

LITHIUM 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/Description of battery	
Lithium-ion Battery	

1a. Name/Description of the cells inside the battery	
3.2V20AH	

The test summary of the cells inside the battery must either be presented or under checkpoint 9 and 9a it must be confirmed that the UN 38.3 test summary for the cells is available.

2. Manufacturer of battery	
Name	Zhejiang E-P Equipment Co.,Ltd
Address	Dipu,Anji,Huzhou,Zhejiang,P.R.China
Phone	400-672-8288
Email	info@ep-zl.com
Website	www.ep-zl.com

2a. Manufacturer of the equipment (if the battery is contained in equipment)	
Name	Zhejiang E-P Equipment Co.,Ltd
Address	Dipu,Anji,Huzhou,Zhejiang,P.R.China
Phone	400-672-8288
Email	info@ep-zl.com
Website	www.ep-zl.com

3. Test laboratory of battery	
Name	CQC Intime Testing Technology Co.,Ltd
Address	East Taihu Technology and Finance City, No.1368 Wuzhong Dadao Rd., Wuzhong
Phone	0512-66303623
Email	cqc_jszlb@126.com
Website	www.cqc-it.com

4. ID-number and date			
Unique test report identification number	20190406J07985	Date of test report	2019.05.15



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Lithium-ion Battery

DESCRIPTION OF BATTERY

5. Mark the type of battery with an "•"

<input checked="" type="radio"/>	Lithium ion battery	Lithium metal battery	<input type="radio"/>
<input type="radio"/>	Lithium hybrid battery		

6. Parameters

Mass in gram (g):	5800
Lithium ion: Indicate watt-hour rating (Wh):	480
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

7. Physical description of battery

24V20AH

8. Model numbers

EL20

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 - for cylindrical cells having a diameter of at least 18 mm See check point 1a and 9a.	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
T6 - Crush - for prismatic cells, pouch cells, button cells and cylindrical cells having a diameter of less than 18 mm. See check point 1a and 9a.	<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, only valid for cells. See check point 1a and 9a.	<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"/>

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9a. UN 38.3 Test Confirmation for the Cells inside the battery When no separate document for the cells is provided, this confirms that the cells inside the battery (see checkpoint 1.a.) have successfully passed the UN 38.3 test. In this case under checkpoint 9 the T.6 and T.8 must be marked as „passed“ and here under 9.a. „Cell UN 38.3 Test confirmed“ needs to be ticked.	<input checked="" type="radio"/>	Cell UN 38.3 Test confirmed	<input type="radio"/>	Cell UN 38.3 Test NOT confirmed	<input type="radio"/>

10. Reference to assembled battery testing requirements	
UN Recommendations on the Transport of Dangerous Goods, Manual of Tests and Criteria, ST/SG/AC.10/11/, sub-section 38.3. Rev.6	N/A

11. Reference to the revised edition of the Manual of Tests and Criteria used and to amendments thereto	
UN Recommendations on the Transport of Dangerous Goods, Manual of Tests and Criteria, ST/SG/AC.10/11/, sub-section 38.3. Rev.6	

ADDITIONAL SUPPLIER INQUIRY

12. Quality management system for manufacturing batteries Does the manufacturer of the battery manufacture the products based on a documented quality management system according to transport regulations?	<input checked="" type="radio"/>	YES	<input type="radio"/>	NO	<input type="radio"/>

13. Are the following parameters exceeded? Lithium ion battery: more than 100 Wh Lithium metal battery: more than 2 g Lithium Lithium hybrid Battery: more than 1,5 g Lithium and/or more than 10 Wh	<input checked="" type="radio"/>	YES	<input type="radio"/>	NO	<input type="radio"/>

Check point 14 – 16 need to be answered when 13 has been ticked "YES":					
14. Does each battery incorporates a safety venting device or is designed to preclude a violent rupture under normal conditions of carriage?	<input checked="" type="radio"/>	YES	<input type="radio"/>	NO	<input type="radio"/>
15. Is each battery equipped with an effective means of preventing external short circuits?	<input checked="" type="radio"/>	YES	<input type="radio"/>	NO	<input type="radio"/>
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.)?	<input type="radio"/>	N/A	<input checked="" type="radio"/>	YES	<input type="radio"/>

17. Only in air transport: State of Charge (SoC) for UN 3480 Lithium ion batteries and lithium polymer batteries					
State of Charge (SoC) max. 30 %	<input checked="" type="radio"/>	N/A	<input type="radio"/>	YES	<input type="radio"/>

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BATTERIES INSTALLED IN EQUIPMENT

18. Check point 18 needs to be answered when the batteries are installed in articles:					
18.a) Only button cells enclosed?	<input checked="" type="radio"/>	YES	<input type="radio"/>	NO	<input type="radio"/>
18.b) Number of 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	<input type="radio"/>	N/A	<input checked="" type="radio"/>	YES	<input type="radio"/>
18.d) Confirmation that the equipment when transported by air fulfills the defined air transport standards for electromagnetic radiation according to DO-160	<input checked="" type="radio"/>	N/A	<input type="radio"/>	YES	<input type="radio"/>

19. Place, Date	20. Title, Surname, First name	21. Company stamp and signature
2020. 1. 13	王波	

