

Report ID: MRIEU05G4963547U3

2024 年 1 月 1 日生效

# MSDS

Sample Name  
& Model

Rechargeable Li-ion Battery EVE84480  
(3.7V 280mAh 1.04Wh)

Applicant

EVE Energy Co., Ltd.

Address

No.38, HuiFeng 7th Road, Zhongkai Hi-TechZone, HuiZhou,  
Guangdong, China

PONY 谱尼测试  
Pony Testing International Group  
www.ponytest.com



No.: MRIEU05G4963547U3  
Code: IXrMZUj13

## 声 明 Statement

1. 本报告无检验检测专用章、报告骑缝章和批准人签章无效。  
This report is invalid without special seal for inspection and test, cross-page seal and signature of the approver.
2. 本报告页面所使用“PONY”、“谱尼”字样为本单位的注册商标，其受《中华人民共和国商标法》保护，任何未经本单位授权的擅自使用和仿冒、伪造、变造“PONY”、“谱尼”商标均为违法侵权行为，本单位将依法追究其法律责任。  
The words "PONY" and "谱尼" used in this report page are the registered trademarks of the company, which are protected by the Trademark Law of the People's Republic of China. Any unauthorized use, counterfeiting, forging or altering of the trademarks of "PONY" and "谱尼" without the authorization of the company is an illegal infringement, and the company will investigate their legal liabilities according to law.
3. 委托单位对报告数据如有异议，请于报告完成之日起十五日内向本单位书面提出复测申请，同时附上报告原件并预付复测费。  
If the applicant has any objection to the report data, please submit a written application for retesting to PONY within 15 days after the completion of the report, with the original report attached and the retesting fee prepaid.
4. 不可重复性或不能进行复测的实验，不进行复测，委托单位放弃异议权利。  
If the experiment cannot be repeated or cannot be retested, no retest shall be conducted, and the applicant shall waive the right of objection.
5. 委托单位必须保证送至本公司的样品及资料与真实的运出货物相一致，如有不符，所涉及的法律及其他后果均由委托单位自行承担。  
The client must guarantee that samples and documents provided for appraisal are consistent with the goods to be transported. Otherwise, the client shall bear all legal responsibilities and other consequences due to it.
6. 本报告仅对所测样品的检测结果负责，检测结果及其相关判定结论仅反映对所测样品的评价或只代表检测时污染物的排放状况。对于报告及所载内容不能进行商业广告宣传使用，使用所产生的直接或间接损失及一切法律后果，本单位不承担任何经济和法律后果。  
This report is only responsible for the test results of the tested samples, The test results and relevant conclusions reflect the evaluation of the tested samples or only represent the emission status of pollutants during the test. The report and the contents contained in it cannot be used for commercial advertising, and PONY does not assume any economic and legal liabilities for direct or indirect losses and all legal consequences arising from the use.
7. 本单位有权在完成报告后按规定方式处理所测样品，除客户特别声明并支付样品管理费，所有超过标准规定时效期的样品均不再做留样。  
PONY has the right to dispose the tested sample after approval of the test report. Unless the applicant specifically declares and pays the sample management fee, all samples beyond the validity period specified in the standard will not be retained.
8. 本单位保证工作的客观公正性，对委托单位的商业信息、技术文件等商业秘密履行保密义务。  
PONY assures objectivity and impartiality of the test, and fulfills the obligation of confidentiality for applicant's commercial information, and technique document.
9. 本报告私自转让、盗用、冒用、涂改、未经本单位批准的复制(全文复制除外)或以其它任何形式的篡改均属无效，本单位将对上述行为追究其相应的法律责任。  
Any unauthorized transfer, appropriation, falsification, alteration, copying (except full text copying) or alteration in any other form of this report without the approval of PONY shall be invalid. PONY shall strictly investigate the corresponding legal liability for the aforesaid behavior.
10. 本报告不考虑国家及经营人差异。  
The certificate/report takes no account of the differences of countries and applicants.

### ▲ 防伪说明：

1. 报告编号是唯一的；  
The report number is unique.
2. 扫描报告首页下方二维码或登录网站(<http://www.ponytest.com/>)，即可查询报告真伪。  
Scan the QR code below the first page or Log on to the website(<http://www.ponytest.com/>) to check the authenticity of the report.

 **全国服务热线**  
**400-819-5688**  
**WWW.PONYTEST.COM**



北京实验室：(010) 83055000	郑州实验室：(0371) 69350670	成都谱尼计量实验室：(028) 87702708	宁波实验室：(0574) 87736499
北京谱尼科技公司：(010) 80415661	郑州市谱尼卫生公司：(0371) 80967099	贵州实验室：(0851) 85221000	合肥实验室：(0551) 63843474
北京谱尼计量实验室：(010) 82492998	新疆实验室：(0991) 6684186	上海实验室：(021) 64851999	深圳实验室：(0755) 26050909
青岛实验室：(0532) 88706866	石家庄实验室：(0311) 85376660	苏州实验室：(0512) 62997900	深圳谱尼计量实验室：(0755) 26050909-846
天津实验室：(022) 23607888	西安实验室：(029) 89608785	苏州汽车座椅实验室及儿童安全座椅	谱尼深圳通测：(0755) 27673339
长春实验室：(0431) 80530198	西安创尼信息科技有限公司：(029) 81123093	碰撞实验室：(0512) 62997900	广州实验室：(020) 89224310
沈阳实验室：(024) 22811886	西安德威检测技术有限公司：(029) 85729073	武汉实验室：(027) 83997127	南宁实验室：(0771) 5518818
大连实验室：(0411) 87336618	呼和浩特实验室：(0471) 3450025	武汉车附所：(027) 82318175	厦门实验室：(0592) 5568048
哈尔滨实验室：(0451) 58627755	成都实验室：(028) 87702708	杭州实验室：(0571) 87219096	



