

# SAFETY DATA SHEET

## 安全技術說明書

Issued/Revised date 發佈/更改日期: January 01 2024

Document No 文件編號.: AC-240101011

### 1. Product and Company Identification 產品與廠商資料

Product Name 產品名稱		Rechargeable Li-Polymer Battery Pack 鋰離子電池組
Product Description 產品描述		Highpower/488171CCT/4715mAh,3S1P
Model Name 型號		AP23A7L
Manufacturer Part Number 製造商零件編號		934QA030H/934QA030HB
Customer Part Number 客戶零件編號:		KT.00307.012
Rating Watt hour (Wh) 電池電力(瓦時)		11.25V==TYP 4715mAh/53Wh Rated 4620mAh/52Wh
Lithium content (gram) 鋰含量 (克)		4.2435g
<b>Details of the supplier of the product 產品供應商的詳細訊息:</b>		
Company (Taiwan) 台灣總公司	Name 名稱	SIMPLO TECHNOLOGY CO., LTD. 新普科技股份有限公司
	Address 地址:	No. 471, Sec. 2, Bade Rd., Hu Kou Township, Hsinchu County, 30348, Taiwan 台灣, 新竹縣湖口鄉八德路二段471號
	Telephone 電話	+886-3-5695920
	Fax 傳真	+886-3-5695931
Manufacturer (Changshu) 製造商(常熟廠)	Name 名稱	SIMPLO TECHNOLOGY(CHANGSHU)INC. 新世電子(常熟)有限公司
	Address 地址	No.888 Dong Nan Avenue, Chang Shu, Jiang Su Province, China 中國, 江蘇省常熟市高新技術產業開發區東南大道 888 號
	Telephone 電話	+86-512-52302255
	Fax 傳真	+86-512-52302277
Manufacturer (Chongqing) 製造商(重慶廠)	Name 名稱	SIMPLO TECHNOLOGY(CHONGQING) INC 新普科技(重慶)有限公司



# 新普科技股份有限公司

## SIMPLO TECHNOLOGY CO., LTD.

	Address地址	NO.2 Zongbao Avenue Shapingba District, Chongqing China 中國, 重慶市沙坪壩綽保大道二號
	Telephone電話	+86-23-61718899
	Fax傳真	+86-23-61710488
Manufacturer (Huapu) 製造商(華普廠)	Name名稱	HUAPU TECHNOLOGY(CHANGSHU)INC. 華普電子(常熟)有限公司
	Address地址	No.888 Dong Nan Avenue, Chang Shu, Jiang Su Province, China 中國, 江蘇省常熟市高新技術產業開發區東南大道 888 號
	Telephone電話	+86-0512-52302255
	Fax傳真	+86- 0512-52302277
Manufacturer (VIETNAM) 製造商(越南廠)	Name名稱	SIMPLO TECHNOLOGY (VIETNAM) CO., LTD 新普科技 ( 越南 ) 有限公司
	Address地址:	Lot CNSG-07, Van Trung Industrial Park, Van Trung Commune, Viet Yen District, Bac Giang Province, Vietnam 越南 · 北江省越安縣雲中社雲中工業區 CNSG-07 區
	Telephone電話	+84-204-3688802
<b>Emergency phone number 緊急電話: +886-3-5695920</b>		

## 2.Hazard(s) identification 危害識別

The battery is considered as an 「 article 」 The product is outside of the scope of GHS system

電池被視為「成品」, 產品不在GHS體系涵蓋範圍內

Main Hazards主要危害	When the battery is in extreme pressure deformation, high-temperature environment, overload, short-circuit condition, or disassemble the battery, an explosion of fire and chemical burn hazards may occur. 當電池處於擠壓變形、高溫環境、過載、短路狀態或拆卸電池時, 可能會發生爆炸火災和化學灼傷危險。
Health Hazards健康危害	Contact with the electrolyte of battery may be irritating to skin. eyes and mucous membranes. Fire will produce irritating corrosive and/or toxic gases. Fumes may cause dizziness or suffocation 與電池電解液接觸可能會刺激皮膚。眼睛和粘膜。



