



# 货物运输条件鉴定报告

# **Certificate for Safe Transport of Goods**

(海运/By Sea)

| 物品名称:             | 磷酸铁锂可充电锂离子电4.5Ah 3.2V 14.4Wh                                 | E池组 ELUBAT 275831 |  |
|-------------------|--|-------------------|--|
| <b>Goods Name</b> | LiFePO4 rechargeable battery ELUBAT 275831 3.2V 4.5Ah 14.4Wh |                   |  |
|                   |  |                   |  |
| 委托单位:             | Polynom ag   |                   |  |
| Client            |  |                   |  |
| 报告编号:             | DGT2022DL1985S   |                   |  |
| Report No.        | - 65   |                   |  |
| 生效日期:             | 2022-06-15   |                   |  |
| Effective Date    |  |                   |  |

中国民用航空总局第二研究所 The Second Research Institute of CAAC

## 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 shall provide samples and relevant data, at the same time, and they shall 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.为适应国际海事组织《国际海运危险货物规则》的年度变化,本《鉴定报告》仅在本年度 内有效。

This certificate is only valid within the year in which the IMO IMDG Code is effective.

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 CASRI-DGI 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

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|--|--|---------------------------|---------------------|--|
| 鉴定目的   | 是否属于海运危险品  | .2                        | _Q_7                |  |
| Inspection Purpose   | Dangerous Goods or not restricted  |                           |                     |  |
| 样品编号<br>Sample No.   | DGT2022DL1985  | 接样日期<br>Receiving Date    | 2022-06-14          |  |
| 鉴定依据   | 国际海事组织《国际海运危险品   | 7. 1                      |                     |  |
| Criteria   | IMO International Maritime Dangerous Goods(IMDG) Code 40-20 2020 Edition   |                           |                     |  |
| 样品名称<br>Sample Name  | 磷酸铁锂可充电锂离子电池组 ELUBAT 275831 4.5Ah 3.2V 14.4Wh<br>LiFePO4 rechargeable battery ELUBAT 275831 4.5Ah 3.2V 14.4Wh  |                           |                     |  |
| 委托单位<br>Client   | Polynom ag   | <u> </u>                  | 765                 |  |
| 电池生产单位<br>Manufacturer   | Sander Elektronik AG   |                           |                     |  |
| 物品信息<br>Sample Information   | -电池信息/Battery information:<br>型号规格/ Model: ELUBAT 2758<br>类型/Type: 锂离子电池/Lithium<br>商标/Brand Mark: /<br>-包装信息/Package information:<br>每个包装件毛重不超过 30.0kg。<br>The gross weight of each package<br>包装件内含 40 个锂离子电池。 | ion battery               |                     |  |
| <u> </u>   | The package contains 40 Lithium i  |                           |                     |  |
|  | 1.危险性识别(Hazards Identifica   | ation)                    |                     |  |
|  | 锂离子电池<br>Lithium ion Batteries   |                           |                     |  |
|  | 2. 按照 IMO IMDG Code 办理的Code)<br>该样品满足特殊说明 188, 按非<br>The sample is not subject to the  | 限制性货物条件办理。                |                     |  |
| 鉴定结论<br>Conclusion   | Provision 188.   | ile INIO INIDO Code,      | according to specia |  |
|  | 3.包装要求(Packing requirements<br>无   |                           |                     |  |
|  | None.  | W ch H ch 关 亲 / O         | 改总局第一               |  |
|  | × V.   | 鉴定单位盖章(Sta<br>签发日期(Issued | mp) Date 2022-06-15 |  |
| 备注 (Comment)   |  | 亚/X 口 为 (155 U C U        | 2022-00-13          |  |

检验:

(Inspected by)

审核

(Checked by):

批准:

(Approved by)



