

MSDS 编号: JC24-2611
MSDS No.



中国认可
国际互认
检测
TESTING
CNAS L0200

化学品安全技术说明书

MSDS

化学品名称: 可充电锂离子电池组 S31-LI-144-6400 14.4V
5800mAh 83.52Wh

Chemical Products Name: Rechargeable Lithium-ion Battery Pack
S31-LI-144-6400 14.4V 5800mAh 83.52Wh

委托单位: 广州明美新能源股份有限公司

Consignor: TWS Technology (Guangzhou) Limited

中认尚动（上海）检测技术有限公司
CQC Standard Testing Technology (Shanghai) Co., Ltd

声 明:

Statement:

1. 试验结果只与所试样品有关。
The results are only related to the samples tested.
2. 未经本公司允许，不得部分复制本报告，除非全部复制。
This test report shall not be reproduced except in full without the written approval of CQC-Standard.
3. 本报告无批准人签字无效。
This report shall be considered as invalid without signature of the approval person.
4. 本报告涂改无效。
This report shall be considered as invalid if altered.

检验单位信息:

Information of Testing Lab.

检 验 单 位:	中认尚动（上海）检测技术有限公司		
Testing Lab:	CQC Standard Testing Technology (Shanghai) Co., Ltd		
地 址:	上海市桂菁路 19 号		
Add:	No.19, Guijing Road, Shanghai, China		
邮 政 编 码:	200233		
Post code:	200233		
电 话:	021-64335270（总机）	021-64954550	
Phone:	021-64954380	021-64315276	
传 真:	021-64339515		
Fax:			
E-mail:	tiet@setri.cn		
银 行 帐 号:	中认尚动（上海）检测技术有限公司		
Account & Bank:	457270581995		
	中国银行上海漕河泾开发区支行		

化学品名称 Chemical products name	中文 Chinese	可充电锂离子电池组 S31-LI-144-6400 14.4V 5800mAh 83.52Wh		
	英文 English	Rechargeable Lithium-ion Battery Pack S31-LI-144-6400 14.4V 5800mAh 83.52Wh		
委托单位 Consignor	广州明美新能源股份有限公司 TWS Technology (Guangzhou) Limited			
生产单位 Manufacturer	广州明美新能源股份有限公司 TWS Technology (Guangzhou) Limited			
测试方法和判定标准 Test method and criterion	化学品安全技术说明书内容和项目顺序（GB/T 16483-2008） Safety data sheet for chemical products-Content and order of sections （GB/T 16483-2008）			
化学品外观 Chemical Products Appearance	蓝色塑料外衣 Blue plastic outerwear			
委托日期 Consignation date	2024.07.22	检查起讫日期 Test date	2024.07.22-2024.07.22	
检查项目 Inspection items	化学品名称和企业标识 Chemical product and company identification 、危险性概述 hazards identification、成分/组成信息 composition information、急救措施/First-aid measures 、消防措施 Fire fighting measures 、泄漏应急处理 Accidental release measures 、操作处置与储存 Handling and storage 、接触控制与个人防护 Exposure controls /personal protection 、理化特性 Physical and chemical properties、稳定性和反应性 Stability and reactivity 、毒理学信息 Toxicological information 、生态学信息 Ecological information、废弃处置 Disposal information 、运输信息 Transportation information 、法规信息 Regulatory information 、其它信息 Other information			
结论 Conclusion	按照 MSDS 的编写要求化学品已全面描述。 Accordingly to the writing requirements of MSDS, the chemical product has been fully described. 签发日期（issue date）: 2024.07.22			
备注 Comments	P 为 Passed, N 为 Not applicable, F 为 False, “——” 为 Not applicable;			
委托单位地址 Consignor address	中国广东省广州市广州高新技术产业开发区科学城南云三路 39 号（1）栋首层、二层、三层 /1510663 Floor 1&2&3 of Building (1),No.39Nan Yun San Road, Science Park, Guangzhou Hi-Tech Industrial Development Zone, 510663, Guangzhou City, Guangdong Province, P. R. China		邮政编码 Post code	/