	火災會產生刺激性的腐蝕性和/或有毒氣體。煙霧可能導致頭暈或窒息。
Description of any hazards not otherwise classified 其他未分類危險性說明	Do not dismantle, open or shred the battery, the ingredients contained within could be harmful. 請勿拆卸、打開或撕碎電池，其中含有的成分可能有害
Ingredient with unknown acute toxicity 未知的急性毒性成份	No information available. 無資料

### 3. Composition / Identification on Ingredients 成分組成信息

Mixtures information: ingredients contained within the battery

混合物信息：電池中包含的成分

Chemical name 化學名稱	CAS No.化學品編號	Weight-%重量%
Cobalt lithium manganese nickel oxide 鈷鋰錳鎳氧化物	182442-95-1	41.54%
Graphite 石墨	7782-42-5	24.81%
Copper 銅	7440-50-8	7.41%
Aluminium 鋁	7429-90-5	7.06%
Ethylene carbonate 碳酸乙烯酯	96-49-1	1.46%
Dimethyl carbonate 碳酸二甲酯	616-38-6	1.46%
Ethyl methyl carbonate 碳酸甲乙酯	623-53-0	1.46%
Diethyl Carbonate 碳酸二乙酯	105-58-8	1.46%
propylene carbonate 碳酸丙烯酯	108-32-7	1.46%
1,3-Propanesultone 1,3-丙烷磺內酯	1120-71-4	1.46%
Lithium hexafluorophosphate 六氟磷酸鋰	21324-40-3	1.46%
Polyethylene 聚乙烯	9002-88-4	1.23%
Polyvinylidene fluoride 聚偏氟乙烯樹脂	24937-79-9	0.76%
Nylon-6 尼龍-6	25038-54-4	0.73%
4-Vinyl-1,3-dioxolan-2-one 碳酸乙烯亞乙酯	4427-96-7	0.73%



4-Fluoro-1,3-dioxolan-2-one 氟代碳酸乙烯酯	114435-02-8	0.73%
Succinonitrile 丁二腈	110-61-2	0.73%
Hexanedinitrile 1,4-二氟基丁烷	111-69-3	0.73%
Vinylene carbonate 碳酸亞乙烯酯	872-36-6	0.73%
Aluminum oxide 氧化鋁	1344-28-1	0.68%
POLY(PROPYLENE-CO-ETHYLENE) 丙烯乙烯共聚	9010-79-1	0.50%
2,5-Furandione, polymer with 1-propene 2,5-呋喃二酮，與1-丙烯的聚合物	25722-45-6	0.50%
Nickel 鎳	7440-02-0	0.48%
Poly(ethylene terephthalate) 聚對苯二甲酸乙二醇酯	25038-59-9	0.43%

## 4. First Aid Measures 急救措施

### (a) Description of first aid measures 急救措施說明

Caution! No effect under routine handling and use. If exposure to internal materials within cell due to damaged outer metal casing, the following actions are recommended.

警告！在日常處理和使用下沒有影響。如果由於外部金屬外殼損壞而接觸到電池內部材料，建議採取以下措施。

Inhalation: 吸入	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if you feel unwell. 將傷者轉移到空氣新鮮處，保持呼吸舒適的休息姿勢。 如果您感到不適，請就醫。
Skin contact: 皮膚接觸	Immediately flush skin with copious amounts of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing and shoes before reuse. Get medical aid. 若接觸到電池內物質，脫去受污染的衣物和鞋襪，立即用清水沖洗15分鐘以上。若刺激持續請就醫。
Eye contact: 眼睛接觸	Rinse cautiously with water for 15-20 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention. 若接觸到電池內物質，用水小心沖洗 15-20 分鐘。取下隱形眼鏡（如果有且易於操作）。若眼睛刺激持續請就醫



Ingestion 食入	Swallowing battery will be damaged to the respiratory tract and cause chemical burns to the stomach; in serious conditions it will cause Permanent damage. 食入會對呼吸道產生傷害、對腸胃產生燒傷，嚴重會造成永久性損害
-----------------	--

