

化学品安全技术说明书 MATERIAL SAFETY DATA SHEET

Report No.: DN-25021212R

报告编号

Reference No

DN-25021212R

委托单位 **Applicant**

DUUX B.V.

地址

Address

Veghelsedijk 2f, 5406TE, Uden, The Netherlands

制造商

Manufacturer

地址 Address 样品名称

Sample's name

RECHARGEABLE LI-ION BATTERY

宁波米寇智能科技有限公司

型号

Model No.

出版日期

Date of Issue

DXCFBP06 2025-02-24

深圳市德莱新能源检测技术有限公司

Shenzhen DL New Energy Testing Technology Co., Ltd.

深圳市坪山区坪山街道六和社区宝山第二工业区102栋深圳市捌零后物业管理有限公司厂房101 Room 101, Building 102, Baoshan Second Industrial Zone, Liuhe Community, Pingshan Street, Pingshan District, Shenzhen City, China 邮政编码: 518118 电话: 400-6823-836 网址: http://dlne-cert.com/

编辑 Compiled by:

林群双/Rico Lin

审核 Approved b

付邀山

付盛山/Sam Fu

TRF No.: MSDS Email: de@dlne-cert.com 第 1 页 共 10 页



Report No.: DN-25021212R

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:	可充电锂离子电池 RECHARGEABLE LI-ION BATTERY
型号Model No.:	DXCFBP06
参数Ratings	10.8V, 3350mAh, 36.18Wh
重量Weight:	202.633g
制造商 Manufacturer:	
地址 Address:	Control of the Control of Control
电话Emergency Telephone:	
传真Fax:	
邮箱Email:	

	第二部分 危险性概述
	Section 2 hazards summarizing
危险性类别	见第14部分
Classification of Danger	(See section 14)
侵入途径	吸入、皮肤接触、眼睛接触和食入
Invasion Route	Inhalation, skin contact, eye contact and ingestion
燃爆危险	高温或短路条件下可能会起火或者爆炸
Fire and explosion risk	May occur fire or explode under high temperature or short circuit conditions
腐蚀危险性	无相关数据
Mordant risk	No information available.
健康危害	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
Health hazard	裂、火灾、发热、膨胀、漏液的风险,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,硬物猛击,尖物刺破、破
	裂。
	Batteries are not hazardous when used according to the instruction of
	manufacturer under normal conditions. In the case of abuse, rupture, fire, heat,
	swelling, leakage risk, and may result in unexpected losses. Abuse includes but
	not limited to the following cases: charged for long time, short-circuited, put into
	fire, hit with hard object, punctured with acute object, crushed, and broken.
环境危害	无相关数据
Environmental hazards	No information available.

TRF No.: MSDS Email: de@dlne-cert.com 第 2 页 共 10 页

Report	140	D14-20	02 12	121

该物质或混合物的分类: □ 纯品 🛛 混合物		ion on Ingredients
Classification of the substance or mixture:		mixture
化学名称	CAS号	百分含量
Chemical Composition	CAS No.	Weight (%)
聚偏氟乙烯PVDF	24937-79-9	0-5
钴酸锂Lithium cobaltate	12190-79-3	25-50
镍Nickel	7440-02-0	0.5-5
铜 Copper	7440-50-8	5-10
石墨 Graphite	7782-42-5	20-30
六氟磷酸锂Lithium hexafluorophosphate	21324-40-3	10-20
铝Aluminum	7429-90-5	2-10
聚乙烯Polyethylene	9002-88-4	5-10
聚丙烯Polypropylene	9003-07-0	5-10

	第四部分 急救措施
	Section 4 First Aid Measures
总说明General information	ation
正常情况下,不需要特	别的措施。在内部物质漏出的情况,如果身体部位接触到这些物质,应采取以下措施:
No special measures r	equired.
吸入	立即将人员移至通风处,如果呼吸困难,速进行人工呼吸抢救。如症状持续,速就
After inhalation	医。
	Remove victim to fresh area. Administer artificial respiration if breathing is difficult.
	Seek medical attention.
皮肤接触	脱去污着衣物,用大量的水清洗,然后清洗双手,衣物清洗后再使用。如果症状持
After skin contact	续,速就医。
	Remove contaminated clothing and shoes. Immediately wash with water and soap
	and rinse thoroughly. Wash clothing and shoes before reuse. If irritation occurs, get
	medical attention.
眼睛接触	张开眼睛在流水下冲洗数分钟,如果症状仍然持续,请咨询医生。
After eye contact	Flush eyes with plenty of water for several minutes while holding eyelids open. Get
	medical attention if irritation persists.
食入After swallowing	禁止催吐,速就医。Do not induce vomiting. Get medical attention.

