材料安全数据表

MATERIAL SAFETY DATA SHEET

Report No.: **报告编号：**	BTI25120409204
Model: **型号：**	402040
Name of Goods: **物品名称：**	Polymer Lithium ion Battery 聚合物锂离子电池
Applicant: **申请商：**	Shenzhen Yiou New Energy Co. , Ltd 深圳市亿欧新能源有限公司
Effective Date: **生效日期:**	Jan. 1st, 2026 2026.01.01

tested: **主检员：**	Mia Huang 黄小青	**Approved:** **批准人：**	Key Yang
Reviewed: **审核人：**	Jammy Chow 周晓宝	**Date of Issue:** **签发日期：**	2025.12.25

Shenzhen BTI Testing & Technology Co., Ltd.

深圳市信宝检测技术有限公司

** 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.*
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。

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

Name of Goods 产品名称	Polymer Lithium ion Battery 聚合物锂离子电池	Weight (g) 重量（g）	3.5
Model 型号	402040	Size (mm) L×W×T 尺寸（mm）L×W×T	41.7×19.6×3.5
Ratings 额定参数	3.7V, 300mAh, 1.11Wh	Trade Mark/ identification 商标/识别码	--
Manufacturer 制造商	Shenzhen Yiou New Energy Co. , Ltd 深圳市亿欧新能源有限公司		
Manufacturer's address 制造商地址	Floor 1, Building A2, New Era Co-Prosperity Industrial Park, No.2, Shihuan Road, Shilong Community, Shiyan Street, Bao'an District, Shenzhen 深圳市宝安区石岩街道石龙社区石环路2号新时代共荣工业园A2栋一层		
Contact person 联系人	--	E-mail 邮箱	66341500@qq.com
Emergency Telephone 应急电话	13530525226	Fax 传真	--

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

Chemical Composition 化学成分	Chemical Formula 化学式	CAS No. CAS号（化学文摘索引登记号）	Concentration or concentration ranges (%) 浓度或浓度范围（%）
Lithium Cobalt Oxide 钴酸锂	$LiCoO_2$	12190-79-3	39.55
Graphite 石墨	C	7782-42-5	21.32
Lithium hexafluorophosphate 六氟磷酸锂	F_6LiP	21324-40-3	18.56
Copper Foil 铜箔	Cu	7440-50-8	9.02
Separator 隔离膜	PE	9002-88-4	0.95
Aluminium Foil 铝箔	Al	7429-90-5	8.77
Nickel 镍	Ni	7440-02-0	1.83

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

Emergency overview 紧急情况概述	N/A 不适用
Classification according to GHS GHS分类	Not a dangerous substance according to GHS 不属于GHS危险物品
Label elements: 标签元素	
Hazard pictogram(s) 危险标签图	Not Applicable 不适用
Signal word 提示语	Not Applicable 不适用
Hazard statement(s) 危险声明	Not Applicable 不适用
Precautionary statement(s): 预防声明	
Prevention 预防	Not Applicable 不适用
Response 反应	Not Applicable 不适用
Disposal 废弃处理	Not Applicable 不适用
Environmental hazards: 环境危害	No relevant information 无相关信息
Important symptoms: 重要症状	See section 11 for more information 见第11部分更多信息

Section 4- First Aid Measures
第四部分-急救措施

Eye contact 眼睛接触	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 contact 皮肤接触	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 摄入	Give at least 2 glasses of milk or water. Induce vomiting unless patient is unconscious. Call a physician. 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。

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 monoxide, Carbon dioxide, Lithium oxide fumes. 一氧化碳，二氧化碳，锂氧化物烟气
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、保护设备和应急程序	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。
Environment precautions 环境预防措施	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 material for containment 方法和材料控制	Stop the leak if safe to do so. Contain the spilled liquid with dry sand or earth. Clean up spills immediately. 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 个人防护装备	Eye and Face Protection: None required for consumer use. If there is a Hazard of contact: Tight sealing safety goggles. Face protection shield. Skin and Body Protection: None required for consumer use. If there is a Hazard of contact: Wear protective gloves and protective clothing. 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. 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。 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。 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。
Hygiene Measures 卫生措施	Do not eat, drink, or smoke in work area. Maintain good housekeeping. 在工作区域不得进食，饮水或吸烟。

