

SDS

SAFETY DATA SHEET

Client : QingDao Novker Communications Technology Co.,Ltd

No.237 Langyatai Road, West Coast New District, Qingdao, China

Prepared by : Shenzhen ZTS Testing Service Co., Ltd..

808, Building 1, 7th Industrial Zone, Yulv Community, Yutang Street,

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*************FOR FURTHER DETAILS, PLEASE REFER TO THE FOLLOWING PAGE(S)*************

Shenzhen ZTS Testing Service Co., Ltd.

Drafted By:

Review By:

Approved By:





1.CHEMICAL PRODUCT INFORMATION

Product details:

Product name : LITHIUM BATTERY

Model : 3.7V 4000mAh

Mark : /

TEL : 18561512133 Fax : 0532-84136116

E-mail : zhangcongshan@grandlinkin.com

Supplier/Manufacturer

Applicant : QingDao Novker Communications Technology Co.,Ltd

Address : No.237 Langyatai Road, West Coast New District, Qingdao, China

Summary:

As specified by the client, This safety data sheet was prepared in accordance with Un GHS Rev.7, The EU CLP REGULATION(EC) No 1272/2013, and US OSH Hazard Communication Standards(29 CFR 1910.1200). Please refer to attached report for details.

2.HAZARDS IDENTIFICATION

The important hazards and adverse effects of the chemical product	No information available
Chemical product specific hazards	No information available
Outline of an anticipated emergency	Chemical contents are sealed in metal can. But if battery is mechanically or electrically abused or placed on high temperature condition, risk of leakage, heat generation or in extreme case explosion may be anticipated. Most likely risk is attaching of released caustic alkali (KOH) to skin and eye. Anticipated volume of leakage is very little. For consumer use, warning to abuse is indicated on package.



3. COMPOSITION /HAZARDOUS INGREDIENTS

Chemical Name	CAS No.	Contents
Lithium cobaltate	12190-79-3	18-35
Graphite	7782-42-5	12-28
Phosphate(1-), hexafluoro-, lithium	21324-40-3	13-25
Copper	7440-50-8	8-17
Aluminium	7429-90-5	wing 175 Test 5-11 Testing
Nickel	7440-02-0	2-5

4. FIRST AID MEASURES

Inhalation	If ingredient leaked out from inside of a battery and if inhaled it, move to a place where fresh air is provided. Refer for medical attention.
Skin contact	If ingredient leaked out from inside of a battery and stuck on skin, wash the contact areas off immediately with plenty of water and soap. If appropriate procedures are not taken, this may cause sores on the skin. Refer for medical attention.
Eyes contact	If ingredient leaked out from inside of a battery and came into eyes, flush the eyes with plenty of water for at least 15 minutes immediately without rubbing. Take a medical treatment. If appropriate procedures are not taken, this may cause an eye irritation.
Swallowing	In case of swallowing of battery, immediately refer for medical attention.

5. FIGHTING MEASURES

Fire extinguishing agent:

Dry chemical, alcohol-resistant foam, powder, atomized water, carbon dioxide and dry sand are effective. Extinguishing method:

Escape batteries to safe place prevent from ignition by spreading fire.

Because packaging material of battery is paper, use water extinguisher, CO₂ extinguisher or powder extinguisher as normal extinguisher.

Since vapor, generated from burning batteries may make eyes, nose and throat irritate, be sure to extinguish the fire on the windward side. Wear the respiratory protection equipment in some cases.



6. ACCIDENTAL RELEASE MEASURES

Chemical contents are sealed in metal can. But if the battery is mechanically or electrically abused, contents may leak out. In such case, take action as showing below.

Personal precautions: Temporary inhalation of odor and attaching of electrolyte to skin does not cause serious health hazard. Be sure the ventilation and washing out of electrolyte quickly. Environmental precautions: Clean up it quickly. Specific environmental precaution is not necessary. Method and materials for containment and methods and materials for cleaning up: Contain and collect spillage and place in container for disposal according to local regulations.

7. HANDING AND STORAGE

Handling	Do not short-circuit, disassemble, deform, heat or incinerate. Do not pile up or mingle batteries with each other. Do not place battery on metal case, metal plate or antistatic material. In case of multi cell application, replace all batteries to new at once when replacing used batteries.
Storage	Be sure to store batteries in well-ventilated, dry and cool conditions. Keep away from water, rain, snow, frost or dew condensation. Do not store batteries near source of heat or nozzle of hot air. Do not store batteries in direct sunshine. Take care not to get wet packing by dew condensation when packing is removed from cold to warm and humid condition.
	Enough number of fire fighting apparatuses should be installed in warehouse. Keep batteries out of reach of children.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

There is no need of personal protective equipment on regular handling and storage. In the event, however, a large amount of electrolyte should be released by mechanical or electrical abuse, use the protections as shown below.

