

材料安全数据表

Material Safety Data Sheet

产品名称: 镍氢可充电电池 AAA800mAh 1.2V

Name of Products: Ni-MH Rechargeable Battery AAA800mAh 1.2V

委托单位: /

Applicant: Grandstream Networks, Inc.

生效日期:
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Date of issue:

Shenzhen NTEK New Energy Technology Co., Ltd.

深圳市北测新能源技术有限公司

1. 化学品及企业标识

CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

产品名称 Name of Products	镍氢可充电电池 Ni-MH Rechargeable Battery
型号 Model/Type	AAA800mAh 1.2V
额定参数 Ratings	1.2V 800mAh
委托单位 Applicant	Grandstream Networks, Inc.
委托单位地址 Address of Applicant	126 Brookline Ave., 3rd Floor Boston, MA 02215, USA
生产厂商 Manufacturer	深圳市倍特力电池有限公司 Shenzhen Betterpower Battery Co., Ltd
生产厂商地址 Address of manufacturer	中国深圳市龙华区大浪街道石凹同富邨工业园11栋 No.11 Bldgs, Tongfucun Industrial zone, Shiao, Dalang, Longhua New District, Shenzhen, China
鉴定依据 Inspection according to	联合国《关于危险品货物运输的建议书》 UN "Recommendations on the TRANSPORT OF DANGEROUS GOODS" EEC Directive 93/112/EC
应急电话 Emergency telephone call	+86-755-28078088
报告生效日期 Report effective date	2025-01-01
编制人 Prepared by	陈嘉南 Jake Chen
批准人 Approved by	张士杰 Jesse Zhang
	报告单位（盖章） Seal of NTEK

2. 危险性概述

Hazards Identification

正常使用无特殊健康危害。

No specific health hazards for normal use.

进入的路线

眼睛，皮肤，吸入，食入

Routes of Entry

Eyes, Skin, Inhalation, Ingestion.

健康危害

这些化学品装在一个密封的罐子里。暴露的风险只发生在机械或电滥用电池。最可能的风险是当电池排气时的急性暴露。泄漏材料暴露于皮肤、眼睛可能引起刺激。吸入烟雾引起呼吸道发炎。

Health Hazards

These chemicals are contained in a sealed can. Risk of exposure occurs only if the battery is mechanically or electrically abused. The most likely risk is acute exposure when a battery vents. Leaking material exposure to skin, eyes may cause irritation. Inhalation of fumes may cause respiratory irritation.

暴露的症状/反应

泄漏会在与皮肤接触时引起热烧伤和化学烧伤。

Sign/Symptoms of Exposure

Leaking can cause thermal and chemical burns upon contact with the skin.

3. 成分/组成信息

COMPOSITION INFORMATION

化学成分 Chemical Composition	CAS 号 CAS No.	重量百分比 Weight (%)
Neodymium	7440-00-8	0.1
Nickel	7440-02-0	35.5
Nickelous hydroxide	12054-48-7	28.5
lanthanum	7439-91-0	12.5
Cerium	7440-45-1	11
Cobalt	7440-48-4	7.6
Manganese	7439-96-5	3.0

Potassium hydroxide	1310-58-3	1.0
Sodium hydroxide	1310-73-2	0.5
Lithium hydroxide	1310-65-2	0.3

4. 急救措施 First aid measures

眼睛:

万一接触, 立即用大量的清水冲洗至少15分钟, 翻起上下眼睑, 直到化学的残留物消失为止, 迅速就医。

Eye

Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

皮肤:

万一接触, 用大量水冲洗至少15分钟, 同时除去污染的衣物和鞋子, 迅速就医。

Skin

Remove contaminated clothes and rinse skin with plenty of water or shower for 15 minutes. Get medical aid.

吸入:

立即从暴露处移至空气清新处, 如果呼吸困难给予输氧, 立即就医。

Inhalation

Remove from exposure and move to fresh air immediately. Use oxygen if available.

Ingestion

Do not induce vomiting. Call a physician immediately.

不要进行催吐, 立即呼叫医生。

5. 消防措施 Fire-fighting measures

燃点: 不适用

Flash Point: N/A.

自燃温度: 不适用

Auto-Ignition Temperature: N/A.

