



NO.2624010317

# 安全技术说明书 (SDS)

锂离子可充电电芯 21700-4000mAh 3.6V

4000mAh 14.4Wh 中文名称:

Lithium-ion Rechargeable Cell 21700-4000mAh 3.6V

英文名称: 4000mAh 14.4Wh

2024年01月01日 生效日期:

编制人: 黄朝峥

审核人:

批准人: 董瓷社





# 江西远东锂电有限公司

## 安全技术说明书

SDS

锂离子可充电电芯 21700-4000mAh 3.6V 4000mAh 14.4Wh

#### 第一部分 化学品及企业标识

中文名称:

锂离子可充电电芯 21700-4000mAh 3.6V 4000mAh 14.4Wh

英文名称:

Lithium-ion Rechargeable Cell 21700-4000mAh 3.6V 4000mAh 14.4Wh

企业名称:

江西远东锂电有限公司

地址:

江西省宜春经济技术开发区经发大道39号

邮编:

336000

E-mail:

133949@600869.com

传真号码:

86-795-3666188

应急咨询电话:

86-18879558285

化学品的推荐用途和限制用途: /

技术说明书编码: 2624010317

生效日期:

2024年01月01日

#### 第二部分 危险性概述

本品不在GHS体系涵盖的范围内。

主要危险性:

火灾或爆炸危险:

当锂离子电池损坏或处理不当(机械损伤或过度充电),其内部的易燃液态电解质在温度高 于150℃时会泄露、着火和产生火花;该类物品可能迅速燃烧并伴有闪燃;可能会引燃邻近的

健康危害:

电池的电解质会刺激皮肤、眼睛和黏膜组织。燃烧可能产生刺激性、腐蚀性和/或毒性气体。

烟雾可能导致头晕或窒息。

#### 第三部分 成分/组成信息

化学品名称: 锂离子可充电电芯 21700-4000mAh 3.6V 4000mAh 14.4Wh

成份	含量	CAS NO.	EC NO.
镍钴锰酸锂	32.0%	182442-95-1	695-690-9
石墨	22.3%	7782-42-5	231-955-3
钢	13. 4%	12597-68-1	603-108-1
六氟磷酸锂	12.8%	21324-40-3	244-334-7

二氟草酸硼酸锂		409071-16-5	803-919-2
碳酸乙烯酯		96-49-1	202-510-0
碳酸甲乙酯		623-53-0	433-480-9
碳酸二甲酯		616-38-6	210-478-4
碳酸亚乙烯酯		872-36-6	212-825-5
氟代碳酸乙烯酯		114435-02-8	483-360-5
铜	9.6%	7440-50-8	231-159-6
铝	6. 78%	7429-90-5	231-072-3
聚乙烯	2. 80%	9002-88-4	618-339-3
三氧化二铝		1344-28-1	215-691-6
聚对苯二甲酸二乙酯	0. 23%	25038-59-9	607-507-1

#### 第四部分 急救措施

皮肤接触:

若接触到电池内的物质,脱去受污染的衣物和鞋袜,立即用流动清水冲洗20分钟以上。如

刺激持续,就医。

眼睛接触:

若接触到电池内的物质,立即提起眼睑,立即用流动清水冲洗20分钟以上。如刺激持续,

就医。

吸入:

若吸入电池内的物质, 立即脱离现场至空气新鲜处。若呼吸困难, 给氧; 若呼吸停止, 人

工呼吸。就医。

食入:

若食入电池内的物质,禁止催吐。立即就医。

最重要的急性和延迟症

状/影响:

无资料。

必要时注明立即就医及

所需的特殊治疗:

无资料。

#### 第五部分 消防措施

适当的灭火剂:

可用水幕和普通泡沫灭火剂灭火。

化学品产生的具体危险: 燃烧可能产生刺激性、腐蚀性和或毒性气体。烟雾可能导致头晕或窒息。

消防人员的特别防护行 动:

