

Certificado de batería

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



PARA EL PRODUCTO

Andafacil® StairPro – Silla Eléctrica

SKU: AFSP-X1



Datos de la batería

458.6 Wh

Energía

25.2 V

Voltaje

18.2 Ah

Capacidad

Litio

Química

Sí

Batería removible

Aprobada

Prueba UN 38.3

USO Y TRANSPORTE • Clase 9 – batería de litio



Este producto no está pensado para viajar en avión (su batería de 458.6 Wh supera los 300 Wh que suelen aceptar las aerolíneas). Este documento identifica su batería para envíos por tierra, almacenaje y servicio técnico.

¿Dudas sobre la batería? Escriba a Marla por WhatsApp



Le ayudamos con la carga, el cuidado y el servicio de su producto. Escanee el código o escriba al:

WhatsApp 55 9990 2396

s.andafacil.com/wabateriaafspx1



Cuidado y transporte de la batería

1. Cárguela con el cargador original, en un lugar ventilado y lejos de fuentes de calor.
2. Si no la usa por varias semanas, cárguela al menos una vez al mes.
3. Para moverla en auto o enviarla, apague el producto, desconecte la batería y protéjala de golpes y del agua.
4. Si se hincha, huele raro o se calienta de más, deje de usarla y escríbanos.



Consejo de Don Andy: guarde este certificado junto con su factura; se lo pueden pedir en envíos o en el servicio técnico.

Evidencia del fabricante

Documento	Detalle
Nombre de la mercancía (como aparece en el certificado)	Li-ion Battery XYN-DHB-35A
Modelo de batería	XYN-DHB-35A
Fabricante	Hunan IMR New Energy Co., Ltd. (factory); applicant Changzhou Xinyuneng New Energy Co., Ltd.
Resumen de prueba UN 38.3	Report No. KS2408S3743B01 · KSIGN (Guangdong) Testing Co., Ltd · issued 2024-09-25 (tests from 2024-09-02) · UN Manual of Tests and Criteria Rev.8 §38.3 · battery 7S7P
Hoja de datos de seguridad (MSDS)	Report No. KS2412S6118B04 · KSIGN (Guangdong) Testing Co., Ltd · issued 2025-01-01 · UN 3480, UN 3481 Lithium ion batteries, Class 9, IATA DGR 66th (2025) PI 965/966/967

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

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

Andafacil® | StairPro – Power Chair

SKU: AFSP-X1



Battery data

458.6 Wh

Energy

25.2 V

Voltage

18.2 Ah

Capacity

Lithium-ion

Chemistry

Yes

Removable
battery

Passed

UN 38.3 test

USE AND TRANSPORT • Class 9 – lithium battery



This product is not meant for air travel (its 458.6 Wh battery is above the 300 Wh airlines usually accept). This document identifies its battery for ground shipping, storage and service.

Battery questions? Message Marla on WhatsApp

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

WhatsApp 55 9990 2396

s.andafacil.com/wabateriaafsp1



Battery care and transport

1. Charge it with the original charger, in a ventilated place away from heat.
2. If you do not use it for several weeks, charge it at least once a month.
3. To move it by car or ship it, switch the product off, disconnect the battery and protect it from impacts and water.
4. If it swells, smells odd or gets too hot, stop using it and contact us.



Don Andy's tip: keep this certificate with your invoice; it may be requested for shipping or service.

Manufacturer evidence

Document	Detail
Goods name (as printed on the certificate)	Li-ion Battery XYN-DHB-35A
Battery model	XYN-DHB-35A
Manufacturer	Hunan IMR New Energy Co., Ltd. (factory); applicant Changzhou Xinyuneng New Energy Co., Ltd.
UN 38.3 Test Summary	Report No. KS2408S3743B01 · KSIGN (Guangdong) Testing Co., Ltd · issued 2024-09-25 (tests from 2024-09-02) · UN Manual of Tests and Criteria Rev.8 §38.3 · battery 7S7P
MSDS	Report No. KS2412S6118B04 · KSIGN (Guangdong) Testing Co., Ltd · issued 2025-01-01 · UN 3480, UN 3481 Lithium ion batteries, Class 9, IATA DGR 66th (2025) PI 965/966/967

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

ANDAFACIL identifies the product; the technical data comes from the original certificates attached.



中国认可
国际互认
检测
TESTING
CNAS L13261

Report No.: KS2408S3743B01

UN38.3 Test Report

Samples Name Li-ion Battery

样品名称 锂离子电池

Model

XYN-DHB-35A

型号

Applicant

Changzhou Xinyuneng New Energy Co., LTD

委托单位

常州鑫宇能新能源有限公司



广东科正技术服务有限公司
KSI(Guangdong) Testing Co., Ltd.

检验检测专用章

General Information
基本资料

Sample Name 样品名称	Li-ion Battery 锂离子电池	Model Name 型号	XYN-DHB-35A
Rated 额定	25.2V, 18.2Ah	Watt-hour 瓦时	458.6Wh
Dimension 尺寸(L*W*H)	226.0*148.0*128.0 (mm)	Weight 重量	Appr.: 2935.5g
Sample Status 样品状态	Good 良好	Sample Information 样品信息	Battery (7S7P) 电池 (7 串 7 并)
Applicant 委托单位	Changzhou Xinyuneng New Energy Co., LTD 常州鑫宇能新能源有限公司		
Applicant Address 委托单位地址	Room 266, Building 1, 35 Yingbin Road, Zhonglou District, Changzhou City, Jiangsu Province 江苏省常州市钟楼区迎宾路 35 号 1 幢 266		
Factory 生产工厂	HUNAN IMR NEW ENERGY CO., LTD 湖南爱美人新能源有限公司		
Factory Address 生产工厂地址	Room 102, Building 4, Xinggong Science and Technology Park, No. 100 Luyun Road, High-tech Development Zone, Changsha City, Hunan Province 湖南省长沙市高新开发区麓云路 100 号兴工科技园 4 栋 102 室		
Factory Telephone 生产工厂电话	+86-18796961007	Factory Email 生产工厂邮箱	495734154@qq.com
Factory Web 生产工厂网址	/		
Test Method & Criterion 检验方法及判定标准	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》(第八版) 38.3 节		
Testing Laboratory 检测单位	KSIGN(Guangdong) Testing Co., Ltd. 广东科正技术服务有限公司 West Side of 1/F., Building C, Zone A, Fuyuan New Factory, Jiujiu Industrial Park, Minzhu, Shatou, Shajing, Bao'an District, Shenzhen, Guangdong, China 广东省深圳市宝安区沙井街道沙头社区民主九九工业区福源厂新厂房A区C栋一层西侧, 518104		
Sample Receiving Date 收样接收日期	2024 年 09 月 02 日	Test Date 测试日期	2024 年 09 月 02 日至 2024 年 09 月 13 日
Conclusion 测试结论	The samples has passed the test items of UN "Manual of Tests and Criteria" ST/SG/AC.10/11/Rev.8/Subsection 38.3. 受检样品通过联合国《试验和标准手册》(第八版) 38.3 节各项检测, 检测结果合格。 Seal/签章: 检验检测专用章 Date of issue/签发日期: 2024 年 09 月 25 日		

