Sunwoda Electronic CO.,LTD.

# 材料安全数据表 Material Safety Data Sheet

样品名称 <b>:</b> <u>二</u>	二次锂离子电池组 BHX305-1000mAh-7.7v 7.4v 1000mAh 7.74wh				
Samples Name: _	Lithium lon polymer Rechargeable Battery				
	7.4v 1000mAh 7.74wh				
供应商名称:	欣旺达惠州新能源限公司				
<b>Supplier Unit:</b>	Sunwoda Huizhou New Energy Co., Ltd				
# <del>다                                   </del>					
共应商地址:	中国广东省惠州市博罗县园洲镇东坡大道欣旺达产业园 9 号厂房				
<b>Supplier Address:</b>	9 Building, Sunwoda Industrial Park, Dongpo Avenue				
	Yuanzhou Town, Boluo County, Huizhou City,				
	Guangdong Province, P.R.China				
报告编号 Report N	No.: MSDS202107004				
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<b>然华日钿 I D</b>	-A I I 12 2021				
签发日期 Lssue Da	ate: <u>July 13, 2021</u>				

地址:中国深圳市宝安区石岩街道石龙社区颐和路2号

Address: No. 2, Yihe Rd, Shilong Community, Shiyan Street, Baoan District, Shenzhen City, China



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第一部分 -化学产品和公司的标识

## Section 1 – Chemical Product and Company Identification

产品名称:锂离子电池

**Product Name: Li-ion Battery** 

样品型号: LW962532

Sample Model: LW962532

制造商: 欣旺达惠州新能源限公司

Manufacturer: Sunwoda Huizhou New Energy Co., Ltd

地址:中国广东省惠州市博罗县园洲镇东坡大道欣旺达产业园9号厂房

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传真/Fax: 0755-29516999

邮箱/E-mail: duhui@depower.com.cn

第二部分 - 成份/成份信息

### Section 2 - Composition/Information on Ingredient

CAS No.	EC No.	REACH Registratio n No.	%[weight]	Name	Common Name (Synonyms)	Classification according to Regulation(EC) No 1278/2008(CLP)
12016-80-7	234-614-7	-	15~25	cobalt hydroxide oxide	Not available	Not classified
7782-42-5	231-955-3	-	10~20	Graphite	Not available	Not classified
7429-90-5	231-072-3	-	10~20	Aluminium	Not available	Pyr. Sol. 1, H250 Water-react. 2, H261
554-13-2	209-062-5	-	10~20	lithium carbonate	Not available	Not classified
7440-50-8	231-159-6	-	1~10	Соррег	Not available	Not classified
623-53-0	Not available	-	1~5	Ethyl methyl carbonate	Not available	Not classified
1308-06-1	215-157-2	-	1~5	tricobalt tetraoxide	Not available	Not classified
96-49-1	202-510-0	-	1~5	1,3-Dioxolan-2-one	Not available	Not classified

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9002-88-4	Not available	-	1~5	Polyethylene	Not available	Not classified
105-58-8	203-311-1	-	1~5	Carbonic acid diethyl ester	Not available	Not classified
21324-40-3	244-334-7	-	1~5	lithium hexafluorophosphate(1-)	Not available	Not classified
110-61-2	203-783-9	-	0.1~1	Butanedinitrile	Not available	Not classified
1333-86-4	215-609-9	-	0.1~1	Carbon black	Not available	Not classified
7439-89-6	231-096-4	-	0.1~1	Iron	Not available	Not classified
7440-02-0	231-111-4	-	0.1~1	Nickel	Not available	Skin Sens. 1, H317 Carc. 2, H351 STOT RE 1, H372 Aquatic Chronic 3, H412
7439-96-5	231-105-1	-	0.1~1	Manganese	Not available	Not classified

### 第三部分 -主要危险性识别

### Section 3 -Hazards Identification

健康危害(急性和慢性)

#### **Health Hazards (Acute and Chronic)**

这些化学物质包含在一个密封的可以接触.风险只发生如果电池是机械力或电滥用。接触的电解质和挤压锂应避免与皮肤和眼睛。

These chemicals are contained in a sealed can .Risk of exposure occurs only if the battery is mechanically or electrically abused. Contact of electrolyte and extruded lithium with skin and eyes should be avoided.

签署/暴露的症状

## Sign/Symptoms of Exposure

做空锂电池会导致热接触和化学烧伤皮肤。可能是生殖危害。

A shorted lithium battery can cause thermal and chemical burns upon contact with the skin. May be a reproductive hazard .

