

Yt⊖S Shanghai PYTES Energy Co.,LTD

| Add. | No.3492 Jinqian Road, Fengxian District, Shanghai, China | P.C | 20250507 |
|------|--|-----|--------------|
| TEL | 021-57475847 | FAX | 021-57475827 |

MATERLAL SAFETY DATA

Issue date:2025-05-07 Rev: A.0 MSDS REF. NO.: 20250507

LITHIUM-ION RECHARGEABLE BATTERY

MATERIAL SAFETY DATA SHEET

IDENTITY Product Category Rechargeable Li-ion Battery Pack

> Model Name 18650*3 11.1V 2600mAh 28.86Wh ER

Brand PYTES Nominal Capacity 2.6 Ah 11.1 V Nominal Voltage

Watt-hour 28.86 W/hr

Chemical System Lithium-Ion (Li-ion)

Desigened for Recharge :

SECTION 1 MANUFACTURER'S INFORMATION

Manufacturer's Name Shanghai PYTES Energy Co.,LTD Supplier's Name Shanghai PYTES Energy Co.,LTD

No.3492, Jinqian Road, Fengxian District, Shanghai, China Supplier's Address

Information Telephone + 0086 (21) 5747-5847 Emergency Telephone + 0086 (21) 5747-5821

Date Prepared 2025/05/07

SECTION 2 Composition

Battery Cell:

Although the chemical composition of the various cell manufacturers is proprietary, the following is typical of the chemistry.

| Hazardous Components (Specific Chemical Identity; Common Name(s)) | % | CAS NO. | LD50(mg/kg) (oral-rat) | LC50 (mg/L) |
|---|------------|-------------|---------------------------|-------------|
| Cobalt lithium manganese nickel oxide | 30-45w/w | 182442-95-1 | N/A | N/A |
| Graphite Powder | 15-25 w/w | 7782-42-5 | 440 (ivn-mouse) | N/A |
| Lithium hexaflurorphosphate (LiPF ₆) | 1-3 w/w | 21324-40-3 | 1702 | Rat: >20 |
| Poly (vinylidene fluoride) (PVDF) | 0.1 -2 w/w | 24937-79-9 | N/A | N/A |
| Aluminum foil | 2-8 w/w | 7429-90-5 | N/A | N/A |
| Copper foil | 5 -10 w/w | 7440-50-8 | 3.5(ipr-mouse) | N/A |
| Carbon black and others | 0.5-2w/w | 1333-86-4 | N/A | N/A |
| Steel, nickel and inert polymer | 0.5-5 w/w | 9003-55-8 | N/A | N/A |



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These chemicals and metals are contained in a sealed can.

SECTION 3 HAZARDS DATA

3.1 Physical:

The lithium-ion batteries described in this Material Safety Data Sheet are sealed which are not hazardous when used according to the recommendations of the manufacturer.

Under normal conditions of use, electrode materials and liquid electrolyte they contain are non-reactive provided the battery integrity is maintained and seals remain intact, risk of exposure only in case of abuse, e.g. mechanical, thermal, electrical, which leads to the activation of safety valves and/or the rupture of the battery containers. Electrolyte leakage, electrode materials reaction with moisture / water of battery vent/ explosion/fire may follow depending upon circumstances.

3.2 Chemical:

Classification of dangerous Substances Contained into the Product as per Directive

| | Chemical symbol | CAS No. | | _ | 1 1 | | Special | Safety advices(2 |
|--|--|---------------------|-------------|---------------|---------------------|-----------|----------------|---------------------|
| Lithium nickel cobalt manganese oxide | $\begin{array}{c} LiNi_{0.8} \\ Co_{0.1}Mn_{0.1} \\ O_2 \end{array}$ | 182442-95-1 | >800°C | / | 1 | / | R36/37 / 38 | S22/S24/ S25 |
| Organic | EC DMC | 96-49-1 616-38-6 | 38°C 4°C | 243°C 90°C | None established | Flammable | R21 R22 R41 | S2 S24 S26 S36 |
| solvents | DEC | 105-58-8 | -43°C | 127°C | OSHA | | R42/43 | S37 S45 |

(1). Name of Special Risks:

R21 Harmful in contact with *skin*R22 Harmful us swallowed

R36/37/38 Irritating to eyes, respiratory system and skin

R41 Risk of serious damage to the eye

R42 May cause sensitization by inhalation and skin contact

R43 May cause sensitization by skin contact

(2). Safety Advices:

- S2 Keep out of reach from children
- S22 Do not breathe dust
- S24 Avoid contact with skin
- S25 Avoid contact with eyes.
- S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical attention
- S36 Wear suitable protective clothing
- S37 Wear suitable gloves
- S45 In case of incident, seek medical attention



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SECTION 4 First Aid Measures

In case of battery rupture or explosion, evacuate personnel from contaminated area and provide maximum ventilation to clear out corrosive fumes/gases and pungent odors.

