No.SET2020-00393

Safety Data Sheet (SDS) Report

Client unit: SHENZHEN PKCELL BATTERY CO.,LTD

Name of sample: Li-ion Battery(ICR18650 2000mAh 3.7V ICR10150、ICR10440、ICR14200、ICR14250、ICR14280、ICR14430、ICR14500、ICR14650、ICR16310、ICR16280、ICR16340、 ICR16430、ICR16500、ICR17335、ICR17500、ICR18350、ICR18500、ICR18650、 ICR26650、ICR32550、ICR32600、ICR32650、ICR34600、LIR1216、LIR1220、LIR1654、LIR2016、LIR2025、LIR2032、LIR2450、LIR2477、LIR3032、LIR3048)

Address: 4th Building,Meitai Technology Park,Guanguang Road,Longhua,Shenzhen,China

Tested by:	Aaron	Checked By:		Approved By:	
Date:	Jan.08.2020	Date:	Jan.08.2020	Date:	Jan.08.2020

Query No. :ETI7BEcA

CCIC Southern Testing CO., Ltd.
Add: Electronic Testing Building, No. 43 Shahe Road, Xili Jiedao, Nanshan District, 518055 Shenzhen, Guangdong, China
http://www.ccic-set.com Tel：86-755-26627338 Fax：86-755-26627238 E-Mail：manager@ccic-set.com

1 Identification of substance

Product details

Product name: Li-ion Battery

Model No.: ICR18650 2000mAh 3.7V/ ICR10150、ICR10440、ICR14200、ICR14250、ICR14280、ICR14430、ICR14500、ICR14650、ICR16310、ICR16280、ICR16340、 ICR16430、ICR16500、ICR17335、ICR17500、ICR18350、ICR18500、ICR18650、 ICR26650、ICR32550、ICR32600、ICR32650、ICR34600、LIR1216、LIR1220、LIR1654、LIR2016、LIR2025、LIR2032、LIR2450、LIR2477、LIR3032、LIR3048

Manufacturer: SHENZHEN PKCELL BATTERY CO.,LTD

Address: 4th Building,Meitai Technology Park,Guanguang Road,Longhua,Shenzhen,China

Tel: +86-755-86670672 **Fax:** 86-755-86670609

Mail: 3004814533@qq.com

SDS Code: SET2020-00393

2 Hazards identification

Emergency Overview: May explode in a fire, which could release hydrogen fluoride gas.
Use extinguishing media suitable for materials burning in fire.

Primary routes of entry:

Skin contact: NO
Skin absorption: NO
Eye contact : NO
Inhalation: NO
Ingestion: NO

Symptoms of exposure:

Skin contact: No effect under routine handling and use.
Skin absorption: No effect under routine handling and use.
Eye contact: No effect under routine handling and use.
Inhalation: No effect under routine handling and use.
Reported as carcinogen: Not applicable.

3 Composition/Data on components

Chemical characterization:
Description : (CAS#)

Chemical Name	In % By Weight	CAS No.	EC No.	Molecular Formula
Lithium Cobalt Dioxide	35	12190-79-3	235-362-0	$LiCoO_2$
Graphite(various Carbons)	18	7782-42-5	231-955-3	C
Organic electrolyte	15	NA	NA	NA
Equivalent Max Lithium	3.5	7439-93-2	231-102-5	Li
Aluminum foil	4	7429-90-5	231-072-3	Al
Copper foil	14	7440-50-8	231-159-6	Cu
Lithium hexafluorophoshate	2	21324-40-3	244-334-7	LiF_6P
Steel and inter conponents	8.5	7439-89-6	231-096-4	Fe

Abbreviation: CAS No. is Chemical Abstract Service Registry Number.
EC No. is European Inventory of Existing Commercial chemical Substances Number.
NA = Not apply.

4 First aid measures

Inhalation
Not a health hazard.

Eye contact
Not a health hazard.

Skin contact
Not a health hazard.

Ingestion
If swallowed, obtain medical attention immediately.

IF EXPOSURE TO INTERNAL MATERIALS WITHIN CELL DUE TO DAMAGED OUTER CASING, THE FOLLOWING ACTIONS ARE RECOMMENDED;
Inhalation
Leave area immediately and seek medical attention.

Eye contact
Rinse eyes with water for 15min.

Skin contact
Wash area thoroughly whit soap and water and seek medical attention.

