



# 材料安全数据表

## Material Safety Data Sheet

货 物 名 称: 镍氢电池组

Name of Goods: Nickel Metal Hydride Battery Pack

委 托 单 位: 东莞市宝博电子有限公司

Commissioner: Dongguan City Bob Electronic Co., Ltd.

广东联鼎检测科技有限公司  
GUANGDONG UTL CO., LTD.

# 材料安全数据表

## Material Safety Data Sheet

1. Identification of the product and supplier (产品和厂商信息)	
样品名称 Name of goods	镍氢电池组 Nickel Metal Hydride Battery Pack
样品型号 Type/Model	AAA1000mAh
规格 Rating	2.4V, 1000mAh
委托单位 Commissioned by	东莞市宝博电子有限公司 Dongguan City Bob Electronic Co., Ltd.
委托单位地址 Commissioner address	东莞市寮步镇石龙坑金园新路49号A栋三楼 The Third Floor, Buliding A, No.49 Jinyuan Road, Shilongkeng, LiaoBu Town, DongGuan, China.
生产厂 Manufacturer's name	东莞市宝博电子有限公司 Dongguan City Bob Electronic Co., Ltd.
生产厂地址 Manufacturer address	东莞市寮步镇石龙坑金园新路49号A栋三楼 The Third Floor, Buliding A, No.49 Jinyuan Road, Shilongkeng, LiaoBu Town, DongGuan, China.
鉴定依据 Inspection according to	联合国《关于危险品货物运输的建议书》20版 UN "Recommendations on the TRANSPORT OF DANGEROUS GOODS" ST/SG/AC.10/1/Rev.20 国际航空运输协会《危险品运输规则》第59版 IATA Dangerous Goods Regulations 59th Edition 国际海运危险货物运输规则 2016版 IMDG CODE (Amdt.37-14) 2016 Edition
紧急联系电话 Emergency telephone call	+86-769-89789077
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## 2. Composition/Information on Ingredient (成分/组成信息)

化学成分 Chemical Composition	重量百分比(%) Weight (%)	CAS编号 CAS Number
镍粉/ Nickel Powder	35.5	7440-02-0
氢氧化镍/ Nickel Hydroxide	28.5	12054-48-7
镧/ Lanthanum	12.5	7439-91-0
铈/ Cerium	11.0	7440-45-1
钴/ Cobalt	7.6	7440-48-4
锰/ Manganese	3.0	7439-96-5
氢氧化钾/ Potassium Hydroxide	1.0	1310-58-3
氢氧化钠/ Sodium Hydroxide	0.5	1310-73-2
氢氧化锂/ Lithium Hydroxide	0.3	1310-65-2
钕/ Neodymium	0.1	7440-00-8

## 3. Hazards Identification (危险性概述)

本报告所述样品镍氢电池是用于便携式电源的小型密封式镍氢电池，瓦时率为2.4Wh。

The sample Ni-MH Battery listed in this report is small sealed nickel metal batteries used in portable power supply. Watt hour rate is 2.4Wh.

根据联合国《关于危险品货物运输的建议书》20版，国际航空运输协会《危险品运输规则》第61版，国际海运危险货物运输规则2018版的相关规定，该样品不属于危险货物。

According to the relevant provision of UN "Recommendations on the TRANSPORT OF DANGEROUS GOODS" ST/SG/AC.10/1/Rev.20, IATA Dangerous Goods Regulations 61st Edition and IMDG CODE (Amdt.39-18) 2018 Edition, the sample doesn't belong to Dangerous Goods.

## 4. First aid measures (急救措施)

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.

食入：引用两杯牛奶或水。如果当事人仍然清晰可以采取催吐的方法，并且立即就医。

### Ingestion:

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Give at least 2 glasses of milk or water. Induce vomiting unless patient is unconscious. Call a physician.

## 5. Fire-fighting measures (消防措施)

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: 大量水(降温), 二氧化碳

Extinguishing Media: Water, CO<sub>2</sub>.

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: 金属氧化物烟气

Hazardous Combustion Products: Metal oxide fumes.

## 6. Accidental release measures (泄漏应急处理)

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烟雾。

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 fumes. 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 fumes. Remove spilled liquid with absorbent and incinerate.

废弃物处置方法

建议将电池完全放电后, 交给专业部门处理。

Waste Disposal Method

It is recommended to discharge the battery to the end and pass to professional department for treatment.

## 7. Handling and storage (操作处置和储存)

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.

