

材料安全数据表

Material Safety Data Sheet

Sample name : Nickel Hydngen Battery

样 品 名 称 : 镍氢电池

Consignor : Jiangsu Highstar Battery Manufacturing Co.,Ltd

委 托 单 位 : 江苏海四达电源有限公司

东莞市全测电子科技有限公司
ATS Electronic Technology Co., Ltd.

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1. Identification of the product and supplier (产品和厂商信息)	
Name of goods 样品名称	Nickel Hydngen Battery 镍氢电池
Type/Mode 样品型号	SC
Commissioned by 委托单位	1.2V, 1500mAh
Commissioner address 委托单位地址	Jiangsu Highstar Battery Manufacturing Co.,Ltd 江苏海四达电源有限公司
Factory 生产单位	No.306 Heping Road(s), Qidong City, Jiangsu, China 启东市和平南路306号
Factory's address 生产单位地址	Jiangsu Highstar Battery Manufacturing Co.,Ltd 江苏海四达电源有限公司
Inspection according to 鉴定依据	No.306 Heping Road(s), Qidong City, Jiangsu, China 启东市和平南路306号
Emergency telephone call 紧急联系电话	EEC Directive 93/112/EC UN "Recommendations on the TRANSPORT OF DANGEROUS GOODS"
Name of goods 样品名称	+86-13405720649
接样日期/ Receiving date: 2023-12-11	签发日期/ Issue date:2024-01-01

Tested by:

Reviewed by:

Approved by:



2. Composition/Information on Ingredient (成分/组成信息)		
Hazardous Ingredients (Chemical Name) 危险成分(化学名称)	Concentration or concentration ranges (%) 含量或含量范围(%)	CAS Number CAS号
Cobalt Oxide 氧化钴	2-6	1307-96-6
Nickel Hydroxide 氢氧化镍	23-28	12054-48-7
Hydrogen absorbing alloy 吸氢合金	30-35	--
Potassium hydroxide 氢氧化钾	<2	1310-58-3
Sodium hydroxide 氢氧化钠	<1	1310-58-3
Lithium hydroxide 氢氧化锂	<1	1310-73-2
Paper 纸	<1	1310-66-3
Steel Casing 铁壳	20-25	--
Plastic 塑料	<1	--
Other 其他	<1	--

Note: CAS number is Chemical Abstract Service Registry Number.

注: CAS编号是化学文摘服务注册编号。

3. Hazards Identification (主要危险性鉴定)	
Explosive risk 爆炸危险性	This article does not belong to the explosion dangerous goods 该物品不属于爆炸危险品
Flammable risk 易燃危险性	This article does not belong to the flammable material 该物品不属于易燃危险品
Oxidation risk 氧化危险性	This article does not belong to the oxidation of dangerous goods 该物品不属于氧化危险品
Toxic risk 毒害危险性	This article does not belong to the toxic dangerous goods 该物品不属于毒害危险品
Radioactive risk 放射危险性	This article does not belong to the radiation of dangerous goods 该物品不属于放射危险品
Mordant risk 腐蚀危险性	This article does not belong to the corrosion of dangerous goods 该物品不属于腐蚀危险品
other risk 其他危险性	The sample Nickel Hydngen Battery listed in this report is small sealed nickel metal hydride batteries. 本报告中列出的镍氢电池样品是小型密封镍金属氢化物电池。

4. First aid measures (急救措施)

Swallowing: Do not induce vomiting. Seek medical attention immediately.

吞咽:不要诱导呕吐,立即就医。

Skin: If the internal cell materials of an opened battery cell comes into contact with the skin, immediately flush with water for at least 15 minutes.

皮肤:如果打开电池,内部材料接触皮肤,立即用水至少冲洗15分钟。

Inhalation: If potential for exposure to fumes or dusts occurs, remove immediately to fresh air and seek medical attention.