Tested By:
主检
Test Engineer

李奕洪

Checker:
审核
Project Engineer

林晓取

Approver:
批准
Technical Director

杨龙

Test Summary Lists

测试摘要列表

Test No. 测试编号	Test Item 测试项目	Test Methods 测试方法	Conclusion 本项结论
T1	Altitude simulation / 高度模拟	See Appendix 1 见附表1	Passed 合格
T2	Thermal test / 温度试验	See Appendix 2 见附表2	Passed 合格
T3	Vibration / 振动测试	See Appendix 3 见附表3	Passed 合格
T4	Shock / 冲击测试	See Appendix 4 见附表4	Passed 合格
T5	External short circuit / 外部短路	See Appendix 5 见附表5	Passed 合格
T6	Impact / 撞击	See Appendix 6 见附表6	Passed 合格
	Crush / 挤压	N/A 不适用	N/A 不适用
T7	Overcharge / 过度充电	See Appendix 7 见附表7	Passed 合格
T8	Forced discharge / 强制放电测试	See Appendix 8 见附表8	Passed 合格
Remark 备注	1) Impact test applicable to cylindrical cells not less than 18.0mm in diameter. 撞击试验适用于直径不小于 18.0mm 的圆柱形电芯。 2) Crush test applicable to prismatic, pouch, coin/button cells and cylindrical cells less than 18.0mm in diameter. 挤压试验适用于棱柱形、袋状、硬币/纽扣电芯和直径不超过 18.0mm 的圆柱形电芯。		

Test Item 测试项目	Sample No. 样品编号	Sample State 样品状态
T1~T5	B01~B04	At first cycle, in fully charged states 第1个充放电周期, 完全充电状态
	B05~B08	After 25 cycles ending in fully charged states 第25个充放电周期, 完全充电状态
T6	C01~C05	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
	C06~C10	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	B09~B12	At first cycle, in fully charged states 第1个充放电周期, 完全充电状态
	B13~B16	After 25 cycles ending in fully charged states 第25个充放电周期, 完全充电状态
T8	C11~C20	At first cycle in fully discharged states 第1个充放电周期, 完全放电状态
	C21~C30	After 25 cycles ending in fully discharged states 第25个充放电周期, 完全放电状态
The above samples have been charged and discharged cycles by the factory as required before the test. 备注: 以上样品在测试前已由工厂按要求进行充放电循环处理。		

Appendix 1

附表 1

Test Items 测试项目	Altitude simulation 高度模拟						
1.1	Test procedure 测试步骤						
	Test cells and batteries shall be stored at a pressure of 11.6kPa or less for at least six hour 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. 试验电芯和电池在环境温度(20±5℃)下, 储存在小于等于11.6kPa的压力下至少六小时。 试验电芯或电池应无重量损失、无渗漏、无排气、无解体、无破裂和无燃烧, 并且每个试验电芯或电池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芯或电池除外)。						
1.2	Result 测试结果						
Sample No. 样品编号	Before 测试前		After 测试后		Mass loss 质量损失 (%)	Residual OCV 剩余电压 (%)	Test result 测试结果
	Mass 样品质量 (g)	Voltage 开路电压 (V)	Mass 样品质量 (g)	Voltage 开路电压 (V)			
B01	2935.3	28.94	2935.0	28.92	0.01	99.93	O
B02	2931.0	28.93	2930.9	28.91	0.00	99.93	O
B03	2935.5	28.94	2935.1	28.91	0.01	99.90	O
B04	2932.2	28.92	2932.0	28.91	0.01	99.97	O
B05	2934.7	28.94	2934.6	28.92	0.00	99.93	O
B06	2933.1	28.90	2933.1	28.89	0.00	99.97	O
B07	2929.6	28.91	2929.3	28.90	0.01	99.97	O
B08	2934.1	28.90	2934.0	28.88	0.00	99.93	O
Note: L- Leakage, V- Venting, D- Disassembly, R- Rupture, F- Fire, O- No leakage, no venting, no disassembly, no rupture, no fire, no mass loss, change ratio is not less than 90 %. 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、无质量损失、电压比不小于 90 %。							

