

# MSDS

## MATERIAL SAFETY DATA SHEET

**Prepared For** : Shenzhen Sentec Technology Co. Ltd.  
Number B Building, Lin Yuan Industry area, Huarong Road, Da Lang  
Street, Long Hua, Shenzhen, Guangdong, China

**Prepared By** : Shenzhen LCS Compliance Testing Laboratory Ltd.  
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**Report Number** : LCS180511036ASD 001

**Written by:** Grace Gan

**Approved by:** Ha



# Material Safety Data Sheet

REPORT NO.: LCS180511036ASD 001

\* 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

<b>Product Name</b>	Li-ion battery
<b>Model</b>	WPA415
<b>Trademark</b>	N/A
<b>Ratings</b>	7.4V, 3000mAh, 22.2WH
<b>Weight</b>	98.2g
<b>Manufacturer</b>	Shenzhen Sentec Technology Co. Ltd.
<b>Manufacturer address</b>	Number B Building, Lin yuan Industry area, Huarong road, Da lang street, Long Hua, Shenzhen, Guangdong, China
<b>Emergency telephone</b>	+86- 755-23271989
<b>Fax</b>	+86- 755-29051205

## Section 2- Hazards Identification

<b>Emergency overview:</b>	N/A
<b>Classification according to GHS</b>	Not a dangerous substance according GHS and EC1907/2006 (REACH), EC1272/2008 and following Regulation EC453/2010
<b>Label elements:</b>	
Hazard pictogram(s)	Not available
Signal word	Not available
Hazard statement(s)	Not available
<b>Precautionary statement(s):</b>	
Prevention	Not available
Response	Not available
Disposal	Not available
<b>Environmental hazards:</b>	No relevant information
<b>Important symptoms:</b>	See section 11 for more information

## Section 3- Composition Information

<b>Chemical Composition</b>	<b>CAS No.</b>	<b>Weight (%)</b>	<b>Trade Secret</b>
Lithium cobaltate	12190-79-3	15 - 40	*
Graphite	7782-42-5	10 - 30	*

# Material Safety Data Sheet

REPORT NO.: LCS180511036ASD 001

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	*

“ \* ” The exact percentage (concentration) of the composition has been withheld as a trade secret.

## Section 4- First Aid Measures

<b>Eye contact</b>	Flush eyes with plenty of water for least 15 minutes, occasionally lifting the upper and lower eyelids. Seek medical aid.
<b>Skin contact</b>	Remove contaminated clothes and rinse skin with plenty of water or shower for 15 minutes. Seek medical aid.
<b>Inhalation</b>	Remove from exposure and move to fresh air immediately. Use oxygen if available.
<b>Ingestion</b>	Give at least 2 glasses of milk or water. Induce vomiting unless patient is unconscious. Call a doctor.

## Section 5- Firefighting Measures

<b>Flash Point</b>	N/A
<b>Auto-Ignition Temperature</b>	N/A
<b>Extinguishing Media</b>	H <sub>2</sub> O, CO <sub>2</sub>
<b>Special Fire-Fighting Procedures</b>	Self-contained breathing apparatus
<b>Unusual Fire and Explosion Hazards</b>	Cell may vent when subjected to excessive heat, exposing battery contents
<b>Hazardous Combustion Products</b>	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 eye contact or inhalation of vapours. Remove spilled liquid with absorbent and incinerate. If leakage of the battery occurs, the liquid may be absorbed with sand, earth or other inert substance and the contaminated area should be ventilated in the meantime.

### Environmental precautions:

Do not allow product to reach the sewage system or any water source. Inform the relevant authorities in the event of seepage into water course or sewage system. Do not allow to enter sewers/ surface or ground water.

# Material Safety Data Sheet

REPORT NO.: LCS180511036ASD 001

## Methods and material for containment and clean-up:

If the battery casing is dismantled, small amounts of electrolyte may leak. Collect all released material in a plastic-lined container. Dispose of according to local law and rules. Avoid leached substances getting into the soil, pipelines or water system.

## Section 7- Handling and Storage

<b>Handling</b>	The battery should not be opened, destroyed or incinerated, since it may leak or rupture and release to the environment the ingredients contained in the hermetically sealed container. Do not short-circuit the terminals or over-charge the battery, force over-discharge or throw into fire. Do not crush or puncture the battery or immerse in liquids.
<b>Storage</b>	Avoid mechanical or electrical misuse. Store preferably in a cool, dry and well-ventilated area, 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.
<b>Other Precautions</b>	The battery may explode or cause burns if dismantled, crushed or exposed to fire or high temperatures. Do not short or install with incorrect polarity.

## Section 8- Exposure Controls/Personal Protection

<b>Engineering Controls</b>	Use local exhaust ventilation or other engineering methods to control sources of dust, mist, fumes and vapour. Keep away from heat and open flames. Store in a cool, dry place.
<b>Personal Protective Equipment</b>	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.
<b>Other Protective Equipment</b>	Have a safety shower and eye wash fountain readily available in the immediate work area.
<b>Hygiene Measures</b>	Do not eat, drink, or smoke in the work area. Maintain good housekeeping.