Respiratory protection : Mask (with a filter preferably)
Hand protection : Synthetic rubber gloves
Eye protection : Goggles or glasses



9. PHYSICAL AND CHEMICAL PROPERTIED

Appearance:	Solids Testing The
Color 17 testing 17 testing 17 testing 17	Blue 12 105 111 12 105 1118 12 105 1118 12 105 1118 12 105 1118 12 105 1118
Nominal Voltage:	3.7V 4000mAh
Odour	Not Applicable
bH to testing to testing the testing the testing the test	Not Applicable
Melting point/freezing point	Not Applicable
Boiling Point and Boiling range	Not Applicable
Flash Point	Not Applicable
Upper/lower flammability or explosive limits	Not Applicable
Vapor Pressure	Not Applicable
Vapor Density	Not Applicable
Relative density	Not Applicable
Solubility in Water	Not Applicable
Auto-ignition temperature	Not Applicable
Decomposition temperature	Not Applicable
Evaporation rate	Not Applicable
Flammability (soil, gas)	Not Applicable
Viscosity	Not Applicable

10. STABILITY AND REACTIVITY

Stability:	Stable on regular handling	
Conditions to avoid:	External short circuit of battery, deformation by crush, exposure at high temperature of more than 85 degree C (may cause leakage and rupture), direct sunlight, high humidity	
Materials to avoid:	Water, a chain, and a piece of metal that causes short circuit. Hazardous decomposition product: Emitted acrid or poisonous gases in fire	

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11 - TOXICOLOGICAL INFORMATION

Irritation	Risk of irritation occurs only if the cell is mechanically, thermally or electrically abused to the point of compromising the enclosure. If this occurs, irritation to the skin, eyes and respiratory tract may occur.
Sensitization	Not Applicable
Neurological Effects	Not Applicable
Teratogenicity	Not Applicable
Reproductive Toxicity	Not Applicable
Mutagenicity (Genetic Effects)	Not Applicable
Toxicologically Synergistic Materials	Not Applicable

12 - ECOLOGICAL INFORMATION

Ecological Toxicity	Not Applicable
Mobility in soil	Not Applicable
Persistence and Degradability	Not Applicable
Bioaccumulation potential	Not Applicable

13- DISPOSAL CONSIDERATIONS

Dispose of batteries in accordance with applicable federal, state and local regulations. For safety precaution, battery should be insulated in proper manner; covering both terminals by tape, wrapping of battery in insulative bag or packing battery in original package is recommended in order to prevent ignition or explosion due to short-circuit.



14.TRANSPORT INFORMATION

This report applies to by sea, by air and by land;

Number of dangerous goods: 9

UN 3480 or UN 3481

Transport Attentions:

According to Section II of PACKING INSTRUCTION $966\sim967$ of the 2022 IATA Dangerous Goods regulations 63^h Edition may be transported. and applicable U.S. DOT regulations for the safe transport of Li-ion Battery.

More information concerning shipping, testing, marking and packaging can be obtained from label master at http://www.labelmaster.com/.pack design shall be chosen so as to prevent the development of unintentional electrical conduction, corrosion of the terminals and ingress of moisture.

The package must be handled with care and that a flammability hazard exists if the package is damaged;

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With regard to 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

15 - REGULATORY INFORMATION

Law Information

《Dangerous Goods Regulation》

《Recommendations on the Transport of Dangerous Goods Model Regulations》

《International Maritime Dangerous Goods》

《Technical Instructions for the Safe Transport of Dangerous Goods》

《Classification and code of dangerous goods》

《Occupational Safety and Health Act》 (OSHA)

《Toxic Substances Control Act》(TSCA)

《Consumer Product Safety Act》(CPSA)

《Federal Environmental Pollution Control Act》(FEPCA)

《The Oil Pollution Act》(OPA)

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

《Resource Conservation and Recovery Act》(RCRA)

《Safety Drinking Water Act》(CWA)

《California Proposition 65》

《Code of Federal Regulations》(CFR)

In accordance with all Federal, State and Local laws.



16- OTHER INFORMATION

The above information is based on the data of which we are aware and is believed to be correct as of the data hereof. Since this information may be applied under conditions beyond our control and with which may be unfamiliar and since data made available subsequent to the data hereof may suggest modifications of the information, we do not assume any responsibility for the results of its use. This information is furnished upon condition that the person receiving it shall make his own determination of the suitability of the material for his particular purpose.

**** THE END ****