

# LITHIUM CELL/BATTERY TEST SUMMARY AND SUPPLIER INQUIRY

IN ACCORDANCE WITH SUB-SECTION 38.3  
OF MANUAL OF TESTS AND CRITERIA

N/A = Not Applicable

1. Name of cell / battery			
WA3551 Lithium Battery Pack			
2. Manufacturer of cell / battery			
Name	Positec Technology (China) Co.,Ltd.		
Address	No.18 Dongwang Road, Suzhou Industrial Park, Jiangsu Province		
Phone	+86-512-67631888		
Email	Positec.sz@positecgroup.com		
Website	www.positecgroup.com		
3. Test laboratory of cell / battery			
Name	Shanghai Research Institute of Chemical Industry Testing Center		
Address	No. 345 East Yunling Road, Putuo, Shanghai, China 200062		
Phone	+86 21 31765555		
Email	battery@ghs.cn		
Website	www.ghs.cn		
4. ID-number and date			
Unique test report identification number	1118040162	Date of test report	May 29 2018

## DESCRIPTION OF CELL / BATTERY

5. Mark the type of cell/battery with an "•"			
<input type="radio"/>	Lithium ion cell	<input type="radio"/>	Lithium metal cell
<input checked="" type="radio"/>	Lithium ion battery	<input type="radio"/>	Lithium metal battery
<input type="radio"/>	Lithium hybrid battery		
6. Parameters		Cell	Battery
Mass in gram (g):			370
Lithium ion: Indicate watt-hour rating (Wh):			36
Lithium metal: Indicate lithium metal content in gram (g):			
Lithium hybrid: Indicate lithium metal content in gram (g) and watt-hour rating (Wh):			g Wh

**LITHIUM CELL/BATTERY TEST SUMMARY AND SUPPLIER INQUIRY**  
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Name of cell/battery (taken from field 1)

WA3551 Lithium Battery Pack

7. Physical description of cell / battery

Black plastics cement shell

8. Model numbers

WA3551

**TESTS AND RESULTS**

9. List of tests conducted and results - Mark N/A, pass or fail with an "●"	N/A	pass	fail
T1 - Altitude simulation	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
T2 - Thermal Test	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
T3 - Vibration	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
T4 - Shock	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
T5 - External Short Circuit	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
T6 - Impact / Crush	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
T7 - Overcharge	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
T8 - Forced Discharge	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

10. Reference to assembled battery testing requirements

United Nations "Recommendations on the Transport of Dangerous Goods" Manual of Tests and Criteria 38.3

N/A

11. Reference to the revised edition of the Manual of Tests and Criteria used and to amendments thereto

ST/SG/AC.10/11/Rev.6

# LITHIUM CELL/BATTERY TEST SUMMARY AND SUPPLIER INQUIRY

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Name of cell/battery (taken from field 1)

WA3551.1 Lithium Battery Pack

## ADDITIONAL SUPPLIER INQUIRY

### 12. Quality management system for manufacturing cells / batteries

Does the manufacturer of the cell/battery manufacture the products based on a documented quality management system according to transport regulations?



YES

NO



### 13. Are the following parameters exceeded?

Lithium ion cell: more than 20 Wh

Lithium ion battery: more than 100 Wh

Lithium metal cell: more than 1 g Lithium

Lithium metal battery: more than 2 g Lithium

Lithium hybrid Battery: more than 1,5 g Lithium and/or more than 10 Wh



YES

NO



Check point 14 – 16 need to be answered when 13 has been ticked "YES":

### 14. Does each cell / battery incorporates a safety venting device or is designed to preclude a violent rupture under normal conditions of carriage?



YES

NO



### 15. Is each cell / battery equipped with an effective means of preventing external short circuits?



YES

NO



### 16. Is each battery containing cells or series of cells connected in parallel equipped with effective means as necessary to prevent dangerous reverse current flow (e.g. diodes, fuses, etc.)?



N/A



YES

NO



### 17. Only in air transport: State of Charge (SoC) for UN 3480 Lithium ion cells/batteries and lithium polymer cells/batteries

State of Charge (SoC) max. 30 %



YES

NO



## CELLS/BATTERIES INSTALLED IN EQUIPMENT

### 18. Check point 18 needs to be answered when the cells / batteries are installed in articles:

#### 18.a) Only button cells enclosed?



YES

NO



#### 18.b) Number of enclosed cells (other than button cells)/batteries per equipment

5

Enclosed cells per equipment

Enclosed batteries per equipment

1

When the equipment is intentionally active/switched on during transport e.g. data loggers:

#### 18.c) Confirmation that no dangerous amount of heat is emitted from the equipment



N/A



YES

NO



#### 18.d) Confirmation that the equipment when transported by air fulfills the defined air transport standards for electromagnetic radiation according to DO-160



N/A



YES

NO



19. Place, Date	20. Title, Surname, First name	21. Company stamp and signature
Suzhou,2019.12.18.	Customer Quality Manager Kenny Wang	