Appendix 2

附表 2

Test Items 测试项目	Thermal test 温度试验						
2.1	Test procedure 测试步骤						
	Test cells and batteries are to be stored for at least six hours at a test temperature equal to $72 \pm 2^\circ\text{C}$, followed by storage for at least six hours at a test temperature equal to $-40 \pm 2^\circ\text{C}$. The maximum time interval between test temperature extremes in 30 minutes. This procedure is to be repeated until 10 total cycles are complete, after which all test cells and batteries are to be stored for 24 hours at ambient temperature ($20 \pm 5^\circ\text{C}$). For large cells and batteries, the duration of exposure to the test temperature extremes should be at least 12 hours. 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. 将电芯和电池在温度为$72 \pm 2^\circ\text{C}$的条件下贮存不少于6个小时，然后，在温度$-40 \pm 2^\circ\text{C}$条件下贮存不少于6个小时，两个温度间的间隔最长为30min，重复操作上述步骤直到10次，然后，将其在环境温度为$20 \pm 5^\circ\text{C}$的条件下放置24个小时。对于大型电池和电池组，暴露于极端试验温度的时间至少应为12小时。 试验电芯或电池应无重量损失、无渗漏、无排气、无解体、无破裂和无燃烧，并且每个试验电芯或电池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除外）。						
2.2	Result 测试结果						
Sample No. 样品编号	Before 测试前		After 测试后		Mass loss 质量损失 (%)	Residual OCV 剩余电压 (%)	Test result 测试结果
	Mass 样品质量 (g)	Voltage 开路电压 (V)	Mass 样品质量 (g)	Voltage 开路电压 (V)			
B01	2935.0	28.92	2934.5	28.75	0.02	99.41	O
B02	2930.9	28.91	2930.0	28.76	0.03	99.48	O
B03	2935.1	28.91	2934.4	28.73	0.02	99.38	O
B04	2932.0	28.91	2931.3	28.75	0.02	99.45	O
B05	2934.6	28.92	2933.8	28.77	0.03	99.48	O
B06	2933.1	28.89	2932.1	28.70	0.03	99.34	O
B07	2929.3	28.90	2928.6	28.74	0.02	99.45	O
B08	2934.0	28.88	2933.4	28.71	0.02	99.41	O
Note: L- Leakage, V- Venting, D- Disassembly, R- Rupture, F- Fire, O- No leakage, no venting, no disassembly, no rupture, no fire, no mass loss, change ratio is not less than 90 %. 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、无质量损失、电压比不小于 90 %。							

Appendix 3

附表 3

Test Items 测试项目	Vibration 振动
3.1	Test procedure 测试步骤
	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 wave form with a logarithmic sweep between 7Hz and 200Hz and back to 7Hz traversed in 15minutes, this cycle shall be 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. The logarithmic frequency sweep shall differ for cells and batteries with a gross mass of not more than 12kg (cells and small batteries), and for batteries with a gross mass of more than 12kg (large batteries). 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. For large batteries: from 7Hz to 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. 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. 将电芯和电池牢固地安装在振动台的台面上，然后开始振动。振动以正弦波形式，以 7Hz 增加至 200Hz，然后再减少回到 7Hz 为一个循环，一个循环持续 15 分钟的对数扫频。每个电芯和电池从三个互相垂直的方向上循环 12 次，每个方向共计 3 个小时。其中一个振动方向必须是垂直样品的极性平面。 对于质量不大于 12kg 的样品(电芯和小电池)和质量超过 12kg 的电池(大电池)，对数扫频不同。 对于电芯和小电池，对数扫频为：从 7Hz 开始保持 1gn 的最大加速度直到频率为 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 8gn (频率约为 50Hz)，将最大加速度保持在 8gn 直到频率增加到 200Hz。 对于大电池，对数扫频为：从 7Hz 开始保持 1gn 的最大加速度直到频率为 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 2gn (频率约为 25Hz)，将最大加速度保持在 2gn 直到频率增加到 200Hz。 试验电芯或电池应无重量损失、无渗漏、无排气、无解体、无破裂和无燃烧，并且每个试验电芯或电池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芯或电池除外）。

3.2	Result 测试结果						
Sample No. 样品编号	Before 测试前		After 测试后		Mass loss 质量损失 (%)	Residual OCV 剩余电压 (%)	Test result 测试结果
	Mass 样品质量 (g)	Voltage 开路电压 (V)	Mass 样品质量 (g)	Voltage 开路电压 (V)			
B01	2934.5	28.75	2934.4	28.72	0.00	99.90	O
B02	2930.0	28.76	2929.8	28.75	0.01	99.97	O
B03	2934.4	28.73	2934.3	28.72	0.00	99.97	O
B04	2931.3	28.75	2931.3	28.73	0.00	99.93	O
B05	2933.8	28.77	2933.6	28.76	0.01	99.97	O
B06	2932.1	28.70	2931.7	28.68	0.01	99.93	O
B07	2928.6	28.74	2928.6	28.72	0.00	99.93	O
B08	2933.4	28.71	2933.2	28.71	0.01	100.00	O

Note: **L**- Leakage, **V**- Venting, **D**- Disassembly, **R**- Rupture, **F**- Fire,
O- No leakage, no venting, no disassembly, no rupture, no fire, no mass loss, change ratio is not less than 90 %.