# 货物运输条件鉴定报告

|   | Certificate for Safe Transport of Goods   |
|---|---|
| 2 | 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 cells and 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和因安全原因而召回的锂电池。 Lithium cells and batteries listed in this report are not defective and returned to the manufacturer for safety reasons ones. 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 cells and batteries listed in the report are of type proved to meet the requirements of each test |
| 2 | of the UN <i>Manual of Tests and Criteria</i> , Part III, subsection 38.3. The test summary is attached. 本报告所述锂电池包装件能够承受 1.2 米跌落试验。   |
|   | The package is capable of withstanding a 1.2 m drop test.   |
| 3 | 本报告所述锂电池具有适当的防外部短路措施。 Lithium cells and batteries are equipped with an effective means of preventing external short circuits. 设备固定在外包装内以免移动。 The equipment is secured against movement within the outer packaging. 设备配置防止发生意外启动的有效手段。   |
|   | The equipment is equipped with an effective means of preventing accidental activation. 设备装入由适当材料构造的坚固外包装件内。 The equipment is packed in strong rigid outer packaging constructed of suitable materials.  |
| 4 | 每个包装件必须标识锂电池标记。 Each package must be marked with a Lithium Battery Mark. 本要求不适用于: - 包装件仅含有安装在设备(包括线路板)内的纽扣电池;和 - 托运货物不超过两个包装件,且每个包装件中安装在设备内的电池芯不超过 4 颗或电池组不超过 2 颗。 This requirement does not apply to: - packages containing only button cell batteries installed in equipment(including circuit boards); and - consignments of two packages or less where each package contains no more than four cells or two batteries installed in equipment.   |
| 5 | 每个包装件应按以下要求进行标记,每批货物提供含以下要求的随附文件。 —标明包装件内装有"锂金属"或"锂离子"电池芯或电池组。 —标明包装件必须小心轻放,如果包装件损坏,有着火的危险。 —标明如包装件受到损坏,必须遵守的特别程序,包括检查和必要时重新包装。 —了解其它情况的电话号码。 Each package shall be marked with the following requirements, and each consignment shall be accompanied with a document including that: —The package contains "lithium metal" or "lithium ion" cells or batteries.  |

- —The package must be handled with care and that a flammability hazard exists if the package is
- —Special procedures must be followed in the event the package is damaged, to include inspection and repacking if necessary.
- —A telephone number for additional information.

## 电池/Battery:







REF 275831

LiFePO4 rechargeable battery 3.2V -4.5Ah - 14.4Wh (E)
Manufacturing date: 16/2022
Type (EN62620): IFpR19/66/[3P]M/0+60/NA---(EN61960): IIFpR19/66-3