第四部分-急救措施

### Section 4 – First Aid Measures

#### 眼睛/Eyes

用大量的水冲洗眼睛至少15分钟,偶尔起重上下眼睑。获得医疗援助。

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

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#### 皮肤/Skin

去除被污染的衣服,用大量的水冲洗皮肤 15 分钟的淋浴。获得医疗援助。

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

#### 吸入/Inhalation

删除从曝光和立即转移到新鲜空气。如果可用使用氧气。

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

#### 摄入/Ingestion

给至少2杯牛奶或水。诱发呕吐,除非病人是无意识的 立即送医。

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

第五部分-消防措施

#### **Section 5 – Fire Fighting Measures**

闪点/Flash Point: 不涉及 N/A

自燃温度/Auto-Ignition Temperature: 不涉及 N/A

灭火介质/Extinguishing Media: 干粉,二氧化碳 Dry powder, CO<sub>2</sub>

不寻常的火灾和爆炸危险:细胞可能发泄时受到过度 heat-exposing 电池内容

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

有害燃烧产物:一氧化碳、二氧化碳、氧化锂烟雾。

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

第六部份-意外释放的措施

#### Section 6 – Accidental Release Measures

必须采取措施以防溢出的物质被释放

## Steps to be Taken in case Material is Released of Spilled

如果电池材料发布、删除人员从区域到烟雾消散。提供最大限度的通风,清除有害气体。用一块布擦,和处理在一个塑料袋,放到一个钢。

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.

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### FICOUNUZ 拉班流

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首选的反应就是离开这个地区,让电池冷却,蒸汽消散。提供最大的通风。避免皮肤和眼睛接触或吸入蒸汽。清除溢出的液体吸收剂和焚烧

The preferred response is to leave the area and allow the batteries 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.

废物处理方法/Waste Disposal Method

电池放电结束,交相关部门统一的废弃电池,电池的处理按照批准的地方、州和联邦政府的要求。咨询国家环境保护局和/或联邦环保局。

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

#### 第7部份-处理和存储

### Section 7 -Handling and Storage

电池不应该打开,摧毁或焚烧,因为它们可能泄漏或破裂并释放到环境的成分包含在密闭容器。不短路端子,或过量充电电池,迫使过放电,把火。请勿挤压或刺穿电池,或浸泡在液体

The batteries 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.

预防措施在处理和存储

#### Precautions to be taken in handling and storing

避免机械或电气滥用。存储最好在凉爽、干燥和通风的地方这是受温度变化小.Storage 应该避免在高温下。不要将电池放置在加热设备,也没有长时间暴露于阳光直射。

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.

其他预防措施/Other Precautions

电池可能会爆炸或造成烧伤,如果拆卸,碾碎或暴露于火或高温。不短或安装不正确的极性。

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

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### FICOUNUZ 拉到新

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#### 第8部分-曝光控制,个人防护

#### Section 8 – Exposure Controls, Personal Protection

呼吸防护:在电池发泄的情况下,提供尽可能多的通风。避免与发泄电池封闭区域。没有必要呼吸防护的条件下正常使用。

**Respiratory Protection**: In case of battery venting, provide as much ventilation as possible. Avoid confined areas with venting batteries. Respiratory Protection is not necessary under conditions of normal use.

通风:没有必要的条件下正常使用。

Ventilation: Not necessary under conditions of normal use.

防护手套:没有必要的条件下正常使用。

Protective Gloves: Not necessary under conditions of normal use.

其他防护服或设备:没有必要的条件下正常使用。保护、防护手套、防护服和安全玻璃一面盾牌。

Protective Gloves: Not necessary under conditions of normal use.

Other Protective Clothing or Equipment: Not necessary under conditions of normal use.

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

#### 第九部分-理化特性

#### Section 9 –Physical and Chemical Properties

额定电压/Nominal Voltage: 7.74V 额定容量/Rated Capacity: 1000mAh

U.S. C. S. S. S. C. S. C

外观特征: 无味、固体/Appearance characters: odorless, solid

### 第十部分-稳定性和反应活性

## Section 10 -Stability and Reactivity

稳定性: 稳定/Stability: Stable

避免接触的条件: 滥用加热、机械和电气

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

产品分解危害:不涉及

**Hazardous Decomposition Products:** N/A.

聚合危害:不涉及

**Hazardous Polymerization:** N/A.

如果泄露,禁止与强氧化剂接触,无机酸、强碱金属卤化碳氢化合物

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

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第十一部分-毒理性资料

### Section 11 -Toxicological Information

nhalation、皮肤接触、眼睛接触电池打开时是有可能的。

暴露在内部内容、腐蚀性气体会非常刺激皮肤,眼睛和粘膜。曝光过度会导致 non-fibrosis 肺损伤和膜发炎的症状。

Inhalation, skin contact and eye contact are possible when the battery is opened.

Exposure to internal contents, the corrosive fumes will be very irritating to skin, eyes and mucous membranes. Overexposure can cause symptoms of non-fibrosis lung injury and membrane irritation.