**(b) Most important symptoms/effects, acute and delayed 主要症狀，急性和遲發性效應**

No effect under routine handling and use 在日常處理和使用下沒有影響

**(c) Immediate medical attention and special treatment 醫療護理和特殊治療**

Note to physicians: Treat symptomatically and supportively. 醫生須知：對症治療。

## 5. Fire Fighting Measures 滅火措施

Suitable extinguishing Media 滅火方法和滅火劑	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. 使用適合當地環境和周圍環境的滅火措施
Unsuitable extinguishing Media 不合適的滅火方法和滅火劑	CAUTION: Use of water spray when fighting fire may be inefficient. 注意：滅火時使用噴水器可能效率降低。
Specific Hazards arising from the chemical 特殊危害	Product is or contains a sensitizer. May cause sensitization by skin contact. 產品或/含有一種導致敏感原，可能因皮膚接觸而引起過敏作用。
Hazardous Combustion Products 危險易燃產品	Carbon oxides. 碳氧化物。
Explosion Data 爆炸資料	Sensitivity to Mechanical Impact: No. 機械衝擊靈敏度：不敏感。 Sensitivity to Static Discharge: No. 靜電靈敏度：不敏感。
Protective Equipment and precautions for firefighters 消防員的防護設備及注意事項	As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. 在任何火災中，佩戴自給式呼吸器壓力要求、



## 6. Accidental Release Measures 洩漏處理方法

<p>Personal precautions, protective equipment and emergency procedures 作業人員防護措施、防護設備和應急處置程式</p>	<p>Personal Precautions: Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal protective equipment as required. Evacuate personnel to safe areas. 作業人員注意事項：避免接觸皮膚、眼睛或衣服。確保作業場所通風充足，根據需要使用個人防護裝備，疏散人員到安全區域。</p>
<p>Methods and materials for containment and cleaning up 洩露化學品的收容和清理方法</p>	<p>Methods for Containment: Prevent further leakage or spillage if safe to do so. Methods for cleaning up: Pick up and transfer to properly labeled containers. 抑制方法：在安全的情況下防止進一步洩漏或溢出。 清理方法：撿起並轉移到張貼適當標籤的容器中。</p>

## 7. Handling and Storage 處理和儲存

<p>Precautions for safe handling 安全處理的注意事項</p>	<p>Do not expose the battery to excessive physical shock or vibration. Short-circuiting should be avoided. However, accidental short-circuiting for a few seconds will not seriously affect the battery. Prolonged short circuits will cause the battery to rapidly lose energy, could generate enough heat to burn skin. Sources of short circuits include jumbled batteries in bulk containers, coins, metal jewelry, metal covered tables, or metal belts used for assembly of batteries in devices. To minimize risk of short-circuiting, the protective case supplied with the battery should be used to cover the terminals when transporting or storing the battery. Do not disassemble or deform the battery. Should an individual cell within a battery become ruptured, do not allow contact with water.</p>
--	--





	<p>不要讓電池受到過度的物理衝擊或振動。應避免短路。但是，幾秒鐘的意外短路不會對電池造成嚴重影響。長時間的短路會導致電池迅速失去能量，可能產生足夠的熱量來灼傷皮膚。短路的來源包括散裝容器中的雜亂電池、硬幣、金屬首飾、金屬覆蓋的桌子或用於在設備中組裝電池的金屬帶。為將短路風險降至最低，在運輸或存放電池時，應使用電池隨附的保護盒蓋住端子。請勿拆卸或變形電池。如果電池中的單顆電池發生破裂，請勿與水接觸。</p>
<p>Conditions for safe storage, including any incompatibilities 安全儲存條件，包括任何不相容性</p>	<p>The lithium ion battery should be between 25% and 75% of full charge when stored for a long period of time. Stored in a cool, dry, and well-ventilated area. Elevated temperatures can result in loss of battery performance, leakage, or rust. Do not expose the battery to open flames.</p> <p>鋰離子電池在長時間存放時應充滿電量的 25% 至 75%。存放在陰涼、乾燥、通風良好的地方。溫度升高會導致電池性能下降、洩漏或生鏽。不要將電池暴露在明火中。</p>