In all case, seek medical advice immediately,

Eye contact: Flush with plenty of water(eyelids-held open) for at least 15 minutes

Skin contact: Remove all contaminated clothing and flush affected areas with plenty of water and sop for at

least 15minutes.

Ingestion: Dilute by giving plenty of water and get immediate medical attention.

Assure that the victim does not aspirate vomited material by use of positional drainage.

Assure that mucus does not obstruct the airway.

Do not give anything by mouth to an unconscious person

Remove to fresh air and ventilate the contaminated area. Inhalation:

Give oxygen or artificial respiration if needed.

ECTION 5 Fire-Fighting Measures

| Eine and availagion howard | The batteries can leak and/or spout vaporized or decomposed and combustible electrolyte fumes in case of exposure above 90°C resulting from inappropriate use or |
|----------------------------|--|
| Fire and explosion hazard | from the environment. Possible formation of hydrogen fluoride (HF) and phosphorous |
| | oxides during fire.LiPF6 salt contained in the electrolyte releases hydrogen fluoride |
| | (HF) in contact with water. |
| | Suitable : CO2, |
| Extinguishing media | Dry chemical or Foam extinguishers |
| | Not to be used: Type D extinguishers |
| | Following cell overheating due to external source or due to improper use, electrolyte |
| | leakage or battery container rupture may occur and release inner component/material |
| | in the environment. |
| | Eye contact: The electrolyte solution contained in the battery is irritant to ocular |
| Special exposure | tissues. |
| hazards: | Skin contact: The electrolyte solution contained in the battery causes skin irritation. |
| | Ingestion: The ingestion of electrolyte solution causes tissue damage to throat and |
| | gastro/respiratory tract. |
| | Inhalation: Contents of a leaking or ruptured battery can cause respiratory tract, |
| | mucus, membrane irritation and edema. |
| Special protective | Use self-contained breathing apparatus to avoid breathing irritant fumes. |
| equipment | Wear protective clothing and equipment to prevent body contact with electrolyte |
| quipinent | solution. |

SECTION 6 ACCIDENTAL RELEASE MEASURES

| Personal Precautions, | | | | |
|-----------------------|--|--|--|--|
| protective equipment, | Restrict access to area until completion of clean-up. Do not touch the spilled | | | |
| and emergency | material. Wear adequate personal protective equipment as indicated in Section 8. | | | |
| procedures | | | | |



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| Environmental Precautions | Prevent material from contaminating soil and from entering sewers or waterways. |
|---------------------------------------|--|
| Methods and materials for Containment | Stop the leak if safe to do so. Contain the spilled liquid with dry sand or earth. Clean up spills immediately. |
| Methods and materials for cleaning up | Absorb spilled material with an inert absorbent (dry sand or earth). Scoop contaminated absorbent into an acceptable waste container. Collect all contaminated absorbent and dispose of according to directions in Section 13. Scrub the area with detergent and water; collect all contaminated wash water for proper disposal. |

SECTION 7 Handling and Storage

The batteries should not be opened destroyed nor incinerated since they may leak or rupture and release the ingredients they contain into the environment.

| greatents they contain the the environment. | | | |
|---|---|--|--|
| | Do not crush, pierce, short (+) and (-) battery terminals with conductive (i.e. metal) | | |
| | goods. Do not directly heat or solder. Do not throw into fire. Do not mix batteries | | |
| Handling | of different types and nds. | | |
| | Do not mix new and used batteries. Keep batteries in non-conductive (i.e. plastic) trays. | | |
| | Store in a cool (preferably below 30°C) and ventilated area away from moisture, | | |
| | sources of heat, open flames, food and drink. Keep adequate clearance between | | |
| Storage | walls and batteries. Temperature above 90°C may result in battery leakage and | | |
| Storage | rupture. Since short circuit can cause burn, leakage and rupture hazard, keep | | |
| | batteries in original packaging until use and do not jumble them. | | |
| | manufacturer recommendations regarding maximum recommended currents and | | |
| 0.1 | operating temperature range. | | |
| Other | Applying pressure on deforming the battery may lead to disassembly followed by eye, skin and throat irritation. | | |

