





中国认可 国际互认 检验 INSPECTION CNAS IB0551



## Certificate for Safe Transport of Goods by Sea

货物海运条件鉴定书

Non-restricted Goods 非限制性货物

Name of Goods

Lithium Battery: ER10450

货物名称

锂电池: ER10450

**Applicant** 

WUHAN FANSO TECHNOLOGY CO., LTD

委托单位

武汉孚安特科技有限公司

**Issue Date** 

签发日期

2024-04-28

Inspected by/检验

Reviewed by/审核

Approved by/批准

Jossey Luo

Inspection Engineer

Audit Engineer

Approval Engineer

la Hongton

广州邦禾检测技术有限公司

Guangzhou MCM Certification & Testing Co., Ltd.



				Technology & Service	
	Ir	spection Conc 检验结论	lusion		
Name of Goods 货物名称	Lithium Battery: ER10 锂电池: ER10450	0450			
Type, Model and Rating 类型、型号参数	Lithium metal batterie 锂金属电池	es : ER10450, 3.6V	, 1000mAh (Lithium cc	ontent= 0.3g)	
Information	Package G.W. 包装毛重	9.6kg	Equipment's Qty. 设备数量	1	
信息	Batteries' N.W. 电池净重	6.9kg	Batteries' Qty. 电池数量	690pcs	
Applicant 委托单位	WUHAN FANSO TECHNOLOGY CO.,LTD 武汉孚安特科技有限公司				
	Village, Hanyang Dist	ahua Technology Indus rict, Wuhan City, China 三村 270 号加华科技产	1	uangjinkou Three	
Manufacturer	WUHAN FANSO TEC 武汉孚安特科技有限公	CHNOLOGY CO., LTD 公司			
Manufacturer 制造单位	Floor 2, Building 3, Jiahua Technology Industrial Park, No. 270, Huangjinkou Three Village, Hanyang District, Wuhan City, China 武汉市汉阳区黄金口三村 270 号加华科技产业园 3 号楼 2 层				
Factory	武汉孚安特科技有限公				
生产单位	Floor 2, Building 3, Jiahua Technology Industrial Park, No. 270, Huangjinkou Three Village, Hanyang District, Wuhan City, China 武汉市汉阳区黄金口三村 270 号加华科技产业园 3 号楼 2 层				
Identification 货物鉴定单位	Guangzhou MCM Certification & Testing Co., Ltd. 广州邦禾检测技术有限公司			)	
Standard 鉴定标准	IMO International Maritime Dangerous Goods Code (41-2022 Edition) IMO《国际海上危险货物运输规则》(41-2022 版)			ion)	
Date	Submission 送检日期	2024-03-20	Appraisal 鉴定日期	2024-04-24	
日期	Validity 有效期	2024-04-28 ~ 2024	-12-31		
Inspection Conclusion: 检验结论:	(1). Hazards identification 危险品识别 Non-restricted Goods 非限制性货物  (2). Basis and provisions of appraisal 鉴定依据及条款 Entry UN 3090 of Dangerous Goods List 危险货物列表 条目 UN 3090  (3). Packing requirements 包装要求 Special Provision 188 特殊条款 188  Seal: 检验专用章:				
Comment: 备注:	1	√17 <u>7</u> -37	4 又川平・		