消防员应戴自给正压式呼吸器, 穿消防防护服以防止皮肤和眼睛接触。在上风处灭火。不相

关人员疏散至安全区域。

#### 第六部分 泄漏应急处理

个人防护措施、防护设备 使用个人防护设备。确保足够的通风。确保人群远离泄露区或处于泄漏区上风向。不相关 人员禁止进入。移除所有点火源。 和应急程序:

环境防护措施:

避免泄露物进入地表、沟渠或水域。清洗废水避免直接释放至环境中。

控制和清洁的方法和材

如电解液泄漏,用土、沙或其他不可燃材料吸附,漏损的电池和污浊的吸附物应放入金属

容器。 料:

#### 第七部分 操作处置与储存

安全操作的防护措施:

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,戴安全手套。 远离火种、热源。避免高温。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。须牢固在内包装中,以有效防止短路和防止可导致短路的移动。万 一电池内的物质泄漏,避免眼睛、皮肤直接接触,避免吸入。应与强氧化剂、易燃物和其它 腐蚀品分开存放。

切不相容性:

安全储存的条件,包括一 储存于阴凉、通风及干燥的库房内。远离火种、热源。避免高温。应与强氧化剂、易燃物和 其它腐蚀品分开存放。须牢固在内包装中,以有效防止短路和防止可导致短路的移动。储存 区配备相应品种和数量的消防器材、泄漏应急处理设备和合适的收容材料。

### 第八部分 接触控制/个体防护

控制参数:

GBZ 2.1-2019 《工作场所有害因素职业接触限值 化学有害因素》: 可溶性镍化合物: PC-TWA 0.5 mg/m3 备注: G1 (镍化合物), 敏

钴及其氧化物,按Co计: PC-TWA 0.05mg/m³ PC-STEL 0.1mg/m³ (备注: G2B) 敏

锰及其无机化合物(按MnO:计): PC-TWA 0.15 mg/m3 石墨粉尘: PC-TWA 4mg/m³(总尘) 2mg/m³(呼尘) 铜:铜尘 PC-TWA 1mg/m³;铜烟 PC-TWA 0.2mg/m³ 铝金属、铝合金粉尘: PC-TWA 3mg/m³(总尘)

聚乙烯粉尘: PC-TWA 5 mg/m³(总尘)

氧化铝粉尘(三氧化二铝): PC-TWA 4 mg/m3(总尘)

石墨: TLV-TWA 2 mg/m³

铜: TLV-TWA 1 mg (Cu)/m³, 粉尘, 烟雾; TLV-TWA 0.2 mg (Cu)/m³, 烟雾

铝: TLV-TWA 1 mg/m3

三氧化二铝: TLV-TWA 10 mg(A1)/m3

适当的工程控制:

有通风系统和设备。提供安全淋浴和洗眼设备。

个体防护措施:

眼/面部防护:

若需要, 戴安全防护眼镜。

皮肤防护:

手防护: 戴安全手套。 身体防护: 穿一般作业防护服。

呼吸系统防护:

若需要, 戴管理部门认可的面罩。

高温危害:

无资料。

其他防护:

工作现场严禁吸烟、进食和饮水。工作后,淋浴更衣。

#### 第九部分 理化特性

外观:

蓝色圆柱型塑料薄膜外壳

气味:

无臭

pH值:

8-9

溶解性:

部分溶于水

熔点/凝固点:

>300℃

沸点、初始沸点和沸程: 无资料

闪点(闭杯):

无资料

密度/相对密度:

无资料

运动黏度:

无资料

燃烧上下极限或爆炸极

无资料

限:

无资料

蒸气压:

3/7





相对蒸气密度:

无资料

n-辛醇/水分配系数(对数无资料

值):

自燃温度:

无资料

分解温度:

无资料

颗粒特征:

无资料

易燃性(固体、气体): 无资料

第十部分 稳定性与反应活性

反应性:

无资料。

化学稳定性:

常温常压下稳定。

危险反应的可能性:

无资料。

应避免的条件:

误操作, 明火, 高温, 机械滥用, 过充电, 防止短路和防止可导致短路的移动。

不相容材料:

强氧化剂、易燃物和其它腐蚀品。

危害性分解产物:

碳的氧化物、金属氧化物等。

第十一部分 毒理学资料

急性毒性:

无资料。

皮肤腐蚀/刺激:

电池内的电解液对皮肤有刺激性。

严重眼损伤/眼刺激:

电池内的电解液对眼睛有刺激性。

呼吸致敏:

无资料。

皮肤致敏:

无资料。

生殖细胞致突变性:

无资料。

致癌性:

无资料。

生殖毒性:

无资料。

特定目标器官毒性-单次 无资料。

接触:

特定目标器官毒性-重复 无资料。

接触:

吸入危险:

无资料。

第十二部分 生态学资料

毒性:

无资料。

持久性和降解性:

无资料。

潜在的生物累积性:

无资料。

在土壤中的流动性:

无资料。

其他有害效应:

无资料。

#### 第十三部分 废弃处理

废弃处置方法:

废弃电池的处置应符合《中华人民共和国固体废物污染环境防治法》、《废电池污染防治技术政策》等有关法律、法规、政策和标准的要求。建议交给具有资格的化学废物处理部门处置。 对于用过的而且将被运送去销毁或回收的电池,在运输前应对其仔细检查,以确保每节电池都是完好无损而且适合运输的。

#### 第十四部分 运输信息

锂电池单独运输:

通过联合国《试验和标准手册》UN38.3试验和《规章范本》SP188的1.2m跌落测试。锂电池总净重<10kg。

RID/ADR (2023版):

根据RID/ADR特殊规定188,运输时不受本规则其它规定限制。

根据2.2.9.1.7(g),锂电池或电池组的制造商和出厂后的销售商应提供联合国《试验和标准手册》第III部分第38.3小节第38.3.5段规定的UN38.3试验概要。

IATA DGR (65版):

危险性类别: 9

UN编号: UN3480

运输名称: 锂离子电池组

本品应满足包装说明965的基本要求和第IB部分的规定。 包装件能够承受包装说明965 IB中所要求的堆码试验。

根据3. 9. 2. 6. 1 (g) , 2003年06月30日之后生产的锂电池或电池组的制造商和出厂后的销售商应提供联合国《试验和标准手册》第111部分第38. 3小节第38. 3. 5段规定的UN38. 3试验概要。

IMO IMDG CODE (2022版):根据IMO IMDG CODE特殊规定188,运输时不受本规则其它规定限制。

根据2.9.4.7, 锂电池或电池组的制造商和出厂后的销售商应提供联合国《试验和标准手册》 第111部分第38.3小节第38.3.5段规定的UN38.3试验概要。

#### 第十五部分 法规信息

#### 国内法规:

锂电池单独运输:

《危险货物道路运输规 联合国编号为:3480,中文名称和描述:锂离子电池。

则》(JT/T 617-2018):该型号锂电池通过联合国《试验和标准手册》UN38.3试验,根据特殊规定188,运输时不受限制。

《危险货物品名表》(GB联合国编号为: 3480, 名称和说明: 锂离子电池组, 包装类别: II。

12268-2012):

该型号锂电池通过联合国《试验和标准手册》UN38.3试验,根据特殊规定188,运输时不受限 割

《铁路危险货物品名表》编号为: 91045, 品名: 锂离子电池组。该型号锂电池通过联合国《试验和标准手册》UN38.3 (TB/T 30006-2022): 试验,根据特殊规定79,运输时不受限制。

#### 国际法规:

**欧盟指令(EU) 2023/1542** 电池的标记,处置,回收等应满足欧盟指令(EU) 2023/1542及2013/56/EU中的规定。 及2013/56/EU:

ICAO TI:

- 1. 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. 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%。

#### 第十六部分 其他信息

编制日期:

2024年01月01日

编制部门:

上海化工院检测有限公司

电话(传真): +86-21-52815377/31765555

修改信息:

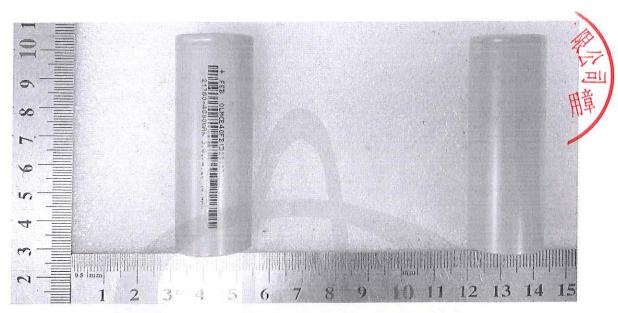
第0次修订

缩略语和首字母缩写:

CAS: 美国化学文摘社 EC: 欧盟委员会 ACGIH: 美国政府工业卫生学家委员会 PC-TWA: 时间加权平均容许浓度 PC-STEL: 短时间接触容许浓度 TLV-TWA: 时间加权平均阈限值 G1: 确认人类致癌物 G2B: 对人可疑致癌 敏: 该物质可能有致敏作用 ADR: 关于国际公路运输危险货物的欧洲协议 RID: 国际铁路运输危险货物规则 IMO IMDG CODE: 国际海事组织 国际海运危险货物规则 IATA DGR: 国际航空运输协会 危险货物规则 EU: 欧洲联盟 ICAO TI: 国际民用航空组织 危险物品安全航空运输技术细则 PI: 包装说明

其他信息:

本SDS报告仅针对电池。报告内容是根据申请单位提供的成分含量等信息和我司现有知识编写,仅作为指导使用。如果电池被用于其它产品中的组件,本SDS报告的信息可能不适用。本SDS的使用者必须对内容的正确性与完整性做出独立判断,根据实际情况决定其适用性,并对使用后果承担相关法律责任。









# SAFETYDATASHEET

Lithium-ion Rechargeable Cell

**Product Name:** 21700-4000mAh 3. 6V 4000mAh 14. 4Wh

2024-01-01 **Effective Date:** 

Huang Chaozheng Compiler:

Checker:

Approver:

Shanghai Institute of Chemical Industry Testing Co., Ltd.



## Jiangxi Far East LIB Co.,Ltd

### SAFETY DATA SHEET

### Lithium-ion Rechargeable Cell 21700-4000mAh 3.6V 4000mAh 14.4Wh

#### SECTION1 PRODUCT AND COMPANY IDENTIFICATION

Product name:

Lithium-ion Rechargeable Cell 21700-4000mAh 3.6V 4000mAh 14.4Wh

Company:

Jiangxi Far East LIB Co., Ltd

Address:

39 Jingfa Road, Yichun Economic Development Zone, Jiangxi Province, 336000,

P. R. China

Email:

133949@600869.com

Fax:

86-795-3666188

Emergency Phone:

86-18879558285

Recommend use of the chemical and restrictions on use: /

SDS Number:

2624010317

**Effective Date:** 

2024-01-01

#### SECTION2 HAZARDS IDENTIFICATION

The product is outside of the scope of GHS system.

#### Main Hazards:

#### Fire or Explosion Hazards:

Lithium ion battery contains flammable liquid electrolyte that may vent, ignite and produce sparks when subjected to high temperatures (>150 $^{\circ}$ C), 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.

#### Health Hazards:

Contact with battery's electrolyte may be irritating to skin, eyes and mucous membranes. Fire will produce irritating, corrosive and/or toxic gases. Fumes may cause dizziness or suffocation.

#### **SECTION3 INFORMATION ON INGREDIENTS**

Product name:

Lithium-ion Rechargeable Cell 21700-4000mAh 3.6V 4000mAh 14.4Wh

Ingredient

Concentration

CAS No.

EC No.