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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、通风及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, where 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

拆解、挤压、直接放入火中或高温条件下，电池可能发生爆炸和燃烧。禁止短接或将电池极性反接。

#### Other Precautions

The battery may explode or cause burns, if disassembled, crushed or exposed to fire or high temperatures. Do not short or install with incorrect polarity.

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

#### 呼吸防护：

正常操作条件下不需要做呼吸保护。

#### Respiratory Protection

Respiratory Protection is not necessary under conditions of normal use.

#### 通风条件

正常使用条件下不需要。

#### Ventilation

Not necessary under conditions of normal use.

#### 防护手套

正常使用条件下不需要。

#### 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

需要准备呼吸防护，防护手套，防护服装和有护边的安全玻璃罩。

#### Personal Protection is recommended for venting battery

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

## 9. Physical and chemical properties (物理和化学特性)

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外形: -

**Appearance:** -

气味: 无。

**Odour:** None.

**酸碱度:** 正常使用条件下不适用。

**pH:** Not applicable under conditions of normal use.

闪点: 无。

**Flash Point:** NA.

易燃度: 无。

**Flammability:** NA.

**溶解性(水溶性):** 正常使用条件下不溶于水。

**Solubility (water):** Insoluble in water under conditions of normal use.

**溶解性(其他):** 针对单个组分暴露情况, 其他不适用。

**Solubility (other):** Not applicable unless individual components exposed.

## 10. Stability and reactivity (稳定性和反应活性)

**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70°C 以上或焚烧、变形、毁坏、粉碎、拆卸、过充电、短路, 长时间暴露在潮湿的条件下。

**Conditions to Avoid :** Heat above 70°C or incinerate. Deform. Mutilate. Crush. Disassemble. Overcharge. Short circuit. Expose over a long period to humid conditions.

应避免的材料: 氧化剂, 酸, 碱, 水。

**Materials to avoid:** Oxidizing agents, acid, alkalis, water.

**危险分解物:** 有毒烟雾, 并可能形成过氧化物。

**Hazardous Decomposition Products:** Toxic Fumes, and may form peroxides.

**聚合危害:** 不适用。

**Hazardous Polymerization:** N/A.

如果发生泄露, 避免与强氧化剂, 无机酸, 强碱, 卤代烃接触。

If leaked, forbidden to contact with strong oxidizers, mineral acids, strong alkalis, halogenated hydrocarbons.

## 11. Toxicological information (毒理学资料)

**标志及症状:** 无, 除非电池破裂。

**Signs & symptoms:** None, unless battery ruptures.

内部物质暴露的情况下, 电解液对眼睛和皮肤有刺激性并产生化学灼伤。

In the event of exposure to internal contents, electrolyte will cause chemical burn and irritating to the eyes and

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skin.

吸入：无。

**Inhalation:** NA.

**皮肤接触：**对皮肤刺激性。

**Skin contact:** Skin irritant.

**眼睛接触：**对眼睛有刺激性。

**Eye contact:** Eye irritant

食入：吞下中毒。

**Ingestion:** Poisoning if swallowed.

下列情况下会危险人员身体健康：如果与电池内部材料直接接触，皮肤可能会出现干燥、灼烧等轻微或严重的刺激，并且损坏靶器官的神经，肝脏和肾脏。

Medical conditions generally aggravated by exposure: In the event of exposure to internal contents, moderate to server irritation, burning and dryness of the skin may occur, Target organs nerves, liver and kidneys.

## 12. Ecological information (生态学资料)

**对哺乳动物的影响：**目前未知。

**Mammalian effects:** None known at present.

**生态毒性：**目前未知。

**Eco-toxicity:** None known at present.

**生物体内积累：**慢慢地生物降解。

**Bioaccumulation potential:** Slowly Bio-degradable.

**环境危害：**目前没有已知的环境危害。

**Environmental fate:** None known environmental hazards at present.

## 13. Disposal consideration (废弃处置)

禁止焚烧，或使电池温度超过70°C，这种滥用可导致泄漏和/或电池爆炸。应按照相应的地方性法规处理。

Do not incinerate, or subject cells to temperature in excess of 70°C, Such abuse can result in loss of seal leakage, and/or cell explosion. Dispose of in accordance with appropriate local regulations.

## 14. Transport information (运输信息)

**运输标签：**不适用

**Label for conveyance:** Not Applicable

**UN 编号：**不适用

**UN Number:** Not Applicable

**海洋污染物：**无

**Marine pollutant:** No

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本报告所述样品包装中需具有适当的防短路和意外启动的措施。

The samples are properly protected so as to prevent short circuits and accidental activation in the package.