TRF No.: MSDS Email: de@dlne-cert.com 第 3 页 共 10 页

Report No.: DN-25021212R

r lane	Section 5 Fire Fighting Measures				
灭火剂	使用适合当地情况和周围环境的灭火剂,如干粉,CO2,冷水,沙子,土等。不要				
Extinguishing agent	使用温水或者热水,不要使用哈龙类灭火材料。				
	Use extinguishing agent suitable for local conditions and the surrounding				
	environment . Such as dry powder , CO2, cold water, sand, earth. Don't use warm or hot water. Don' te use Halon type extinguishing material.				
特别危险性	在起火条件下,电池可能会破裂,释放出有害的分解产物。在经受高温(>				
Special hazards	150°C(302°F))时,含有易燃电解液的电池,可能泄漏,点燃,产生火花,当损坏或				
	滥用(如机械损伤或过度充电)时,可能燃烧迅速与耀斑燃烧效果,也可能引燃其他在 电池附近衣服。				
	Special hazards arising from the substance or mixture: Battery may burst and release hazardous decomposition products when exposed to a fire situation.				
	Polymer Lithium Battery contain flammable electrolyte that may vent, ignite and				
	produce sparks when subjected to high temperature(>150°C(302°F)), when				
	damaged or abused (e.g. mechanical damage or electrical overcharging); may				
	burn rapidly with flare-burning effect; may ignite other batteries in clothes proximity				
有害燃烧产物	一氧化碳,二氧化碳,锂氧化物烟气。				
Hazardous	Carbon monoxide, carbon dioxide, lithium oxide fumes.				
Combustion Products					
防护措施	如起火, 佩戴自主呼吸机和防护服。				
Protective measures	Wear self-contained respirator. Wear fully protective impervious suit.				

TRF No.: MSDS Email: de@dlne-cert.com 第 4 页 共 10 页

Report No.: DN-25021212R

Section 6	Accidental Release Measures		
作业人员防护措施、防护装备和应急处置程序: Homework personnel protective measures, protective equipment and emergency disposal procedures:	穿上保护装备,疏散人群,确保有足够的通风。 Wear protective equipment. Keep unprotected persons away. Ensure adequate ventilation		
环境保护措施: Environmental precautions:	若无政府许可,勿将材料排入周围环境。 Do not allow material to be released to the environment without proper governmental permits.		
泄漏化学品的收容、清除方法及所使用的处置材料: Steps to be taken in case material is spilled or released and Waste disposal method:	从泄露区移除所有的火源,隔离人员。用一个不产生粉尘的方法打扫处理泄漏物,尽可能多地收集泄漏处理物于有标签的合适的容器中。泄露处理物禁止倒入下水道,沟渠或水源。所有废弃物必须参照联合国,国家,地方性法规进行处置。 Remove ignition sources, evacuate area. Sweep up using a method that does not generate dust. Collect as much of the spilled material as possible, placed the spilled material into a suitable disposal container. Keep spilled material out of sewers, ditches and bodies of water. All waste must refer to the United Nations, the national and local regulations for disposal.		
防止次生灾害的预防措施: To prevent the secondary disasters prevention measures:	有关安全处理的资料请参阅第七部分。有关个人保护装备的资料请参阅第八部分。有关弃置的资料请参阅第十三部分。 See Section 7 for information on safe handling. See Section 8 for information on personal protection equipment. See Section 13 for disposal information.		

第七	部分 操作处置与储存		
Section	7 Handling and Storage		
操作注意事项	不要以接头短路的方式对电池进行操作		
Precautions for safe handling	Don't handling the batteries in manner that allows terminals to		
	short circuit		
有关火灾及防止爆炸的资料	电池在拆开、挤压、遇火或高温情况下,会引起起火或爆炸,		
Information about fire and explosion	严禁短路或非正确操作。		
protection	Batteries may explode or cause burns, if disassembled,		
	crushed or exposed to fire or high temperatures. Do not short		
	or install with incorrect polarity.		
储存注意事项	储存在一个低温,干燥,通风良好的环境。远离热源,避免长		
Conditions for safe storage, including any	时间阳光照射。未使用时密封容器。Requirements to be met by		
incompatibilities	storerooms and receptacles. Store in a cool, dry,		
	well-ventilated place. Keep away from heat, avoiding the long		
	time of sunlight.		