## Section 9- Physical and Chemical Properties

<b>Form</b>	Solid
<b>Colour</b>	Black
<b>Odour</b>	Not available
<b>pH</b>	Not available
<b>Melting point/freezing point</b>	Not available

# Material Safety Data Sheet

REPORT NO.: LCS180511036ASD 001

<b>Boiling point and Boiling range</b>	Not available
<b>Flash Point</b>	Not available
<b>Upper/lower flammability or explosive limits</b>	Not available
<b>Vapour Pressure</b>	Not available
<b>Vapour Density</b>	Not available
<b>Relative Density</b>	Not available
<b>Solubility in Water</b>	Not available
<b>Self-ignition Temperature</b>	Not available
<b>Decomposition Temperature</b>	Not available
<b>Evaporation Rate</b>	Not available
<b>Flammability (soil, gas)</b>	Not available
<b>Viscosity</b>	Not available

## Section 10- Stability and reactivity

<b>Stability</b>	The product is stable under conditions described in Section 7
<b>Conditions to avoid</b>	Heat above 70°C or incineration. Deformation, mutilation, crushing, dismantling, overcharging, short-circuit, prolonged exposure to damp conditions.
<b>Incompatible materials</b>	Oxidizing agents, acid, base.
<b>Hazardous Decomposition Products</b>	Carbon monoxide, carbon dioxide, lithium oxide fumes.
<b>Possibility of Hazardous Reaction</b>	Not available

## Section 11 – Toxicological Information

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

# Material Safety Data Sheet

REPORT NO.: LCS180511036ASD 001

<b>Materials</b>	
<b>Section 12- Ecological Information</b>	
<b>Ecological Toxicity</b>	Not available
<b>Mobility in soil</b>	Not available
<b>Persistence and Degradability</b>	Not available
<b>Bioaccumulation potential</b>	Not available
<b>Other Adverse Effects</b>	Not available
<b>Section 13- Disposal Considerations</b>	
<b>Product disposal recommendation</b>	Observe local, state and federal laws and regulations.
<b>Uncleaned packaging recommendation</b>	Disposal must be made according to official regulations
<b>Section 14 – Transport Information</b>	
<b>Label for conveyance</b>	Lithium Battery Label
<b>UN Number</b>	UN 3480 or UN3481
<b>Transport hazard class(es)</b>	9
<b>Packing group</b>	--
<b>Marine pollutant</b>	No
<b>UN Proper shipping name</b>	Lithium ion Batteries (Including lithium ion polymer batteries) Lithium ion Batteries packed with equipment (Including lithium ion polymer batteries) Lithium ion Batteries contained in equipment (Including lithium ionpolymer batteries)
<p><b>Transport information:</b></p> <p>Li-ion battery (Sample Model: WPA415) is tested and has been found compliant the with UN manual of Tests and Criteria, Part III, subsection 38.3.</p> <p>The goods are compliant with the requirements of Section IB-II of Packing Instruction 965 or of Section II of Packing Instruction 966 967 of the 59<sup>th</sup> DGR Manual of IATA or special provision 188 of IMDG CODE (Amdt. 38-16).</p> <p>Separate Lithium-ion batteries when shipping to prevent short-circuiting. They should be packed in strong packaging to provide support during transport and ensure protection from falling, dropping and breakage. Avoid the collapse of cargo piles and wetting by rain.</p> <p><b>Transport Method:</b> By air, sea, railway or road.</p>	

# Material Safety Data Sheet

REPORT NO.: LCS180511036ASD 001

## Section 15- Regulatory Information

### Legal 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 Coding 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)  
《Oil Pollution Act》 (OPA)  
《Superfund Amendments and Re-authorization Act Title III (302/311/312/313)》 (SARA)  
《Resource Conservation and Recovery Act》 (RCRA)  
《Safety of Drinking Water Act》 (CWA)  
《California Proposition 65》  
《Code of Federal Regulations》 (CFR)  
EC 1907/2006 (REACH) EC 1272/2008 Regulation EC 453/2010  
Globally Harmonised System of Classification and Labelling of Chemical (GHS)  
In compliance with all Federal, State and Local laws.

## Section 16- Other Information

The above information 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, explicit 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 whether additional precautions are required.

-- End of Report --

Arese, 29 November 2019

## CERTIFICATE OF CONFORMITY

Capit Performance Srl, based in Via G. Mattei 45, 20020 Arese (MI) – Italy

### CERTIFICATES

That its own products below listed of WarmMe line are in conformity with the following regulations:

- UN 38.3

### DECLARES

That a sample of the product has been tested and found in conformity with below Standard Test:

- UN 38.3

## UN 38.3 TEST SUMMARY REPORT

### Test reference

Reference Report ID: LCS180511036ASA V1.1

Date of Issue: 16 July 2018

Standard Section 38.3 of the Sixth Revised Edition of the Recommendations on the Transport of Dangerous Goods, Manual of Test and Criteria (ST/SG/AC.10/11/Rev 6 Section 38.3)

### Product Reference

Product: Li-ion Battery

Classification:

Li-ion Battery

Description: WPA415 Li-ion Battery with package and connector.

Code: WPA415

Ratings:

7.4V 3000mAh 22.2Wh

-

### Supplier:

Capit Performance srl  
Via G. Mattei, 45  
20020 Arese (MI) Italy

### Laboratory:

Shenzhen Sentec Technology co. Ltd

### Test Result

The Li-ion battery submitted by Shenzhen Sentec Technology co. Ltd are tested according to Section 38.3 of the Sixth Revised Edition of the Recommendations on the Transport of Dangerous Goods, Manual of Test and Criteria (ST/SG/AC.10/11/Rev 6 Section 38.3)

TEST	RESULT
38.3.4.1 Altitude Simulation	PASS
38.3.4.2 Thermal Test	PASS
38.3.4.3 Vibration	PASS
38.3.4.4 Shock	PASS
38.3.4.5 External Short Circuit	PASS
38.3.4.6 Crush-Impact	PASS
38.3.4.7 Overcharge	PASS
38.3.4.8 Forced Discharge	PASS

### Final Note

The below signatory/signatories affirm that this document is a true and correct summary of the original individual tests and test data. The original test data is confidential information available to competent State Authorities with Valid identification and only upon their formal request. Disclosure of the original test data to any other entity upon its request will be considered by Capit Performance srl

CAPIT PERFORMANCE SRL  
Arese 29-11-2019