第十二部分-生态学信息

### Section 12 - Ecological Information

当及时使用或处置电池不存在环境风险。当处理,远离水,雨和雪。

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

### 第十三部分-废弃处理

## Section 13 –Disposal Considerations

#### 适当的物质或准备处理的方法

如果电池还是完全充电或只是部分放电,他们可以被认为是一种被动的危险废物,因为大量的不创造,或 花剩余未耗尽的锂电池。电池必须中和通过批准的二级处理设施之前,作为危险废物处置。回收的电池可 以通过授权设施,通过授权浪费载体。

#### APPROPRIATE METHOD OF DISPOSAL OF SUBSTANCE OR PREPARTION

If batteries are still fully charged or only partially discharged, they can be considered a reactive hazardous waste because of significant amount of not creation, or unconsumed lithium remaining in the spent battery. The batteries must be neutralized through an approved secondary treatment facility prior to disposal as a hazardous waste. Recycling of battery can be done in authorized facility, through licensed waste carrier.

## 第十四部分-运输信息

## Section 14 – Transport Information

列出的电池模型有一个瓦特小时不超过 100 wh 的评级。和货物不包含项列在国际航空运输协会 DGR 特别规定 A154 和符合所有要求在联合国第三部分手动的测试和标准,38.3 小节

The battery models listed have a Watt-hour rating of no more than 100Wh.And shipment contains no item listed under IATA DGR Special Provision A154 and meets all requirements under UN Manual of Tests and Criteria Part III, subsection 38.3.

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			,
No	ITEMS	RESULT	REMARKS
1	Altitude simulation	Pass	
2	Thermal test	Pass	T-41 4- 541 d-4-1
3	Vibration	Pass	Test1 to 5 must be conducted in
4	Shock	Pass	sequence on the same cell or battery
5	External short circuit	Pass	
6	Impact	Pass	
7	Overcharge	Pass	Only battery do need this test item
8	Forced discharge	Pass	

每个包能够承受1.2米跌落试验在任何方向没有损坏电池或电池包含在其中,没有改变的内容,以使电池电池(细胞或细胞)接触,没有发布的内容。包不超过10公斤总质量。

Each package is capable of withstanding a 1.2m drop test in any orientation without damage to cells or batteries contained therein, without shifting of the contents so as to allow battery to battery (or cell to cell) contact and without release of contents. Package does not exceed 10kg gross mass.

包装符合要求的第二部分或部分 IB 的包装指令 965/966/967 国际航空运输协会的第 62 DGR 手册 Packaging complies with the requirements of section II or section IB of Packing Instructions 965/966/967 of 62nd DGR Manual of IATA.

本文并不局限于 IMO IMDG 代码根据 188 年的特别规定。

货物按照普通货物的包装要求包装。

更多的信息关于航运、测试、标记和包装可以从标签获得主人的 http://www.labelmaster.com。

The article is not restricted to IMO IMDG Code according to special provision 188.

The goods are packaged according to the packaging requirement of ordinary goods.

More information concerning shipping, testing, marking and packaging can be obtained from Label master at http://www.labelmaster.com.

单独的电池在运输,防止短路。他们应该用坚固的包装包装运输期间的支持。把他们的货物没有下降,下降,和破损。防止货物堆崩溃和被雨水湿。

Separate battery when shipping to prevent short-circuiting. They should be packed in strong packaging for support during transport. Take in a cargo of them without falling, dropping, and breakage. Prevent collapse of cargo piles and wet by rain.

运输方式:陆运

Transport Fashion: Land transportation

第十五部分-法规信息

Section 15 - Regulatory Information

Law Information

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《Dangerous Goods Regulation》

《Recommendations on the Transport of Dangerous Goods Model Regulations》

《International Maritime Dangerous Goods》

《Technical Instructions for the Safe Transport of Dangerous Goods》

《Classification and code of dangerous goods》

《Occupational Safety and Health Act》 (OSHA)

《Toxic Substances Control Act》 (TSCA)

《Consumer Product Safety Act》(CPSA)

《Federal Environmental Pollution Control Act》 (FEPCA)

《The Oil Pollution Act》 (OPA)

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

《Resource Conservation and Recovery Act》 (RCRA)

《Safety Drinking Water Act》 (CWA)

《California Proposition 65》

《Code of Federal Regulations》(CFR)

In accordance with all Federal, State and Local laws.

第十六部分-其他信息

#### Section 16 -Additional Information

上面的信息是基于日期的我们都知道,被认为是正确的数据处理规定在地层条件下可以应用我们无法控制的,这可能是陌生的,因为数据提供后续的数据本可能建议修改信息,我们不承担任何责任,其使用的结果。该信息提供条件,收到的人应当自己确定材料的适用性的特定目的。

The above information is based on the date of which we are aware and is believed to be correct as of the data hereof. Since this in formation 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 the person receiving it shall make his own determination of the suitability of the material of his particular purpose.

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