批准: 彭彦玲
Approver:

审核: 刘保林
Checker:

主检: 黄亮
Appraiser

MSDS No.
化学品名称: 可充电锂离子电池组 S31-LI-144-6400 14.4V 5800mAh 83.52Wh

Chemical products name: Rechargeable Lithium-ion Battery Pack S31-LI-144-6400 14.4V 5800mAh 83.52Wh

1	化学品名称和企业标识 Chemical product and company identification	名称 Name	可充电锂离子电池组 S31-LI-144-6400 14.4V 5800mAh 83.52Wh Rechargeable Lithium-ion Battery Pack S31-LI-144-6400 14.4V 5800mAh 83.52Wh			
		生产单位 Manufacturer	广州明美新能源股份有限公司 TWS Technology (Guangzhou) Limited			
		生产单位地址 Manufacturer address	中国广东省广州市广州高新技术产业开发区科学城南云三路 39 号（1）栋首层、二层、三层 /1510663 Floor 1 & 2 & 3 of Building (1), No. 39 Nan Yun San Road, Science Park, Guangzhou Hi-Tech Industrial Development Zone, 510663, Guangzhou City, Guangdong Province, P. R. China			
		应急联系 Emergence Contact	13738043854			
2	危险性概述 Hazards identification、	<p>在正常状况下,按照制造商的说明使用，锂离子电池没有危险。锂离子电池在滥用的情况下会造成爆炸、破裂、起火、过热或内部元件泄露，从而释放危险性物质，如氟化氢气体。</p> <p>Lithium ion cells are not hazardous when used according to the instructions of the manufacturer under normal conditions. There is a risk of explode, rupture, heat, or leakage of internal components, which would release hazardous materials, for example, HF gas.</p> <p>接触症状:</p> <p>皮肤接触：常规处理和使用时无影响;接触内部物质可能引起灼伤。</p> <p>眼睛接触：常规处理和使用时无影响;接触内部物质可能引起灼伤。</p> <p>吸入：常规处理和使用时无影响;吸入释放的气体可能引起灼伤。</p> <p>Symptoms of exposure:</p> <p>Skin contact: No effect under routine handling and use, internal materials may cause burns.</p> <p>Eye contact: No effect under routine handling and use, internal materials may cause burns.</p> <p>Inhalation: No effect under routine handling and use, released gas may cause burns.</p>				
3	成分/组成信息 Composition information	成分 Composition		含量 Quantity	CAS 编号 CAS-No.	
		Cobalt lithium manganese nickel oxide 镍钴锰酸锂		34	182442-95-1	
		Graphite 石墨		18	7782-42-5	
		Electrolyte 电解液		17	N/AA	
		Copper Foil 铜箔		6	7440-50-8	
		Aluminum Foil 铝箔		18	7429-90-5	
		Other 其他		34	N/A	
4	急救措施 First-aid measures	<p>皮肤和眼睛接触及吸入，不会危害健康。</p> <p>食入：如果吞咽，立即就医。</p> <p>Skin contact, eye contact and inhalation: No hazard to health.</p> <p>Ingestion: If swallow, get medical aid at once.</p> <p>由于外壳受损，如果接触到内部材料，建议采取以下急救措施：</p> <p>吸入：立即离开该区域，立即就医。</p> <p>眼睛接触：立即用水冲洗眼睛 15 分钟，并就医。</p> <p>皮肤接触：用肥皂和水立即清洗去除，并就医。</p> <p>食入：喝牛奶/水，催吐，就医。</p> <p>The following first aid measures are required only in case of exposure to interior battery components because of damage of the external battery casing.</p> <p>Inhalation: Leave area immediately and seek medical care.</p> <p>Eye contact: Rinse immediately with plenty of water for at least 15Minutes, and seek medical care.</p>				