## Material Safety Data Sheet

Reference to ST/SG/AC.10/30/Rev.10 (GHS)

### Section 1 - Chemical Product and Company Identification

#### Chemical Product Identification

**Sample Name:** Rechargeable Li-ion Battery

**Sample Model:** EVE84480

**Recommended Uses:** N/A

**Restrictions on Use:** N/A

**Supplier Name:** EVE Energy Co., Ltd.

**Address:** No.38, HuiFeng 7th Road, Zhongkai Hi-TechZone, HuiZhou, Guangdong, China

**Phone Number:** 18512060339

**FAX:** /

**E-mail:** 061315@evebattery.com

**Emergency Phone Number:** 13828810395

### Section 2 - Hazards Identification

**Emergency overview:** This product is a battery. Intended use of the product should not result in exposure to the chemical substance. In case of rupture the below hazards exist.

#### Classification according to GHS

Acute toxicity, oral (4)

Skin corrosion/irritation (2)

Serious eye damage/eye irritation (2A)

Specific target organ toxicity, single exposure; Respiratory tract irritation (3)

#### Label elements

##### Hazard pictogram(s):



##### Signal word:

Warning

##### Hazard statement(s):

H302 Harmful if swallowed

H315 Causes skin irritation

H319 Causes serious eye irritation

H335 May cause respiratory irritation

##### Precautionary statement(s):



**Hotline 400-819-5688**

**www.ponytest.com**

PONY-BGLS186-03E-027-2023B

Pony Testing Group Shenzhen Co., Ltd.

Address: 3/F. of Building 2, Building 1, Xinhaosheng Industrial Park, Yonghe Road, Qiaotou Community, Baoan District, Shenzhen, Guangdong, China

Testing Address: 3/F. of Building 2, Building 1, Xinhaosheng Industrial Park, Yonghe Road, Qiaotou Community, Baoan District, Shenzhen, Guangdong, China

Tel: 0755-26050909

Fax: 0755-26068336

**Prevention:**

P264 Wash skin and clothing thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P280 Wear protective gloves, protective clothing, eye protection, face protection.

P261 Avoid breathing dust, fume, gas, mist, vapours, spray.

P271 Use only outdoors or in a well-ventilated area.

**Response:**

P301 + P312 IF SWALLOWED: Call a POISON CENTER if you feel unwell.

P330 Rinse mouth.

P302 + P352 IF ON SKIN: Wash with plenty water.

P321 Specific treatment (See additional emergency instructions).

P333 + P313 If skin irritation or rash occurs: Get medical advice.

P362 + P364 Take off contaminated clothing and wash it before reuse.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337 + P313 If eye irritation persists: Get medical advice.

P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P312 Call a POISON CENTER, if you feel unwell.

**Storage**

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

P405 Store locked up.

**Disposal:**

P501 Send contents to approved waste treatment plants.

**Other hazards**

**Physical and chemical hazards:** See Section 10

**Human health hazards:** See Section 11

**Environmental hazards:** See Section 12

### Section 3 – Composition/Information on Ingredients

**Chemical characterization:** Mixture

Chemical Composition	CAS No.	EC#	Weight (%)
Cobaltate, lithium	12190-79-3	235-362-0	45
Graphite	7782-42-5	231-955-3	20~35
Polyvinylidene fluoride resin	24937-79-9	607-458-6	2
Carbon black	1333-86-4	215-609-9	0.5~3



Carbonic acid, ethyl methyl ester	623-53-0	613-014-2	10~18
Phosphate(1-), hexafluoro-, lithium	21324-40-3	244-334-7	

## Section 4 - First Aid Measures

### Description of first aid measures

**General information** No special measures required.

#### After eye contact

Flush eyes with plenty of water for several minutes while holding eyelids open. Get medical attention if irritation persists.

#### After skin contact

Remove contaminated clothing and shoes. Immediately wash with water and soap and rinse thoroughly. Wash clothing and shoes before reuse. If irritation occurs, get medical attention.

#### After inhalation

Remove victim to fresh area. Administer artificial respiration if breathing is difficult. Seek medical attention.

#### After swallowing

Do not induce vomiting. Get medical attention.

**Personal protective equipment for first-aid responders:** No data available.

**Most important symptoms/effects, acute and delayed:** No data available.

**Indication of immediate medical attention and special treatment needed:** Treat symptomatically.

## Section 5 - Fire Fighting Measures

### Suitable extinguishing media:

Small Fire: Dry chemical, CO<sub>2</sub>, water spray or regular foam. Large Fire: Water spray, fog or regular foam. Move containers from fire area if you can do it without risk.

### Unsuitable extinguishing media:

No data available.

