REMS

for Professionals

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REMS Akku Li-Ion 3,7 V, 2,7 Ah, 10 Wh

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11/2026

材 料 安 全 数 据 表

Material Safety Data Sheet

报 告 编 号: Report No:	BCTC2512514025B
委 托 单 位: Applicant	深圳市丽柏电池有限公司 LiPol Battery Co., Ltd
产 品 名 称: Product Name:	可充式锂聚合物电池 Rechargeable Lithium Polymer Battery
产 品 型 号: Test Model:	LP953566
签 发 日 期: Issued Date:	2026-01-04
编 制: Prepared By:	Jerry Yang
批 准: Approved By:	Andre Yu

深圳市倍测检测有限公司
Shenzhen BCTC Testing Co., Ltd.

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.

第一部分-化学品及企业标识
Section 1-Chemical Product and Company Identification

产品名称 Product Name	可充式锂聚合物电池 Rechargeable Lithium Polymer Battery
型号 Model/Type Reference	LP953566
商标 Trademark	N/A
额定参数 Ratings	3.7V, 2700mAh, 9.99Wh
重量 Weight	大约 54.0g About 54.0g
制造商 Manufacturer	LiPol Battery Co., Ltd 深圳市丽柏电池有限公司
制造商地址 Address	深圳市龙华区民治街道大岭社区龙光玖钻北甲期A座720 Block A-720, Longguangjiuzuan, Daling Community, Minzhi Street, Longhua District, Shenzhen, China
应急电话 Emergency Telephone	+86-13510203456

第二部分-成分信息
Section 2- Composition Information

化学成分 Chemical Composition	**CAS号 CAS No.**	**含量(%) Weight (%)**	**商业机密 Trade Secret**
钴酸锂 Lithium cobaltate	12190-79-3	15-40	*
石墨 Graphite	7782-42-5	10-30	*
六氟磷酸锂 Phosphate(1-), hexafluoro-, lithium	21324-40-3	10-30	*
铜 Copper	7440-50-8	7-13	*
铝 Aluminium	7429-90-5	5-10	*
镍 Nickel	7440-02-0	1-5	*

“ * ”准确的百分比(浓度)的构成已经作为商业机密。
“ * ” The exact percentage (concentration) of composition has been withheld as a trade secret.

第三部分-危险性概述
Section 3- Hazards Identification

紧急情况概述 Emergency overview:	不适用 N/A
GHS分类 Classification according to GHS	不属于GHS危险物品 Not a dangerous substance according to GHS

标签元素 **Label elements:**	
危险标签图 **Hazard pictogram(s)**	不适用 No available
提示语 **Signal word**	不适用 No available
危险声明 **Hazard statement(s)**	不适用 No available
预防声明 **Precautionary statement(s):**	
预防 **Prevention**	不适用 No available
反应 **Response**	不适用 No available
处理 **Disposal**	不适用 No available
环境危害 **Environmental hazards:**	无相关信息 No relevant information
重要症状 **Important symptoms:**	见第11部分更多信息 See section 11 for more information
第四部分-急救措施 **Section 4- First Aid Measures**	
眼睛接触 **Eye contact**	万一接触，立即用大量的清水冲洗至少15分钟，翻起上下眼脸，直到化学的残留物消失为止，迅速就医。 Flush eyes with plenty of water for least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.
皮肤接触 **Skin contact**	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。 Remove contaminated clothes and rinse skin with plenty of water or shower for 15 minutes. Get medical aid.
吸入 **Inhalation**	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。 Remove from exposure and move to fresh air immediately. Use oxygen if available.
摄入 **Ingestion**	饮用两杯牛奶或水，如果当事人仍然清晰可以采取催吐的方法，并且立即就医。 Give at least 2 glasses of milk or water. Induce vomiting unless patient is unconscious. Call a physician.
第五部分-消防措施 **Section 5- Fire Fighting Measures**	
燃点 **Flash Point**	不适用 N/A
自燃温度 **Auto-Ignition Temperature**	不适用 N/A
灭火介质 **Extinguishing Media**	水，二氧化碳 H_2O, CO_2
特殊灭火程序 **Special Fire-Fighting Procedures**	自给式呼吸器 Self-contained breathing apparatus
异常火灾或爆炸 **Unusual Fire and Explosion Hazards**	当电芯暴露于过热的环境中时，安全阀可能会打开 Cell may vent when subjected to excessive heat-exposing battery contents
燃烧产生的危险物品 **Hazardous Combustion**	一氧化碳，二氧化碳，锂氧化物烟气 Carbon monoxide, carbon dioxide, lithium oxide fumes.

