment / 锂离子电池与设备包装在一起		
Remark 备注	Suggested limited to a maximum of 30% SoC 荷电状态不得超过其额定容量的 30%		
Class or Div 危险性类别	9	Packing grade: 包装等级	II
UN number 联合国货物编号 (UN 编号)	UN3481		
Proper Shipping Name 运输专用名称	Lithium ion batteries contained in equipment 锂离子电池安装在设备中		
Class or Div 危险性类别	9	Packing grade: 包装等级	/
UN number 联合国货物编号 (UN 编号)	UN3556 Vehicle, Lithium ion Battery powered 锂离子电池供电车辆		
Class or Div 危险性类别	9	Packing grade: 包装等级	/
Special precautions which a user needs to be aware of, or needs to comply with, in connection with transport or conveyance either within or outside their premises. 无论是对内还是对外的运输或运输方式, 用户都需要注意或遵守的特殊预防措施。			
IMDG CODE: 国际海运危险货物规则:	Shipping may be done in accordance with the IMDG Code 2024 Edition (Amdt 42-24). 可根据 IMDG Code 2024 版(Amdt 42-24)相关规定进行海运。		
UN number 联合国货物编号 (UN 编号)	UN3480/UN3481		
Proper Shipping Name 运输专用名称	Lithium ion batteries / 锂离子电池 Lithium ion batteries packed with equipment / 锂离子电池与设备包装在一起		
Class or Div	9	Packing grade:	II

危险性类别		包装等级	
UN number 联合国货物编号（UN 编号）	UN3481		
Proper Shipping Name 运输专用名称	Lithium ion batteries contained in equipment 锂离子电池安装在设备中		
Class or Div 危险性类别	9	Packing grade: 包装等级	/
UN number 联合国货物编号（UN 编号）	UN3556 Lithium ion Battery-powered vehicle 锂离子电池供电车辆		
Class or Div 危险性类别	9	Packing grade: 包装等级	/
EmS No. 危险品应急措施编号	F-A: 一般灭火程序 S-I: 易燃固体（可重包装）		
ADR/ ADN: 欧洲国际陆运危险货物协定/ 关于内陆水道国际运输危险 货物的欧洲协定：	Transport Requirements for United Nations Economic Commission for Europe (UNECE) ADR/ADN, Applicable as from 1 January 2025. 自 2025 年 1 月 1 日起需符合联合国欧洲经济委员会（UNECE）ADR / ADN 的运输 要求。		
In addition, to be permitted in transport each lithium cell and battery types must have passed the applicable tests set out in Subsection 38.3 of the UN Manual of Tests and Criteria. The batteries should be well protected against short circuits. 此外，每个锂电芯和电池类型都必须通过联合国《关于危险货物运输的建议书 试验和标准手册》第 38.3 节规定的 适用测试。电池应做好防短路措施。			

Section 15- Regulatory information**第十五部分 法规信息****Dangerous Goods Regulations**

《危险物品规则》

Recommendations on the Transport of Dangerous Goods-Model Regulations (24th revised edition)

联合国《关于危险货物运输的建议书 规章范本》(24th 修订版)

UNITED NATIONS "Manual of Tests and Criteria"

联合国《试验和标准手册》

International Air Transport Association (IATA)

《国际航空运输协会》(IATA)

International Maritime Dangerous Goods (IMDG Code 2024 Edition Amdt 42-24)

《国际海运危险货物规则》(IMDG Code 2024 版 Amdt 42-24)

Technical Instructions for the Safe Transport of Dangerous Goods

《危险货物安全运输技术指南》

Classification and code of dangerous goods (GB 6944-2012)

《危险货物分类和品名编号》- GB 6944-2012

2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

2012《职业安全与健康标准》危险通信标准 (29 CFR 1910.1200)

Toxic Substance Control Act (TSCA)

《有毒物质控制法》(TSCA)

Code of Federal Regulations

《联邦条例》

In accordance with all Federal, State and local laws

符合所有联邦、州和地方法律

Section 16- Other Information

第十六部分-其它信息

MSDS creation date: 2026

Version: 1.0

Sample photo 样品照片:



To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

本份 MSDS 中的信息只是基于我们当前所拥有的相关材料的信息而编制的, 只是为了描述本品的健康、安全与环境需求, 以使各有关方面能更好地了解和信任本产品。这些信息只是提供给您, 以供考虑、研究和确认。其中的一些危害预防措施描述并非唯一的。所以本份 MSDS 不能作为使用本品实现任何特定目的的保证。各有关使用者有责任预先完成本品的安全性及其他方面的测试, 以评判其是否满足您的使用目的。

*****End of report*****

*****报告结束*****