



SDS

SAFETY DATA SHEET

样品名称&型号
Sample Description &
Model 可充电锂离子电池 Rechargeable Li-ion Battery
KOK18650-320B2P 23.68Wh, 3200mAh, 7.4V

申请商
Applicant KOKIDO DEVELOPMENT LIMITED

地址
Address UNIT 1319, SUNBEAM CENTRE, 27 SHING YIP STREET, KWUN
TONG, KOWLOON, HONG KONG

签发日期
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编写
Written by:



化学品安全技术说明书 SDS

依据 GB/T16483-2008&IS011014:2009 编制
According to GB/T16483-2008&IS011014:2009



第一部分 化学品及企业标识

Section 1 - Chemical Product and Company Identification

化学品信息 Chemical product information			
样品名称 Sample Name	可充电锂离子电池 Rechargeable Li-ion Battery	样品型号 Sample Model	KOK18650-320B2P 23.68Wh, 3200mAh, 7.4V
收样日期 Sample Receiving Date	2025-12-26 December 26, 2025	产品推荐及限制用途 Sample Uses	---
单位信息 Company information			
委托单位 Applicant	KOKIDO DEVELOPMENT LIMITED		
委托单位地址 Client address	UNIT 1319, SUNBEAM CENTRE, 27 SHING YIP STREET, KWUN TONG, KOWLOON, HONG KONG		
生产单位 Manufacture	KOKIDO DEVELOPMENT LIMITED		
生产单位地址 Manufacturer address	UNIT 1319, SUNBEAM CENTRE, 27 SHING YIP STREET, KWUN TONG, KOWLOON, HONG KONG		
联系电话 Telephone	(852) 23423008		
传真号码 Fax number	---		
邮政编码 Post code	---		
应急电话 Emergency telephone	(852) 23423008		
紧急联系人 Contact Person	Daniel Wong		
电子邮件 E-mail	danielwong@kokido.com		



第二部分 危险性概述 Section 2 - Hazards Identification

危险性类别 Classification of Danger	见第十四部分。 See section 14.
浸入途径 Primary Route(s) of Exposure	眼睛，皮肤接触，摄入。 Eye, skin contact, ingestion.
健康危害 Health Hazard	<p>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。</p> <p>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.</p>

第三部分 成分/组成信息 Section 3 - Composition, Information on Ingredients

化学名称 Chemical Name	成份(%) In % by weight	CAS号 CAS No.	EC号 EC NO.
Lithium nickel cobalt manganese oxide	45	346417-97-8	620-032-4
Carbon	26	7440-44-0	231-153-3
Electrolyte (EMC/PC/EC/LiPF6)	14	623-53-0/108-32-7/ 96-49-1/21324-40-3	433-480-9/203-572-1/ 202-510-0/244-334-7
Copper	2-10	7440-50-8	231-159-6
Aluminium	4-5	7429-90-5	231-072-3
Polyvinylidene fluoride	1	24937-79-9	607-458-6
<p>不需要象形符号和危险短语。 No symbol and Hazard phrase are required. 注意：CAS 号是化学文摘服务注册号码。 Note: CAS number is Chemical Abstract Service Registry Number. N / A =不适用。 N/A=Not apply.</p>			



第四部分 急救措施

Section 4 - First Aid Measures

眼睛 Eye contact	万一接触，立即用大量的清水冲洗至少15分钟，翻起上下眼睑，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 Skin contact	万一接触，用大量水冲洗至少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.

第五部分 消防措施

Section 5 - Fire Fighting Measures

危险特性 Characteristics of Hazard	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。 The product causes burns of eyes, skin and mucous membranes. Thermal decomposition can lead to release of irritating gases and vapors.
燃烧产生的危险物品 Hazardous Combustion Products	二氧化碳。 Carbon dioxide.
灭火方法及灭火剂 Fire-extinguishing Methods and Extinguishing Media	使用适合当地情况和周围环境的灭火措施。 Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
灭火注意事项 Attention in Fire-extinguishing	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。 Wear self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.