Cobalt lithium manganese nickel oxide

32.0%

182442-95-1

695-690-9

22. 3%	7782-42-5	231-955-3
13: 4%	12597-68-1	603-108-1
12.8%	21324-40-3	244-334-7
	409071-16-5	803-919-2
	96-49-1	202-510-0
	623-53-0	613-014-2
	616-38-6	210-478-4
	872-36-6	212-825-5
	114435-02-8	483-360-5
9.6%	7440-50-8	231-159-6
6. 78%	7429-90-5	231-072-3
2. 80%	9002-88-4	618-339-3
	1344-28-1	215-691-6
0. 23%	25038-59-9	607-507-1
	13. 4% 12. 8%  9. 6% 6. 78% 2. 80%	13: 4% 12597-68-1 12: 8% 21324-40-3 409071-16-5 96-49-1 623-53-0 616-38-6 872-36-6 114435-02-8 9: 6% 7440-50-8 6: 78% 7429-90-5 2: 80% 9002-88-4 1344-28-1

#### SECTION4 FIRST-AID MEASURES

#### Skin Exposure:

If the internal battery's materials of an opened battery cell come into contact with the skin, remove the contaminated clothing and footwear, immediately flush with plenty of water for at least 20 minutes. If irritation persists, call a physician.

#### Eye Exposure:

In case of the internal battery's materials in contact with eyes, lift your eyelids immediately and rinse them with running water for more than 20 minutes. If irritation persists, call a physician.

#### Inhalation Exposure:

If inhaled the internal battery's materials, immediately remove to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Call a physician.

#### Oral Exposure:

If swallowed the internal battery's materials, do not induce vomiting. Call a physician immediately.

#### Most Important Symptoms/Effects, Acute and Delayed:

No data available.

### Indication of Immediate Medical Attention and Special Treatment Needed, If Necessary:

No data available.

#### SECTION5 FIRE FIGHTING MEASURES

#### Suitable Extinguishing Media:

Suitable: Water spray or regular foam.

#### Specific Hazards Arising from the Chemical:

May decompose upon combustion to generate irritating, corrosive or toxic fumes. Fumes may cause dizziness or suffocation.

#### Special Protective Action for Fire-fighters:

Protective Equipment: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. Fire-extinguishing work is done from the windward. Uninvolved persons should evacuate to a safe place.

#### SECTION6 ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures:

Use personal protective equipment. Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Entry to noninvolved personnel should be controlled around the leakage area by roping off. Remove all sources of ignition.

Environmental Precautions:

Avoid leakage enter the earth, ditches or waters. Avoid directly release the cleaning waste water into the environment.

Methods and Materials for Containment and Cleaning Up:

If the electrolyte leaks, use soil, sand or other non-combustible materials to absorb. The leaked batteries and dirty adsorbents should be placed in metal containers.

#### SECTION7 HANDLING AND STORAGE

Precautions for Safe Handling:

Operators should be trained and strictly abide by operating procedures. Wear appropriate protective clothing and safety gloves. Keep away from ignition sources, heat and flame. No smoking at working site. Handling is performed in a well ventilated place. Avoid disassembling the battery at will and reversing battery polarity within the battery assembly. Such batteries must be packed in inner packaging in such a manner as to effectively prevent short circuits and to prevent movement which could lead to short circuits. In case of leakage of the material in the battery, avoid directly contact with eyes and skin. Avoid inhalation. Incompatibilities: Strong oxidizing agents, Combustible materials and Corrosives.

Conditions for Safe Storage, Including Any Incompatibilities:

Store in a cool, dry, and well-ventilated area. Keep away from ignition sources, heat and flame. Incompatibilities: Strong oxidizing agents, Combustible materials and Corrosives. Such batteries must be packed in inner packaging in such a manner as to effectively prevent short circuits and to prevent movement which could lead to short circuits. Storage place should be equipped with appropriate varieties and quantities of fire fighting equipment and leakage emergency treatment equipment.

#### SECTION8 EXPOSURE CONTROL/PPE

Control Parameters:

GBZ 2.1-2019 Occupational Exposure Limits for Hazardous Agents in the Workplace - Part 1: Chemical Hazardous Agents:

Soluble nickel compounds: PC-TWA 0.5mg/m³ Remarks: G1 (Nickel compounds), Sensitization Cobalt and compounds, as Co PC-TWA 0.05mg/m³ PC-STEL 0.1mg/m³ (Remarks: G2B) Sensitization

Manganese and its inorganic compounds (calculated as MnO<sub>2</sub>): PC-TWA 0.15 mg/m<sup>3</sup>