TRF No.: IMDG/Li-2022 00 page 2 of 8 pages



	IMO International Maritime Dangerous		nology & Service
	IMO《国际海上危险货物运输规 Clause- Requirement 条款-要求	见则》(41-2022 版) Result-Remark 结果-备注	Verdict 判定
Special 特殊条款	Provision 188		Р
1.	For a lithium metal or lithium alloy cell, the lithium content is not more than 1 g; 对于锂金属电芯或锂合金电芯, 锂含量不超过 1g;	0.3g	Р
	For a lithium-ion cell, the watt-hour rating is not more than 20 Wh; 对于锂离子电芯, 瓦特-小时的额定值不超过 20Wh;	Not applicable 不适用	N/A
	For a lithium metal or lithium alloy battery, the aggregate lithium content is not more than 2 g; 对于锂金属电池或锂合金电池,合计锂含量不超过 2g;	Not applicable 不适用	N/A
2.	For a lithium-ion battery, the watt-hour rating is not more than 100 Wh. 对于锂离子电池,瓦特-小时的额定值不超过 100Wh。 Lithium-ion batteries subject to this provision shall be marked with the watt-hour rating on the outer case, except those manufactured before 1 January 2009; 受本规定限制的锂离子电池,须在外壳上标识瓦特-小时的额定值,2009 年 1 月 1 日前制造的锂离子电池除外。	Not applicable 不适用	N/A
3.	Each cell or battery meets the provisions of 2.9.4 2.9.4.7; 每个电芯或电池均符合 2.9.4.1, 2.9.4.5, 2.9.4.6	(如适用)和 2.9.4.7;	Р
2.9.4.1	Each cell or battery is of the type proved to meet the requirements of each test of the Manual of Tests and Criteria, part III, subsection 38.3. 每个电芯或电池按类型满足《试验和标准手册》第 III 部分第 38.3 节每项试验的要求。	The lithium battery met the test requirements of Section 38.3 of UN Manual of Test and Criteria Rev.7/Amend.1, see WHFAT20240320U01  理电池符合联合国《试验和标准手册》 Rev.7/Amend.1 中 38.3 章的测试要求,检测报告见 WHFAT20240320U01	Р
2.9.4.5	Cells and batteries shall be manufactured under a quality management programme. 电芯和电池应在质量管理计划下生产。	The customer states that it meets the requirements. 客户申明满足要求。	Р

TRF No.: IMDG/Li-2022 00 page 3 of 8 pages



			chnology & Service
	IMO International Maritime Dangerous		
	IMO《国际海上危险货物运输规 Clause- Requirement	紀则》(41-2022 成) Result-Remark	Verdict
	条款-要求	结果-备注	判定
	Lithium batteries, containing both primary	21水 田江	79,00
	lithium ion cells metal cells and rechargeable		
	lithium ion cells, that are not designed to be		
	externally charged(see special provision 387 of		
	chapter 3.3) shall meet the following conditions:		
	.1 the rechargeable lithium ion cells can be only		
	charged from the primary lithium metal cells.		
	.2 overcharge of the rechargeable lithium ion		
	cells is precluded by design;		
	.3 the battery has been tested as a lithium		
	primary battery; and		
	.4 component cells of the battery shall be of a	The battery does not belong to this	
2.9.4.6	type proved to meet the respective testing	type	N/A
	requirements of the Manual of Tests and	电池不属于此种类型	
	Criteria, part III, subsection 38.3.		
	按设计要求不能外部充电的既含有一次性锂金		
	属电芯又含有可充电锂离子电芯的电池(见第		
	3.3 章节特殊规定 387), 必须满足下列条件:		
	.1 可充电锂离子电芯仅能通过一次性锂金属		
	电芯充电;		
	.2 通过设计排除了可充电锂离子电池发生过		
	充现象的可能性; .3 整个电池已经作为一次性电池通过实验;且		
	.3 整个电池已经作为一次性电池通过实验;且  .4 组成电池的各个电芯必须分别通过《试验及		
	标准手册》第Ⅲ部分第38.3节中的实验。		
	Except for button cells installed in equipment		
	(including circuit boards), manufactures and		
	subsequent distributors of cells or batteries		
	manufactured after 30 June 2003 shall make	Lithium battery test summary is	
	available the test summary as specified in the	provided as required:	
2.9.4.7	Manual of Tests and Criteria, part III,	WHFAT20240320UG01	Р
	subsection 38.3, paragraph 38.3.5.	锂电池按要求提供了测试概要:	
	除安装在设备(包括电路板)中的纽扣电池外,	WHFAT20240320UG01	
	2003年6月30日之后制造的电芯或电池的制造		
	商和后续分销商必须提供《试验和标准手册》第		
	三部分第38.3 小节第38.3.5 段规定的测试概要。		
	Cells and batteries, except when installed in		
	equipment, shall be packed in inner packagings		
	that completely enclose the cell or battery. Cells		
	and batteries shall be protected so as to prevent short circuits. This includes protection		
	against contact with electrically conductive	Equivalent protection	
	material within the same packaging that could	existed	P
	lead to a short circuit.	   已有相当防护措施	
4.	电芯和电池,除安装在设备中外,应采用完全包		
	裹电芯或电池的内包装进行包装。应保护电芯和		
	电池,以防止短路。这包括防止与同一封装内的		
	导电材料接触,从而导致短路。		
	The inner packagings shall be packed in strong		
	outer packagings which conform to the	Strong outer packagings, Complied	
	provisions of 4.1.1.1, 4.1.1.2, and 4.1.1.5;		Р
	内包装应采用符合 4.1.1.1、4.1.1.2 和 4.1.1.5 规	坚固外包装箱,满足要求	
	定的坚固外包装包装;		