第六部分 泄露应急处理

Section 6 - Accidental Release Measures

<p>个人预防措施、防护装备和应急程序 Personal Precautions, protective equipment, and emergency procedures</p>	<p>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。 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.</p>
<p>环境保护措施 Environmental Precautions</p>	<p>防止产品污染土壤和进入下水道或水道。 Prevent product from contaminating soil and from entering sewers or waterways.</p>
<p>方法和材料控制 Methods and materials for Containment</p>	<p>出于安全，阻止泄漏，可以用干砂或泥土来遏制液体溢出，立即清理溢物。 Stop the leak if safe to do so. Contain the spilled liquid with dry sand or earth. Clean up spills immediately.</p>
<p>清理的方法和材料 Methods and materials for cleaning up</p>	<p>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。 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.</p>



第七部分 操作处置与储存 Section 7 - Handling and Storage

操作 Handling	<p>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。</p> <p>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.</p>
储存 Storage	<p>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。</p> <p>Store in a cool, dry, well-ventilated area away from incompatible substances. Store locked up. Keep out of the reach of children.</p>
其他要注意的防范措施 Other Precautions	<p>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。</p> <p>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.</p>



第八部分 接触控制/个体防护

Section 8 - Exposure Controls, Personal Protection

<p>工程控制 Engineering Controls</p>	<p>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/m³ ACGIH TLV-TWA 3 的吸入量（总量为 10mg/m³）。 Use adequate ventilation to keep airborne concentrations low. If used under conditions that generate particulates, the ACGIH TLV-TWA of 3mg/m³ respirable fraction (10mg/m³total) should be observed.</p>
<p>个人防护设备 Personal Protective Equipment</p>	<p>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。 Eye and Face Protection: None required for consumer use. If there is a Hazard of contact: Tight sealing safety goggles. Face protection shield.</p> <p>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。 Skin and Body Protection: None required for consumer use. If there is a Hazard of contact: Wear protective gloves and protective clothing.</p> <p>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。 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.</p>



第九部分 理化特性

Section 9 - Physical and Chemical Properties

物理状态 Physical State	外形：近圆柱体。 Appearance: Nearly cylindrical
	颜色：无相关信息。 Color: No relevant information
	气味：不适用。 Odour: Not applicable as supplied.
变化的条件： Change in condition:	
酸碱度 PH	不适用。 Not applicable as supplied.
闪点 Flash Point	除非单个的组件暴露，否则不适用。 Not applicable unless individual components exposed.
易燃度 Flammability	除非单个的组件暴露，否则不适用。 Not applicable unless individual components exposed.
相对密度 Relative density:	除非单个的组件暴露，否则不适用。 Not applicable unless individual components exposed.
溶解性（水溶性） Solubility (water)	除非单个的组件暴露，否则不适用。 Not applicable unless individual components exposed.
溶解性（其他） Solubility (other)	除非单个的组件暴露，否则不适用。 Not applicable unless individual components exposed.



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

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

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

刺激 Irritation	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.
致敏 Sensitization	不适用。 Not Available.
再生毒性 Reproductive Toxicity	不适用。 Not Available.
协同材料毒理学 Toxicologically Synergistic Materials	不适用。 Not Available.



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

通用信息 General note	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。 Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
化学产品对环境/可能的环境预期的行为的一种生态毒性 Anticipated behavior of a chemical product in environment/possible environmental impact/ecotoxicity	不适用。 Not Available.

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

废弃处置方法 Waste Treatment	建议遵照国家和地方法规处置或再利用。 Recycle or dispose of in accordance with government, state & local regulations.
废弃注意事项 Attention for Waste Treatment	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。 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.



第十四部分 运输信息

Section 14 - Transport Information

该产品已按照联合国测试和标准手册的要求进行了测试。

The product had been tested according to the requirements of the UN manual of tests and Criteria.

EmS 编号: F-A, S-I

EmS No: F-A, S-I

海洋污染物: 无

Marine pollutant: No

环境危害: 不适用

Environmental hazards: Not applicable

用户特别注意事项: 不适用

Special precautions for user: Not applicable

该产品已根据联合国《试验和标准手册》第 38.3 节进行了运输安全测试, 符合标准要求。报告号: 1125010430。

The product has been tested for transport safety according to section 38.3 of the United Nations Manual of Tests and Criteria and meets the standard requirements. Report No.: 1125010430.

锂电池包装已通过 1.2m 跌落测试。报告号: 1125020687。

The lithium battery package has passed the 1.2m drop test. Report No.: 1125020687.