## 8. Exposure Controls / Personal Protection 接觸控制/個人防護

<p>Appropriate Engineering Controls 適當的工程控制</p>	<p>Choose the suitable ventilation equipment; provide sufficient quantity of fire extinguishers, gas mask and water; equip with metal storage containers and bathing equipment</p> <p>選擇合理的通風設備，提供足夠數量的防毒面具滅火器及水源，配置存放電池的金屬容器和洗浴設備</p>
<p>Respirator Protection 呼吸系統防護</p>	<p>Normally there is no need to do protection.</p> <p>Wear government approved respirator, if needed</p> <p>正常情況下無必要作防護</p> <p>若需要，請佩帶管理部門認可的面罩。</p>
<p>Eye/Face Protection 眼睛/面部防護</p>	<p>Normally there is no need to do protection</p> <p>Wear chemical safety glasses, if needed</p> <p>正常情況下無必要作防護</p> <p>若需要，請佩戴安全防護眼鏡</p>



Skin Protection 皮膚防護	<p>Hand protection: Wear safety gloves</p> <p>Foot Protection: Steel toed shoes recommended for large container handling</p> <p>Body protection: Wear appropriate protective clothing 手部防護, 請佩帶安全手套。 足部防護, 處理大量電池時建議穿著鋼頭鞋 身體防護: 穿戴一般作業防護服。</p>
Other Protection 其他防護	<p>No smoking, drinking and eating at working site, Wash thoroughly after handling 工作場所嚴禁吸菸、進食和飲水。工作後淋浴更衣</p>

## 9. Physical and Chemical Properties 物理和化學特性

Physical Properties 物理特性	Physical state 物理狀態	Solid 固體
	Appearance 外觀	Black Plastics or Mylar film shell 黑色塑膠或聚酯薄膜外殼
	Color 顏色	Black 黑色
	Odor 氣味:	Odorless 無味
	Odor Threshold 嗅覺閾值	No information available 無資料
Chemical Properties 化學特性:		
Property 特性	Values 值	Remarks/ Method 備註
pH 酸鹼度	8~9	None known未知
Melting / freezing point 熔點和冰點	No data available無資料	None known未知
Boiling point / boiling range 沸點/沸程	No data available無資料	None known未知
Flash Point 閃點	No data available無資料	None known未知
Evaporation Rate 蒸發率	No data available無資料	None known未知
Flammability (solid, gas) 易燃性 (固體、氣體)	No data available無資料	None known未知
Flammability Limit in Air 空氣中的易燃性限制 Upper/ Lower flammability 上下燃點限制	No data available無資料	-
Vapor pressure 蒸氣壓力	No data available無資料	None known未知
Vapor density 蒸汽密度	No data available無資料	None known未知





Specific Gravity 比重	No data available無資料	None known未知
Water Solubility 水溶性	No data available無資料	None known未知
Solubility in other solvents 其他溶劑中的溶解度	No data available無資料	None known未知
Partition coefficient n-octanol/water: n-辛醇/水分配係數(對數值)	No data available無資料	None known未知
Autoignition temperature 自燃溫度	130°C	None known未知
Decomposition temperature 分解溫度	No data available無資料	None known未知
Kinematic viscosity 運動黏度	No data available無資料	None known未知
Dynamic viscosity 動態黏度	No data available無資料	None known未知
Explosive properties 爆炸特性	No data available無資料	None known未知
Oxidizing Properties 氧化特性	No data available無資料	None known未知

## 10. Stability and Reactivity 安定性與反應性

Reactivity 反應性	None during normal operating or handling conditions. 在正常操作或處理條件下,無不良反應。
Chemical stability 化學穩定性	Stable under recommended storage conditions. 在推薦的儲存條件下保持穩定。
Possibility of Hazardous Reactions 發生危險反應的可能性	None under normal processing 正常處理下, 無
Hazardous Polymerization 危險聚合	Hazardous polymerization does not occur. 不會發生危險的聚合反應。
Conditions to avoid 應避免的條件	None known based on information supplied. 根據提供的訊息, 未知
Incompatible materials 不相容物質	Strong acids. Strong oxidizing agents. Strong bases. 強酸。強氧化劑
Hazardous Decomposition Products危險分解產物	Carbon oxides. 碳氧化物。

