

# SAFETY DATA SHEET

# 安全技术说明书

### SECTION 1 PRODUCT AND COMPANY IDENTIFICATION

第一部分 化学品及企业标识

Product Name: Ni-MH Battery 中文名称: 镍氢电池

Model:

产品型号:

2xC 4000mAh 2.4V 9.6Wh

Company: Guangzhou Great Power Energy & Technology Co., Ltd

企业名称: 广州鹏辉能源科技股份有限公司

No.912, West Village Segment, Shiliang Road, Shavan, Town,

Address: Panyu District, Guangzhou City, Guangdo Strovince 51

P.R. China

地址: 广州市番禺区沙湾镇市良路(西村段

Post Code:

邮编: 511483

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**Emergency Phone:** 

企业应急电话:

0086-20-39196888

E-mail: lcni@greatpower.net

SDS Date:

生效日期:

2020年1月1日

### SECTION 2 HAZARDS IDENTIFICATION

第二部分 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 9.6Wh。

The sample Ni-MH Battery listed in this report is small sealed nickel metal hydride batteries used in portable power supply. Watt hour rate is 9.6Wh.

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 2016 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 61th

Edition and IMDG CODE (Amdt.39-18) 2016 Edition, the sample doesn?t belong to Dangerous Goods.







第三部分 成分/组成信息

| Ingredient          | Concentration | CAS NO.          |
|---------------------|---------------|------------------|
| Nickel Hydroxide    | 29.1%         | 12054-48-7       |
| Cobalt Oxide        | 2.1%          | 1307-96-6        |
| Nickel Powder       | 0.2%          | 7440-02-0        |
| Alloy Powder        | 42.4%         | N/A              |
| Potassium Hydroxide | 0.7%          | 1310-58-3        |
| Lithium Hydroxide   | 0.1%          | 1310-65-2        |
| Foamed Nickel       | 11.6%         | 7440-02-0        |
| Polypropylene       | 7.1%          | 9003-07-0        |
| Steel               | 6.7%          | 7439-89-6        |
|                     |               | WER ENERGY & TEC |

# SECTION 4 FIRS-AID MEASURES

第四部分 急救措施

Skin Exposure: If the internal battery materials of an opened battery cell come into contact with the skin, immediately flush with plenty of water.

皮肤接触: 若接触到电池内的物质, 立即用肥皂和大量清水彻底清洗皮肤。

Eye Exposure: In case of the internal battery materials in contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

眼睛接触: 若接触到电池内的物质, 立即提起眼睑, 用流动清水冲洗 15 分钟以上。

Inhalation Exposure: If inhaled the internal materials of battery, remove immediately to fresh air and seek medical attention.

吸入: 若吸入电池内的物质, 立即脱离现场至空气新鲜处。

Oral Exposure: If swallowed the internal materials of battery, do not induce vomiting. Seek immediate Medical attention.

食入: 若食入电池内的物质, 不宜催吐, 立即就医。

### SECTION 5 FIRE FIGHTING MEASURES

第五部分 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.

### SECTION 6 ACCIDENTAL RELEASE MEASURES

第六部分 泄露应急处理

#### **Procedure of Personal Precaution:**

If batteries show signs of leaking, avoid skin or eye contact with the material leaking from the battery. Use chemical resistant rubber gloves and non-flammable absorbent materials for clean up. Mix with inert material(e.g. Dry sand, vermiculite) and transfer to sealed container for disposal.

**应急处理:** 若电池内的物质泄露,用洁净铲子收集于干燥、洁净、有盖的容器中待处置。处理人员应穿合适的防护服。

### SECTION 7 HANDLING AND STORAGE

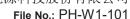
第七部分 操作处置与储存

Handling: Keep away from ignition sources, heat and flame. Such bath the must be packed in inner packages in such a manner as to effectively prevent short circuits and to prevent movement which could lead to short circuits. Avoid mechanical or electrical abuse. More than a momentary short circuit will generally reduce the battery service life. Avoid reversing battery polarity within the battery assembly. In case of a battery unintentionally be crushed, rubber gloves must be used to handle all battery components. Avoid contact with eyes, skin. Avoid inhalation. No smoking at working site. Materials to Avoid: Strong oxidizing agents, Corrosives.

操作处置注意事项:操作人员应经过培训,严格遵守操作规程。建议操作人员穿一般作业防护服,带安全手套。远离火种、热源,避免阳光直射。工作场所严禁吸烟。工作场所应有通风系统和设备。避免随意拆卸电池和弄错正负极。须牢记在内包装中,以有效防止短路和防止可导致短路的移动。万一电池内的物质泄露,避免眼睛、皮肤直接接触,避免吸入。应与强氧化剂、腐蚀品分开存放。

Storage: Store in a cool, well-ventilated area. Keep away from ignition sources, heat and flame. Such batteries must be packed in inner packages in such a manner as to effectively prevent short circuits and to prevent movement which could to short circuits. Materials to Avoid: Strong oxidizing agents, Corrosives.

储存注意事项:储存于阴凉、通风的库房内。远离火种、热源,避免阳光直射。应与强氧化剂、腐蚀品分开存放。储存区配备相应品种和数量的消防器材、泄露应急处理设备和合适的收容材料。





# SECTION 8 EXPOSURE CONTROL/PPE

第八部分 接触控制/个体防护

### **Engineering Controls:**

Use ventilation equipment if available. Safety shower and eye bath

# **Personal Protective Equipment:**

Respiratory System: Not necessary under conditions of normal use.

Eyes: Not necessary under conditions of normal use.

Clothing: Wear appropriate protective clothing.

Hand: Safety gloves.

**Other Protect:** 

No smoking, drinking and eating at working site. Wash thoroughly after handling.

最高容许浓度: 未制定标准

检测方法: 无

工程控制: 有通风系统和设备。提供安全淋浴和选

呼吸系统防护: 正常使用情况下不需要。 眼睛防护: 正常适应情况下不需要。 身体防护: 穿一般作业防护服。

手防护: 带安全手套。

其它防护: 工作现场严禁吸烟、进食。工作后,淋浴更衣。

# SECTION 9 PHYSICAL/CHEMICAL PROPERTIES

第九部分 理化特征

外形:圆柱型电池

**Appearance:** Cylinder battery

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.



## SECTION 10 STABILITY AND REACTIVITY

第十部分 稳定性与反应活性

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 70C 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 70C 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, miner

## SECTION 11 TOXICOLOGICAL INFOPMATION

第十一部分 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 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.



### SECTION12 ECOLOGICAL INFORMATION

第十二部分 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.

# SECTION 13 Disposal consideration

第十三部分 废弃处理

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.

### SECTION 14 TRANSPORT INFORMATION

第十四部分 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

本报告所述样品包装中需具有适当的防短路和意义造动的探施。

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 2016 版特殊规定 963 条款,安装或包含在设备中的镍氢纽扣电池会镍氢电池

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 61<sup>st</sup> 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.39-18) 2016 Edition special provisions 963, the Ni-MH button cell 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.



#### SECTION 15 REGULATORY INORMATION

## 第十五部分 法规信息

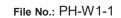
### 法律信息

#### 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)
- 《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)

The above information is based on the data of which we are aware and is believed to be correct as of the data hereof. Since this information may be applied under conditions beyond our control and with which may be unfamiliar and since data made available subsequent to the data hereof may suggest modifications of the information, we do not assume any responsibility for the results of its use. This information is furnished upon condition that person receiving it shall made his own determination of







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Effective date: 2020

生效日期: 2000