SECTION 8.Exposure Controls/Personal Protection

| Respiratory protection: | Not necessary under normal use. In case of battery rupture, use self-contained full-face respiratory equipment. equipment with type ABEK filter. |
|-------------------------|---|
| Hand protection: | Not necessary under normal use. Use rubber gloves if handling a leaking or ruptured battery. |
| Eye protection: | Not necessary under normal use. Wear safety goggles or glasses with side shields if handling a leaking or ruptured battery. |
| Skin protection: | Not necessary under normal use. Use rubber apron and protective working in case of handling of a ruptured battery. |



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SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

9.1 Appearance (Physical shape and color as supplied:)

Lithium nickel cobalt manganese oxide is a Black Powder; Silicon oxide / graphite is a black or odorless power; Organic solvent is a colorless liquid.

9.2 Specific gravity (H₂O=1)

Lithium nickel cobalt manganese oxide :2.2 Silicon oxide / graphite: 2.0~2.2

9.3 Melting point

Silicon oxide / graphite: 3500-3900°C

SECTION 10 STABILITY AND REACTIVITY

| Conditions to avoid | d Heat above 90°C or incinerate. Deform, mutilate, crush, pierce, disassemble. Short | |
|---------------------|---|--|
| | circuit. Prolonged exposure to humid conditions. | |
| Materials to avoid | N/A | |
| Hazardous | Corrosive/Irritant Hydrogen fluoride (HF) is produced in case of reaction of lithium | |
| decomposition | (LiPF ₆) with water. Combustible vapors and formation of Hydrogen fluoride (HF) | |
| products | and phosphorous oxides during fire. | |

SECTION 11 TOXICOLOGICAL INFORMATION

The LITHIUM-ION batteries do not contain toxic materials.

SECTION 12 ECOLOGICAL INFORMATION

When properly used or disposed, the LITHIUM-ION batteries do not resent environmental hazard.

SECTION 13 DISPOSAL CONSIDERATIONS

Dispose in accordance with applicable regulations which vary from country to country.

(In more countries, the thrashing of used batteries is forbidden and the end-users are invited to dispose them properly, eventually through not-for-profit organizations, mandated by local governments or organized on a voluntary basis by professionals).

Lithium-Ion batteries should have their terminals insulated and be preferably wrapped in plastic bags prior to disposal.

13.1 Incineration: Incineration should never be performed by battery users but eventually by trained professionals in authorized facilities with proper gas and fumes treatment.

13.2 Land filling: Leach ability regulations (mg/l)

| | | <u> </u> | | |
|-----------|---------------|----------|-----|--------|
| Component | Leach ability | EC limit | EPA | Other* |
| Iron | 100 | | | 5 |



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| Nickel | 500 | 2 | 0.5 |
|---------|-----|---|-----|
| INICKCI | 300 | _ | 0.3 |

SECTION 14 Transport information

- 14.1 Lithium ion batteries containing Watt-hour rating is not more than 100Wh.
- 14.2 The Lithium-ion battery have been tested under provisions of the UN Manual of Tests and Criteria, the battery is passed the UN 38.3 test, Part III, sub-section 38.3(withstanding a 1.2m drop test) and are classified as non-dangerous goods.
- 14.3 Lithium-ion batteries can be treated as "Non-dangerous goods" under the United Nations Recommendations on the Transport of Dangerous Goods, Special Provision 188, provided that packaging is strong and prevent the products from short-circuit.
- 14.4 The Li-ion battery are complied with Section II of PI967 (66rd Edition 2025).
- 14.5 The consignment can be shipped as "Not Restricted" in accordance with the current edition-66rd of IATA-DGR-2025.
- 14.6 With regard to air transport, the following regulations are cited and considered:
 - -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 Transportations' (DOT)

Research and Special Programs Administration (RSPA).

SECTION 15 REGULATORY INFORMATION

The LITHIUM-ION CYLINDRICAL BATTERY (≥ 2550 mAh) according to Section II /IA/IB of PACKING INSTRUCTION 965/966/967 of the 2025 IATA Dangerous Goods regulations 66nd Editon may be transported and applicable U.S.DOT regulations for the safe transport of Li-ion Battery.