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、无质量损失、电压比不小于 90 %。

Appendix 4

附表 4

Test Items 测试项目	Shock 冲击									
4.1	Test procedure 测试步骤 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 cell or battery shall be subjected to a halfsine shock of peak acceleration of 150gn and pulse duration of 6milliseconds. Alternatively, large cells may besubjected to a half-sine shock of peak acceleration of 50gn and pulse duration of 11 milliseconds. Each battery shall be subjected to a half-sine shock of peak acceleration depending on themass of the battery. The pulse duration shall be 6 milliseconds for small batteries and 11 milliseconds for large batteries. The formulas below are provided to calculate the appropriate minimum peak accelerations. 将试验电芯和电池用坚硬的支架固定在试验装置上， 支架支撑着每个试验电池的所有安装面;电芯经受峰值加速度 150gn 和脉冲持续时间 6ms 的半正弦波冲击;大电芯需经受峰值加速度 50gn 和脉冲持续时间 11ms 的半正弦波冲击;每个电池需经受半正弦波冲击的峰值加速度取决于电池的质量。小型电池的脉冲持续时间为 6ms， 大型电池为 11ms。以下提供的公式用来计算适合的最小峰值加速度。 <table><tr><td>Battery</td><td>Minimum peak acceleration</td><td>Pulse duration</td></tr><tr><td>Small batteries</td><td>150 gn or result of formula $\text{Acceleration(gn)}=\sqrt{\frac{100850}{\text{mass}^*}}$ whichever is smaller</td><td>6 ms</td></tr><tr><td>Large batteries</td><td>50 gn or result of formula $\text{Acceleration(gn)}=\sqrt{\frac{30000}{\text{mass}^*}}$ whichever is smaller</td><td>11 ms</td></tr></table> Note: “*” Mass is expressed in kilograms Each cell or battery shall be subjected to three shocks in the positive direction and to three shocks in the negative direction in each 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) 每个电芯或电池须在三个互相垂直的电芯安装方位的正方向经受三次冲击， 接着反方向经受三次冲击， 总共经受 18 次冲击。 各试验电芯或电池应无重量损失、无渗漏、无排气、无解体、无破裂和无燃烧， 并且每个试验电芯或电池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芯或电池除外）。	Battery	Minimum peak acceleration	Pulse duration	Small batteries	150 gn or result of formula $\text{Acceleration(gn)}=\sqrt{\frac{100850}{\text{mass}^*}}$ whichever is smaller	6 ms	Large batteries	50 gn or result of formula $\text{Acceleration(gn)}=\sqrt{\frac{30000}{\text{mass}^*}}$ whichever is smaller	11 ms
Battery	Minimum peak acceleration	Pulse duration								
Small batteries	150 gn or result of formula $\text{Acceleration(gn)}=\sqrt{\frac{100850}{\text{mass}^*}}$ whichever is smaller	6 ms								
Large batteries	50 gn or result of formula $\text{Acceleration(gn)}=\sqrt{\frac{30000}{\text{mass}^*}}$ whichever is smaller	11 ms								
4.2	Result 测试结果									

Sample No. 样品编号	Before 测试前		After 测试后		Mass loss 质量损失 (%)	Residual OCV 剩余电压 (%)	Test result 测试结果
	Mass 样品质量 (g)	Voltage 开路电压 (V)	Mass 样品质量 (g)	Voltage 开路电压 (V)			
B01	2934.4	28.72	2934.3	28.71	0.00	99.97	O
B02	2929.8	28.75	2929.5	28.74	0.01	99.97	O
B03	2934.3	28.72	2934.3	28.70	0.00	99.93	O
B04	2931.3	28.73	2931.0	28.71	0.01	99.93	O
B05	2933.6	28.76	2933.4	28.73	0.01	99.90	O
B06	2931.7	28.68	2931.6	28.66	0.00	99.93	O
B07	2928.6	28.72	2928.3	28.71	0.01	99.97	O
B08	2933.2	28.71	2933.1	28.70	0.00	99.97	O

Note: **L**- Leakage, **V**- Venting, **D**- Disassembly, **R**- Rupture, **F**- Fire,

O- No leakage, no venting, no disassembly, no rupture, no fire, no mass loss, change ratio is not less than 90 %.

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、无质量损失、电压比不小于 90 %。

Appendix 5

附表 5

Test Items 测试项目	External short circuit 外部短路
5.1	Test procedure 测试步骤 The cell or battery to be tested shall be heated for a period of time necessary to reach a homogeneous stabilized temperature of 57 ± 4 °C, measured on the external case. This period of time depends on the size and design of the cell or battery and should be assessed and documented. If this assessment is not feasible, the exposure time shall be at least 6 hours for small cells and small batteries, and 12 hours for large cells and large batteries. Then the cell or battery at 57 ± 4 °C shall be subjected to one short circuit condition with a total external resistance of less than 0.1 ohm. This short circuit condition is continued for at least one hour after the cell or battery external case temperature has returned to 57 ± 4 °C, or in the case of the large batteries, has decreased by half of the maximum temperature increase observed during the test and remains below that value. The short circuit and cooling down phases shall be conducted at least at ambient temperature. 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. 测试的电芯或电池外壳温度达到恒温57 ± 4 °C后, 再进行外部短路。短路的时间取决于电芯或电池的尺寸和设计, 并需被评估和记录。如果这个评估无法进行, 那么小电芯和小电池短路时间至少6小时, 大电芯和大电池短路时间至少12小时。然后电芯或电池在57 ± 4 °C环境下经受一个阻值小于0.1Ω的外部电路短路。 电芯或电池温度到57 ± 4 °C之后, 短路时间需持续1小时, 大型电池短路温度下降到最大温升的一半并保持。

	短路和降温阶段至少应在环境温度下进行。 电芯或电池的外壳温度应不超过 170℃，并且试验后6h 内应无解体、无破裂和无燃烧。	
5.2	Result 测试结果	
Sample No. 样品编号	Max. External Temperature 样品表面最高温度(℃)	Test result 测试结果
B01	58.6	O
B02	58.4	O
B03	58.5	O
B04	58.2	O
B05	58.1	O
B06	57.9	O
B07	58.0	O
B08	58.3	O
Note: D - Disassembly, R - Rupture, F - Fire, O - No disassembly, no rupture, no fire, test sample external temperature does not exceed 170 °C. 注: D - 解体; R - 破裂; F - 起火; O - 无解体、无破裂、无起火, 测试样品表面温度不超过 170 °C。		
Appendix 6 附表 6		
Test Items 测试项目	☒ Impact 撞击 ☐ Crush 挤压	
6.1	Test procedure 测试步骤	
	The sample cell or component cell is to be placed on a flat smooth surface. A 15.8mm ± 0.1mm diameter, at least 6 cm long, or the longest dimension of the cell, whichever is greater. Type 316 stainless steel bar is to be placed across the centre of the sample. A 9.1kg ± 0.1kg mass is to be dropped from a height of 61 ± 2.5cm at the intersection of the bar and sample in a controlled manner using a near frictionless, vertical sliding track or channel with minimal drag on the falling mass. The vertical track or channel used to guide the falling mass shall be oriented 90 degrees from the horizontal supporting surface. The test sample is to be impacted with its longitudinal axis parallel to the flat surface and perpendicular to the longitudinal axis of the 15.8mm ± 0.1mm diameter curved surface lying across the centre of the test sample. Each sample is to be subjected to only a single impact. 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. 将试验电池或元件电芯放在平坦光滑的表面上。一根 316 型不锈钢棒横放在试样中心，钢棒直径 15.8mm ±0.1mm，长度至少 6cm，或电池最长端的尺度，取二者之长者。将一块 9.1kg±0.1kg 的重锤从 61 ± 2.5cm 高处跌落到钢棒和试样交叉处，使用一个几乎没有摩擦的，对落体重锤力最小的垂直轨道或管道加以控制。垂直管道或管道用于引导落锤沿与水平支撑表面呈 90°落下。接受撞击的试样，纵轴应与平坦表面平行并与横放在试样中心的直径 15.8mm ± 0.1mm 弯曲表面的纵轴垂直;每一个试样只经受一次撞击。 试验电芯或电池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。	

