

# LITHIUM CELL TEST SUMMARY AND SUPPLIER INQUIRY

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

<i>Name/Description of cell</i>
Polymer Lithium ion Battery

## *Manufacturer of cell*

Name	Shenzhen Huanyuyuan technology Co., Ltd.
Address	Block 72C, Dongyuan Industrial Park, No.28 Beihuan Road West, longteng Area, Shiyan town, Baoan District Shenzhen China
Phone	+86 755 2222 0111
E-Mail	netxmxs2008@yeah.net
Website	http://www.hyybattery.

## *Manufacturer of the equipment (if the cell is contained in equipment)*

Name	Shenzhen Huanyuyuan technology Co., Ltd.
Address	Block 72C, Dongyuan Industrial Park, No.28 Beihuan Road West, longteng Area, Shiyan town, Baoan District Shenzhen China
Phone	+86 755 2222 0111
E-Mail	netxmxs2008@yeah.net
Website	http://www.hyybattery.net

## *Test laboratory of cell*

Name	Waltek Services (Shenzhen) Co., Ltd.
Address	1/F, Fukangtai Building, West Banma Rd., Songgang Street, Baoan District, Shenzhen China
Phone	+86 755 8355 1033
E-Mail	info@waltek.com.cn
Website	www.waltek.com.cn

## *ID-number and date*

<i>Unique test report identification number</i>	WTS17S0475926S-1
<i>Date of test report</i>	2017-04-26

## *DESCRIPTION OF CELL ( Mark with an“X”)*

<i>Lithium ion cell</i>	X
<i>Lithium metal cell</i>	

## *Parameters*

<i>Mass in gram (g):</i>	6.5g
<i>Lithium ion: Indicate watt-hour rating (Wh):</i>	1.11Wh
<i>Lithium metal: Indicate lithium metal content in gram (g):</i>	

## *Physical description of cell*

Polymer Lithium ion Battery
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## *Model numbers*

523830
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**TESTS AND RESULTS**

<i>List of tests conducted and results</i> <i>- Mark N/A, pass or fail with an "X"</i>	<i>N/A</i>	<i>Pass</i>	<i>Fail</i>
<i>T1 - Altitude simulation</i>		<i>X</i>	
<i>T2 - Thermal Test</i>		<i>X</i>	
<i>T3 - Vibration</i>		<i>X</i>	
<i>T4 - Shock</i>		<i>X</i>	
<i>T5 - External Short Circuit</i>		<i>X</i>	
<i>T6 - Impact - for cylindrical cells having a diameter of at least 18 mm</i>		<i>X</i>	
<i>T6 - Crush - for prismatic cells, pouch cells, button cells and cylindrical cells having a diameter of less than 18 mm</i>		<i>X</i>	
<i>T7 - Overcharge</i>		<i>X</i>	
<i>T8 - Forced Discharge</i>		<i>X</i>	

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

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**ADDITIONAL SUPPLIER INQUIRY**

<i>Mark Yes or no with an "X"</i>	<i>Yes</i>	<i>No</i>
<i>Quality management system for manufacturing cells</i> <i>Does the manufacturer of the cell/battery manufacture the products based on a documented quality management system according to transport regulations?</i>	<i>X</i>	
<i>Are the following parameters exceeded?</i> <i>Lithium ion cell: more than 20 Wh</i> <i>Lithium metal cell: more than 1 g Lithium</i>		

*Check point 13 - 15 need to be answered when 12 has been ticked "YES":*

<i>Mark Yes or no with an "X"</i>	<i>Yes</i>	<i>No</i>
<i>Does each cell incorporates a safety venting device or is designed to preclude a violent rupture under normal conditions of carriage?</i>	<i>X</i>	

Is each cell equipped with an effective means of preventing external short circuits? yes	X	
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.) Not relevant for cells	x	

**Only in air transport: State of Charge (SoC) for UN 3480 Lithium ion cells and lithium polymer cells**

State of Charge (SoC) max. 30 %	x	
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**CELLS INSTALLED IN EQUIPMENT**

Check point 17 needs to be answered when the cells are installed in articles: Mark N/A, pass or fail with an "X"	N/A	Pass	Fail
17c) Only button cells enclosed?		x	
17b) Number of enclosed cells (other than button cells) per equipment			
When the equipment is intentionally active/switched on during transport e.g. data loggers:			
17c) Confirmation that no dangerous amount of heat is emitted from the equipment		x	
17d) Confirmation that the equipment when transported by air fulfills the defined air transport standards for electromagnetic radiation according to DO-160		x	

Place, Date	Title, Surname, First Name	Company stamp and Signature
2019-11-22	Sales manager Lily Peng	