灭火介质: 二氧化碳, 干粉灭火剂

Extinguishing Media: CO₂, dry chemical.

特殊灭火程序: 自给式呼吸器

Special Fire-Fighting Procedures: Self-contained breathing apparatus.

异常火灾或爆炸: 当电芯暴露于过热的环境中时, 安全阀可能会打开。

Unusual Fire and Explosion Hazards: Cell may vent when subjected to excessive heat-exposing battery contents.

燃烧产生的危险物品: 一氧化碳, 二氧化碳, 其它金属氧化物烟气

Hazardous Combustion Products: Carbon monoxide, carbon dioxide, other metallic oxide fumes.

6. 泄露应急处理 Accidental release measures

为防止电池材料泄露或释放采取的措施

如果电池内部材料泄露, 试验人员应立刻撤离试验区直到烟气消散。将通风设备打开吹散危险性气体。用抹布擦净试验区, 清除溢出的液体, 将泄露电池放进塑料袋中, 然后放进钢制容器。避免皮肤和眼睛接触或吸入有害气体。

Steps to be Taken in case Material is Released or Spilled

If the battery material is released, remove personnel from area until fumes dissipate. Provide maximum ventilation to clear out hazardous gases. Wipe it up with a cloth, and dispose of it in a plastic bag and put into a steel can. The preferred response is to leave the area and allow the battery to cool and vapors to dissipate. Provide maximum ventilation. Avoid skin and eye contact or inhalation of vapors. Remove spilled liquid with absorbent and incinerate.

废弃物处置方法

建议将电池完全放电, 回收铜和其它金属, 将废旧电池统一交给相关部门处理, 并按照当地、州和联邦政府批准的要求处理电池。咨询州环境保护机构和/或联邦环境保护局。

Waste Disposal Method

It is recommended to discharge the battery to the end, recycle copper and other metal, handing in the abandoned batteries to related department unified, and dispose of the batteries in accordance with approved local, state, and federal requirements. Consult state environmental protection agency and/or federal EPA.

7. 操作处置和储存 Handling and storage

禁止打开、毁坏或焚烧电池，因为电池有可能在这些处理过程中发生爆炸、破裂或泄露等事故。禁止将电池短路、过充、强制放电或扔入火中。禁止挤压刺穿电池或将电池浸入溶液中。

The battery should not be opened, destroyed or incinerate, since they may leak or rupture and release to the environment the ingredients that they contain in the hermetically sealed container. Do not short circuit terminals, or over charge the battery, forced over-discharge, throw to fire. Do not crush or puncture the battery, or immerse in liquids.

操作处置和储存中的防范措施

禁止物理或电滥用，禁止高温储存，最好将电池储存在阴凉、干燥、通风等温度变化较小的环境中。禁止将电池接触加热设备或将电池直接暴露与阳光中。

Precautions to be taken in handling and storing

Avoid mechanical or electrical abuse. Storage preferably in cool, dry and ventilated area, which is subject to little temperature change. Storage at high temperatures should be avoided. Do not place the battery near heating equipment, nor expose to direct sunlight for long periods.

其他要注意的防范措施

禁止短接或将电池正负极错误的安装在设备中。

Other Precautions

Do not short or install with incorrect polarity.

8. 接触控制/个人防护 Exposure controls/personal protection

呼吸防护

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。

Respiratory Protection

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.

其他防护服装或设备

正常使用条件下不需要。

Other Protective Clothing or Equipment

Not necessary under conditions of normal use.

电池开阀试验时应做好个人防护

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的。

Personal Protection is recommended for venting battery

Respiratory Protection, Protective Gloves, Protective Clothing and safety glass with side shields.

9. 物理和化学特性

Physical and chemical properties

标称电压: 1.2V

Nominal Voltage: 1.2V

额定容量: 800mAh

Rated Capacity: 800mAh

外观特征: 无气味的固体电池

Appearance Characters: Odorless solid battery.

10. 稳定性和反应活性

Stability and reactivity

稳定性: 产品在第 7 节所述的条件下稳定。

Stability: Product is stable under conditions described in Section 7.

应避免的条件: 加热, 燃烧, 机械滥用和电气滥用

Conditions to Avoid : Heating, fire, mechanical abuse and electrical abuse.