TRF No.: MSDS Email: de@dlne-cert.com 第 5 页 共 10 页

Report No.: DN-25021212R

第	八部分 接触控制/个体防护		
Section 8 Exp	osure Controls, Personal Protection		
呼吸防护 Respiratory Protection	当电池排气阀打开时,应尽量使通风设备开至最大,避免将打开排气阀的电芯局限在某一狭窄空间内。正常操作条件下,呼吸保护是不必要的。 In case of battery venting, provide as much ventilation as possible. Avoid confined areas with venting cell cores. Respiratory Protection is not necessary under conditions of normal use.		
通风条件	正常使用条件下不必考虑。		
Ventilation	Not necessary under conditions of normal use.		
防护手套	正常使用条件下不必考虑。		
Protective Gloves	Not necessary under conditions of normal use.		
其他防护服装或设备	正常使用条件下不必考虑。		
Other Protective Clothing or Equipment	Not necessary under conditions of normal use.		
电池破损时应做好个人防护	呼吸防护, 防护手套, 防护服装和有护边的安全玻璃罩都是要准备		
Personal Protection is recommended	的。		
for damaged battery	Respiratory Protection, Protective Gloves, Protective Clothing and safety glass with side shields.		

Section		邓分 理化特性 and Chemical Properties		
外观Appearance 黑色近长方体 Approximate Black Cuboid				
颜色 Color	黑色 Bla	黑色 Black		
气味Odour	无味 Odorless			
电压Voltage	10.8	V		
电芯电压Cell Voltage	3.6	V		
电容量Electric capacity	3350	3350 mAh		
功率Watt-hour	36.18 Wh			

TRF No.: MSDS Email: de@dlne-cert.com 第 6 页 共 10 页



Report No.: DN-25021212R

s. 177	第十部分 稳定性和反应活性		
Sect	ion 10 Stability and Reactivity		
稳定性	正常情况下稳定。		
Chemical stability	Stable in normal circumstances.		
禁配物	氧化剂,酸,碱。		
Incompatibilities	Oxidant, acid, alkali		
应避免条件 加热70癈 以上或焚烧、变形、毁坏、粉碎、拆卸、运			
Conditions to Avoid	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.		
危险反应	无资料		
Possibility of hazardous reactions	Data not available.		
危险的分解产物	一氧化碳,二氧化碳,锂氧化物烟气		
Hazardous Combustible Products	Carbon monoxide, carbon dioxide, lithium oxide fumes		

第十	一部分	毒理学	资料
Section 11	Toxicol	ogical	Information

在日常操作和使用中本产品不会引起毒理学性能。

This product does not elicit toxicological properties during routine handling and use.

TRF No.: MSDS Email: de@dlne-cert.com 第 7 页 共 10 页

Report No.: DN-25021212R

	第十二部分 生态学资料	
Section 12 Ecological Information		
生态毒性		
Ecological toxicity		
水生毒性	无相关详细资料。No further relevant information available.	
Aquatic toxicity		
持久性和降解性	无相关详细资料。No further relevant information available.	
Persistence and degradability		
环境系统习性	无相关详细资料。No further relevant information available.	
Behaviour in environmental systems		
潜在的生物累积性	无相关详细资料。No further relevant information available.	
Bioaccumulative potential		
土壤内移动性	无相关详细资料。No further relevant information available.	
Mobility in soil		
生态学资料		
Ecological effects		
总括注解	若无政府许可, 勿将材料排入周围环境。Do not allow material to be	
General notes	released to the environment without proper governmental permits.	
其他副作用	无相关详细资料。No further relevant information available.	
Other adverse effects		

	第十三部分 废弃处置	
Section 13 Disposal Considerations		
废弃处置方法建议	请参考国家和地方的相关法规正确进行处理。	
Waste treatment methods and	Consult state, local or national regulations to ensure proper	
Recommendation	disposal.	
废弃注意事项	废电池不能当作普通垃圾。不能扔进火中或置于高温下。不能解体	
Attention for waste treatment	刺穿,破碎或类似的处理。	
	Deserted batteries couldn't be treated as ordinary trash. Couldn't	
	be thrown into fire or placed in high temperature. Couldn't be	
	dissected, pierced, crushed or treated similarly. Best way is	
	recycling.	

