

# M S D S

# MATERIAL SAFETY DATA SHEET

**Report No.:** BCTC2302622103B

**Applicant:** Zhongshan Tianmao Battery Co., Ltd.

**Product Name:** Rechargeable Li-ion Polymer Battery

**Product Type:** BP1763

**Issued Date:** 2023-02-11

**Issued By:** 

Andre Yn Deter par

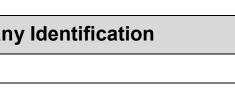


Shenzhen BCTC Testing Co., Ltd

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Edition.: A.



BCTC

\* The MSDS is prepared based on the information provided by client. The contents and formats of this MSDS are revised as per client's request.

Section 1-Chemical Product and Company Identification	
Product Name	Rechargeable Li-ion Polymer Battery
Model	BP1763
Trade Mark	N/A
Ratings	3.8V, 2100mAh, 7.98Wh
Weight	About 38.5g
Manufacturer	Zhongshan Tianmao Battery Co., Ltd.
Manufacturer address	No.208, Qianjin One Road, Xin Qianjin Village, Tan Zhou Town, ZhongShan City, China.
Emergency Telephone	+86-760-86289888
Fax	

Section 2- Composition Information			
Chemical Composition	CAS No.	Weight (%)	Trade Secret
Lithium cobaltate	12190-79-3	15-40	*
Graphite	7782-42-5	10-30	*
Phosphate(1-), hexafluoro-, lithium	21324-40-3	10-30	*
Copper	7440-50-8	7-13	\\\
Aluminium	7429-90-5	5-10	\\\\\
Nickel	7440-02-0	1-5	

<sup>&</sup>quot; \* " The exact percentage (concentration) of composition has been withheld as a trade secret.

Section 3- Hazards Identification				
Emergency overview:	N/A			
Classification according to GHS	Not a dangerous substance according to GHS			
Label elements:				
Hazard pictogram(s)	Not Available			
Signal word	Not Available			



Hazard statement(s)	Not Available	
Precautionary statement(s):		
Prevention	Not Available	
Response	Not Available	
Disposal	Not Available	
Environmental hazards:	No relevant information	
Important symptoms:	See section 11 for more information	
Section 4- First Aid Measures		
Eye contact	Flush eyes with plenty of water for least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.	
Skin contact	Remove contaminated clothes and rinse skin with plenty of water or shower for 15 minutes. Get medical aid.	
Inhalation	Remove from exposure and move to fresh air immediately. Use oxygen if available.	
Ingestion	Give at least 2 glasses of milk or water. Induce vomiting unless patient is unconscious. Call a physician.	
Section 5- Fire Fighting Measures		
Flash Point	N/A	
Auto-Ignition Temperature	N/A	
Extinguishing Media	H <sub>2</sub> O, CO <sub>2</sub>	
Special Fire-Fighting Procedures	Self-contained breathing apparatus	
Unusual Fire and Explosion Hazards	Cell may vent when subjected to excessive heat-exposing battery contents	
Hazardous Combustion Products	Carbon monoxide, carbon dioxide, lithium oxide fumes.	

## **Section 6- Accidental Release Measures**

#### Personal precautions, protective equipment and emergency procedures:

If the battery is released, remove personnel from area until fumes dissipate. Provide maximum ventilation to clear out hazardous gases. The preferred response is to leave the area and allow the vapors to dissipate. Avoid skin and eyes contact or inhalation of vapors. Remove spilled liquid with absorbent and incinerated. If leakage of the battery happens, liquid could be absorbed with sand, earth or other inert substance and contaminated area should be ventilated meantime.

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#### **Environment precautions:**

Do not allow product to reach sewage system or any water source.

Inform respective authorities in case of seepage into water course or sewage system.

Do not allow to enter sewers surface or ground water.

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

If battery casing is dismantled, small amounts of electrolyte may leak. Collect all released material in a plastic lined container. Dispose off according to the local law and rules. Avoid leached substances to get into the earth, canalization or waters

canalization or waters.		
Section 7- Handling and Storage		
Handling	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.	
Storage	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.	
Other Precautions	The battery may explode or cause burns, if disassembled, crushed or exposed to fire or high temperatures. Do not short or install with incorrect polarity.	
Section 8- Exposure Controls/Personal Protection		
Engineering Controls	Use local exhaust ventilation or other engineering controls to control sources of dust, mist, fumes and vapor.  Keep away from heat and open flame. Store in a cool, dry place.	
Personal Protective Equipment	Respiratory Protection: Not necessary under normal conditions.  Skin and body Protection: Not necessary under normal conditions, Wear suitable protective clothing and gloves if handling an open or leaking battery.  Hand protection: Wear suitable gloves if handling an open or leaking battery.  Eye Protection: Not necessary under normal conditions, Wear safety glasses if handling an open or leaking battery.	
Other Protective Equipment	Have a safety shower and eye wash fountain readily available in the immediate work area.	
Hygiene Measures	Do not eat, drink, or smoke in work area. Maintain good housekeeping.	
Section 9- Physical and Chemical Properties		
Form	Solid	
Color	Blue	
Odour	Not Available	



