中国认可
检验
INSPECTION
CNAS IB0396

货物运输条件鉴定报告

Certificate for Safe Transport of Goods

(海运/by Sea)

危险物品
DANGEROUS GOODS

物品名称:	可充电锂离子电池系统 MF-GREENE-BAT 51.2V 100Ah 5.12kWh
Goods Name	Rechargeable Li-ion Battery System MF-GREENE-BAT 51.2V 100Ah 5.12kWh
委托单位:	Master Battery S.L.
Client	
报告编号:	DGT2313DL1016770P
Report No.	
生效日期:	2023-03-07
Effective Date	

中国民用航空总局第二研究所

The Second Research Institute of CAAC

2023-03-07 第 1 次打印

声 明

STATEMENT

1.本《鉴定报告》依据本年度国际海事组织《国际海运危险货物规则》、委托人（托运人或代理人）提供的物品及其运输信息出具。

The certificate is issued by The Second Research Institute of CAAC according to IMO IMDG Code published in the current year and the information of the goods and its shipment provided by the client (shipper or its agent).

2.本《鉴定报告》的鉴定结论仅对样品负责。

The certificate is only responsible for the sample provided by the client.

3.客户必须如实提供样品及资料，并保证申报品名和样品与运输货物相同。

The client should provide samples and relevant data, at the same time, and they should guarantee that the name they declared is the same as the samples they provided and the goods to be transported.

4.本《鉴定报告》经检验人、审核人、批准人签字并加盖检验印章后生效。

The certificate will be effective only after it is signed by the inspector, checker, and approver, and stamped.

5.本《鉴定报告》不得全部或部分复制，复制无效。本鉴定报告私自转让、复制、盗用、冒用、涂改或以任何媒体形式篡改的均属无效。

The certificate must not be copied wholly or partly. The certificate is invalid if anything of the following happens, such as illegal transfer, reproduction, embezzlement, imposture, modification or tampering in any media form.

6.本《鉴定报告》不考虑国家及经营人差异。

The certificate takes no account of the State and Operator Variations.

7.本《鉴定报告》仅在本年度内有效。

This certificate is only valid within the current year.

8.对《鉴定报告》若有异议，应于收到报告之日起十五日内向本机构提出。

Objections to the certificate must be submitted to The Second Research Institute of CAAC within 15 days.

地址：成都双流西航港经济开发区腾飞路 765 号

Address: No.765, Tengfei Road, Xihanggang Economic Development Zone, Shuangliu, Chengdu, Sichuan

电话(Tel)：028-64458155 028-64458156

传真(Fax)：028-64458195

邮编(Post Code)：610200

报告查询网址：http://service.caacdgt.com

货物运输条件鉴定报告

Certificate for Safe Transport of Goods

鉴定目的 **Inspection Purpose**	是否属于海运危险品 Dangerous goods or not restricted		
样品编号 **Sample No.**	DGT2313DL1016770	接样日期 **Receiving Date**	2023-03-06
鉴定依据 **Criteria**	国际海事组织《国际海运危险品规则》40-20 2020 版 IMO International Maritime Dangerous Goods(IMDG) Code 40-20 2020 Edition		
样品名称 **Sample Name**	可充电锂离子电池系统 MF-GREENE-BAT 51.2V 100Ah 5.12kWh Rechargeable Li-ion Battery System MF-GREENE-BAT 51.2V 100Ah 5.12kWh		
委托单位 **Client**	Master Battery S.L.		
电池生产单位 **Manufacturer**	宁德时代科士达科技有限公司 CATL-KSTAR Science and Technology Co., Ltd		
物品信息 **Sample Information**	**-电池信息/Battery information：** 型号/ Model: MF-GREENE-BAT 51.2V 100Ah 5.12kWh 类型/Type:锂离子电池/Li-ion battery 商标/Brand Mark: / **-包装信息/Package information：** 包装件内含 1 个锂电池。 The package contains 1 Lithium battery.		
鉴定结论 **Conclusion**	1.危险性识别(Hazards Identification) 危险类别/Class: 9 UN Number: UN 3480 Proper Shipping Name: Lithium ion batteries 2. 按照 IMO IMDG Code 办理的类型（Suggestion according to IMO IMDG Code） 该样品满足包装说明 P903 的要求。 The sample meets the requirements of Packing Instruction P903. 3.包装要求(Packing requirements) 按包装说明 P903 要求办理。 The sample is packaged according to the Packing Instruction P903. 鉴定单位盖章(Stamp) 签发日期(Issued Date):2023-03-07		
备注（Comment）	包装必须符合 II 级包装性能标准。		