### Specific Hazards arising from the chemical:

Special hazards arising from the substance or mixture

Battery may burst and release hazardous decomposition products when exposed to a fire situation. Lithium ion batteries contain flammable electrolyte that may vent, ignite and produce sparks when subjected to high temperature(>150°C(302°F)), when damaged or abused (e.g. mechanical damage or electrical overcharging); may burn rapidly with flare-burning effect; may ignite other batteries in close proximity.

### Specific protective actions for fire-fighters:

Wear positive pressure self-contained breathing apparatus (SCBA). Structural firefighters' protective

clothing will only provide limited protection.

## Section 6 - Accidental Release Measures

### Personal precautions:

As an immediate precautionary measure, isolate spill or leak area for at least 25 meters (75 feet) in all directions. Keep unauthorized personnel away. Stay upwind, uphill and/or upstream. Ventilate closed spaces before entering. Large Spill: Consider initial downwind evacuation for at least 100 meters (330 feet).

### Protective equipment:

No data available.

### Emergency procedures:

ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Do not touch or walk through spilled material. Absorb with earth, sand or other non-combustible material. Leaking batteries and contaminated absorbent material should be placed in metal containers.

### Environmental precautions:

Do not allow material to be released to the environment without proper governmental permits.

### Methods and materials for containment and cleaning up:

For all waste handling must refer to United Nations, National and Local Regulations for disposal.

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

## Section 7 - Handling and Storage

### Precautions for safe handling:

Avoid short circuiting the battery. Avoid mechanical damage of the battery. Do not open or disassemble. Batteries may explode or cause burns, if disassembled, crushed or exposed to fire or high temperatures. Do not short or install with incorrect polarity. Avoid all personal contact, including inhalation. Wear protective clothing when risk of exposure occurs. Use in a well-ventilated area. Prevent concentration in hollows and sumps.

### Conditions for safe storage, including any incompatibilities:

Store in a cool, dry, well-ventilated place. Keep away from heat, avoiding the long time of sunlight.

## Section 8 - Exposure Controls/Personal Protection

### Control parameters

CAS No.	ACGIH	NIOSH	OSHA
12190-79-3	N/A	N/A	N/A



7782-42-5	TLV-TWA 2mg/m <sup>3</sup>	REL-TWA 2.5mg/m <sup>3</sup>	PEL-TWA 15mppcf PEL-TWA 20mppcf
24937-79-9	N/A	N/A	N/A
1333-86-4	TLV-TWA 3mg/m <sup>3</sup>	REL-TWA 3.5mg/m <sup>3</sup>	PEL-TWA 3.5mg/m <sup>3</sup>
623-53-0	N/A	N/A	N/A
21324-40-3	N/A	N/A	N/A

#### Appropriate engineering controls:

The usual precautionary measures for handling chemicals should be followed.

Keep away from foodstuffs, beverages and feed.

Remove all soiled and contaminated clothing immediately.

Wash hands before breaks and at the end of work.

#### Personal Protective Equipment:

**Respiratory protection:** Wear suitable protective mask. For a large large number of battery leakages, wear chemical protective clothing, including self-contained breathing apparatus.

**Hand Protection:** Wear appropriate protective gloves to reduce skin contact.

**Eye Protection:** Wear safety goggles or eye protection combined with respiratory protection.

**Skin and Body Protection:** Working environment required, wear suitable protective clothing to minimize contact with skin. The type of protective equipment must be according to the concentration and the content of certain hazardous substances in the workplace.

## Section 9 - Physical and Chemical Properties

#### Information on basic physical and chemical properties

<b>Colour:</b>	Silver.
<b>Physical State:</b>	Cylindrical.
<b>Odour:</b>	Not available.
<b>pH:</b>	Not available.
<b>Melting point/freezing point:</b>	Not available.
<b>Boiling point or initial boiling point and boiling range:</b>	Not available.
<b>Flash Point:</b>	Not available.
<b>Flammability:</b>	Not available.
<b>Solubility:</b>	Not available.
<b>Lower and upper explosion limit/flammability limit:</b>	Not available.
<b>Auto-ignition temperature:</b>	Not available.
<b>Decomposition temperature:</b>	Not available.
<b>Kinematic viscosity:</b>	Not available.

<b>Partition coefficient: n-octanol/water (log value):</b>	Not available.
<b>Vapour pressure:</b>	Not available.
<b>Density and/or relative density:</b>	Not available.
<b>Relative vapour density:</b>	Not available.
<b>Particle characteristics:</b>	Not available.
<b>Other information:</b>	
<b>Voltage</b>	3.7V
<b>Electric capacity</b>	280mAh
<b>Electric Energy</b>	1.04Wh

## Section 10 - Stability and Reactivity

**Reactivity:** No data available.

**Chemical stability:** Stable.

**Possibility of hazardous reactions:** No data available.

**Conditions to Avoid:** Flames, sparks, and other sources of ignition, incompatible materials.

**Incompatible materials:** Oxidizing agents, acid base.

**Hazardous decomposition products:** Carbon monoxide, carbon dioxide, lithium oxide fumes.

## Section 11 - Toxicological Information

### Acute Toxicity:

CAS No.	LC50/LD50
12190-79-3	No data available.
7782-42-5	No data available.
24937-79-9	No data available.
1333-86-4	No data available.
623-53-0	No data available.
21324-40-3	No data available.