吸入:如果接触气体或粉尘时,立即呼吸新鲜空气和就医。

Eyes: If the contents from an opened battery comes into contact with the eyes, immediately flush eyes with water continuously for at least 15 minutes. Seek medical attention.

眼睛:如果打开电池,内部材料接触眼睛,立即用水冲洗眼睛至少持续15分钟和就医。

5. Fire-fighting measures (泄漏应急处理)

Extinguishing Media: Any class of extinguishing medium may be used on the batteries or their packing material.

灭火剂的灭火媒体:任何可以使用的电池或包装材料。

Fire Fighting Procedures: Exposure to temperatures of above 100°C can cause evaporation of the liquid content of the alkalinity electrolyte resulting in the rupture of the cell. Potential for exposure to metal alloy fumes during fire; use self-contained breathing apparatus.

消防程序:电池暴露在100°C以上的高温会导致导致的破裂,从而碱性电解液的蒸发。可能在火灾烟雾中接触到金属合金;需使用自给式呼吸器。

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

Spill and leaks are unlikely because cells are contained in a hermetically-sealed case. If the battery case is breached, do protective clothing that is impervious to caustic materials and absorb or pack spill residues in inert material. Dispose of as a hazardous waste in accordance with applicable state and federal regulations.

Resultant spill residues may be characterized as caustic. See Section VII for response to fires or explosions. If there is a great deal leaked, collect and transport them to the professional waste treatment, and wash the ground with plenty of water which should be flushed to the waste water system.

电池在一个密封的情况,不太可能存在泄漏。如果违反了电池的情况下,使用防护服,不接触腐蚀性材料并使用惰性材料吸收泄漏残留物。作为危险废物处置需按照适用的州和联邦法规。合成泄漏残留可能具有腐蚀性。参见第七节应对火灾或者爆炸。如果有大量泄露,需专业的机构收集废物和运输,应该用大量的水清洗地面,冲洗废水处理系统。

7. Handling and storage (操作处置和储存)

Storage: Store in a cool place, but prevent condensation on cell or battery terminals. Elevated temperatures may result in reduced battery life. Optimum storage temperatures are between -20° C and 35° C. Optimum storage humidity are 65 ± 20%.

储存:储存在阴凉的地方,防止电芯或电池的电极冷凝水珠。温度升高可能导致电池寿命减少。最佳储存温度在-20°C到35°C之间。最佳存储湿度65 ± 20%。

Mechanical Containment: If there are special encapsulation or sealing requirements, consult your McNair company representative about possible cell hazard precautions or limitations.

机械密封:如果有特殊的封装和密封要求,请咨询您的McNair公司代表,有关可能的电芯危害注意事项或限制。

Handling: Accidental short circuit will bring high temperature elevation to the battery as well as shorten the battery life. Be sure to avoid prolonged short circuit since the heat can burn attendant skin and even rupture of the battery cell case. Batteries packaged in bulk containers should not be shaken. Metal covered tables or belts used for assembly of batteries into devices can be the source of short circuits; apply insulating material to assembly work surface. If soldering or welding to the case of the battery is required, consult your McNair company representative for proper precautions to prevent seal damage or external short circuit.

处理:意外短路将给电池带来高温以及缩短电池寿命。一定要避免接触长时间短路甚至破裂的电池, 会烧伤肤。电池包装散装容器不可以晃动。电池组件用的金属极耳或转接线可作为短路的来源, 将绝缘材料应用于装配工作台面。如果焊接或焊接到电池外壳是必需的, 请咨询您的McNair公司代表, 防止密封损坏或外部短路的适当预防措施。

Charging: This battery is designed for recharging. A loss of voltage and capacity of batteries due to self-discharge during prolonged storage is unavoidable. Charge battery before use. Observe the specified charge rate since higher rates can cause a rise in internal gas pressure that may result in damaging heat generation or cell rupture and/or venting.