检验: (Inspected by) 李娜 审核: (Checked by) 李志 批准: (Approved by) 王章淦

中国民用航空总局第二研究所 检验专用章

货物运输条件鉴定报告

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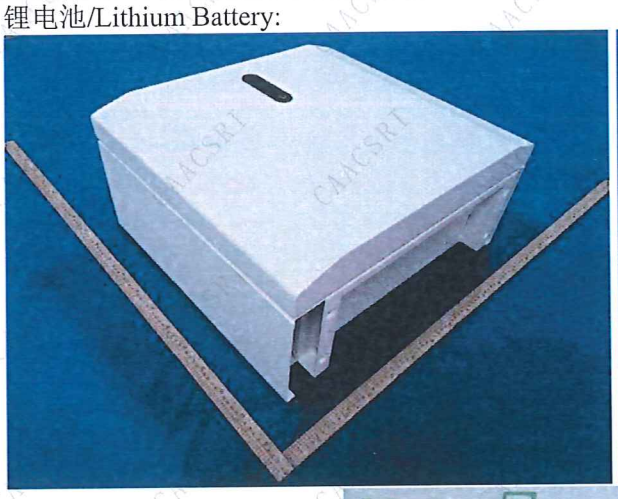
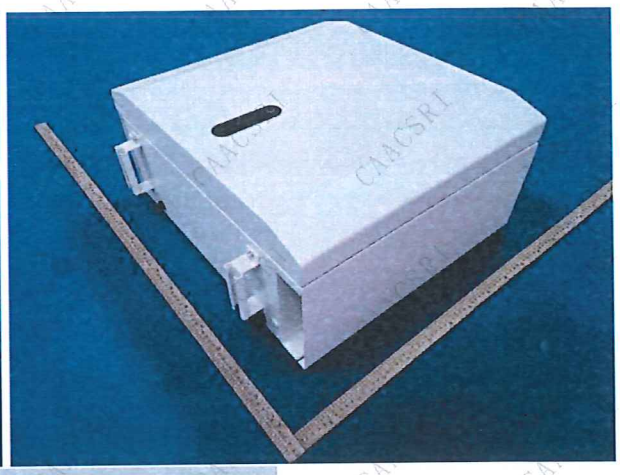
检验结果及其他事项 Inspection results and other information	
1	本报告所述锂电池按照《国际海运危险品规则》40-20（2020 版）2.9.4.5 规定的质量管理体系进行制造。 Lithium batteries listed in this report are manufactured under the quality management program as described in IMO IMDG Code 40-20 2020 Edition 2.9.4.5. 本报告所述锂电池不属于有缺陷或已损坏的锂电池。 Lithium batteries listed in this report are not damaged or defective lithium batteries. 本报告所述锂电池不属于为处理或回收而运输的锂电池。 Lithium batteries listed in this report are not disposal or recycling lithium batteries.
2	本报告所述锂电池已经通过联合国《试验与标准手册》第III部分第 38.3 节的测试。测试摘要详见附件。 Lithium batteries listed in the report are of the type proved to meet the requirements of each test of the UN *Manual of Tests and Criteria,* Part III, subsection 38.3. The test summary is detailed in the attachment.
3	本报告所述锂电池具有适当的防外部短路措施。 Lithium batteries are equipped with an effective means of preventing external short circuits. 本报告所述锂电池应采取保护措施，以防电池因在容器中的移动或位置变化而造成损坏。 Lithium batteries shall be packed in packagings so that the cells or batteries are protected against damaged that may be caused by the movement of the cell or batteries within the packaging. 本报告所述锂电池的容器必须达到 II 类包装的性能指标。 Packaging shall conform to the packing group II performance level.
4	对于重量在 12kg 及以上的，采用坚固、耐碰撞外壳的电池或集合电池，还需要： （a）坚固的外包装； （b）保护外罩（如完全封闭的或木制的板条箱）；或 （c）托盘或其他搬运设备。 电池必须紧固以防意外移动，电极不得承受其他堆放物品的重量。 In additional for cells or batteries with a gross mass of 12kg or more employing a strong, impact resistant outer casing, and assemblies of such cells or batteries: (a) Strong outer packagings; (b) Protective enclosures(e.g. fully enclosed or wooden slatted crates); or (c) Pallets or other handling devices. Cells or batteries shall be secured to prevent inadvertent movement, and the terminals shall not support the weight of other superimposed elements.
5	每个包装件必须耐久清晰的标识锂电池标签。 Each package must be durably and legibly marked with the lithium battery label.
6	附图/pictures