6.2	Result 测试结果	
Sample No. 样品编号	Max. External Temperature 样品表面最高温度(°C)	Test result 测试结果
C01	25.1	O
C02	25.4	O
C03	25.3	O
C04	25.0	O
C05	24.8	O
C06	25.3	O
C07	25.5	O
C08	25.1	O
C09	25.4	O
C10	25.3	O

Note: **D**- Disassembly, **F**- Fire, **O**- No disassembly, no fire, test sample external temperature does not exceed 170 °C.

注: **D**- 解体; **F**- 起火; **O**- 无解体、无起火, 测试样品表面温度不超过 170 °C。

Appendix 7

附表 7

Test Items 测试项目	Overcharge 过度充电	
7.1	Test procedure 测试步骤	
	The charge current shall be twice the manufacturer's recommended maximum continuous charge current. The duration of the test shall be 24 hours. The minimum voltage of the test shall be as follows: 充电电流必须是制造商建议的最大持续充电电流的两倍, 测试时间为 24 小时。试验的最小电压如下:	
	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 or 22V. Rechargeable batteries meet this requirement if there is no disassembly and no fire within seven days of the test. 如果厂家推荐的充电电压不超过 18V, 则测试电压是两倍的厂家推荐的最大充电电压或者 22V 之间的较小值。 试验样品在试验后 7 天内应无解体和无燃烧。	N/A 不适用

	When the manufacturer's recommended charge voltage is more than 18V, the minimum voltage of the test shall be 1.2 times maximum charge voltage. Rechargeable batteries meet this requirement if there is no disassembly and no fire within seven days of the test. 如果厂家推荐的充电电压超过 18V，本测试的最小充电电压应该为 1.2 倍的厂家推荐的最大充电电压。 试验样品在试验后 7 天内应无解体和无燃烧。	The specified maximum charge voltage is 29.4V; The specified maximum charge current is 5A; The test voltage is 35.28V; The test current is 10A. 厂家规定的最大充电电压为 29.4V; 厂家规定的最大充电电流为 5A; 测试电压为 35.28V; 测试电流为 10A。
--	--	---

7.2	Result 测试结果	
Sample No. 样品编号	Voltage Before test(V) 测试前开路电压(V)	Test result 测试结果
B09	28.90	O
B10	28.94	O
B11	28.93	O
B12	28.91	O
B13	28.92	O
B14	28.94	O
B15	28.90	O
B16	28.93	O

Note: **D**- Disassembly, **F**- Fire, **O**- No disassembly, no fire.
注: **D**- 解体; **F**- 起火; **O**- 无解体、无起火。

Appendix 8

附表 8

Test Items 测试项目	Forced discharge 强制放电				
8.1	Test procedure 测试步骤				
	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 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. 每个电芯应在环境温度下与 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。指定的放电电流通过串联在测试电芯上的合适大小和功率的负载来获得，每个电芯的强制放电时间(小时)为额定容量除以初始电流(安培)。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。				
8.2	Result 测试结果				
Sample No. 样品编号	Voltage Before test 测试前开路电压(V)	Test result 测试结果	Sample No. 样品编号	Voltage Before test 测试前开路电压(V)	Test result 测试结果
C11	3.390	O	C21	3.386	O
C12	3.393	O	C22	3.380	O
C13	3.388	O	C23	3.377	O
C14	3.385	O	C24	3.375	O
C15	3.384	O	C25	3.372	O
C16	3.392	O	C26	3.386	O
C17	3.385	O	C27	3.388	O
C18	3.380	O	C28	3.381	O
C19	3.378	O	C29	3.375	O
C20	3.383	O	C30	3.372	O
Note: D- Disassembly, F- Fire, O- No disassembly, no fire. 注: D- 解体; F- 起火; O- 无解体、无起火					

Photos of samples
样品图片



Figure 1 Front view of battery



Figure 2 Back view of battery

Photos of samples
样品图片



Figure 3 Front view of cell



Figure 4 Back view of cell

Photos of samples**样品图片**

Figure 5 Label view

Statement 声明

1. The results are valid only for the samples submitted.
检测结论仅对送检样品有效;
2. The report is invalid without the "APPROVED Seal" and the "Riding Seam Seal".
报告未加盖“检验检测专用章”和“骑缝章”无效;
3. This report is invalid without the signature of the main inspector, reviewer, or approver.
本报告书无主检、审核、批准人员签字无效;
4. The testing report cannot be partially copied without the written consent of our laboratory.
检测报告未经本实验室书面同意, 不得部分复制;
5. If the report is not stamped with the "CMA" logo, it indicates that the report does not have any social certification effect in China.
报告如未加盖 CMA 标识章, 表明该报告不具有对社会的证明作用;
6. Product information, customer information, and sample sources are all provided by the client, and we are not responsible for their authenticity.
产品信息、客户信息和样品来源均由委托人提供, 我们不对其真实性负责;
7. The inspection basis or inspection items marked with "★" are not within the scope of CNAS, CMA and A2LA accreditation in this laboratory.
标注★的检验依据或检验项目不在本实验室 CNAS、CMA、A2LA 认可范围内;
8. Reports that are transferred, copied, stolen, impersonated, altered, or tampered with in any media form without authorization are invalid.
私自转让、复制、盗用、冒用、涂改、或以任何媒体形式篡改的报告无效;
9. If you have any objections to this report, you can appeal to our unit within 15 days after receiving the report. Failure to do so will not be accepted.
如对本报告有异议, 可在收到报告后 15 天内向本单位申诉, 逾期不予受理;
10. For situations where compliance decision needs to be made based on test result, such as when there are no relevant decision rules required by the regulations, standards, or technical specifications used, or when there are no relevant customer requirements, the report issued by our laboratory refer to ILAC-G8:09-2019 and CNAS-GL015:2022 using simple acceptance decision rules.
对于需要根据测试值做符合性判定的情况, 如所使用的法规、标准、技术规范无相关判定规则要求或客户无相关要求时, 本实验室出具的检测报告参考 ILAC-G8:09/2019、CNAS-GL015: 2022 采用简单接受的判定规则进行结果判定。