TRF No.: MSDS Email: de@dlne-cert.com 第 8 页 共 10 页

运输方式

Transport Fashion

Shenzhen DL New Energy Testing Technology Co., Ltd.

Report No.: DN-25021212R

第十四部分 运输信息 Section 14 Transport Information		
UN Number	UN3481	
运输专用名称	锂离子电池	
shipping name	Lithium Ion Batteries	
	锂离子电池与设备打包	
	Lithium Ion Batteries Packed With Equipment	
	锂离子电池装在设备中	
	Lithium Ion Batteries Contained In Equipment	
包装标志	第9类	
Lables for package	Class 9	
包装组等级	不适用N/A	
Packing group		
海运污染物质	无No	
Marine pollutant		
运输信息	危险品规例规定,运输前,每一个锂电池设计须需要通过联合国试验和标准手	
Transport information	册38.3节所载的测试。	
	The dangerous goods regulations require that each lithium battery design be	
	subject to tests contained in Section 38.3 of the UN Manual of Tests and	
	Criteria prior offered for transport.	
	符合国际航空协会(IATA)DGR 66th(2025年版)包装说明PI965第IB部分或	
	PI966~ PI967第II部分相关规定	
	The goods are complied with the requirements of Packing Instructions PI965	
	Section IB or PI966~PI967 Section II of 66th DGR Manual of IATA	
	(2025 edition)	
	符合《国际海运危险货物规则》特殊规定188(Amdt. 42-24)	
	The goods are complied with the requirements of Special provision 188 of	

更多关于聚合物锂电池运输,测试,包装等相关规定请参见网址http://www.labelmaster.com.

By air, by sea, by railway, by road.

IMDG CODE (Amdt. 42-24) 空运,海运,铁路,公路。

More information concerning shipping, testing, marking and packaging can be obtained from Label master at http://www.labelmaster.com.

电池相互隔开并防止短路, 泄露, 并装放在结实的容器内运输。

注:该电池在运输过程中应防止剧烈振动、冲击或挤压,防止日晒雨淋。具体细节请参照本文第七部分操作处置与储存。

Separate Lithium-ion batteries when shipping to prevent short-circuiting. They should be packed in strong packaging for support during transport. Take in a cargo of them without falling, dropping, and breakage. Prevent collapse of cargo piles and wet by rain.

TRF No.: MSDS Email: de@dlne-cert.com 第 9 页 共 10 页



第十五部分 法规信息

Report No.: DN-25021212R

Section 15 Regulatory Information

联合国《关于危险货物运输的建议书规章范本》(23修订版)

Recommendations on the transport of dangerous goods-model Regulations 23 Revision

国际航空运输协会《危险品规则》(66版)

IATA dangerous goods regulations 66th

《国际海运危险货物规则》 (IMDG Code) (42-24版)

International maritime dangerous goods code(42-24)

《欧洲道路危险货物国际运输协议》

European Agreement concerning the International Carriage of Dangerous Goods by Road

《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)

《石油污染法案》

The Oil Pollution Act (OPA)

第十六部分 其他信息

Section 16 Additional Information

注意Declare to reader:

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.

备注:报告未经本司的书面批准不得部分复制,检验检测结果仅对测试样品负责。报告经涂改、增删、无批准人签字或未加盖本司检验检测专用章无效。报告未加盖资质认定标志章,则仅用于科研、教学、内部质量控制等活动,不可用作为向社会出具具有证明作用数据的用途。

Remarks:

The results shown in this test report refer only to the sample(s) tested; this test report cannot be reproduced, except in full, without prior written permission of the company. The report would be invalid without specific stamp of test institute and the signatures of compiler and approver. If the report is not stamped with the acc reditation recognized seal, it will only be used for scientific research, education, and internal quality control activities, and is not used for the purpose of issuing supporting data to the society.

=====报告结束 End of Report ======

TRF No.: MSDS Email: de@dlne-cert.com 第 10 页 共 10 页