TRF No.: IMDG/Li-2022 00 page 4 of 8 pages



Technology & Service IMO <i>International Maritime Dangerous Goods Code</i> (41-2022 Edition) IMO《国际海上危险货物运输规则》(41-2022 版)				
	IMO《国际海上厄险页彻运潮》 Clause- Requirement 条款-要求	Result-Remark 结果-备注	Verdict 判定	
	Cells and batteries when installed in equipment shall be protected from damage and short circuit, and the equipment shall be equipped with an effective means of preventing accidental activation. 安装在设备中的电芯和电池,应保护以防损坏和短路,且设备应装配有效的防止意外激活的措施。	Batteries transport separated from equipment 电池单独运输	N/A	
5.	When batteries are installed in equipment, the equipment shall be packed in strong outer packagings constructed of suitable material of adequate strength and design in relation to the packaging's capacity and its intended use unless the battery is afforded equivalent protection by the equipment in which it is contained; 当电池安装在设备中时,设备应包装在坚固的外包装中,外包装由适当的材料制成,其强度和设计与包装的容量及其预期用途有关,除非装有电池的设备能提供同等的保护;	Not applicable 不适用	N/A	
	Each package shall be marked with the appropriate lithium battery marking, as illustrated in 5.2.1.10. 每个包装件都应按照 5.2.1.10 所示,标有相应的理电池标签。	See the package photo of page 7 见第 7 页的包装照片	Р	
6.	This requirement does not apply to: .1 packages containing only button cell batteries installed in equipment (including circuit boards); or .2 packages containing no more than four cells or two batteries installed in equipment, where there are not more than two packages in the consignment. 这项要求不适用于以下情况: .1 包装件内只有安装在设备上(包括电路板上)的纽扣电池: 或 .2 包装件内只有不超过 4 个安装在设备上的电芯或 2 个电池,每批货物的包装件不超过 2 个。	Not applicable 不适用	N/A	
7.	Except when cells or batteries are installed in equipment, each package shall be capable of withstanding a 1.2 m drop test in any orientation without damage to cells or batteries contained therein, without shifting of the contents so as to allow battery to battery (or cell to cell) contact and without release of contents; and 除安装在设备上的电芯或电池外,每个包装件以任何方向进行 1.2 米跌落试验都能够不使其中所装的电芯或电池受损,不造成内装物移动,以致电池与电池(或电芯与电芯)互相接触,并且没有内装物释出;和	Report No./报告编号: WHFAT20240320D02	Р	
8.	Except when cells or batteries are installed in or packed with equipment, packages shall not exceed 30 kg gross mass. 除非电芯或电池安装在设备上或与设备打包在一起,否则包装件总重不得超过 30kg。	Batteries transported separated from equipment, and Gross mass:9.6kg 电池单独运输,毛重: 9.6kg	Р	