检测单位: 广东科正技术服务有限公司
Laboratory KSIGN(Guangdong) Testing Co., Ltd.
地 址: 广东省深圳市宝安区沙井街道沙头社区民主九九工业区福源厂新厂房A区C栋一层西侧, 518104
Address West Side of 1/F., Building C, Zone A, Fuyuan New Factory, Jiujiu Industrial Park, Minzhu, Shatou, Shajing, Bao'an District, Shenzhen, Guangdong, China
电话(Tel.): +(86) 0755-29852678
传真(Fax.): +(86) 0755-29852397
E-mail: info@gdkesign.cn

--- End of Report ---
报告结束



材料安全数据表

MATERIAL SAFETY DATA SHEET

产品名称 : 锂离子电池
Goods Name : Li-ion Battery

型号 : XYN-DHB-35A
Model Name

委托单位 : 常州鑫宇能新能源有限公司
Applicant : Changzhou Xinyuneng New Energy Co., LTD

报告编号 : KS2412S6118B04
Report Number

发行日期 : January 01, 2025
Issue Date

(制作: 黄彩青)

(批准: 杨龙)

Written by:

黄彩青

Approved by:

杨龙

广东科正技术服务有限公司
KSIGN(Guangdong) Testing Co., Ltd.

检验检测专用章



材料安全数据表

Material Safety Data Sheet

Report No.: KS2412S6118B04

*这份材料安全数据表是根据客户提供的信息编辑，其内容和格式按客户要求来修订。

* The MSDS is prepared based on the information provided by client. The contents and formats of this MSDS are revised as per client's request.

1. 化学品及企业标识

Chemical and Enterprise Identification

产品名称 Product Name	锂离子电池(型号: XYN-DHB-35A) Li-ion Battery (Model: XYN-DHB-35A)
产品描述 Product description	额定: Rated: 25.2V, 18.2Ah, 458.6Wh 重量: Weight: Appr. 2935.5g 尺寸: Dimensions: 226.0*148.0*128.0 (mm)
商标 Trademark	N/A

材料安全数据表生产工厂的详细信息

Details of the Factory of the Material safety data sheet

生产工厂 Factory	湖南爱美人新能源有限公司 HUNAN IMR NEW ENERGY CO., LTD
生产工厂地址 Factory Address	湖南省长沙市高新开发区麓云路100号兴工科技园4栋102室 Room 102, Building 4, Xinggong Science and Technology Park, No. 100 Luyun Road, High-tech Development Zone, Changsha City, Hunan Province
电话 Telephone	+86-18796961007
网址 Website	/
邮箱 E-mail	495734154@qq.com
紧急电话号码 Company Emergency Phone Number	+86-18796961007

材料安全数据表

Material Safety Data Sheet

Report No.: KS2412S6118B04

2. 危险性概述

Hazards identification

分类
Classification 锂离子电池
LITHIUM ION BATTERIES
危险说明
Hazard statement 无损坏且正常使用情况下无危险。
No dangerous in normal use & without damage.

泄漏的内部电池材料引起的危害和预防说明如下：

Hazards caused by spilled internal cell materials and precautionary statements as following:

分类 Classification			标签 Labelling				危害说明 代码 Hazard statement codes
危害种类 Hazard class	危害类别 Hazard category		象形图 Pictogram		信号词 Signal word	危害说明 Hazard statement	
			全球统一制度 GHS	联合国规章范本 UN Model Regulations			
吸入危害 Aspiration hazard	2			不要求 Not required	警告 Warning	吞咽及进入呼吸道可能有害 May be harmful if swallowed and enters airways	H305
急毒性 Acute toxicity	3	口服 Oral		不要求 Not required	警告 Warning	吞咽有害 Harmful if swallowed	H302
		皮肤 Dermal				皮肤接触有害 Harmful in contact with skin	H312
		吸入 Inhalation				吸入有害 Harmful if inhaled	H332
皮肤腐蚀/刺激 Skin corrosion/irritation	2			不要求 Not required	警告 Warning	造成皮肤刺激 Causes skin irritation	H315
严重眼损伤/眼刺激 Serious eye damage/eye irritation	2/2A			不要求 Not required	警告 Warning	造成严重眼刺激 Causes serious eye irritation	H319
皮肤致敏物 Skin sensitization	1、1A ^a 、1B ^a			不要求 Not required	警告 Warning	可引起皮肤过敏反应 May cause an allergic skin reaction	H317

材料安全数据表

Material Safety Data Sheet

Report No.: KS2412S6118B04

皮肤腐蚀/刺激 Skin corrosion/ irritation	1 1A、1B、1Ca			危险 Danger	造成严重皮肤灼伤和眼损伤 Causes severe skin burns and eye damage	H314
严重眼损伤/眼刺激 Serious eye damage/eye irritation	1		不要求 Not required	危险 Danger	造成严重眼损伤 Causes serious eye damage	H318

备注Note:

a 在掌握充分数据且主管部门要求的情况下,可划分子类别。

a - categories may be applied where data are sufficient and where required by a competent authority.