Products	
第六部分-泄露应急处理 Section 6- Accidental Release Measures	
个人预防措施、保护设备和应急程序 Personal precautions, protective equipment and emergency procedures	如果电池被泄露，让人员离开该区域直到烟雾消散。提供最大限度的通风，清除有害气体。首选的反应就是离开这个地区并消散气体，避免皮肤和眼睛接触或吸入气体。用吸收剂清除溢出的液体然后焚烧。如果电池泄漏发生时,液体可以用砂、泥土或其他惰性物质来吸收，污染区域应该保持通风。 If the battery is released, remove personnel from area until fumes dissipate. Provide maximum ventilation to clear out hazardous gases. The preferred response is to leave the area and allow the vapors to dissipate, Avoid skin and eyes contact or inhalation of vapors. Remove spilled liquid with absorbent and incinerated. If leakage of the battery happens, liquid could be absorbed by using sand, earth or other inert substance and contaminated area should be ventilated meantime.
环境预防措施 Environment precautions	不允许产品到达排水系统或任何水源。 如果渗透进排水系统或任何水源，通知相应的部门。 不允许进入下水道/表面或地下水。 Do not allow product to reach sewage system or any water source. Inform respective authorities in case of seepage into water course or sewage system.Do not allow to enter sewers/ surface or ground water.
抑制和清理材料的方法 Methods and material for containment and cleaning up	如果电池外壳被拆除，少量电解液可能会泄漏。收集所有材料放进一个塑料容器。根据当地的法律法规来处置，避免可溶物质进入大地、下水道或水源。 If battery casing is dismantled, small amounts of electrolyte may leak. Collect all released material in a plastic lined container. Dispose off according to the local law and rules, Avoid leached substances to get into the earth, canalization or waters.
第七部分-操作处置和储存 Section 7- Handling and Storage	
操作处置 Handling	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、破裂或泄露等事故。禁止将电池短路、过充、强制放电或扔入火中。 禁止挤压或刺穿电池，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.
储存 Storage	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、通风及温度变化较小的环境中。禁止将电池接触加热设备，或将电池长时间直接暴露在阳光中。 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 Other Precautions	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。 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.
第八部分-接触控制和个体防护 Section 8- Exposure Controls/Personal Protection	

设计控制 Engineering Controls	设计局部排气通风或其它设计来控制粉尘、雾、烟雾和气体。 Use local exhaust ventilation or other engineering controls to control sources of dust, mist, fumes and vapor. Keep away from heat and open flame. Store in a cool, dry place.
个人防护装备 Personal Protective Equipment	呼吸防护:在正常情况下不需要。 皮肤和身体防护：在正常情况下不需要, 如果处理一个裂开的或泄漏的电池需要穿戴适当的防护服和手套。 手保护：如果处理一个裂开的或泄漏的电池需要戴适当手套。 眼睛保护：在正常情况下不需要，如果处理一个裂开的或泄漏的电池需要戴上安全眼镜。 Respiratory Protection: Not necessary under normal conditions. Skin and body Protection: Not necessary under normal conditions, Wear suitable protective clothing and gloves if handling an open or leaking battery. Hand protection: Wear suitable gloves if handling an open or leaking battery. Eye Protection: Not necessary under normal conditions, Wear safety glasses if handling an open or leaking battery.
其它防护装备 Other Protective Equipment	在工作区域应该有一个立即可以使用的安全淋浴和喷水洗眼器。 Have a safety shower and eye wash fountain readily available in the immediate work area.
卫生措施 Hygiene Measures	在工作区域不得进食，饮水或吸烟。 Do not eat, drink, or smoke in work area. Maintain good housekeeping.
第九部分–物理和化学特性 Section 9- Physical and Chemical Properties	
形态 Form	固体 Solid
颜色 Color	银色 Silver
气味 Odour	不适用 No available
酸碱度 pH	不适用 No available
熔点/凝固点 Melting point/freezing point	不适用 No available
沸点、沸点范围: Boiling Point and Boiling range	不适用 No available
易燃度 Flash Point	不适用 No available
自燃或爆炸的上、下极限 Upper/lower flammability or explosive limits	不适用 No available
蒸汽压 Vapor Pressure	不适用 No available
蒸汽密度 Vapor Density	不适用 No available
相对密度 Relative density	不适用 No available
水溶性 Solubility in Water	不适用 No available

自燃温度 **Auto-ignition temperature**	不适用 No available
分解温度 **Decomposition temperature**	不适用 No available
蒸发速率 **Evaporation rate**	不适用 No available
易燃性(土壤、天然气) **Flammability (soil, gas)**	不适用 No available
粘性 **Viscosity**	不适用 No available
第十部分 稳定性和反应活性 **Section 10- Stability and reactivity**	
稳定性 **Stability**	产品在第七部分所述的条件下稳定 The product is stable under conditions described Section 7
应避免的条件 **Conditions to Avoid**	加热 70°C 以上或焚烧、变形、毁坏、粉碎、拆卸、过充电、短路，长时间暴露在潮湿的条件下。 Heat above 70°C or incinerate. Deform, Mutilate, Crush, Disassemble, Overcharge, Short circuit, Expose over a long period to humid conditions.
不兼容的材料 **Incompatible Materials**	氧化剂，酸，碱。 Oxidizing agents, acid, base.
危险分解物 **Hazardous Decomposition Products**	一氧化碳、二氧化碳、氧化锂烟雾。 Carbon monoxide, carbon dioxide, lithium oxide fumes.
危险反应的可能性 **Possibility of Hazardous Reaction**	不适用 Not Available
第十一部分-毒理学资料 **Section 11 – Toxicological Information**	
刺激 **Irritation**	如果电芯的外壳受到机械、热或电的滥用到达一定程度，会发生刺激的风险。如果发生这种情况，可能会刺激皮肤、眼睛和呼吸道。 Risk of irritation occurs only if the cell is mechanically, thermally or electrically abused to the point of compromising the enclosure. If this occurs, irritation to the skin, eyes and respiratory tract may occur.
致过敏 **Sensitization**	不适用 Not Available
影响神经系统 **Neurological Effects**	不适用 Not Available
致畸 **Teratogenicity**	不适用 Not Available
再生毒性 **Reproductive Toxicity**	不适用 Not Available
诱变(遗传效应) **Mutagenicity (Genetic Effects)**	不适用 Not Available
附带材料毒理性 **Toxicologically Synergistic Materials**	不适用 Not Available