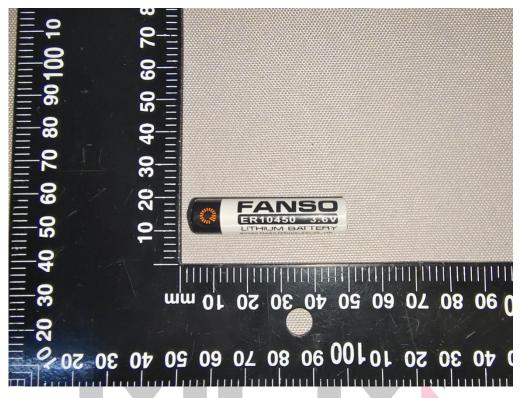
TRF No.: IMDG/Li-2022 00 page 5 of 8 pages

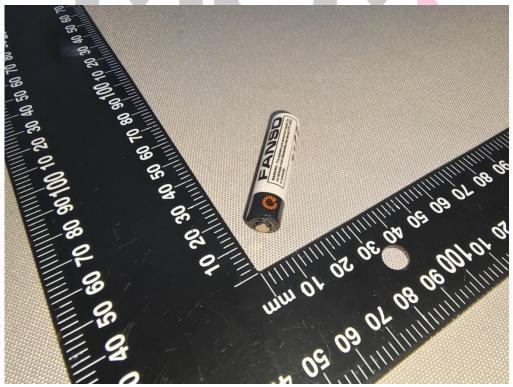


## **Photos of the Cell**

电芯照片

Cell (ER10450, 3.6V, 1000mAh (Lithium content= 0.3g))





TRF No.: IMDG/Li-2022 00 page 6 of 8 pages



## Photos of the Package 包装件照片





-- End of Report -

TRF No.: IMDG/Li-2022 00 page 7 of 8 pages



## Important Note 注意事项

1. This inspection report is invalid without special inspection seal and cross-page seal of Guangzhou MCM Certification & Testing Co., Ltd.

本检验报告无广州邦禾检测技术有限公司检验专用章、骑缝章无效。

2. Nobody is allowed to partly photocopy this inspection report without written permission of Guangzhou MCM Certification & Testing Co., Ltd.

未经广州邦禾检测技术有限公司书面同意,不得部分复印本检验报告。

- 3. This inspection report is invalid without the signatures of Approver, Reviewer and Inspector. 本检验报告无批准人、审核人及检验员签名无效。
- 4. This inspection report is invalid if altered.

本检验报告涂改无效。

5. Objection to this inspection report must be submitted to Guangzhou MCM Certification & Testing Co., Ltd. within 15 days after the publication of the report.

若对检验报告有异议,必须在报告发布之日起十五天内向广州邦禾检测技术有限公司提出。

- 6. This report is only responsible for the received samples. 本报告仅对来样负责。
- 7. As for the inspection results, "N/A" means "Not applicable", "P" means "Pass" and "F" means "Fail".

本检验结果中"N/A"表示"不适用", "P"表示"通过", "F"表示"不通过"。

Identification Guangzhou MCM Certification & Testing Co., Ltd.

货物鉴定单位 广州邦禾检测技术有限公司

Building 2 No. 45 Zhong Er Section of Shiguang Road, Zhongcun Street, Panyu District, Guangzhou City, Guangdong Province, China.

中国 广东省广州市番禺区钟村街市广路钟二路段 45 号 2 栋

Tel 电话: +86-20-3477 7662 或 0086-020-3477 7662

Email 电子邮箱: <u>service@mcmtek.com</u>

Web 公司网址: https://www.mcmtek.com

TRF No.: IMDG/Li-2022 00 page 8 of 8 pages