## 11. Toxicological Information 毒性學信息

### (a) Information on the likely routes of exposure 可能接觸的途徑

Product Information 產品資訊	Product does not present an acute toxicity hazard based on known or supplied information. In case of rupture
--------------------------	--



	如有破裂，根據已知或提供的資訊，產品不存在急性毒性危害。
Inhalation 吸入	No effect under routine handling and use for sealed battery. If battery is broken, inhale fume/dust may cause irritation, chemical burns or lung edema. 密封電池在常規處理和使用下無影響。如果電池壞了，吸入煙霧/灰塵可能會引起刺激、化學灼傷或肺水腫。
Eye Contact 眼部接觸	Specific test data for the substance or mixture is not available. Expected to be an irritant based on components. Irritating to eyes. May cause redness, itching, and pain. May cause temporary eye irritation. 沒有關於該物質或混合物的具體測試資料。成分可能是刺激物，刺激眼睛，可能會引起發紅、搔癢和疼痛可能會引起暫時性的眼睛刺激。
Skin Contact 皮膚接觸	Specific test data for the substance or mixture is not available. Expected to be an irritant based on components. Irritating to skin. Prolonged contact may cause redness and irritation. 沒有關於該物質或混合物的具體測試資料。成分可能是刺激物，長時間的接觸皮膚可能會引起發紅和刺激
Ingestion 食入	Specific test data for the substance or mixture is not available. Ingestion may cause irritation to mucous membranes. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. 沒有關於該物質或混合物的具體測試資料。食入可能會刺激粘膜，也可能引起胃腸道刺激、噁心、嘔吐和腹瀉。

## (b) Information on toxicological characteristics 毒理學特徵信息

This product does not elicit toxicological properties during routine handling and use. If the cells are opened through misuse or damage, discard immediately. Internal components of cell are irritants and sensitizers.  
本產品在日常處理和使用過程中不會產生毒理學特性。如果電池因誤用或損壞而打開，請立即丟棄。內部成分是刺激物和過敏原。

Acute Toxicity 急性毒性	No information available. 無資料
Skin corrosion/irritation 皮膚腐蝕/刺激	No information available. 無資料
Serious eye damage/irritation: 嚴重的眼睛損傷/刺激	No information available. 無資料
Respiratory sensitization 呼吸過敏	No information available. 無資料
skin sensitization 皮膚過敏	No information available. 無資料
Carcinogenicity 致癌性	No information available. 無資料
Germ Cell Mutagenicity 生殖細胞致突變性:	No information available. 無資料
Reproductive Toxicity 生殖毒性	No information available. 無資料



STOT-Single Exposure特定目標器官毒性-單次接觸	No information available. 無資料
STOT-Repeated Exposure特定目標器官毒性-重覆接觸	No information available. 無資料
Aspiration Hazard吸入危害	No information available. 無資料

## 12. Ecological Information 生態學信息

Ecotoxicity生態毒性	No information available. 無資料
Persistence and Degradability持久性和降解度	No information available. 無資料
Bioaccumulations Potential潛在的生物累積性	No information available. 無資料
Mobility in soil在土壤中的流動性	No information available. 無資料
Other adverse effects其他有害效應	No information available. 無資料

## 13. Disposal Consideration 廢棄處置

### (a) Disposal methods 處置方法:

Disposal methods: This material, as supplied, is not a hazardous waste according to Federal regulations (40CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local regulations for additional requirements.

根據聯邦法規(40CFR 261)，材料不是危險廢物，如果與危險廢物混合或以其他方式接觸，經過添加化學品，或加工改變，該材料可能成為危險廢物，請參考40 CFR 261，以確定已改變的材料是否為危險廢物。有關其他要求，請諮詢適當的州、地區或地方法規。

### (b) Contaminated Packaging 受污染的包裝

Dispose of in accordance with federal, state and local regulations.