рН	Not Available		
Melting point/freezing point	Not Available		
Boiling Point and Boiling range	Not Available		
Flash Point	Not Available		
Upper/lower flammability or explosive limits	Not Available		
Vapor Pressure	Not Available		
Vapor Density	Not Available		
Relative density	Not Available		
Solubility in Water	Not Available		
Auto-ignition temperature	Not Available		
Decomposition temperature	Not Available		
Evaporation rate	Not Available		
Flammability (soil, gas)	Not Available		
Viscosity	Not Available		
Sec	Section 10- Stability and reactivity		
Stability	The product is stable under conditions described Section 7		
Conditions to Avoid	Heat above 70°C or incinerate. Deform, Mutilate, Crush, Disassemble, Overcharge, Short circuit, Expose over a long period to humid conditions.		
Incompatible Materials	Oxidizing agents, acid, base.		
Hazardous Decomposition Products	Carbon monoxide, carbon dioxide, lithium oxide fumes.		
Possibility of Hazardous Reaction	Not Available		
Section 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 Available		
Neurological Effects	Not Available		



Teratogenicity	Not Available	
Reproductive Toxicity	Not Available	
Mutagenicity (Genetic Effects)	Not Available	
Toxicologically Synergistic Materials	Not Available	
Section 12- Ecological Information		
Ecological Toxicity	Not Available	
Mobility in soil	Not Available	
Persistence and Degradability	Not Available	
Bioaccumulation potential	Not Available	
Other Adverse Effects	Not Available	
Section 13- Disposal Considerations		
Product disposal recommendation	Observe local, state and federal laws and regulations.	
Uncleaned packaging recommendation	Disposal must be made according to official regulations	
Section 14 – Transport Information		
UN Number	UN 3480 or UN 3481	
UN Proper shipping name	PI965 Lithium ion Batteries PI966 Lithium ion Batteries packed with equipments PI967 Lithium ion Batteries contained in equipments	

#### **Transport information:**

Rechargeable Li-ion Polymer Battery (Sample Model: BP1763) is tested and has passed in accordance with UN manual of Tests and Criteria, Part III, subsection 38.3.

The goods shall be complied with the requirements of Section IB of Packing Instruction 965 or of Section II of Packing Instruction 966 967 of 64th DGR Manual of IATA or special provision 188 of IMDG CODE (Amdt. 40-20).

Separate Lithium-ion batteries when shipping to prevent short-circuiting. They should be packed in strong packaging for support during transport, ensure that the goods will not falling, dropping, and breakage, Prevent collapse of cargo piles and wet by rain.

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

# **Section 15- Regulatory information**



#### Law information

《Dangerous Goods Regulations》

《Recommendation 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 Substance 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)

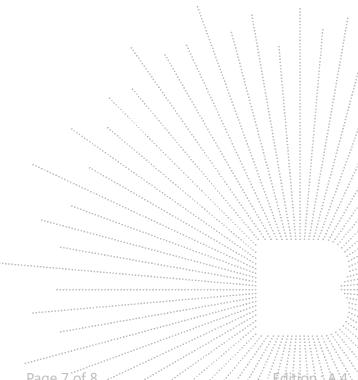
《California Proposition 65》

《Code of Federal Regulations》(CFR)

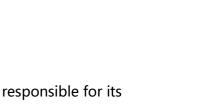
In according with all Federal, State and local laws.

#### Section 16- Other Information

The information above is believed to be accurate and represents the best information currently available to us. However, concorde 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 material 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.



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### **STATEMENT**

- 1. The equipment lists are traceable to the national reference standards.
- 2. The test report can not be partially copied unless prior written approval is issued from our lab.
- 3. The test report is invalid without the "special seal for inspection and testing".
- 4. The test report is invalid without the signature of the approver.
- 5. The test process and test result is only related to the Unit Under Test.
- 6. Sample information is provided by the client and the laboratory is not responsible for its authenticity.
- 7. The test report without CMA mark is only used for scientific research, teaching, enterprise product development and internal quality control purposes.
- 8. The quality system of our laboratory is in accordance with ISO/IEC17025.
- 9. If there is any objection to this test report, the client should inform issuing laboratory within 15 days from the date of receiving test report.

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