**Skin corrosion/irritation:** No data available.

**Serious eye damage/irritation:** No data available.

**Respiratory or Skin sensitization:** No data available.

**Germ Cell mutagenicity:** No data available.

**Carcinogenicity:** No data available.

**Reproductive toxicity:** No data available.

**Specific target organ toxicity-Single exposure:** No data available.

**Specific target organ toxicity-Repeated exposure:** No data available.



**Hotline 400-819-5688**

**www.ponytest.com**

PONY-BGLS186-03E-027-2023B

Pony Testing Group Shenzhen Co., Ltd.

Address: 3/F. of Building 2, Building 1, Xinhaosheng Industrial Park, Yonghe

Road, Qiaotou Community, Baoan District, Shenzhen, Guangdong, China

Testing Address: 3/F. of Building 2, Building 1, Xinhaosheng Industrial Park,

Yonghe Road, Qiaotou Community, Baoan District, Shenzhen, Guangdong, China

Tel: 0755-26050909

Fax: 0755-26068336



**Aspiration hazard:** No data available.

**Information on the likely routes of exposure:** No data available.

**Eye:** No data available.

**Skin:** No data available.

**Ingestion:** No data available.

**Inhalation:** No data available.

## Section 12 - Ecological Information

**Ecological Toxicity:** No data available.

**Persistence and degradability:** No data available.

**Bioaccumulative Potential:** No data available.

**Mobility in Soil:** No data available.

**Other adverse effects:** No data available.

## Section 13 - Disposal Considerations

**Disposal methods:**

**Recommendation:**

Consult state, local or national regulations to ensure proper disposal.

**Uncleaned packaging**

**Recommendation:** Disposal must be made according to official regulations.

## Section 14 - Transport Information

<b>UN or ID Number</b>	
<b>IATA</b>	UN3480
<b>IMDG</b>	UN3480
<b>Model Regulation</b>	UN3480
<b>Proper Shipping Name/Description</b>	
<b>IATA</b>	Lithium ion batteries
<b>IMDG</b>	LITHIUM ION BATTERIES
<b>Model Regulation</b>	LITHIUM ION BATTERIES
<b>Class or Div. (Sub Hazard)</b>	
<b>IATA</b>	9
<b>Packing Group</b>	
<b>IATA</b>	N/A
<b>IMDG</b>	N/A



**Hotline 400-819-5688**

**www.ponytest.com**

PONY-BGLS186-03E-027-2023B


Pony Testing Group Shenzhen Co., Ltd.

Address: 3/F. of Building 2, Building 1, Xinhaosheng Industrial Park, Yonghe Road, Qiaotou Community, Baoan District, Shenzhen, Guangdong, China

Testing Address: 3/F. of Building 2, Building 1, Xinhaosheng Industrial Park, Yonghe Road, Qiaotou Community, Baoan District, Shenzhen, Guangdong, China

Tel: 0755-26050909

Fax: 0755-26068336

<b>Model Regulation</b>	N/A
<b>Hazard Label</b>	
<b>IATA</b>	
<b>IMDG</b>	N/A
<b>Model Regulation</b>	N/A
<b>Environmental hazards</b>	
<b>Marine pollutant:</b>	No
<b>IMDG EmS:</b>	F-A. S-I
<b>Special precautions for user</b>	No information available.

**Transport information:** The Rechargeable Li-ion Battery EVE84480 has passed the test UN38.3, according to the report ID: MQI35OUG0142297U5.

According to the Packing Instruction 965 section IB of IATA DGR 65<sup>th</sup> Edition for transportation, Cargo aircraft only.

According to the special provision 188 of IMDG (41-22) or the special provision 188 of <<Recommendations On The Transport Of Dangerous Goods-Model Regulations>> (23<sup>rd</sup>), the goods are not subject to other provision of this code.

Separate batteries to prevent short-circuiting. and they should be packed in strong package during transport. Lithium cell or battery should incorporate a safety venting device or be designed to prevent a violent rupture under normal transport conditions. Keep away from high temperature and open flames.

**Note: State of Charge (SoC) not exceeding 30% of their rated capacity. (By air, Lithium ion batteries)**

**Transport Fashion:** By air, by sea, by railway, by road.

## Section 15 - Regulatory Information

**Safety, health and environmental regulations/legislation specific for the substance or mixture**

CAS No.	TSCA	IECSC	DSL/NDSL	EINECS/ ELINCS/ NLP
12190-79-3	Listed	Listed	Listed DSL	Listed
7782-42-5	Listed	Listed	Listed DSL	Listed
24937-79-9	Listed	Listed	Listed DSL	Listed



**Hotline 400-819-5688**

**www.ponytest.com**

PONY-BGLS186-03E-027-2023B

Pony Testing Group Shenzhen Co., Ltd.