Graphite dust: PC-TWA 4mg/m³ (total dust) PC-TWA 2mg/m³ (respiratory dust)

Copper (calculated as Cu) : Copper dust PC-TWA 1 mg/m³; Copper smoke PC-TWA 0.2 mg/m³

Aluminum metal, aluminum alloy dust: PC-TWA 3 mg/m³ (Total dust)

Polyethylene dust: PC-TWA 5 mg/m³ (total dust)

Aluminum oxide dust (Aluminum oxide): PC-TWA 4 mg/m³ (Total dust)

ACGIH:

Graphite: TLV-TWA 2 mg/m3

Copper: TLV-TWA 1 mg (Cu) /m³ Dust, smoke; TLV-TWA 0.2 mg (Cu) /m³, smoke

Aluminum: TLV-TWA 1 mg/m<sup>3</sup>

Aluminum oxide: TLV-TWA 10 mg(A1)/m3

Appropriate Engineering Controls:

Mechanical exhaust required. Safety shower and eye bath.

#### Individual Protection Measures:

Eye/Face Protection:

Wear chemical safety glasses if needed.

Skin Protection:

Hand Protection: Wear safety gloves.

Body Protection: Wear appropriate protective clothing.

Respiratory Protection:

Wear government approved respirator if needed.

Thermal hazards:

No data available.

Other Protect:

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

#### SECTION9 PHYSICAL/CHEMICAL PROPERTIES

Appearance:

Blue cylinder plastics film shell

Odor:

Odorless

pH Value:

8-9

Solubility:

Partial soluble in water

Boiling Point,

No data available

Initial Boiling Point and Boiling

Range: Melting

>300°C

Point/Freezing

Point:

Flash Point

No data available

(Closed Cup):

Density/Relative

No data available

Density:

Kinematic

No data available

Viscosity:

Lower/Upper

No data available

Explosion

Limit/Flammabili

ty Limit:

Vapour Pressure:

No data available

Relative Vapor

No data available

Density:

Partition

No data available

Coefficient N-Octanol/Water(

Log Value): Autoingnition

No data available

Temperature:

Decomposition

No data available

Temperature:

Particle

No data available

characteristics:

Flammability

No data available

(Solid, Gas):

#### SECTION10 STABILITY AND REACTIVITY

#### Reactivity:

No data available.

#### Chemical Stability:

Stable under normal temperatures and pressures.

#### Possibility of Hazardous Reactions:

No data available.

#### Conditions to Avoid:

Avoid misoperation, exposure to heat and open flame. Avoid mechanical or electrical abuse and overcharge. Prevent short circuits. Prevent movement which could lead to short circuits.

#### Incompatible Materials:

Strong oxidizing agents, Combustible materials and Corrosives.

#### Hazardous Decomposition Products:

Carbon oxides, metal oxides, etc.

#### SECTION11 TOXICOLOGICAL INFORMATION

#### Acute Toxicity:

No data available.

#### Skin Corrosion/Irritation:

The electrolyte in the battery causes skin irritation.

#### Serious Eye Damage/Irritation:

The electrolyte in the battery causes eye irritation.

#### Respiratory Sensitization:

No data available.

#### Skin Sensitization:

No data available.

#### Carcinogenicity:

No data available.

#### Germ Cell Mutagenicity:

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.

#### Aspiration Hazard:

No data available.

#### SECTION12 ECOLOGICAL INFORMATION

#### 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.

#### SECTION13 DISPOSAL CONSIDERATION

Disposal Methods:

The disposal of discarded battery shall comply with the requirements of relevant laws, regulations, policies and standards such as the "Law of the People's Republic of China on the Prevention and Control of Environmental Pollution by Solid Waste" and "Technical Policy for the Prevention and Control of Waste Battery Pollution". Contact a licensed professional waste disposal service to dispose of wastes. Used battery being transported for disposal or reclamation should be carefully checked prior to shipment to ensure the integrity of each battery and its suitability for transport.