3. 成分/组成信息

Ingredients/Composition Information

纯品 ☐

Pure chemical ☐

混合物 ☒

Mixture ☒

化学名称 Chemical name	CAS号 CAS No.	重量含量 (%) Weight-%	备注 Remark
钴锂锰镍氧化物 Cobalt lithium manganese nickel oxide	182442-95-1	30~40	-
炭黑 Carbon Black	1333-86-4	1~2	-
聚偏氟乙烯树脂 Polyingylidene Fluoride (PVDF)	24937-79-9	0~1	-
石墨 Graphite	7782-42-5	20~21	-
羧甲基纤维素钠 Carboxymethyl cellulose	9004-32-4	0~1	-
丁苯胶 Styrene-butadiene rubber (SBR)	9003-55-8	0~1	-
聚乙烯 Polyethylene	9002-88-4	2~3	-
六氟磷酸锂 Phosphate(1-), hexafluoro-, lithium	21324-40-3	17~20	-
铜 Copper	7440-50-8	8~10	-
铝 Aluminum	7429-90-5	3~4	-
镍 Nickel	7440-02-0	1~2	-

材料安全数据表

Material Safety Data Sheet

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铁 Iron	7439-89-6	4~6	-
聚氯乙烯树脂 PVC (Chloroethylene, polymer)	9002-86-2	1~3	-

4. 急救措施

First aid measures

正常环境条件下, 眼睛和皮肤接触锂离子电池不会产生危害。在内部有害物质漏出的情况, 如果身体部位接触到这些物质, 应采取以下措施:

The lithium ion batteries are not hazardous with eye and skin contact under normal circumstance. In case of internal hazardous substance leaking an hazardous substance, following measures should be taken if body parts contact with these substance:

皮肤接触: 皮肤接触后马上用肥皂和大量清水冲洗皮肤

After Skin Contact: In case of contact, immediately wash skin with soap and copious amounts of water.

眼睛接触: 提起眼皮用清水冲洗15分钟, 立即就医。

After Eye Contact: In case of contact, flush eyes with clean water for 15 minutes while lifting eyelids. Get prompt medical attention.

吸入: 如有吸入, 迅速脱离现场至空气新鲜处。如果停止呼吸, 进行人工呼吸。如果呼吸困难, 供给氧气。

After Inhalation: If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen.

食入: 如有知觉用水冲洗口腔, 就医。

After Ingestion: If swallowed, wash out mouth with water provided person is conscious. Call a physician.

5. 消防措施

Fire-fighting measures

危险特性: 在火灾时可释放有害浓烟、气体或者蒸汽。

Characteristics of Hazard: Toxic fumes; gases or vapors may evolve on burning.

有害燃烧产物: 一氧化碳和二氧化碳、HF、氟磷化物

Hazardous Combustion Products: CO, CO₂, HF, phosphorus fluoride.

灭火方法及灭火剂: 对锂离子电池, 大量冷水是一个有效的灭火剂。

不要使用温或热水。不要使用哈龙类灭火材料。可使用干粉、沙、土。

Fire-extinguishing Methods and Extinguishing Media: Copious amounts of cold water are an effective extinguishing medium for lithium-ion batteries.

Don't use warm or hot water. Don't use Halon type extinguishing material. Dry powder, sand and earth might be used.

灭火注意事项: 消防人员须佩戴防毒面具、穿全身消防服

Attention in Fire-extinguishing: The Firemen should put on antigas masks and full fire-fighting suits.

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6. 泄漏应急处理

Accidental release measures

为防止电池材料泄漏或释放采取的措施

如果电池内部材料泄漏，试验人员应立刻撤离试验区直到烟气消散。将通风设备打开吹散危险性气体。用抹布擦净试验区，清除溢出的液体，将泄漏电池放进塑料袋中，然后放进钢制容器。避免皮肤和眼睛接触或吸入有害气体。

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.

7. 操作处置和储存

Handling and storage

禁止打开、毁坏或焚烧电池，因为电池有可能在这些处理过程中发生爆炸、破裂或泄漏等事故。禁止将电池短路、过充、强制放电或扔入火中。禁止挤压刺穿电池或将电池浸入溶液中。

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.

操作处置和储存中的防范措施

禁止物理或电滥用，禁止高温储存，最好将电池储存在阴凉、干燥、通风等温度变化较小的环境中。禁止将电池接触加热设备或将电池直接暴露与阳光中。

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.

其他要注意的防范措施

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。禁止短接或将电池正负极错误的安装在设备中。

Other Precautions

The battery may explode or cause burns, if disassembled, crushed or exposed to fire or high temperatures. Do not short circuit or install with incorrect polarity.

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8. 接触控制和个人防护

Exposure control and personal protection

呼吸防护:

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。

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.

通风条件

正常使用条件下不需要。

Ventilation

Not necessary under conditions of normal use.

防护手套

正常使用条件下不需要。

Protective Gloves

Not necessary under conditions of normal use.

其他防护服装或设备

正常使用条件下不需要。

Other Protective Clothing or Equipment

Not necessary under conditions of normal use.

电池开阀试验时应做好个人防护

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。

Personal Protection is recommended for venting battery

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

9.理化特性

Physical and chemical properties

外形: 长方体

Appearance: Cuboid

颜色: 黑色

Color: Black

气味: 泄漏时, 有醚的气味。

Odors: If leaking, smells of medical ether.

酸碱度: 不适用

pH: Not applicable as supplied.

闪点: 除单个电芯暴露试验外其他不适用。

Flash Point: Not applicable unless individual components exposed.

可燃性: 除单个电芯暴露试验外其他不适用。

Flammability: Not applicable unless individual components exposed.

相对密度: 除单个电芯暴露试验外其他不适用。

Relative density: Not applicable unless individual components exposed.

溶解性(水溶性): 除单个电芯暴露试验外其他不适用。

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

溶解性(其他): 除单个电芯暴露试验外其他不适用。

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

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10. 稳定性和反应活性

Stability and reactivity

稳定性: 常温常压下稳定

Stability: Stable under normal temperatures and pressures.