Address: 3/F. of Building 2, Building 1, Xinhaosheng Industrial Park, Yonghe Road, Qiaotou Community, Baoan District, Shenzhen, Guangdong, China

Testing Address: 3/F. of Building 2, Building 1, Xinhaosheng Industrial Park, Yonghe Road, Qiaotou Community, Baoan District, Shenzhen, Guangdong, China

Tel: 0755-26050909

Fax: 0755-26068336



1333-86-4	Listed	Listed	Listed DSL	Listed
623-53-0	Listed	Listed	Listed DSL	Listed
21324-40-3	Listed	Listed	Listed DSL	Listed

## Section 16 - Other Information

Issue Date: 2023-12-04

Issue Department: Technical department

Modification record:

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

Other Information:

CAS: (Chemical Abstracts Service);

EC: (European Commission);

ACGIH: (American Conference of Governmental Industrial Hygienists);

NIOSH: (US National Institute for Occupational Safety and Health);

OSHA: (US Occupational Safety and Health);

TLV: (Threshold Limit Value)

TWA: (Time Weighted Average);

STEL: (Short Term Exposure Limit);

PEL: (Permissible Exposure Level);

REL: (Recommended Exposure Limit);

PC-STEL: (Permissible concentration-short time exposure limit);

PC-TWA: (Permissible concentration-time weighted average);

IARC: (International Agency for Research on Cancer);

LC50: (Lethal concentration, 50 percent kill);

LD50: (Lethal dose, 50 percent kill);

EC50: (Median effective concentration);

BCF: (Bioconcentration Factor);

BOD: (Biochemical oxygen demand);

IECSC: (Inventory of Existing Chemical Substances in China);

NOEC: (No observed effect concentration);

NTP: (US National Toxicology Program);



**Hotline 400-819-5688**

**www.ponytest.com**

PONY-BGLS186-03E-027-2023B

Pony Testing Group Shenzhen Co., Ltd.

Address: 3/F. of Building 2, Building 1, Xinhaosheng Industrial Park, Yonghe Road, Qiaotou Community, Baoan District, Shenzhen, Guangdong, China

Testing Address: 3/F. of Building 2, Building 1, Xinhaosheng Industrial Park, Yonghe Road, Qiaotou Community, Baoan District, Shenzhen, Guangdong, China

Tel: 0755-26050909

Fax: 0755-26068336

RTECS: (Registry of Toxic Effects of Chemical Substances);  
TOC: (Total Organic Carbon);  
TSCA: (Toxic Substances Control Act of USA);  
DSL: (the Domestic Substances List of Canada);  
NDSL: (the Non-domestic Substances List of Canada);  
IATA: (International Air Transport Association);  
IMDG: (International Maritime Dangerous Goods);  
TDG: (Recommendations on the TRANSPORT OF DANGEROUS GOODS Model Regulations)

Approver: Chunmei Zheng

\*\*\*End of report\*\*\*



**Hotline 400-819-5688**

**www.ponytest.com**

PONY-BGLS186-03E-027-2023B

Pony Testing Group Shenzhen Co., Ltd.

Address: 3/F. of Building 2, Building 1, Xinhaosheng Industrial Park, Yonghe Road, Qiaotou Community, Baoan District, Shenzhen, Guangdong, China

Testing Address: 3/F. of Building 2, Building 1, Xinhaosheng Industrial Park, Yonghe Road, Qiaotou Community, Baoan District, Shenzhen, Guangdong, China

Tel: 0755-26050909

Fax: 0755-26068336







三帕认证

# Material Safety Data Sheet

## 化学品安全技术说明书

**Product Name 产品名称:** Lithium Manganese Dioxide Batteries  
锂-二氧化锰电池

**Model 型号:** CR2025PH

**Issue Date 签发日期:** 2022.01.05

**Report No. 报告号:** SZLJ20220105MSDS01

**Compiler 编制:** Ailen Feng

**Reviewer 审核:** Tracy Chen

**Approver 批准:** Leo Zhi

广州三帕认证技术服务有限公司  
Guangzhou CP-UP Certification Technology Service Co., Ltd.



**Section 1 - Chemical and Company Identification****第一部分-化学品及企业标识**

Product Name 产品名称	Lithium Manganese Dioxide Batteries 锂-二氧化锰电池	
Model/型号	CR2025PH	
Ratings/额定参数	3V, 165mAh	
Applicant 申请商	YICHANG POWER GLORY TECHNOLOGY CO., LTD 宜昌力佳科技有限公司	
Applicant address 申请商地址	NO.19, XIANFENG ROAD, XIAOTING DISTRICT, YICHANG CITY, HUBEI PROVINCE, CHINA 湖北省宜昌市猇亭区先锋路 19 号	
Manufacturer 制造商	YICHANG POWER GLORY TECHNOLOGY CO., LTD 宜昌力佳科技有限公司	
Manufacturer Contact information 制造商联系信息	address 地址	NO.19, XIANFENG ROAD, XIAOTING DISTRICT, YICHANG CITY, HUBEI PROVINCE, CHINA 湖北省宜昌市猇亭区先锋路 19 号
	Tel./应急电话	0752-5306338
	Email/邮箱	cy@szlijia.com

**Section 2 - Hazards Identification****第二部分-危险性概述****Hazards Identification: 危险性描述**

Not dangerous with normal use. Do not dismantle, open or shred the battery ingredients contained within or their ingredients products could be harmful.

正常使用没有危险，不能拆解、打开或分解电池，里面的材料或成分是有害的。

**Primary Route (s) of Exposure: 接触途径**

inhalation, ingestion, Skin contact and Eye contact.

吸入、食入、皮肤接触、眼睛接触。

**Potential Health Effects: 潜在健康影响**

**inhalation:** Vapors or mists from a ruptured battery may cause respiratory irritation.

**吸入:** 破裂的电池散发出来的气雾会引起呼吸道刺激。

**Ingestion:** The battery ingredients contained within or their ingredients products can cause serious chemical burns of mouth, esophagus, and gastrointestinal tract.