根據聯邦、州和地方法規進行處理

## 14. Transport Information 運輸信息

### (a) Only Lithium Battery During: This report applies to by land, by air by sea.

產品為鋰離子電池單獨運輸：本報告適用於海運、空運和陸運。

Transport 運輸	<p>The product has passed the test items of UN model regulations, manual of test and Criteria Section 38.3 and UN model regulation SP188 1.2m drop test and to that each package prepared in accordance with PI 965 Section IB must be capable of withstanding the 3m stack test as applies to limited quantity packages. The total net weight of the Lithium batteries is less than 10 kg</p> <p>產品通過聯合國《關於危險貨物運輸的建議書,試驗和標準手冊》</p>
--------------	---



	UN 38.3測試和《規章範本》SP188的1.2m 跌落測試以及按照PI 965第IB節每個包裝必須能夠承受3米堆疊測試。鋰電池的總淨重小於10公斤
<b>RID /ADR (2023 Edition)</b> <b>RID /ADR (2023版)</b>	<p>The product is not subject to RID/ADR according to special provision 188 According to 2.2.9.1.7 (g) of RID/ADR (2023 Edition), Manufacturers and subsequent distributors of cells or batteries manufactured shall make available the test summary as specified in the Manual of Tests and Criteria Part III. sub-section 38.3 paragraph 38.3.5</p> <p>根據RID/ADR特殊規定188，運輸時不受本規則其他規定限制。根據RID/ADR(2023版)的2.2.9.1.7(g)，鋰電池或電池組的製造商和出廠後的銷售商應提供聯合國《試驗和標準手冊》第三部分第38.3小節第38.3.5段規定的UN38.3試驗概要</p>
<b>IATA DGR (65th Edition):</b> <b>IATA DGR (65版)</b>	UN3480
	Hazard Class 9
	<p>The product shall meet the General Requirements and section IB of Packaging Instruction 965 According to 3.9.2.6.1(g) of IATA DGR (65th Edition), Manufacturers and subsequent distributors of cells or batteries manufactured after 30 June 2003 shall make available the test summary as specified in the Manual of tests and Criteria Part III, sub-section 38.3 paragraph 38.3.5.</p> <p>本產品應滿足IATA DGR包裝說明965的基本要求和第IB部分的規定。根據 IATA DGR (第65版) 的 3.9.2.6.1(g)，2003年6月30日之後生產的鋰電池或電池組的製造商和出廠後的銷售商應提供聯合國《試驗和標準手冊》。第三部分第38.3小節第38.3.5段規定的UN38.3試驗概要。</p>
	<p>The International Civil Aviation Organization (ICAO) Technical Instructions Packing instruction 965 section IB (2023-2024 Edition)</p> <p>國際民用航空組織 ( ICAO ) 技術說明包裝說明965部分IB (2023-2024版)</p>
	<p>Lithium-ion batteries according to thePI965 Section IB transport listed in this report must be offered for transport at a state of charge (SoC) not exceeding 30% of their rated capacity.</p> <p>根據本報告中列出的PI965第IB節運輸的鋰離子電池必須以不超過其額定容量30% 的充電狀態(SoC)進行運輸。</p>



IMO IMDC CODE (2022 Edition) IMO IMDC CODE (2022版)	Special provision 188 of the 《International Maritime Dangerous Goods (IMDG) Code》 (Amendment 41-22 Edition) Distributors of cells or batteries manufactured shall make available the test summary as specified in the Manual of Tests and Criteria, Part III, sub-section 38.3 paragraph 38.3.5 《國際海上危險貨物(IMDG)規範》(修正案41-22版)第188條 鋰電池或電池組的製造商和出廠後的銷售商應提供聯合國《試驗和標準手冊》第三部分第38.3小節第38.3.5段規定的UN38.3試驗概要
---	--