根据国际航空运输协会《危险品运输规则》第61版特殊规定A199条款，本报告所述样品可按照普通货物运输，在空运单中的货物描述中必须包含“非受限制”和特殊规定编号。根据国际海运危险货物运输规则2018版特殊规定963条款，安装或包含在设备中的镍氢纽扣电池或镍氢电池或蓄电池，以及单个货物运输组件中的电池总重量不超过100kg，不适用于该规则中的任何其他规定。

According to the IATA Dangerous Goods Regulations 61st Edition special provisions A199, the sample list in this report can be transport as normal goods, the words “Not Restricted” and the Special Provision number must be included in the description of the substance on the Air Waybill. According to IMDG CODE (Amdt.37-14) 2018 Edition special provisions 963, the Ni-MH button cells or Ni-MH cells or batteries install in(or packed with) equipments, and the battery in the carriage of goods by a single component does not exceed the total weight of 100 kg, does not apply to any other provisions of this rule of IMDG.

## 15. Regulation information (法规信息)

### 法律信息

#### Law information

- 《危险品规则》
- 《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)
- 《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)

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## 16. Other information (其他信息)

本报告仅对由东莞市宝博电子有限公司提供的东莞市宝博电子有限公司(AAA1000mAh) 电池有效。本报告中的化学成分信息来源于委托单位，但不担保包含的所有信息的完整性和准确性。由于电池使用不当造成的损害或损失，广东联鼎检测科技有限公司(UTL)不承担任何责任。用户使用电池时应掌握正确的使用方法，并自行承担

责任。  
This report is only effective to Dongguan City Bob Electronic Co., Ltd. (AAA1000mAh) provided by Dongguan City Bob Electronic Co., Ltd. The chemical components information comes from the Commission, but no warranty is made to the completeness and accuracy of information contained. GUANGDONG UTL CO., LTD. (UTL) doesn't assume responsibility for any damage or loss because of misuse of batteries. User's should grasp the correct use method and be responsible for the use of batteries.

Photos



Fig.1 Overall view I of battery

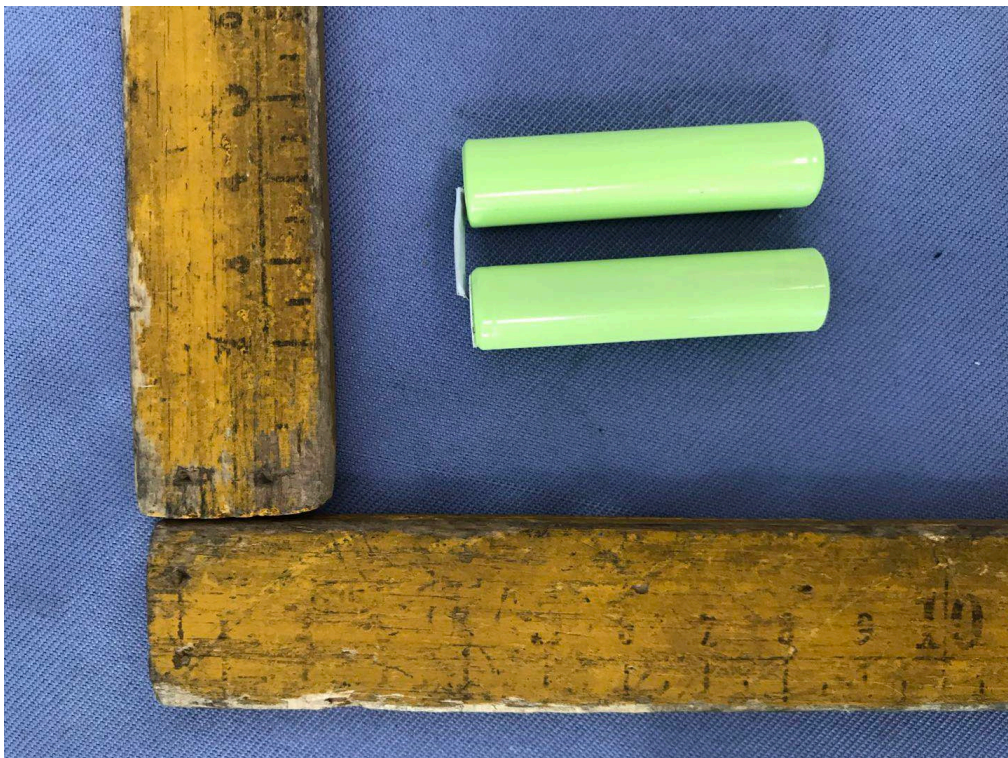


Fig.2 Overall view II of battery