**食入:** 电池的组成成分或原料可以导致嘴，食道和胃肠道的严重化学烧伤。

**Skin:** Skin contact with contents of an open battery can cause severe irritation or burns to the skin.

**皮肤:** 皮肤接触到电池的內部化学材料可能会导致严重的刺激或烧伤皮肤。

**Eye:** Eye contact with contents of an open battery can cause severe irritation or burns to the eye.

**眼睛:** 眼睛接触到电池的內部化学材料可能会导致严重的刺激或烧伤眼睛。



**Section 3- Composition/Information on Ingredients****第三部分-成分/组成信息**

<b>Chemical Name</b> 化学名称	<b>CAS Number</b> CAS 号 (化学文摘索引登记号)	<b>Concentration or concentration ranges (%)</b> 浓度或浓度范围(%)
Lithium 锂	7439-93-2	1.93 (0.052 gram)
Propylene Carbonate 碳酸丙烯酯	108-32-7	6.0
Manganese dioxide 二氧化锰	1313-13-9	26.0
1,2-Dimethoxyethane 1,2-二甲氧基乙烷	110-71-4	3.6
Lithium perchlorate 高氯酸锂	7791-03-9	1.1
Graphite 石墨	7782-42-5、1333-86-4	3.0
Polypropylene 聚丙烯	9003-07-0	4.1
Teflon 聚四氟乙烯	9002-84-0	0.3
Stainless steel 不锈钢	7439-89-6	53.97
<p>Note: CAS number is Chemical Abstract Service Registry Number.            注意: CAS 号是化学文摘服务注册号。            N/A=Not apply.            N/A=不适用</p>		

**Section 4- First Aid Measure****第四部分-急救措施**

<b>Inhalation</b> 吸入	Remove source of contamination or move victim to fresh air. Obtain medical advice. 移除污染源或者将受害者移至新鲜空气处。寻求医生建议。
<b>Ingestion</b> 食入	Please rinse mouth thoroughly with water, induce vomiting under the guidance of professional personage. Please seek medical treatment in time. 立即用清水漱口, 在专业人士的指导下催吐, 速就医。
<b>Skin contact</b> 皮肤接触	Remove contaminated clothes and rinse skin with plenty of water or shower for 15 minutes. Get medical aid. 脱下已污染衣服, 用大量的水冲洗至少 15 分钟, 速就医。
<b>Eye contact</b> 眼睛接触	Irrigate with flowing water for 15 minutes. If irritation persists, consult a physician. 用流动水冲洗 15 分钟, 如刺激持续发生, 请求助于医生。

**Section 5- Fire Fighting Measures****第五部分-消防措施**

<b>Characteristics of Hazard</b> 危险特性	Toxic fumes, gases or vapors may evolve on burning. 火灾时可释放有害浓烟、气体或者蒸汽。
<b>Hazardous Combustion Products</b> 燃烧产生的危险物品	Carbon monoxide, carbon dioxide, lithium oxide fumes and so on. 一氧化碳, 二氧化碳, 锂氧化物烟气等。



<b>Fire-extinguishing Methods and Extinguishing Media</b> 灭火方法及灭火剂	Please use water, dry sand and other proper fire extinguishing media. 请使用水, 干沙等合适的灭火介质。
<b>Attention in Fire-extinguishing</b> 灭火注意事项	The firemen should put on antigas masks and full fire-fighting suits. 消防人员须佩戴防毒面具、穿全身消防服。

**Section 6- Accidental Release Measure****第六部分-泄漏应急处理**

<b>Personal Precautions, protective equipment, and emergency procedures</b> 个人预防措施、防护装备和应急程序	Restrict access to area until completion of clean-up. Do not touch the spilled material. Wear adequate personal protective equipment as indicated in Section 8. 限制区域, 直到完成清理工作。请勿触摸泄漏的材料。穿戴适当的个人防护设备, 如第 8 部分所示。
<b>Environmental Precautions</b> 环境保护措施	Prevent material from contaminating soil and from entering sewers or waterways. 防止物质污染土壤和进入下水道或水道。
<b>Methods and materials for Containment</b> 方法和材料控制	Stop the leak if safe to do so. Contain the spilled liquid with dry sand or earth. Clean up spills immediately. 出于安全, 阻止泄漏, 可以用干沙或沙土来遏制液体泄露, 立即清理泄漏。
<b>Methods and materials for cleaning up</b> 清理的方法和材料	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. 用惰性吸收剂(干沙或沙土)吸收溢出的材料。污染物转移到可吸收废物的容器。收集所有受污染的吸收剂和根据第 13 部分的指令处置。用洗涤剂和水清洁污染区域, 收集所有受污染的洗涤水进行适当处置。

**Section 7- Handling and Storage****第七部分-操作处置与储存**

<b>Handling</b> 操作	Don't handling the batteries in manner that allows terminals to short circuit. Do not open, disassemble, crush or burn battery. 不要以让接头短路的方式对电池进行操作。不要打开, 分解, 挤压或燃烧电池。
<b>Storage</b> 储存	Long period storage: 25±5°C, 60±25%R.H 长期存储: 25±5°C, 相对湿度 60±25% Do not storage the battery haphazardly in a box or drawer where they may short-circuit each other or be short-circuited by other metal objects. 不要将电池随意丢在盒子或抽屉里, 以免电池之间或电池与其他金属物质发生短路。 Keep out of reach of children. 储存在小孩接触不到的地方。 Do not expose the battery to heat or fire. Avoid storage in direct sunlight. 不要将电池暴露在火源和热源附近, 避免在阳光直射下存储。





Do not store together with oxidizing and acidic materials.