Depending on their lithium metal equivalent weight content, design, and ability to pass safety tests defined by the UN in the "Recommendations on the Transport of Dangerous Good - Manual of Tests and Criteria -4^{th} Revised edition - Ref. ST/SG/AC.10/11 Rev.4 Amendment 1 «Lithium Batteries»", the Lithium-ion cells and the battery packs are not be assigned to the UN 3480 or UN 3481 Class-9, that is restricted for transport.

Notes:

- UN 3480, Lithium ion batteries in bulk (PI 965)
- UN 3481, Lithium ion batteries contained in equipment (PI 967) or
- UN 3481, Lithium ion batteries packed with equipment

Individual Lithium-ion cells and battery packs with respectively less than 20 and 100 Wh per gram that pass the UN-defined safety tests, are not restricted for transport.

SECTION 16 OTHER INFORMATION/DISCLAIMER

This information has been compiled from sources considered to be dependable and is, to the best of our knowledge and belief, accurate and reliable as of the date compiled. However, no representation, warranty (either expressed or implied) or guarantee is made to the accuracy, reliability or completeness of the information contained herein.

This information relates to the specific materials designated and may not be valid for such material used in combination with any other materials or in any process. It is the user's responsibility to satisfy himself as to the suitability and completeness of this information for his particular use.

PYTES does not accept liability for any loss or damage that may occur, whether direct, indirect, incidental



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or consequential, from the use of this information.PYTES does not offer warranty against patent infringement. Additional information is available by calling the telephone number above designated purpose.



Add:Sanhe Integrated Industrial Production Base,Dapu County,Guangdong Province,P.R.China Tel: 0753-5400318 Fax: 0753-5401383

http://www.bfnbattery.com E-mail: bfn@bfnbattery.com

NO.:GJW20250320012

Material Safety Data Sheet 材料安全数据表

| 样 | 口口口 | 名 | 称: | 锂离子 | 电池 | | |
|-----|--------------------------------|-------|-------|-------------|---------------|--------|--------------|
| Nan | Name of Sample: Li-ion Battery | | | | | | |
| 委 | 托 | 单 | 位: | 梅州市博 | 富能科技 | 有限公司 | |
| Con | miss | sione | er: 1 | MEI ZHOU BO | 425 FUNEIN | ECHNOI | .OGY CO.,LTD |
| | | | | \ | THE BUT | | |



Add:Sanhe Integrated Industrial Production Base, Dapu County, Guangdong Province, P.R. China Fax: <u>0753-5401383</u> Tel: <u>0753-5400318</u> E-mail: bfn@bfnbatterycom

http://www.bfnbattery.com

材料安全数据表

Material Safety Data Sheet

| | 1. 化学品及企业标识 Chemical product and company identification | | |
|---------------------------------|---|--|--|
| 样品名称 Name of Sample | 锂离子电池 Li-ion Battery | | |
| 样品型号 Type/Model | 17500 1200mAh | | |
| 产品参数 Ratings | 1200mAh 3.7V 4.44Wh | | |
| 委托单位 Commissioned by | 梅州市博富能科技有限公司 MEI ZHOU BO FU NENG TECHNOLOGY CO.,LTD | | |
| 委托单位地址 Commissioner address | 广东省大埔县三河综合工业生产基地 Sanhe Integrated Industrial Production Base,Dapu County,Guangdong Province,P.R.China | | |
| 生产单位 Manufacturer | 梅州市博富能科技有限公司 MEI ZHOU BO FU NENG TECHNOLOGY CO.,LTD | | |
| 生产单位地址 Manufacturer address | 广东省大埔县三河综合工业生产基地 Sanhe Integrated Industrial Production Base,Dapu County,Guangdong Province,P.R.China | | |
| 鉴定依据 Inspection according to | EEC Directive 93/112/EC 联合国《关于危险品货物运输的建议书》 UN "Recommendations on the TRANSPORT OF DANGEROUS GOODS" | | |
| 应急电话 Emergency telephone | 0753-5400318 | | |
| | 送样日期: 2025-03-19 | | |

| Approved By: | | Reviewed By: | | Tested By: | | | |
|--------------|------------|--------------|-----|------------|-----|-----|--|
| 批注: 3 | 罩爱娟 | 审核: | 雷正平 | | 主检: | 王丽金 | |