Ingestion
Drink milk/water and induce vomiting; seek medical attention.

5 Fire fighting measures

General Hazard:
Cell is not flammable. Combustion products include, but are not limited to Hydrogen fluoride, carbon monoxide and carbon dioxide.

Extinguishing Media:
Use extinguishing media suitable for the materials that are burning.
Special Fire fighting Instructions:
If possible, remove cell(s) from fire fighting area, If heated above 160℃, cell(s) may explode/vent.

Fire fighting Equipment:
Use NIOSH/MSHA approved full-face self-contained breathing apparatus (SCBA) with full protective gear.

6 Accidental release measures

On land:
Place material into suitable containers and call local fire/police department.
In water:
If possible, remove from water and call local fire/police department.

7 Handling and storage

Handling: No special protective clothing required for handing individual cells.
Storage: Store in a cool, dry place.

8 Exposure controls and personal protection

Engineering controls: Keep away from heat and open flame. Store in a cool dry place.
Personal Protection:
Respirator: Not required during normal operations. SCBA required in the event of a fire.
Eye/face protection: Not required safety practices of employer.
Gloves: Not required for handling of cells.
Foot protection: Steel toed shoes recommended for large container handling.

9 Physical and chemical properties:

General Information
State: Solid
Chemical properties:
Boiling Point: Not Applicable
Vapor Pressure: Not Applicable
Vapor Density: Not Applicable
Solubility In Water: Insoluble
Specific Gravity (H_2O = 1): Not Applicable
pH: Not Applicable
Density: Not Applicable

10 Stability and reactivity

Reactivity: None.

Incompatibilities: None during normal operation. Avoid exposure to heat, open flame, and corrosives.

Hazardous Decomposition Products: None during normal operating conditions. If cells are opened, hydrogen fluoride and carbon monoxide may be released.

Conditions to Avoid: Avoid exposure to heat and open flame. Do not puncture, crush or incinerate.

11 Toxicological information

This product does not elicit toxicological properties during routine handling and use
Sensitization: No
Teratogenicity: No
Reproductive toxicity: No
Acute toxicity: No

If the cells are opened through misuse or damage, discard immediately. Internal components of cell are irritants and sensitizers.

12 Ecological information

Some materials within the cell are bio-accumulative. Under normal conditions, These materials are contained and pose no risk to persons or the surrounding environment.

13 Disposal considerations

California regulated debris
RCRA Waste Code: Non-regulated
Dispose of according to all federal, state, and local regulations.

14 Transport information

Number of dangerous goods: 9
UN Number: 3480 or 3481

Transport Attentions:
Li-ion Battery should be compliant with UN38.3 test requirement for air transport.
The goods shall be complied with the requirements of 61th DGR Manual the Packing Instruction 965-967,Section IB or II of IATA (2020 edition), including the passing of the UN38.3 test, And also complies with the Special Provision 188 and 230 of IMDG CODE (Amdt.39-18) 2019 Edition.
The batteries should be securely packed and protected against short-circuits. Examine whether the package of the containers are integrate and tighten closed before transport. Take in a cargo of them without falling, dropping, and breakage. Prevent collapse of cargo piles. Don't put the goods together with oxidizer and chief food chemicals. The transport vehicle and ship must be cleaned and sterilized otherwise it is not allowed to assemble articles. During transport, the vehicle should prevent exposure, rain and high temperature. For stopovers, the vehicle should be away from fire and heat sources. When transported by sea, the assemble place should keep away from bedroom and kitchen, and isolated from the engine room, power and fire source. Under the condition of Road Transportation, the driver should drive in accordance with regulated route, don't stop over in the residential area and congested area. Forbid to use wooden, cement for bulk transport.

15 Regulations

OSHA Hazard communication standard (29 CFR 1910.1200)
Hazardous ___ Non-hazardous √__
ISO 11014-2009 Safety data sheet for chemical products - Content and order of sections.
The International Air Transport Association (IATA) Dangerous Goods Regulations, 61th, 2020.
International Maritime Dangerous Goods (IMDG CODE) (Amdt.39-18)

16 Other information:

The above information are correct, but does not contain all of the information and only used as a guide. The information in this document is based on our current knowledge, it apply to this product as for the correct safety tips. The information does not guarantee the properties of this product. Our company is not responsible for any damages caused by the products.

Note:
-The model for test is ICR18650 2000mAh 3.7V.
-Sample photo:



****** END OF REPORT ******