## 包装件/Package:







以下无正文内

# 附件:

# 测试摘要 TEST SUMMARY

| 电池生产商   |  |  |      |  |
|---|--|--|------|--|
| 电枢生厂向<br>Manufacturer   | Sander Elektronik A  | G O  |      |  |
| 生产商地址   | Stauseestrasse73, CH-5314, Kleindöttingen, Switzerland   |  |      |  |
| Address   |  |  |      |  |
| 联系电话  | +41764315555   | 电子邮箱   | eri  | ka.noe@sanderelek.                     |
| Tell  |  | E-mail   | ch   |  |
| 网站地址/website  | https://www.sandere  | ek.ch  |      | (5)                                    |
|   |  |  |      |  |
| 电池信息/Battery inform   | ation  |  | 1    | Lat.                                   |
| 电池类型  | 锂离子电池  | 型号   |      | 275831                                 |
| Туре  | Lithium-ion battery  | Model  |      |  |
| 额定能量  | 14.4Wh   | 电池质量   | 量    | 约(120±20)g                             |
| Energy  |  | Mass   |      |  |
| 物理形状说明  | 圆柱形  |  |      |  |
| Physical description  | Cylindrical  |  |      |  |
| Car S   |  | <u> </u>   | 1    | 7                                      |
| 测学机 投停 自 / 12   | . 6  | 7  |      |  |
| 火川スグレバシ / in 尼 / Lest labo.   | ratory information   |  |      |  |
| 7.4   | ratory information<br>枣庄市产品质量监   | Y 检验所  |      |  |
| <b>测试机构信息/Test labo</b><br>测试机构<br>test laboratory  |  |  | sion | and Inspection or                      |
| 测试机构  | 枣庄市产品质量监督  |  | sion | and Inspection or                      |
| 测试机构<br>test laboratory   | 枣庄市产品质量监想<br>Zaozhuang Institute   | of Supervi   | sion | and Inspection or                      |
| 测试机构<br>test laboratory<br>机构地址   | 枣庄市产品质量监想<br>Zaozhuang Institute<br>Product Quality  | of Supervi<br>夏元三路   |      |  |
| 测试机构<br>test laboratory<br>机构地址   | 枣庄市产品质量监想<br>Zaozhuang Institute<br>Product Quality<br>山东省枣庄高新区数   | of Supervi<br>夏元三路<br>, High-tech                                |      |  |
| 测试机构<br>test laboratory<br>机构地址<br>Address  | 枣庄市产品质量监想 Zaozhuang Institute Product Quality 山东省枣庄高新区 Fuyuan 3rd Road   | of Supervi<br>夏元三路<br>, High-tech                                | n D  |  |
| 测试机构<br>test laboratory<br>机构地址<br>Address  | 枣庄市产品质量监想 Zaozhuang Institute Product Quality 山东省枣庄高新区 Fuyuan 3rd Road Shandong, P. R. Chir  | of Supervi<br>夏元三路<br>, High-tech<br>na.                         | n D  | istrict, Zaozhuang                     |
| 测试机构<br>test laboratory<br>机构地址<br>Address<br>联系电话/Tell   | 枣庄市产品质量监想 Zaozhuang Institute Product Quality 山东省枣庄高新区 Fuyuan 3rd Road Shandong, P. R. Chir  | of Supervi<br>夏元三路<br>, High-tech<br>na.<br>电子邮约<br>E-mail       | n D  | istrict, Zaozhuang                     |
| 测试机构<br>test laboratory<br>机构地址<br>Address<br>联系电话/Tell   | 枣庄市产品质量监想 Zaozhuang Institute Product Quality 山东省枣庄高新区 Fuyuan 3rd Road Shandong, P. R. Chir 86-0632-8637868  | of Supervi<br>夏元三路<br>, High-tech<br>na.<br>电子邮约<br>E-mail       | n D  | istrict, Zaozhuang                     |
| 测试机构 test laboratory 机构地址 Address 联系电话/Tell 网站地址/website  | 枣庄市产品质量监想 Zaozhuang Institute Product Quality 山东省枣庄高新区 Fuyuan 3rd Road Shandong, P. R. Chir 86-0632-8637868 www.guojialidianjian   | of Supervi<br>夏元三路<br>, High-tech<br>na.<br>电子邮约<br>E-mail       | n D  | istrict, Zaozhuang                     |
| 测试机构 test laboratory  机构地址 Address 联系电话/Tell  网站地址/website  | 枣庄市产品质量监想 Zaozhuang Institute Product Quality 山东省枣庄高新区 Fuyuan 3rd Road Shandong, P. R. Chir 86-0632-8637868 www.guojialidianjian   | of Supervi<br>夏元三路<br>, High-tech<br>na.<br>电子邮约<br>E-mail       | n D  | istrict, Zaozhuang                     |
| 测试机构 test laboratory  机构地址 Address 联系电话/Tell  网站地址/website <b>测试报告信息/Test repo</b> 报告编号/Test report ID      | 枣庄市产品质量监控 Zaozhuang Institute Product Quality 山东省枣庄高新区 Fuyuan 3rd Road Shandong, P. R. Chir 86-0632-8637868 www.guojialidianjian rt information UNWT(2022)05042            | of Supervi<br>夏元三路<br>, High-tech<br>na.<br>电子邮约<br>E-mail       | n D  | istrict, Zaozhuang<br>gjldzjzx@163.com |
| 测试机构 test laboratory  机构地址 Address 联系电话/Tell  网站地址/website <b>测试报告信息/Test repo</b> 报告编号/Test report ID 接样日期 | 枣庄市产品质量监想 Zaozhuang Institute Product Quality 山东省枣庄高新区 Fuyuan 3rd Road Shandong, P. R. Chir 86-0632-8637868 www.guojialidianjian rt information UNWT(2022)05042 2022-04-24 | of Supervi<br>夏元三路<br>,High-tech<br>na.<br>电子邮约<br>E-mail        | n D  | istrict, Zaozhuang                     |
| 测试机构  | 枣庄市产品质量监控 Zaozhuang Institute Product Quality 山东省枣庄高新区 Fuyuan 3rd Road Shandong, P. R. Chir 86-0632-8637868 www.guojialidianjian rt information UNWT(2022)05042 2022-04-24 | of Supervi<br>夏元三路<br>, High-techna.<br>电子邮<br>E-mail<br>nce.com | n D  | gjldzjzx@163.com                       |

# 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 |
|-----------|-----------------------------|-----------|-----------|
| 20 2 2(6) | 小型集成电池                      | 不适用       | 1 (2)     |
| 38.3.3(f) | small battery assemblies    | N/A       | - Pr      |
| 20.2.2(-) | 大型集成电池                      | 不适用       | 1         |
| 38.3.3(g) | Large battery assemblies    | N/A       | J.        |
| 38.3.4.1  | 高度模拟/Altitude simulation    | 通过/Pass   | 1         |
| 38.3.4.2  | 温度试验/Thermal test           | 通过/Pass   | 1 0       |
| 38.3.4.3  | 振动/Vibration                | 通过/Pass   | 1,0       |
| 38.3.4.4  | 冲击/Shock                    | 通过/Pass   |           |
| 38.3.4.5  | 外部短路/External short circuit | 通过/Pass   | 7         |
| 38.3.4.6  | 重物冲击/Impact                 | 通过/Pass   | /         |
|           | 挤压/Crush                    | 不适用/N/A   | /         |
| 38.3.4.7  | 过度充电/Overcharge             | 不适用/N/A   | 1         |
| 38.3.4.8  | 强制放电/Forced discharge       | 通过/Pass   | 1         |

## 结论/Result:

样品满足联合国《试验与标准手册》第7修订版第38.3节的测试要求。

The sample meets the requirement of UNITED NATION Manual of Test and Criteria ST/SG/AC.10/11/Rev.7 section 38.3.

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



<sup>\*</sup>测试摘要信息由委托客户提供。