禁配物: 氧化剂

Incompatibility: oxidizing agents

避免接触的条件: 热和明火、短路和水

Conditions to Avoid: Heat and open flame, short circuit, and water

聚合危害: 不会发生

Hazardous polymerization: Will not occur

分解产物: 一氧化碳、二氧化碳、HF、氟磷化物

Decomposition Products: CO, CO₂, HF, phosphorus fluoride

11. 毒理学资料

Toxicological Information

标志及症状: 无, 除非电池破裂。

Signs & symptoms: None, unless battery ruptures.

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。

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

吸入: 对肺有刺激性。

Inhalation: Lung irritant.

皮肤接触: 对皮肤刺激性。

Skin contact: Skin irritant.

眼睛接触: 对眼睛有刺激性。

Eye contact: Eye irritant

食入: 吞下中毒。

Ingestion: Poisoning if swallowed.

下列情况下健康状况会恶化: 万一发生与电池内部材料接触的事故, 轻微或严重的刺激, 都可能使皮肤出现干燥和灼烧的感觉, 并且损坏靶器官(肝脏, 肾脏)的神经。

Medical conditions generally aggravated by exposure: In the event of exposure to internal contents, moderate to severe irritation, burning and dryness of the skin may occur, Target Organs nerves, liver and kidneys.

12. 生态学资料

Ecological Information

对哺乳动物的影响: 目前未知。

Mammalian effects: None known at present.

生态毒性: 目前未知。

Eco-toxicity: None known at present.

生物体内积累: 慢慢地生物降解。

Bioaccumulation potential: Slowly Bio-degradable.

环境危害: 目前没有已知的环境危害。

Environmental fate: None known environmental hazards at present.

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13. 废弃处置

Waste Disposal

废物处理应为:

回收应符合适用的地区和国家法规, 这些法规可能因国家而异。

Waste disposal should read:

Recycling should be in accordance with the applicable Regional & National regulations which may vary from country to country.

废物处理注意事项:

不要将电池作为正常废物进行处理。请勿焚烧、焚烧或置于火中。请勿刺穿、解剖或挤压。

Attention for waste disposal: should read:

Do NOT dispose of batteries as normal waste. Do NOT incinerate, burn or place into a fire. Do NOT pierce, dissect or crush.

14. 运输信息

Transport Information

UN编号
UN No.

UN 3480, UN 3481

运输专用名称

Proper Shipping Name

锂离子电池 (包括锂离子聚合物电池)

Lithium ion batteries (Including lithium ion polymer batteries) or;

设备里内含锂离子电池 (包括锂离子聚合物电池)

Lithium ion batteries contained in equipment (Including lithium ion polymer batteries) or;

锂离子电池和设备包装在一起 (包括锂离子聚合物电池)

Lithium ion batteries packed with equipment (Including lithium ion polymer batteries)

包装标志

Labels for Package



EmS编号
EmS No

F-A, S-I

国际民间航空组织/国际航空运输协会:
ICAO / IATA:

可根据民用航空组织 (ICAO), TI 或国际航空运输协会 (IATA), DGR 66th (2025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。
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 66th (2025 Edition) for transportation.

国际海运危险货物规则:
IMDG CODE:

《国际海运危险货物规则》 (IMDG Code 42-24)。
《International Maritime Dangerous Goods》 Code (IMDG Code 42-24) .

国际危险货物道路运输欧洲协定:
ADR:

《国际危险货物道路运输欧洲协定》 (ADR 2025)。
《European Agreement concerning the International Carriage of Dangerous Goods by Road》 (ADR 2025).

国际危险货物铁路运输欧洲协定:
RID:

《国际危险货物铁路运输欧洲协定》 (RID 2025)。
《Regulations concerning the International Carriage of Dangerous Goods by Rail》 (RID 2025).

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本报告所述锂电池货物已经通过联合国《试验与标准手册》第38.3 节的测试。

The lithium battery goods described in this report has passed the testing in Section 38.3 of the United Nations Manual of Tests and Standards.

15. 法规信息

Regulatory Information

法规信息

Regulatory information

《危险物品规则》
《Dangerous Goods Regulations》
《对危险货物运输的有关规定的建议》
《Recommendation on the Transport of Dangerous Goods Model Regulations》
《国际海运危险货物规则》
《International Maritime Dangerous Goods》
《危险品安全运输技术指令》
《Technical Instructions for the Safe Transport of Dangerous Goods》
《危险货物分类和品名编号》
《Classification and code of dangerous Goods》
《职业安全卫生法》
《Occupational Safety and Health Act》(OSHA)
《有毒物质控制法》
《Toxic Substance Control Act》(TSCA)
《消费产品安全法》
《Consumer Product Safety Act》(CPSA)
《联邦环境污染控制法》
《Federal Environmental Pollution Control Act》(FEPCA)
《石油污染法案》
《The Oil Pollution Act》(OPA)
《超级基金修正案和再授权法案III(302/311/312/313)》
《Superfund Amendments and Reauthorization Act Title III (302/311/312/313)》(SARA)
《资源保护及恢复法案》
《Resource Conservation and Recovery Act》(RCRA)
《安全饮用水法》
《Safety Drinking Water Act》(CWA)
《加州65提案》
《California Proposition 65》
《美国联邦法规》
《Code of Federal Regulations》(CFR)

根据所有联邦、州和地方法律。

In according with all Federal, State and local laws.

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16. 其他信息

Other Information

参考文献: 中华人民共和国国家标准 (GB/T 16483-2008) 化学品安全技术说明书内容和项目顺序、中华人民共和国国家标准 (GB/T 17519-2013) 化学品安全技术说明书编写指南。

Reference: National standard of People's Republic of China. (GB/T 16483-2008) Safety data sheet for chemical products-Content and order of sections, National standard of People's Republic of China. (GB/T 17519-2013) Guidance on the compilation of safety data sheet for chemical products.

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Users should carefully read this document and use the battery according to the correct method. KSIGN(Guangdong) Testing Co., Ltd. shall not be responsible for any damage or loss caused by improper use of the battery.

报告结束
--End of Report--

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Guangdong KSIGN Testing Co., Ltd.