第十二部分–生态学资料 Section 12- Ecological Information	
生态毒性 **Ecological Toxicity**	不适用 Not Available
在土壤中的流动性 **Mobility in soil**	不适用 Not Available
持久性和分解性 **Persistence and Degradability**	不适用 Not Available
生物聚积 **Bioaccumulation potential**	不适用 Not Available
其他不利影响 **Other Adverse Effects**	不适用 Not Available
第十三部分–废弃处置 Section 13- Disposal Considerations	
产品废弃处理建议 **Product disposal recommendation**	遵守当地、州和联邦法律和法规。 Observe local, state and federal laws and regulations.
包装处理建议 **Packaging disposal recommendation**	废弃处理必须根据当地法规 Disposal must be made according to official regulations
第十四部分–运输信息 Section 14 – Transport Information	
UN编号 **UN Number**	UN 3480 or UN 3481
联合国运输专用名称 **UN Proper shipping name**	PI965 Lithium ion Batteries PI966 Lithium ion Batteries packed with equipment PI967 Lithium ion Batteries contained in equipment
包装说明 **Packing Instructions**	9
空运 **Air**	IATA第67版DGR手册 IATA DGR Manual 67th
海运 **Sea**	海运危险货物规则（Amdt. 42-24）的特殊规定188 IMDG CODE（Amdt. 42-24）SP188
道路运输 **Road**	国际危险货物道路运输协定 ADR - Agreement concerning the International Carriage of Dangerous Goods by Road
铁路运输 **Railway**	国际危险货物铁路运输协定 RID - Regulations concerning the International Carriage of Dangerous Goods by Rail
货物应符合国际航空运输协会第 67 版 DGR 手册包装说明 965 第 IB 节或包装说明 966、967 第 II 节或国际海运危险货物代码（修订版 42-24）第 188 条的要求。 The goods shall be complied with the requirements of Section IB of Packing Instruction 965 or of Section II of Packing Instruction 966 967 of 67th DGR Manual of IATA or special provision 188 of IMDG CODE (Amdt. 42-24). 单独的锂离子电池在运输中应防止短路。他们应该在运输期间用坚固的包装来固定，确保货物不会倾斜，掉落和破损，防止货物倒塌和被雨水浸湿。 Separate Lithium-ion batteries when shipping to prevent short-circuiting. They should be packed in strong packaging for support during transport, ensure that the goods will not falling, dropping, and breakage, Prevent collapse of cargo	

piles and wet by rain.

第十五部分 法规信息
Section 15- 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)
《石油污染控制法》《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)

第十六部分-其它信息
Section 16- Other Information

本份MSDS中的信息只是基于我们当前的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是唯一的。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。

The information in this MSDS has only been compiled based on the information in the relevant materials currently in our possession and is intended only to describe the health, safety and environmental requirements of this product so that all interested parties can better understand and trust this product. This information is provided to you only for your consideration, research and confirmation. Some of the harm prevention measures described are not unique. Therefore, this MSDS is not a guarantee that this product will be used for any particular purpose. It is the responsibility of the user concerned to complete the safety and other aspects of the product in advance to determine whether it meets your purpose of use.

声　明
STATEMENT

1. 本次检测所用的测量设备的量值均可以溯源到国家计量标准。
The equipment lists are traceable to the national reference standards.
2. 检测报告未经本实验室书面批准，不得部分复制。
The test report can not be partially copied unless prior written approval is issued from our lab.
3. 报告未加盖“检验检测专用章”无效。
The test report is invalid without stamp of laboratory.
4. 报告无检测、批准人员签字无效。
The test report is invalid without signature of person(s) testing and authorizing.
5. 本次检测的结果仅对所检测样品有效。
The test process and test result is only related to the Unit Under Test.
6. 样品的相关信息由委托单位提供，实验室不对其真实性负责。
Sample information is provided by the customer and the laboratory is not responsible for its authenticity.
7. 无CMA标志的报告，仅供科研、教学、企业产品研发及内部质量控制目的用。
Reports without CMA mark are only used for scientific research, teaching, enterprise product development and internal quality control purposes.
8. 本实验室的质量体系符合ISO/IEC17025标准的要求。
The quality system of our laboratory is in accordance with ISO/IEC17025.
9. 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。
If there is any objection to report, the client should inform issuing laboratory within 15 days from the date of receiving test report.

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