不要与氧化和酸性物质存储在一起。

### Section 8 - Exposure Controls/Personal Protection

#### 第八部分-接触控制和个体防护

<b>Engineering Controls</b> 工程控制	<p>No engineering controls are required for handling batteries that have not been damaged. Personal protective equipments for damaged batteries should include chemical resistant gloves and safety glasses.</p> <p>操作未破损的电池，没有工程控制要求。对于破损的电池，个人防护用品应包括化学品防护手套和安全眼镜。</p>
<b>Personal Protective Equipment</b> 个人防护设备	<p>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. Not necessary under conditions of normal use.</p> <p>呼吸保护：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。正常使用条件下不必考虑。</p> <p>Protective Gloves: Not necessary under conditions of normal use.</p> <p>防护手套：正常使用条件下不必考虑。</p> <p>Other Protective Clothing or Equipment: Not necessary under conditions of normal use.</p> <p>其他防护服装或设备：正常使用条件下不必考虑。</p> <p>Personal Protection is recommended for venting battery: Respiratory Protection, Protective Gloves, Protective Clothing and safety glass with side shields.</p> <p>当电池排气阀打开时，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。</p>

### Section 9- Physical and Chemical Properties

#### 第九部分-理化特性

**Physical state:** Solid

物理状态：固体

**Form:** Button

形状：纽扣状

**Odor:** Odorless

气味：无气味

**Solubility:** Partial soluble in water

溶解度：部分溶于水

### Section 10 - Stability and Reactivity

#### 第十部分-稳定性和反应性

**Stability**

稳定性

Stable under normal temperatures and pressures.

常温常压下稳定。

**Conditions to Avoid**

应避免的条件

Heat above 70°C or Incinerate, Deform, Mutilate, Crush, Disassemble, Overcharge, Short circuit, Expose over a long period to humid conditions.



	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。
<b>Hazardous Decomposition Products</b> 危害分解物	Toxic Fumes, and may form peroxides. 有毒烟雾，并可能形成过氧化物。
<b>Possibility of Hazardous Reaction</b> 危险反应的可能性	If leaked, forbidden to contact with strong oxidizers ,mineral acids ,strong alkalis, halogenated hydrocarbons. 如果发生泄露，避免与强氧化剂，无机酸，强碱，卤代烃接触。

**Section 11 - Toxicological Information****第十一部分-毒理学信息**

<b>Irritation</b> 刺激	In the event of exposure to internal contents, vapor fumes may be very irritating to the eyes and skin. 内部物质暴露的情况下，蒸汽烟雾可能对眼睛和皮肤产生刺激性。
<b>Sensitization</b> 致敏	Not applicable. 不适用
<b>Reproductive Toxicity</b> 再生毒性	Not applicable. 不适用
<b>Toxicologically Synergistic Materials</b> 协同材料毒理学	Not applicable. 不适用

**Section 12-Ecological Information****第十二部分-生态学信息**

<b>General note</b> 通用信息	Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system. 不允许未稀释或大量的产品到达地下水、水道或污水系统。
<b>Anticipated behavior of a chemical product in environment/possible environmental impact/ ecotoxicity</b> 化学产品对环境/可能的环境预期的行为的一种生态毒性	Not applicable. 不适用
<b>Mobility in soil</b> 土壤中移动性	Not applicable. 不适用
<b>Persistence and Degradability</b> 持久性和降解性	Not applicable. 不适用

**Section 13 - Disposal Considerations****第十三部分-废弃处置**

<b>Waste Treatment</b> 废弃处置方法	Recycle or dispose of in accordance with government, state & local regulations. 建议遵照国家和地方法规处置或再利用。
----------------------------------	---





<b>Attention for Waste Treatment</b> <b>废弃注意事项</b>	Deserted batteries couldn't be treated as ordinary trash. Couldn't be thrown into fire or placed in high temperature. Couldn't be dissected, pierced, crushed or treated similarly. Best way is recycling. 废电池不能被当做普通垃圾。不能扔进火中或置于高温下。不能解体，刺穿，破碎或类似的处理。最好的办法是回收利用。
---	--

**Section 14 - Transport Information****第十四部分-运输信息**

The battery shall be passed the test items of the UNITED NATIONS "Recommendations on the Transport of Dangerous Goods, Manual of Tests and Criteria" section 38.3 and meet the requirements of UNITED NATIONS "Recommendations on the Transport of Dangerous Goods, model Regulations "

该电池必须通过联合国《关于危险货物运输的建议书 试验和标准手册》第 38.3 章节的测试项目和满足联合国《关于危险货物运输的建议书 规章范本》的要求。

The battery shall be protected so as to prevent short circuits. This includes protection against contact with conductive materials within the same packaging that could lead to short circuit;

该电池必须做好防短路保护。包括防止与同一封装内的导电材料接触可能导致的短路。

The packaging shall be adequate to avoid mechanical damage during transport, handling and stacking.