Section 9- Physical and Chemical Properties
第九部分-物理和化学特性

Shape 形状	Almost Cuboid 近长方体
Color 颜色	Silver 银色
Odour 气味	If leaking, smells of medical ether. 泄漏时，医用乙醚的气味。
pH 酸碱度	Not Applicable 不适用
Melting point/freezing point 熔点/凝固点	Not Applicable 不适用
Boiling Point and Boiling range 沸点、沸点范围	Not Applicable 不适用
Flash Point 易燃度	Not Applicable 不适用
Upper/lower flammability or explosive limits 自燃或爆炸的上、下极限	Not Applicable 不适用
Vapor Pressure 蒸汽压	Not Applicable 不适用
Vapor Density 蒸汽密度	Not Applicable 不适用

Relative density 相对密度	Not Applicable 不适用
Solubility in Water 水溶性	Not Applicable 不适用
Auto-ignition temperature 自燃温度	Not Applicable 不适用
Decomposition temperature 分解温度	Not Applicable 不适用
Evaporation rate 蒸发速率	Not Applicable 不适用
Flammability (soil, gas) 易燃性(土壤、天然气)	Not Applicable 不适用

Section 10- Stability and reactivity
第十部分 稳定性和反应活性

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。
Conditions to Avoid 应避免的条件	Incinerate. Deform, Mutilate, Crush, Disassemble, Overcharge, Short circuit, Expose over a long period to humid conditions. 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。
Incompatible Materials 不兼容的材料	Oxidizing agents, acid, base. 氧化剂，酸，碱。
Hazardous Decomposition Products 危险分解物	Carbon monoxide, carbon dioxide, lithium oxide fumes. 一氧化碳、二氧化碳、氧化锂烟雾。
Possibility of Hazardous Reaction 危险反应的可能性	Not Applicable 不适用

Section 11 – Toxicological Information
第十一部分-毒理学资料

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 致过敏	Not Applicable 不适用
Neurological Effects 影响神经系统	Not Applicable 不适用
Reproductive Toxicity 再生毒性	Not Applicable 不适用
Mutagenicity (Genetic Effects) 诱变(遗传效应)	Not Applicable 不适用
Toxicologically Synergistic Materials 附带材料毒理性	Not Applicable 不适用

Section 12- Ecological Information
第十二部分-生态学资料

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。
Ecological Toxicity 生态毒性	Not Applicable 不适用
Mobility in soil 在土壤中的流动性	Not Applicable 不适用
Persistence and Degradability 持久性和分解性	Not Applicable 不适用
Bioaccumulation potential 生物聚积	Not Applicable 不适用
Other Adverse Effects 其他不利影响	Not Applicable 不适用

Section 13- Disposal Considerations
第十三部分-废弃处置

Product disposal recommendation 产品废弃处理建议	Observe local, state and federal laws and regulations. 遵守当地、州和联邦法律和法规。
Packaging disposal recommendation 包装处理建议	Disposal must be made according to official regulations 废弃处理必须根据当地法规

Section 14 – Transport Information
第十四部分-运输信息

UN Number 联合国货物编号（UN编号）	UN 3480 or UN 3481 UN 3480 或 UN 3481
UN Proper shipping name 联合国运输专用名称	Lithium ion Batteries (Including lithium ion polymer batteries) (limited to a maximum of 30% SoC) or; 锂离子电池（包括锂离子聚合物电池）（荷电状态不得超过其额定容量的 30%）或； Lithium ion Batteries packed with equipment (Including lithium ion polymer batteries) or; 与设备一起包装的锂离子电池（包括锂离子聚合物电池）或； Lithium ion Batteries contained in equipments (Including lithium ion polymer batteries) 包含在设备中的锂离子电池（包括锂离子聚合物电池）
Label(s) / Placard Required 标签/标牌要求	Miscellaneous Lithium BATT 杂项锂电池
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) or International Air Transport Association (IATA) DGR Packing Instructions PI 966 Section IB, PI 966 Section II and PI 967 Section II appropriate of IATA DGR 67th for transportation. 可根据国际民用航空组织（ICAO）或国际航空协会（IATA），DGR 67版本包装说明PI 966第IB节， PI 966～PI 967第II节规定进行空运。
IMDG CODE	The batteries are not restricted to IMDG Code 2024 Edition (Amdt 42-24) according to special provision 188.