锂电池/Lithium Battery:





MasterPower®
Unlimited power

Model: MF-GREENE-BAT

Rechargeable Li-ion Battery System
IFpP35/174/202/[(8S)2S]M/-10+40/90

Battery type:	LiFePO4
Rated capacity:	100Ah
Rated energy:	5.12kWh
Nominal voltage:	51.2Vd.c.
Protection degree:	IP65
Operating ambient Temperature:	0°C~+50°C(Charging)/ -10°C~+50°C(Discharging)
Operation voltage range:	44.8~56.5Vd.c.
Maximum discharge current:	80Ad.c.
Maximum discharge power:	4.096kW
Maximum charge current:	50Ad.c.
Maximum charge power:	2.825kW
Protection class:	I

包装件/Package:

——以下无正文内容——

民航局第一研究所 检验专用章

附件：

测试摘要
TEST SUMMARY

电池生产商信息/Manufacturer information			
电池生产商 Manufacturer	宁德时代科士达科技有限公司 CATL-KSTAR Science and Technology Co., Ltd		
生产商地址 Address	福建省宁德市霞浦经济开发区松山路 8 号 No.8 Songshan Road, Xiapu Economic Development Zone, Ningde City, FujianProvince, China		
联系电话/Tell	+86-18928484760	电子邮箱 E-mail	LeiGX@catlkstar.com
网站地址/website	www.catlkstar.com		
电池信息/Battery information			
电池类型 Type	锂离子电池 Lithium ion Battery	型号 Model	MF-GREENE-BAT
额定能量 Rated Energy	5.12kWh	电池质量 Mass	约 54.5kg
物理形状说明 Physical description	长方体 Cuboid		
测试机构信息/Test laboratory information			
测试机构 test laboratory	广东科正技术服务有限公司 KSIGN(Guangdong) Testing Co., Ltd.		
机构地址 Address	广东省深圳市宝安区沙井街道沙头社区民主九九工业区福源厂新厂房 A 区 C 栋一层西侧，518104 West Side of 1/F., Building C, Zone A, Fuyuan New Factory, Jiujiu Industrial Park, Minzhu, Shatou, Shajing, Bao'an District, Shenzhen, Guangdong, China		
联系电话 Tell	0755-29852678	电子邮箱 E-mail	info@gdksign.cn
网站地址/website	http: www.gdksign.com		
测试报告信息/Test report information			
报告编号/Test report ID	KS2212S5989B01&KS2212S5989B01R1		
接样日期 Receiving date	2022-11-24	测试日期 Testing date	2022-11-24 ~2022-12-29
测试人员 Tester	黄思奇	批准人员 Approver	杨龙

测试项目及结论/Test item and result

条款/Clause	测试项目/Test Item	结论/Result	备注/Remark
38.3.3(f)	小型集成电池 small battery assemblies	不适用 N/A	/
38.3.3(g)	大型集成电池 Large battery assemblies	不适用 N/A	/
38.3.4.1	高度模拟/Altitude simulation	通过/Pass	/
38.3.4.2	温度试验/Thermal test	通过/Pass	/
38.3.4.3	振动/Vibration	通过/Pass	/
38.3.4.4	冲击/Shock	通过/Pass	/
38.3.4.5	外部短路/External short circuit	通过/Pass	/
38.3.4.6	重物冲击/Impact	不适用 N/A	/
	挤压/Crush	通过/Pass	/
38.3.4.7	过度充电/Overcharge	通过/Pass	/
38.3.4.8	强制放电/Forced discharge	通过/Pass	/

结论/Result：

样品满足联合国《试验与标准手册》第 7 修订版修正 1 第 38.3 节的测试要求。

The sample meets the requirement of UNITED NATIONS Manual of Tests and Criteria ST/SG/AC.10/11/Rev.7/Amend.1, section 38.3.

*测试摘要信息由委托客户提供。

The information of Test Summary about UN38.3 is provided by client.

运输信息 **Transport Information**		
件数 **Pieces**		本栏内容由托运人或其代理人在使用本鉴定书时填写，不属于鉴定内容。运输信息及实际运输货物与鉴定书的一致性由托运人或其代理人保证并承担全部责任。请认真填写本栏内容并盖章。 签字人：　　盖章：
运单号 **Waybill No.**		
目的港 **Destination**		

——以下无内容——