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| 2. 成分组成信息 Composition information | | | | |
|--------------------------------------|-------------------------|------------------|-------------------|--|
| 材料及组分 Chemical Name | 化学式 Chemical Formula | CAS 号 CAS NO. | 重量含量 Wt% | |
| 镍钴锰酸锂 Lithium Ni-Co-Mn Oxid | LiNiCoMnO2 | 182442-95-1 | 39.6 | |
| 丁苯橡胶 SBR | (C8H8.C4H6)X | 9003-55-8 | 1.78 | |
| (PE)聚乙烯 Polyethylene | (CH2H4)n | 9002-88-4 | 0.06 | |
| 聚偏二氟乙烯 PVDF | (CH2CF2)n | 24937-79-9 | 1.15 | |
| 石墨 Graphite | С | 7782-42-5 | 23.2 | |
| 六氟磷酸锂 Lithium Hexafluorophoshate | LiPF6 | 21324-40-3 | 15.35 | |
| 碳酸乙烯酯 Ethylene carbonate | С3Н4О3 | 96-49-1 | 2.72 | |
| 铜箔 Copper Foil | Cu | 7440-50-8 | 9.8 | |
| 铝箔 Aluminum Foil | Al | 7429-90-5 | 5.56 | |
| (PP)聚丙烯 Polypropylene | (CH3H6)n | 9003-07-0 | 0.78 | |
| 铅 Lead | Pb | 7439-92-1 | 无 Not Detected | |
| 镉 Cadmium | Cd | 7440-43-9 | 无 Not Detected | |
| 汞 Mercury | Hg | 7439-97-6 | 无 Not Detected | |



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| 3.危险性概述 Hazards Identification | | |
|-----------------------------------|--|--|
| 爆炸危险性 | 该物品不属于爆炸危险品 | |
| Explosive Risk | This article does not belong to the explosion dangerous goods. | |
| 易燃危险性 | 该物品不属于易燃危险品 | |
| Flammable Risk | This article does not belong to the flammable material. | |
| 氧化危险性 | 该物品不属于氧化危险品 | |
| Oxidation Risk | This article does not belong to the oxidation of dangerous goods. | |
| 毒害危险性 | 该物品不属于毒害危险品 | |
| Toxic Risk | This article does not belong to the toxic dangerous goods. | |
| 放射危险性 | 该物品不属于放射性危险品 | |
| Radioactive Risk | This article does not belong to the radiation of dangerous goods. | |
| 腐蚀危险性 | 该物品不属于腐蚀危险品 | |
| Mordant Risk | This article does not belong to the corrosion of dangerous goods. | |
| | 该物品为锂离子电池,瓦时率 9.62Wh,属于锂离子电池(包括锂 | |
| 其他危险性 | 聚合物电池) | |
| Other Risk | This article is Li-ion Battery, Watt hour rate 9.62Wh, Which belong to | |
| | the Lithium ion batteries (including lithium polymer batteries) | |

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,泛起上下眼脸。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,如果呼吸困难给及输氧,立即就医。

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

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

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



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5. 消防措施

Fire-fighting measures

燃点:不适用 Flash Point: N/A 自燃温度:不适用

Anto-Ignition Temperature: N/A

灭火介质: 大量水(降温),二氧化碳 Extinguishing Media: Water .CO₂

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,锂氧化物烟气

Hazardous Combustion Products:

Carbon monoxide. Carbon dioxide, lithium 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,实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 the personnel form 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,消耗电池内部的锂金属,并且深埋于土壤中。

Waste Disposal Method

It is recommended to discharge the battery to the end ,to use up the metal lithium inside the battery, and to bury the discharged battery in soil .



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7. 操作处置和储存

Handing and Storage

禁止打开、毁坏活焚烧电池,因为电池有可能在这些处理过程中发生爆炸、破裂或者泄露等事故。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、通风及温度变化较小的环境中,禁止将电池接触加热设备或电池直接暴露与阳光中。

Precautions to be taken in handing 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

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。禁止短接或电池正负极错误的安装在设备中。

Other Precautions

The battery may explode or cause bums, if disassembled, crushed or exposed to fire or high temperatures. 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.

通风条件

正常使用条件下不必考虑

Ventilation

No necessary under conditions of normal use.