**(b) Test results of the UN Recommendation on the Transport of Dangerous Goods**  
**聯合國關於危險貨物運輸的建議的測試結果**

Manual of Test and Criteria (38.3 Lithium battery) 測試和標準手冊 ( 38.3鋰電池 )			
No 編號	Test item 項目	Test Results 測試結果	Remark備註
T1	Altitude Simulation高度模擬測試	Pass通過	
T2	Thermal Test加熱測試	Pass通過	
T3	Vibration振動測試	Pass通過	
T4	Shock衝擊測試	Pass通過	
T5	External Short Circuit外部短路測試	Pass通過	
T6	Impact/Crush擠壓測試	Pass通過	
T7	Overcharge過度充電測試	Pass通過	
T8	Forced Discharge強制放電測試	Pass通過	

**(c) UN regulation 聯合國法規**

UN3480	Batteries only, IATA Dangerous Goods Regulations, packing instruction 965 Section IB. 純電池包裝，適用 IATA 危險貨物規則，滿足包裝說明 965 的基本要求和第 IB 部分的規定。
UN3481	Lithium ion batteries packed with equipment, IATA Dangerous Goods Regulations, packing instruction 966 Section II 鋰離子電池和設備一起包裝，適用 IATA 危險貨物規則，滿足包裝說明 966 的基本要求和第二部分的規定。
UN3481	Lithium ion batteries contained in equipment, IATA Dangerous Goods Regulations, packing instruction 967 Section II. 鋰離子電池含於設備中，適用IATA危險貨物規例，滿足包裝說明967的基本要求和第二部分的規定。

**15. Regulatory Information 法規信息**



Dangerous Goods Regulations 《危險品規則》

IMO International Maritime Dangerous Goods Code relevant regulations 《國際海運危險貨物規則》

Refer to U. N., national, local regulations. 參照聯合國，國家，地方性法規。

## 16. Other Information 其他信息

### (a) Preparation and revision information 編制和修訂信息

The information contained in this Safety data sheet is based on the present state of knowledge and current legislation.

This safety data sheet provides guidance on health, safety and environmental aspects of the product and should not be construed as any guarantee of technical performance or suitability for particular applications. The information contained in this Safety data sheet is based on the present state of knowledge and current legislation.

本安全數據表中包含的信息基於當前的知識狀況和現行法規。

本安全數據表提供有關產品健康、安全和環境方面的指導，不應解釋為對特定應用的技術性能或適用性的任何保證。本安全數據表中包含的信息基於當前的知識狀態和當前立法。

### (b) Abbreviations and acronyms 縮略語和首字母縮寫

ACGIH	American Conference of Governmental Industrial Hygienists 美國政府工業衛生學家委員會
OSHA:	The United States Occupational Safety and Health Administration. 美國職業安全與健康管理局
GHS	Globally Harmonized System of Classification and Labelling of Chemicals 全球化學品統一分類和標籤制度
CAS	Chemical Abstracts Service 美國化學文摘社
DOT	US Department Of Transportation 美國交通部
RID	Regulation for rail International transportation 國際鐵路危險貨物運輸規則
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road 關於公路運輸危險貨物歐洲協定
IMO IMDC CODE	International Maritime Organization, International Maritime Dangerous Goods Code 國際海事組織, 國際海運危險或貨物規則
ICAO	International Civil Aviation Organization 國際民用航空組織
IATA	International Air Transport Association 國際航空運輸協會
PI	Packaging Instruction 包裝說明
TSCA	Toxic Substances Control Act, The American chemical inventory. 美國化學品有毒物質控制法，



IECSC	Inventory of existing chemical substances in China. 中國現有化學物質清單
-------	---

### (c) Disclaimer免責聲明

The information in this SDS is provided all the relevant data fully and truly. However, the information is provided without any warranty on their absolute extensiveness and accuracy. This SDS was prepared to provide safety preventive measures for the users who have got professional training. The personal user who obtained this SDS should make independent judgment for the applicability of this SDS under special conditions. In these special cases, we do not assume responsibility for the damage.

本SDS中的信息完整、真實地提供了所有相關數據。但是，提供的信息不保證其絕對的廣泛性和準確性。本SDS旨在為受過專業培訓的用戶提供安全預防措施。獲取本SDS的個人用戶應對本SDS在特殊情況下的適用性做出獨立判斷。在這些特殊情況下，我們不對損壞承擔責任

----- End of the SDS -----