包装应足以避免在运输，处理和堆放期间的机械损坏。

The package must be handled with care and that a flammability hazard exists if the package is damaged. 包装必须小心处理，如果包装损坏，存在易燃危险。

With regard to transport, the following regulations are cited and considered:

关于运输，引用和考虑了以下法规：

-The international Civil Aviation Organization (ICAO) Technical Instructions.

-国际民用航空组织(ICAO)技术细则。

-The international Air transport Association (IATA) Dangerous Goods Regulations.

-国际航空运输协会(IATA)危险物品规则。

The battery can be shipped by air in according to PACKING INSTRUCTION 968 Section IB , or PACKING INSTRUCTION 969~970 Section II of the 2022 IATA Dangerous Goods regulations 63<sup>rd</sup> Edition.

该电池可以根据 2022 年 IATA 危险物品规则第 63 版包装指令 968 第 IB 部分或包装指令 969~970 第 II 部分运输。

UN number: UN3090 or UN3091;

UN 编号：UN3090 或 UN3091:

UN Proper shipping name/Description (technical name): Lithium metal batteries or Lithium metal batteries packed with equipment or Lithium metal batteries contained in equipment;

UN 合适的运输名称/描述(技术名称)：锂金属电池，锂金属电池与设备包装在一起或锂金属电池内置于设备中；

UN Classification (Transport hazard class): Class 9 (PI968 Section IB) or N/A (PI969~970 Section II)

UN 分类(运输危险类别)：9 类危险品(包装指令 968 第 IB 部分)或者不适用(包装指令 969~970 第 II 部分)

UN packaging group: N/A

UN 包装类别：不适用

-The international Maritime Dangerous Goods (IMDG) Code.



-国际海运危险货物(IMDG)规则。

UN number: UN3090 or UN3091;

UN 编号: UN3090 或 UN3091:

UN Proper shipping name/Description (technical name): Lithium metal batteries or Lithium metal batteries packed with equipment or Lithium metal batteries contained in equipment;

UN 合适的运输名称/描述(技术名称): 锂金属电池, 锂金属电池与设备包装在一起或锂金属电池内置于设备中;

UN Classification (Transport hazard class): N/A

UN 分类(运输危险类别): 不适用

UN packaging group: N/A

UN 包装类别: 不适用

The battery is not restricted according to IMO IMDG Code (inc. Amendment 40-20) Special Provision 188.

海运按照国际海事组织《国际海运危险货物规则》(40-20 版)特殊规定 188 不受限制。

## Section 15 - Regulatory Information

### 第十五部分-法规信息

#### International Civil Aviation Organization (ICAO) Technical Instructions

##### ICAO 国际民用航空组织(ICAO)技术细则:

1. Unless be exempted according to ICAO TI, the lithium ion cell/batteries (UN 3480, PI 965) and lithium metal cell/batteries (UN 3090, PI 968) are forbidden for carriage on passenger aircraft.

除非依据《技术细则》的相关要求取得豁免, 单独包装的锂离子电池(芯)(UN 3480, PI 965)和锂金属电池(芯)(UN 3090, PI 968)货物禁止使用客机运输。

2. Unless be approved according to ICAO TI, Lithium ion cells/batteries (UN 3480, PI 965) must be offered for transport at a state of charge (SoC) not exceeding 30% of their rated design capacity.

除非依据《技术细则》的相关要求取得特别批准, 按照包装说明 965 要求运输的锂离子电池(芯)货物, 交运时锂离子电池(芯)的荷电状态不得超过其额定容量的 30%。

## Section 16 - Additional Information

### 第十六部分-附加信息

#### Compile unit 编制单位:

Guangzhou CP-UP Certification Technology Service Co., Ltd.

广州三帕认证技术服务有限公司

Room C101, C102, C103, and C104, No 9, Hengji Road, Yunxing Zhukeng Village, Shiqiao Street, Panyu District, Guangzhou City, China

广州市番禺区市桥街云星珠坑村横基路 9 号 C101、C102、C103、C104 室

Tel./电话: 0086-20-31127037

Web/网址: www.cp-up.com

Email/邮箱: info@cp-up.com

#### Revision 修订: 0

#### Other Information 其他信息:

The information above is believed to be accurate and represents the best information currently available to us. However, we makes no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. Although reasonable precautions have been taken in the preparation of the data contained herein, it is offered solely for your information, consideration and investigation. This safety data sheet provides guidelines for the safe handling and use of this product; it does not and cannot advise on all possible situations, therefore, your specific use of this product should be evaluated to





determine if additional precautions are required.

在我们看来上面的信息是准确的，这是我们目前能提供的最佳的信息。但是，对于这些信息，我们不对商品的性能做任何明示的或者暗示的保证，我们也不对使用这些信息造成的后果担负任何责任。用户应当自己调查研究后决定这些信息是否适用于他们的特定用途。尽管在该文档里提出了合理的预警，但是这仅仅只是给您做参考、考量和调查。这份安全技术说明书提供了安全处理和使用该产品的指南，但是它没有，也不能对所有可能发生的情景提出建议，所以您需要根据您对该产品的特定使用情况来决定是否需要其他的预防措施。

--End of report--

--报告结束--