危险分解物: 当电池暴露在火或极端高温下时, 可能会释放出有毒的烟雾

Hazardous Decomposition Products : When exposed to fire or extreme heat, batteries may emit toxic fumes.

11. 毒理学资料

Toxicological information

打开电池时, 可能会有吸入、皮肤接触和眼睛接触。暴露于内部内容物, 腐蚀性气体将刺激皮肤, 眼睛和粘膜。过度暴露可导致非纤维瘤肺损伤和膜刺激症状。

Inhalation, skin contact and eye contact are possible when the battery is opened. Exposure to internal contents, the corrosive fumes will be irritation to skin, eyes and mucous membranes. Overexposure can cause symptoms of non-fibroid lung injury and membrane irritation.

12. 生态学资料

Ecological information

环境危害

当及时使用或处置电池时不存在环境危害。使用时应远离水、雨、雪。

Environment Effect

When promptly used or disposed the battery does not present environmental hazard. When disposed, keep away from water, rain and snow.

13. 废弃处置

Disposal consideration

物质或制剂的适当处置方法

按照当地批准的要求处理电池。咨询当地环境机构。

Appropriate Method of Disposal of Substance or Preparation

Dispose of the batteries in accordance with approved local requirements. Consult state environmental agency.

14. 运输信息

Transport information

航空运输:

镍氢电池符合国际航空运输协会DGR第66版A199特殊规定。

ICAO和IATA运输这些电池的要求是A199特别条款, 其中规定:

“联合国编号UN3496只适用于海运。镍金属氢化物电池或镍金属氢化物电池供电的设备、设备或车辆具有可能发生危险的热演变, 但它们是防止以下情况而准备运输的, 则不受本条例的约束:

- (a) 短路(以电池为例, 通过对暴露的端子的有效绝缘; 或在设备的情况下, 通过断开电池和保护暴露的端子); 和
- (b) 意外启动

根据8.2.6的要求, 在签发航空运单时, 航空运单上的物质描述中必须包含“不受限制”字样和特殊规定编号。

Air transport:

The NI-MH BATTERY according to Special Provision A199 of IATA DGR 66th edition for transportation.

The requirement for shipping these batteries by ICAO and IATA is Special Provision A199 which states:

“The UN number UN3496 is only applicable in sea transport. Nickel-metal hydride batteries or nickel-metal hydride battery-powered devices, equipment or vehicles having the potential of a dangerous evolution of heat are not subject to these Regulations provided they are prepared for transport so as to prevent:

- (a) a short circuit (e.g. in the case of batteries, by the effective insulation of exposed terminals; or, in the case of equipment, by disconnection of the battery and protection of exposed terminals); and
- (b) unintentional activation.

The words “Not Restricted” and the Special Provision number must be included in the description of the substance on the Air Waybill as required by 8.2.6, when an Air Waybill is issued.”

海上运输:

镍氢电池根据《国际危规》第42-24版海运特别规定第963条。

The NI-MH BATTERY according to Special Provision 963 of IMDG Code 42-24 edition for sea transportation.

UN编号: UN3496

UN No.: UN3496

正式运输名称 (PSN): 电池, 镍金属氢化物

Proper Shipping Name (PSN): BATTERIES, NICKEL-METAL HYDRIDE

类别或分类: 9

Class or division: 9

特殊条款: 117和963

由IMO运输这些电池的要求是特殊条款963, 其中规定:

“金属氢化物镍纽扣电池或金属氢化物镍电池或与设备包装或包含在设备中的电池不受本守则的规定的约束。

所有其他镍金属氢化物电池或电池应妥善包装并防止短路。它们不受本法典其他规定的约束，但它们是在总重量不超过100公斤的货物运输单元中装载的。当货物运输单元装载总重量为100公斤或以上时，除第3.2章危险品清单第5.4.1、5.4.3和第16栏的规定外，不受本守则其他规定的约束。”

关于运输，现参考引用下列规定：

- 国际民用航空组织(民航组织)技术细则。
- 《国际航空运输协会危险品条例》。
- 《国际海运危险货物规则》。
- 美国有害物质法规（HMR）根据RSPA发布的最终规则 - 美国运输部（DOT）的有害物质安全办公室-研究和特别项目管理局（RSPA）

Special provisions: 117 and 963

The requirement for shipping these batteries by IMO is Special Provision 963 which states:
“Nickel-metal hydride button cells or nickel-metal hydride cells or batteries packed with or contained in equipment are not subject to the provisions of this Code.