充电:这是设计为可充电的电池。由于电池长期储存, 电压和容量自放电损失在是不可避免的。充电电池在使用前。遵守指定的充电率由于更高的利率可以导致内部气体压力上升可能导致破坏热代或细胞破裂和/或排气。

Labeling: If normal label warnings are not visible, it is important to provide a device label stating: CAUTION: Do not dispose in fire, mix with other battery types, charge above specified rate, connect improperly, or short circuit, which may result in overheating, explosion or leakage of cell contents.

标签:如果正常标签警告不明显的,提供一个设备标签声明是很重要的: 警告: 不要在火上操作, 与其他类型的电池混合, 充电超过标准比率, 连接不当或短路, 这可能导致过热、爆炸或泄漏电池内物质。

Soldering/welding: If soldering or welding to the case of the battery is required, consult your McNair company representative for proper precautions to prevent seal damage or external short circuit.

钎焊/焊接:如果必须钎焊或焊接的电池, 请咨询你的McNair公司代表适当的预防措施防止密封损坏或外部短路。

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

Threshold Limit Values: See Section III.

阈值限制:参见第三节。

Ventilation Requirements: Not required under normal use.

通风要求:正常使用不需要。

Respiratory Protection: Not required under normal use.

呼吸防护:正常使用不需要。

Eye Protection: Not required under normal use.

眼睛保护:正常使用不需要。

Gloves: Not required under normal use.

手套:正常使用不需要。

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

Appearance: Cuboid shape

外形: 长方体形状

Relative Density (Water=1): N/A

相对密度(水= 1): N/A

Relative Vapor Density(Air=1): N/A

相对蒸气密度(空气= 1): N/A

Solubility in Water: Insoluble

水溶性: 不溶性

Flash Point: N/A

闪点: N/A

Lower Explosive Limit: N/A

爆炸下限: N/A

Upper Explosive Limit: N/A

爆炸上限: N/A

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

The batteries are stable under normal operating conditions.

电池在正常操作条件下是稳定的。

Hazardous polymerization will not occur.

危险的聚合作用不会发生。

Hazardous decomposition products: oxides of nickel and cobalt.

避免的条件: 热度、明火、火花和湿度。

Potential incompatibilities (i.e., materials to avoid contact with): The battery cells are encased in a nonreactive container; however, if the container is breached, avoid contact of internal battery components with acids, aldehydes, and carbamate compounds.

潜在的不兼容(例如,材料,避免接触): 电池包裹在一个无电抗容器;然而,如果违反了容器,避免与内部电池组件酸、醛、氨基甲酸酯化合物接触。

11. Toxicological information (毒理性资料)

During normal use, hazardous materials are fully contained inside the battery cell. However, if the battery case is breached, hazardous materials may be released. The following information is provided for the user's information only.

在正常使用,有害物质完全包含在电池内。然而,如果电池的外壳被破坏,有害物质可能被释放。以下信息仅提供给用户参考。

Acute toxicity: Cobalt oxide: LD50: 1700 mg/kg (Swallowing of big mouse)

急性毒性: 钴氧化物: LD50: 1700毫克/公斤(大老鼠吞咽做实验)

Nickel hydroxide: LD50: 1500 mg/kg (Swallowing of big mouse)

氢氧化镍: LD50: 1500毫克/公斤(大老鼠吞咽做实验)

12. Ecological information (生态学资料)

Other hazardous effect: -During normal use, it is not hazardous. If the battery case is breached, the substances inside the battery are hazardous to the environment. There should especially pay attention to the pollution to the waters.

其它有害作用: 在正常使用期间,它并不危险。如果电池外壳遭破坏,电池内部的物质对环境是有害的。应该尤其注意污染的水域。

13. Disposal consideration (废弃处置)

Cell encourages battery recycling. Our Nickel Metal Hydride batteries are recyclable through the professional waste disposal company. Nickel Metal Hydride batteries must be handled in accordance with all applicable state and federal laws and regulations.