防护手套

正常使用条件下不必考虑

Protective Gloves



Add:Sanhe Integrated Industrial Production Base, Dapu County, Guangdong Province, P.R. China

 Tel: 0753-5400318
 Fax: 0753-5401383

 http: //www.bfnbattery.com
 E-mail: bfn@bfnbattery.com

No necessary under conditions of normal use.

其他防护服装或设备

正常使用条件下不必考虑

Other Protective Clothing or Equipment

No 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

外形:圆柱形

Appearance: Cylindrical 认证编号: RZUN2021-1427 Ref,NO::RZUN2021-1427 气味: 泄露时,有醚的气味

O dour: If leaking, smells of medical ether

酸碱度: 不适用

PH: Not applicable as supplied

燃点:除单个电芯暴露试验外其他不适用。

Flash Point: Not applicable unless individual components exposed.

可燃性:除单个电芯暴露试验外其他不适用。

Flammability: Not applicable unless individual components exposed.

相对密度: 除单个电芯暴露试验外其他不适用。Relative density: Not applicable unless individual components exposed.

溶解性(水溶性):除单个电芯暴露试验外其他不适用。

Solubility(water): Not applicable unless individual components exposed.

溶解性(其他):除单个电芯暴露试验外其他不适用。

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

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 70℃以上或焚烧、变形、毁坏、粉碎、拆卸、过充电、短路、长时间暴露在



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潮湿的条件下.

Conditions to Avoid: Heat above 70 $^{\circ}\mathrm{C}$ 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、碱、水

Materials to avoid: Oxidising agents, alkalis, water

危险分解物: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 alkalies, halogenated

hydrocarbons.

11. 毒理学资料

Toxicological information

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,蒸汽烟雾可能对眼睛和皮肤的刺激性。

In the event of exposure to internal contents ,vapour fumes may be very irritating to the eyes

and skin.

吸入:对肺有刺激性

Inhalation: Lung irritant

皮肤接触:对皮肤有刺激性 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. 生态学资料

Ecological information

对哺乳动物的影响:目前未知

Mammalian effects: None know at present

生态毒性:目前未知



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Eco-toxicity: None know at present 生物体内累积: 慢慢的生物降解

Bio-accumulation potential: Slowly Bio-accumulation

环境危害: 目前没有已知的环境危害

Environmental fate: None know environmental hazards at present.

13. 废弃处置

Disposal consideration

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

Do not incinerate or subject cells to temperature in excess of $70\,^\circ\!\!\!\mathrm{C}_{\,}$, such abuse can result in loss of seal leakage, and cell explosion .Dispose of in accordance with appropriate local regulations .

14. 运输信息

Transport information

运输标签: 锂电池标记,第九类危险品标签,仅限货机标签

Label for conveyance: Lithium battery Mark, Class 9 Hazard Label, Cargo Aircraft Oircraft Only

Label

UN 编号: 3480 UN Number: 3480 包装等级:不适用 Packaging Group: N/A EMS 编号: F-A-S-I

EMS NO.: F-A-S-I 海洋污染物: 无 Marine pollutant: NO

正确装运名称: 锂离子电池(单独)运输(包括锂离子聚合物电池)

Proper Shipping name: Lithium ion battery (including lithium ion polymer battery)

危害分类: 货物应遵守 IATA DGR(第 66 版)PI965 IB 规定或特殊规定 188 海运危险货物规则

(Amdt.41-22)版,包括通过 UN38.3 测试。

Hazard classification: the goods shall comply with IATA DGR (66th Edition) PI965

Part IB or special provisions 188 maritime dangerous goods rules (amdt. 41-22), including UN38.3 test.



Add:Sanhe Integrated Industrial Production Base, Dapu County, Guangdong Province, P.R. China Tel: <u>0753-5400318</u> Fax: 0753-5401383 E-mail: bfn@bfnbatterycom

http://www.bfnbattery.com

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 Re-authorization Act Title∭(302/311/312/313)» (SARA)
- 《资源保护及恢复法案》
- 《Resource Conservation and Recovery Act》(RARA)
- 《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.



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http://www.bfnbattery.com E-mail: bfn@bfnbattery.com

16. 其他信息 Other information

本文件仅对由梅州市博富能科技有限公司提供的,并由梅州市博富能科技有限公司生产的单电芯电池(17500 1200mAh)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,梅州市博富能科技有限公司不承担任何责任。

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