UN 3480	
空运: 运输标签: 电池标记, 第9 类锂电池或钠离子电池 危险品标签, 仅限货机标签 货物应符合国际航空运输协会第67版《危险品规则》 (2026 年版) 包装说明 965 第 IB 节的要求。	Air transport: Label for conveyance: Battery Mark, Class 9 Lithium Batteries or Sodium Ion Batteries hazard label, Cargo Aircraft Only Label The goods are complied with the requirements of Section IB of Packing Instruction 965 of 67 th DGR Manual of IATA (2026 Edition).
海运: 运输标签: 锂电池标记 货物符合国际海事组织《国际海运危险货物规则》 (Amdt. 42-24版) 2024 版特殊规定188 的要求。	Maritime transport: Label for conveyance: Lithium Battery Mark The goods are complied with the requirements of Special provision 188 of IMDG CODE (Amdt. 42-24) (2024 Edition)
陆运: 运输标签: 锂电池标记 货物应符合《危险货物道路运输规则》JT/T 617-2018 及第1 号修改单特殊规定188 的要求	Land transport: Label for conveyance: Battery Mark The goods are complied with the requirements of Special provision 188 of Agreement concerning the International Carriage of Dangerous Goods by Road (ADR 2025)
UN 3481	
空运: 运输标签: 电池标记 货物应符合国际航空运输协会第67版《危险品规则》 (2026 年版) 包装说明 967 第II 节的要求。	Air transport: Label for conveyance: Battery Mark The goods are complied with the requirements of Section II of Packing Instruction 967 of 67 th



	DGR Manual of IATA (2026 Edition).
<p>海运： 运输标签：锂电池标记 货物符合国际海事组织《国际海运危险货物规则》（Amdt. 42-24版）2024 版特殊规定188 的要求</p>	<p>Maritime transport: Label for conveyance: Lithium Battery Mark The goods are complied with the requirements of Special provision 188 of IMDG CODE (Amdt. 42-24) (2024 Edition)</p>
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<p>备注：锂电池分为锂离子电池(包括锂离子聚合物电池)和锂金属电池(包括锂合金电池)。 作为“锂电池”、“随设备包装的锂电池”或“设备中包含的锂电池”运输的锂电池，在按照“IATA-DGR 的PI966-970 section II”或“IMO-IMDG 代码的特殊条款 188”运输时，按非危险货物办理。</p>	<p>Note: Lithium batteries are divided into lithium-ion batteries (including lithium-ion polymer batteries) and lithium metal batteries (including lithium alloy batteries). Lithium batteries transported as "lithium batteries", "Lithium batteries packaged with equipment" or "lithium batteries contained in equipment" are treated as non-dangerous goods when transported in accordance with "PI966-970 section II of IATA-DGR" or "Special Article 188 of the IMO-IMDG Code".</p>



第十五部分法规信息 Section 15 - Regulatory Information

《危险物品规则》

Dangerous Goods Regulations

联合国《关于危险货物运输的建议书 规章范本》（22nd 修订版）

Recommendations on the Transport of Dangerous Goods-Model Regulations (22nd revised edition)

联合国《关于危险货物运输的建议书 试验和标准手册》

Recommendations on the Transport of Dangerous Goods-Manual of Tests and Criteria

《国际航空运输协会》（IATA）

International Air Transport Association (IATA)

《国际海运危险货物规则》 IMDG CODE (Amdt 42-24)。

International Maritime Dangerous Goods IMDG CODE (Amdt 42-24)

《危险货物安全运输技术指南》

Technical Instructions for the Safe Transport of Dangerous Goods

《危险货物分类和品名编号》- GB 6944-2012

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

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

2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

《有毒物质控制法》（TSCA）

Toxic Substance Control Act (TSCA)

《联邦条例》

Code of Federal Regulations

符合所有联邦、州和地方法律

In accordance with all Federal, State and local laws



第十六部分 其他信息 Section 16 - Additional Information

注意：

上述信息是基于现有的数据信息，在实际应用过程中可能出现其他未预料的情况，其相应信息可能需要修改，我方不承担此项责任。在操作中请根据实际情况作出相应的正确的处置。

The above information is based on the data of which we are aware and is believed to be correct as of the data hereof. Since this information may be applied under conditions beyond our control and with which may be unfamiliar and since data made available subsequent to the data hereof may suggest modifications of the information, we do not assume any responsibility for the results of its use. This information is furnished upon condition that the person receiving it shall make his own determination of the suitability of the material for his particular purpose.

-----End of Report-----