鼓励电池回收。我们的镍金属氢化物电池通过专业废物处理公司是可回收的。镍金属氢化物电池必须依照所有适用的州和联邦法律法规。

Cell encourages battery recycling. Our Nickel Metal Hydride batteries are recyclable through the professional waste disposal company. Nickel Metal Hydride batteries must be handled in accordance with all applicable state and federal laws and regulations.

不焚烧或电池温度超过100°C,这样的方法可以导致电池破裂,蒸发液体电解质。焚烧可能导致金属合金烟雾排放。

14. Transport information (运输信息)

Cell sealed Nickel Cadmium Batteries are considered to "dry cell" batteries and not subject to hazardous materials (dangerous goods) regulations for the purpose of transportation by the U.S. Department of Transportation (DOT), the International Civil Aviation Organization (ICAO), the International Air Transport Association (IATA) or the International Maritime Organization (IMO).

The only DOT requirement for shipping Nickel Cadmium batteries are contained in Special Provision 130 which states, "Batteries, dry" are not subject to the requirements of this subchapter when they are securely packaged and offered for transportation in a manner that prevents the dangerous evolution of heat (for example, by the effective insulation of exposed terminals) and protects against short circuits." A similar requirement is contained in 49 CFR 173.21(c) of the U.S. DOT hazardous materials regulations.

This battery is a Nickel Cadmium Battery, it belongs to non-spillable battery. According to 2024 IATA DGR 65th edition, this battery can be classified as "NOT RESTRICTED, AS PER SPECIAL PROVISION A199" . This entries applies to Batteries, electric storage, not otherwise listed in Subsection 4.2 - List of Dangerous Goods. Any electrical battery or battery powered device having the potential of dangerous evolution of heat that is not prepared so as to prevent 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) is forbidden from transport." As of 1/1/97 IATA requires that batteries being transported by air must be protected from short-circuiting and protected from movement that could lead to short-circuiting. Codes and classifications according to international regulations for transport air IATA-DGR: special provision A45((a)-(e)).

Failure to comply with these requirements may result in substantial civil penalties.

由美国交通部(DOT),国际民用航空组织(ICAO),国际航空运输协会(IATA)或国际海事组织(IMO)规定密封的镍镉电池被认为“干电池”和不受有害物质(危险品)来运输。

唯一点要求运输镍金属电池特别规定中包含130,“干电池”不受这分章的要求,当他们安全地包装并提供运输的方式阻止危险的热演化(例如,通过有效的绝缘暴露终端),防止短路。类似的要求包含在美国有害物质法规49CFR 173.21(c)上。

这个电池是镍镉电池,它属于non-spillable电池。根据2024年国际航空运输协会DGR第65版,这种电池可划分为“不受限制,按特殊条款A199”。这个条目适用于电池,电能存储,不列入分段4.2 -危险货物列表。任何电气电池或用电池供电的设备有潜在危险的热演化的,无防止短路准备(如在电池的情况下,对暴露电极进行有效绝缘;或者,在设备的情况下,断开的电池和暴露电极保护)是禁止运输。1/1/97 IATA的要求被空运电池必须从短路保护,免受运动可能导致短路。编码和分类根据国际空运规定IATA-DGR:特别规定A45((a)-(e))。

未能遵守这些要求可能会导致大量的民事处罚。

15. Regulation information (法规信息)

Statute information: No detail definite Rules issued by the Government.
法规信息:政府没有详细明确的发布规定。

16. Other information (其他信息)

This file is only effective to the batteries provided by commissioner Jiangsu Highstar Battery Manufacturing Co.,Ltd which manufactured by Jiangsu Highstar Battery Manufacturing Co.,Ltd commissioner provides the composition information of batteries, and promises its integrity and curacy. Users should read this file carefully, and use the batteries in correct method. ATS Electronic Technology Co., Ltd. doesn't assume responsibility for any damage or loss cause of misuse of batteries.

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