All other nickel-metal hydride cells or batteries shall be securely packed and protected from short circuit. They are not subject to other provisions of this Code provided that they are loaded in a cargo transport unit in a total quantity of less than 100 kg gross mass. When loaded in a cargo transport unit in a total quantity of 100 kg gross mass or more, they are not subject to other provisions of this Code except those of 5.4.1, 5.4.3 and column 16 of the Dangerous Goods List in chapter 3.2.”

- The International Civil Aviation Organization (ICAO) Technical Instructions.
- The International Air transport Association (IATA) Dangerous Goods Regulations.
- The International Maritime Dangerous Goods (IMDG) Code.
- The US Hazardous Materials Regulation (HMR) pursuant to a final rule issued by RSPA
- The Office of Hazardous Materials Safety within the US Department of Transportation (DOT)
- Research and Special Programs Administration (RSPA)

运输方式：空运，海运，铁路，公路。

Transport Fashion: By air, by sea, by railway, by road.

15. 法规信息 Regulation information

法律信息

Law information

- 《危险物品规则》
- 《Dangerous Goods Regulations》
- 《对危险货物运输的有关规定的建议》
- 《Recommendations on the Transport of Dangerous Goods Model Regulations》
- 《国际海运危险货物规则》
- 《International Maritime Dangerous Goods》
- 《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)

《超级基金修正案和再授权法案III(302/311/312/313)》

《Superfund Amendments and Reauthorization Act Title III (302/311/312/313)》(SARA)

《资源保护及恢复法案》

《Resource Conservation and Recovery Act》(RCRA)

《安全饮用水法》

《Safety Drinking Water Act》(CWA)

《加州65提案》

《California Proposition 65》

《美国联邦法规》

《Code of Federal Regulations》(CFR)

根据所有联邦、州和地方法律。

In accordance with all Federal, State and local laws.

16. 其他信息 Other Information

本文件仅对由委托方（Grandstream Networks, Inc.）提供的，并由深圳市倍特力电池有限公司生产的电池（AAA800mAh 1.2V）有效。该电池的成分信息由委托方提供并承诺其完整性和准确性。用户应仔细阅读此文件，并按照正确的方法使用电池，如因电池使用不当造成的损害或损失，深圳市北测新能源技术有限公司不承担任何责任。

This file is only effective to the batteries (AAA800mAh 1.2V) provided by commissioner (Grandstream Networks, Inc.) which manufactured by Shenzhen Betterpower Battery Co., Ltd. The commissioner provides the composition information of batteries, and promises its integrity and accuracy. Users should read this file carefully, and use the batteries in correct method. Shenzhen NTEK New Energy Technology Co., Ltd. doesn't assume responsibility for any damage or loss because of misuse of batteries.

--End of Material Safety Data Sheet 材料安全数据表结束--

注意事项

Important Notice

1. 本报告书无本公司报告专用章、骑缝章无效。

The test report is invalid without the Report Seal of NTEK and Paging seal of NTEK.

2. 未经本试验室书面同意，不得部分地复制本报告。

Nobody is allowed to photocopy or partly photocopy this test report without written permission of NTEK.

3. 本报告书无批准人、及编制人签名无效。

The test report is invalid without the signatures of Approved and Preparer.

4. 私自转让、复制、盗用、冒用、涂改、或以任何媒体形式篡改的报告书无效。

The report is invalid when anything of following happens – illegal transfer, reproduce, embezzlement, imposture, modification or tampering in any media form.

5. 对报告书若有异议，应于收到报告之日起15天内向本公司提出。

Objections to the test report must be submitted to NTEK within 15 days.

6. 本报告仅对测试样品有效。

The test report is valid for the tested samples only.

7. 本报告中的中文内容仅供参考。

The Chinese contents in this report are only for reference.

深圳市北测新能源技术有限公司

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