#### SECTION14 TRANSPORT INFORMATION

Only Lithium Battery during Transport:

The product has passed the test items of Manual of Tests and Criteria Section 38.3 and UN Model Regulations, SP188, 1.2m drop test. The total net weight of the Lithium batteries is less than 10 kg.

RID/ADR (2023

The product is not subject to the other provisions of RID/ADR according to special provision

Edition):

188.

According to 2.2.9.1.7(g), Manufacturers and subsequent distributors of cells or batteries manufactured shall make available the test summary as specified in the Manual of Tests and Criteria, Part III, sub-section 38.3, paragraph 38.3.5.

IATA DGR (65<sup>th</sup> Edition):

Hazard Class: 9 UN Number: UN3480

Proper Shipping Name: Lithium ion batteries

The product shall meet the General Requirements and section IB of Packaging Instruction

965.

The package has passed the stacking test required in PI 965 IB.

According to 3.9.2.6.1(g), Manufacturers and subsequent distributors of cells or batteries manufactured after 30 June 2003 shall make available the test summary as specified in the Manual of Tests and Criteria, Part III, sub-section 38.3, paragraph 38.3.5.

IMO IMDG CODE

The product is not subject to the other provisions of IMO IMDG Code according to special

(2022 Edition) :provision 188.

According to 2.9.4.7, Manufacturers and subsequent distributors of cells or batteries manufactured shall make available the test summary as specified in the Manual of Tests and Criteria, Part III, sub-section 38.3, paragraph 38.3.5.

#### SECTION15 REGULATORY INFORMATION

Domestic Regulations:

Only Lithium Battery during Transport:

Regulations Concerning Road Transportation Of Dangerous Goods (JT/T 617-2018):

UN Number: UN3480

Name and Description: Lithium ion batteries

The product has passed the test items of Manual of Tests and Criteria Section 38.3.

The product is not subject to JT/T 617-2018 according to special provision 188.

#### List of Dangerous Goods (GB 12268-2012) :

UN Number: UN3480

Shipping Name: Lithium ion batteries

Packing Group: II

The product has passed the test items of Manual of Tests and Criteria Section 38.3. The product is not subject to GB 12268-2012 according to special provision 188.

List of Dangerous Goods by Rail(TB/T 30006-2022):

Number: 91045 Name of Product: Lithium ion batteries The product has passed the test items of Manual of Tests and Criteria Section 38.3. The product is not subject to TB/T 30006-2022 according to special provision 79.

#### International Regulations:

Directive (EU) 2023/1542 and 2013/56/EU:

The label, disposal and recycling of the battery shall meet the requirements of EU Directive (EU) 2023/1542 and 2013/56/EU.

#### ICAO TI:

- 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.
- 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.

#### SECTION16 OTHER INFORMATION

#### Preparation Date:

2024-01-01

#### Preparation Department:

Shanghai Institute of Chemical Industry Testing Co., Ltd. Tel(Fax):+86-21-52815377/31765555

#### Revision:

n

#### Abbreviations and Acronyms:

CAS: Chemical Abstracts Service EC: European Commission ACGIH: American Conference of Governmental Industrial Hygienists PC-TWA: Permissible concentration-time weighted average PC-STEL: Permissible concentration-short term exposure limit TLV-TWA: Threshold limit value-time weighted average G1: Carcinogenic to humans G2B: Possibly carcinogenic to humans Sensitization: The substance may have allergenic effects ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road RID: Regulations concerning the International Carriage of Dangerous Goods by Rail IMO IMDG CODE: International Maritime Organization International Maritime Code for Dangerous Goods IATA DGR: International Air Transport Association Dangerous Goods Regulations EU: European Union ICAO TI: International Civil Aviation Organization Technical Instructions for the Safe Transport of Dangerous Goods by Air PI:Packaging Instruction

#### Other Information:

This SDS is only compiled for battery and based on the information such as ingredients provided by the applicant and our current knowledge. This SDS shall be used only as a guide. If the battery is used as a component in another product, the information in this SDS may not be applicable. The users of this SDS must make independent judgments on the correctness and completeness and then decide its suitability according to the actual situation. The users should take the relevant legal responsibilities for the consequences of use.