		<p>Skin contact: wash off immediately with soap and plenty of water, and seek medical care.</p> <p>Ingestion: Drink milk / plenty of water, induce vomiting, and seek medical care.</p>
5	消防措施 Fire fighting measures	<p>危险: 电池不易燃, 但如果电池燃烧, 燃烧时电池可能会发生爆炸, 内部有机物也会燃烧。燃烧产物包括但不限于氟化氢、一氧化碳和二氧化碳。</p> <p>灭火器具: 使用正在燃烧物质适合的灭火工具: 粉末灭火器、二氧化碳灭火器, 黄沙, 水等,</p> <p>特殊消防说明:</p> <p>如果在 120°C 以上, 内部可能会发生爆炸/发泄。</p> <p>消防设备: 使用国家相关主管部门认证的全面罩自给式呼吸装置与完整的防护装备。</p> <p>Hazard: cell is not flammable, but cell will explode and internal organic material will burn if the cell is incinerated. Combustion products include, but are not limited to hydrogen fluoride, carbon monoxide and carbon dioxide.</p> <p>Extinguishing media: using extinguishing media suitable for the materials that are burning.</p> <p>Special firefighting instructions: if possible, remove cell(s) from firefighting area. If heated above 120°C, cell(s) can explode/vent.</p> <p>Firefighting equipment:</p> <p>Use full-face self-contained breathing apparatus with full protective gear., which is accredited by national related competent authority.</p>
6	泄漏应急处理 Accidental release measures	<p>个人预防措施:</p> <p>使用个人防护服, 避免与皮肤、眼睛、衣物接触; 避免吸入烟雾和气体。</p> <p>环境预防措施: 不要排入下水道, 地表水, 地下水。</p> <p>清理方法: 机械吸收并送去处理。</p> <p>Personal precautions: Use personal protective clothing. Avoid contact with skin, eyes and clothing. Avoid breathing fume and gas.</p> <p>Environmental precautions: Do not discharge into the drains/surface Waters/groundwater.</p> <p>Methods for cleaning up/taking up: Take up mechanically and send for disposal.</p>
7	操作处置与储存 Handling and storage	<p>操作: 避免短路, 避免电池的机械损伤, 不要打开或拆解。远离明火、热表面、点火源。</p> <p>储存: 储存于阴凉、干燥的地方。</p> <p>Handling: Avoid short circuit. Avoid mechanical damage of the cell. Do not open or disassemble. Keep away from open flames, hot surfaces and sources of ignition.</p> <p>Storage: Store in cool and dry place.</p>
8	接触控制与个人防护 Exposure controls /personal protection	<p>正常使用时没有物质释放。</p> <p>职业暴露控制: 无需特殊预防措施。</p> <p>保护和卫生措施: 使用时不要吃、喝和抽烟。下班和休息前要洗手。</p> <p>呼吸系统防护: 无需特殊预防措施。</p> <p>手防护: 无需特殊预防措施。</p> <p>眼防护: 无需特殊预防措施。</p> <p>皮肤防护: 无需特殊预防措施。</p> <p>During normal using there is no release of product.</p> <p>Occupational exposure controls: No specific precautions necessary.</p> <p>Protective and hygiene measures: When using do not eat, drink or smoke. Wash hands before breaks and after work.</p> <p>Respiratory protection: No specific precautions necessary.</p> <p>Hand protection: No specific precautions necessary.</p> <p>Eye protection: No specific precautions necessary.</p> <p>Skin protection: No specific precautions necessary.</p>
9	理化特性 Physical and chemical properties	<p>外观</p> <p>形态: 固体, 颜色: 蓝色 味道: 无味。</p> <p>Appearance</p>

MSDS No.