国际海运危险货物规则	根据特殊规定 188，该电池不受 IMDG Code 2024 版（Amdt 42-24）限制。
DOT 美国运输部	Other requirements for the US Department of Transportation (DOT) Subchapter C. Hazardous Materials Regulations if shipped in compliance with 49 CFR 173.185. 美国运输部（DOT）有害物质规则 C 分章中的其他规定，运输符合要求 49 CFR 173.185
ADR/AND 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	The batteries are not subject to the provisions of United Nations Economic Commission for Europe (UNECE) ADR/ADN if they meet the requirements of special provision 188 of Chapter 3.3. Applicable as from 1 January 2025. 自 2025 年 1 月 1 日起适用于联合国欧洲经济委员会(UNECE) ADR/AND，如果电池符合第 3.3 章第 188 条的特殊要求，则电池不受限制。
The dangerous goods regulations require that each battery design be subject to tests contained in Section 38.3 of the UN Manual of Tests and Criteria prior to being offered for transport. 危险品规例规定，运输前，每一个电池设计须通过联合国试验和标准手册 38.3 节所载的测试。	

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》
联合国《关于危险货物运输的建议书规章范本》
Recommendations on the Transport of Dangerous Goods-Manual of Tests and Criteria
联合国《关于危险货物运输的建议书试验和标准手册》
International Air Transport Association
《国际航空运输协会》
International Maritime Dangerous Goods
《国际海运危险货物规则》
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
《危险货物分类和品名编号》
2012 OSHA Hazard Communication Standard
2012《职业安全与健康标准》危险通信标准
Toxic Substance Control Act
《有毒物质控制法》
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

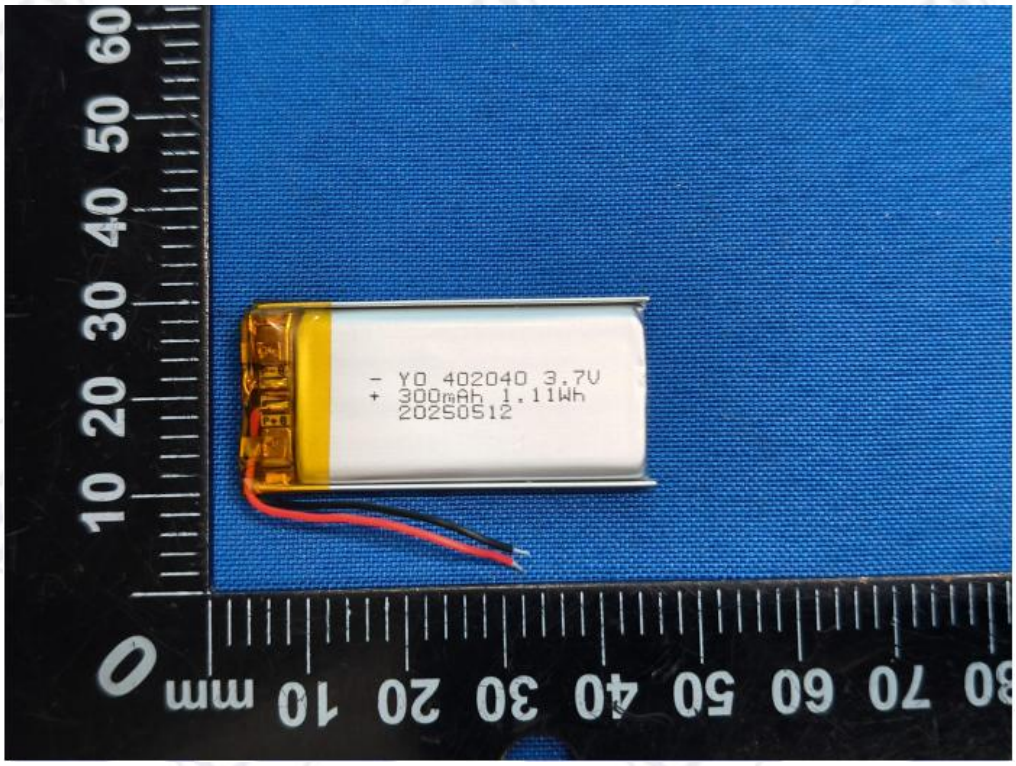
Section 16- Other Information
第十六部分-其它信息

The information above is believed to be accurate and represents the best information currently available to us. However, concorde makes no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. Although reasonable precautions have been taken in the preparation of the data contained herein, it is offered solely for your information, consideration and investigation. This material safety data sheet provides guidelines for the safe handling and use of this product; it does not and cannot advise on all possible situations, therefore, your specific use of this product should be evaluated to determine if additional precautions are required.

上面的信息被认为是准确代表了目前最好的信息提供给我们。然而。飞机没有对商品性能保证或任何其他保证，包括明示或暗示，对这类信息的使用我们不承担责任。用户应作出自己的调查，以确定是否适合其特定用途的信息。虽然在此处所包含的数据的准备已经采取了合理的预防措施，这是仅为你提供的信息、考虑和调查。这个化学品安全技术说明书为本产品提供了安全操作指南和使用指南，它并不能对所有可能发生的情况提供建议，因此，您特殊使用该产品应先进行评估，以确定是否需要额外的预防措施。

Photo of the sample

样品照片



-- End of Report --

-- 报告结束 --