化学品名称: 可充电锂离子电池组 S31-LI-144-6400 14.4V 5800mAh 83.52Wh

Chemical products name:Rechargeable Lithium-ion Battery Pack S31-LI-144-6400 14.4V 5800mAh 83.52Wh

		Form: Solid. Color: Black. Odor: Odorless.														
		<table><tr><td>PH 值: PHValue:</td><td>不适用 n.a.</td></tr><tr><td>闪点: Flash point:</td><td>不适用 n.a.</td></tr><tr><td>爆炸下限: Lowerexplosion limits:</td><td>不适用 n.a.</td></tr><tr><td>饱和蒸气压: Vapour pressure:</td><td>不适用 n.a.</td></tr><tr><td>密度: Density:</td><td>不适用 n.a.</td></tr><tr><td>水溶性: Water solubility:</td><td>不溶 Insoluble</td></tr><tr><td>引燃温度: Ignition temperature:</td><td>不适用 n.a.</td></tr></table>	PH 值: PHValue:	不适用 n.a.	闪点: Flash point:	不适用 n.a.	爆炸下限: Lowerexplosion limits:	不适用 n.a.	饱和蒸气压: Vapour pressure:	不适用 n.a.	密度: Density:	不适用 n.a.	水溶性: Water solubility:	不溶 Insoluble	引燃温度: Ignition temperature:	不适用 n.a.
PH 值: PHValue:	不适用 n.a.															
闪点: Flash point:	不适用 n.a.															
爆炸下限: Lowerexplosion limits:	不适用 n.a.															
饱和蒸气压: Vapour pressure:	不适用 n.a.															
密度: Density:	不适用 n.a.															
水溶性: Water solubility:	不溶 Insoluble															
引燃温度: Ignition temperature:	不适用 n.a.															
10	稳定性和反应性 Stability and reactivity	稳定性: 稳定 避免的情形:避免接触高温、明火和腐蚀性物质。不要刺穿、挤压、焚烧。 危险的分解产物: 当电池被打开, 可能释放酸, 有机物等。 额外信息: 如按指导进行储存和使用, 不会分解。 Stability: Stable Conditions to avoid: Avoid exposure to heat, open flame and corrosives. Do not puncture, crush or incinerate. Hazardous decomposition products: In case of open cells, there is the possibility of hydrofluoric acid and carbon monoxide released. Additional information: No decomposition if stored and applied as directed.														
11	毒理学信息 Toxicological information	合适的使用, 锂离子电池没有危害。如果发生火灾或泄漏, 燃烧和分解产物可能会对皮肤, 眼睛和呼吸系统造成刺激和毒性。 Cells are not hazardous when used properly. In case of fire or leakage combustion and decomposition products may cause irritation and toxicity to skin, eye and respiratory systems.														
12	生态学信息 Ecological information	生态危害在正常使用情况下是未知的或预期的。不要冲入地表水或污水下水道系统。 Ecological injuries are not known or expected under normal use. Do not flush into surface water or sanitary sewer system.														
13	废弃处置 Disposal information	废弃产品的处置: 不要随意丢弃, 通过回收公司循环利用。 污染的包装物: 容器或包装在正常使用时不会被污染。当电池内部污染物泄漏, 根据特殊控制作为工业垃圾处置。 Don not throw out a used battery cell. Recycle it through the recycling company. Contaminated packaging: Neither a container nor packing is contaminated during normal use. When internal materials leaked from a battery cell contaminates, dispose as industrial waste subject to special control.														
14	运输信息 Transportation information	运输时具体要求应当参照以下规则: - 在国际民用航空组织 (ICAO) 技术细则 (2023-2024 年版) - 国际航空运输协会 (IATA) 危险品规则 (第 65 版, 2024) - 国际海运危险货物 (IMDG) 代码 (2022 年版) - 关于危险货物运输的联合国建议书, 试验和标准 38.3 锂手册电池方面, 第 5/6/7 版 (含校正) - UN3480 With regard to transport, the following regulations are cited and considered:														
