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**Prüfzusammenfassung nach UN 38.3 für Lithium-Akkus/-Batterien**  
**Test Summary according to UN 38.3 for Lithium accumulators and batteries**

Sehr geehrte Damen und Herren,  
*Dear Ladies and Gentlemen,*

gemäß den Anforderungen nach UN 38.3 für Lithium-Akkus/-Batterien übersenden wir Ihnen im Anhang dieses Schreibens die Prüfzusammenfassung für folgendes Produkt und dem darin enthaltenen Lithium-Batterie-Typ:  
*according to the requirements of UN 38.3 for Lithium accumulators/batteries, we are sending you as attachment the Test Summary for the following product and the contained Lithium-Battery-Type:*

<b>IU-Artikel-Nummer</b> <i>IU item number</i>	<b>GTIN</b>	<b>Batterie-Typ</b> <i>Battery type</i>
47012	4008153470127	CR2032

Mit freundlichen Grüßen / *Best regards*

Inter-Union Technohandel GmbH

i. A. Michael Bernhart  
*Leiter Qualitätssicherung*

Anlage/*Attachment:*

- Prüfzusammenfassung / *Test Summary*

# 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

<b>1. Name of cell / battery</b>
LITHIUM CELL warrios CR2032 3V 210mAh

<b>2. Manufacturer of cell / battery</b>	
Name	
Address	
Phone	
Email	
Website	

<b>3. Test laboratory of cell / battery</b>	
Name	Shanghai Research Institute of Chemical Industry Testing Centre
Address	Nb. 2779 Guangfu West Road, Putuo District, Shanghai, Chi na
Phone	86-21-31765555
Email	battery@ghs.cn
Website	www.ghs.cn

<b>4. ID-number and date</b>			
Unique test report identification number	1114010125	Date of test report	20140305

## DESCRIPTION OF CELL / BATTERY

<b>5. Mark the type of cell/battery with an "•"</b>			
<input type="radio"/>	Lithium ion cell	Lithium metal cell	<input type="radio"/>
<input checked="" type="radio"/>	Lithium ion battery	Lithium metal battery	<input type="radio"/>
<input type="radio"/>	Lithium hybrid battery		

<b>6. Parameters</b>	<b>Cell</b>	<b>Battery</b>
<b>Mass</b> in gram (g):		3
<b>Lithium ion:</b> Indicate watt-hour rating (Wh):		0.63
<b>Lithium metal:</b> Indicate lithium metal content in gram (g):		
<b>Lithium hybrid:</b> Indicate lithium metal content in gram (g) and watt-hour rating (Wh):		3 g
		0.63 Wh

# LITHIUM CELL/BATTERY TEST SUMMARY AND SUPPLIER INQUIRY

IN ACCORDANCE WITH SUB-SECTION 38.3  
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Name of cell/battery (taken from field 1)
JM CELL warrios CR2032 3V 21

**7. Physical description of cell / battery**

Silvery Button

**8. Model numbers**

CR2032

## 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 checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
T8 - Forced Discharge	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**10. Reference to assembled battery testing requirements**

ST/SG/AC. 10/11/Rev. 5/Amend. 1 38.3 UNITED NATIONS "Recommendations on the TRANSPORT OF DANGEROUS GOODS" Manual of Tests and Criteria ST/SG/AC. 10/11/Rev. 5/Amend. 1 38.3	N/A
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**11. Reference to the revised edition of the Manual of Tests and Criteria used and to amendments thereto**

ST/SG/AC. 10/11/Rev. 5/Amend. 1 38.3 UNITED NATIONS "Recommendations on the TRANSPORT OF DANGEROUS GOODS" Manual of Tests and Criteria ST/SG/AC. 10/11/Rev. 5/Amend. 1 38.3



# LITHIUM CELL/BATTERY TEST SUMMARY AND SUPPLIER INQUIRY

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Name of cell/battery (taken from field 1)

JM CELL warrios CR2032 3V 21

## ADDITIONAL SUPPLIER INQUIRY

<b>12. Quality management system for manufacturing cells / batteries</b> Does the manufacturer of the cell/battery manufacture the products based on a documented quality management system according to transport regulations?	<input checked="" type="radio"/>	YES	NO	<input type="radio"/>
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<b>13. Are the following parameters exceeded?</b> 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	<input type="radio"/>	YES	NO	<input checked="" type="radio"/>
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<b>Check point 14 – 16 need to be answered when 13 has been ticked "YES":</b>						
<b>14.</b> Does each cell / battery incorporates a safety venting device or is designed to preclude a violent rupture under normal conditions of carriage?	<input checked="" type="radio"/>	YES	NO	<input type="radio"/>		
<b>15.</b> Is each cell / battery equipped with an effective means of preventing external short circuits?	<input checked="" type="radio"/>	YES	NO	<input type="radio"/>		
<b>16.</b> 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	NO	<input type="radio"/>

<b>17. Only in air transport: State of Charge (SoC) for UN 3480 Lithium ion cells/batteries and lithium polymer cells/batteries</b>				
State of Charge (SoC) max. 30 %	<input type="radio"/>	YES	NO	<input checked="" type="radio"/>

## CELLS/BATTERIES INSTALLED IN EQUIPMENT

<b>18. Check point 18 needs to be answered when the cells / batteries are installed in articles:</b>						
<b>18.a) Only button cells enclosed?</b>	<input checked="" type="radio"/>	YES	NO	<input type="radio"/>		
<b>18.b) Number of enclosed cells (other than button cells)/batteries per equipment</b>						
Enclosed cells per equipment		Enclosed batteries per equipment	2			
<b>When the equipment is intentionally active/switched on during transport e.g. data loggers:</b>						
<b>18.c) Confirmation that no dangerous amount of heat is emitted from the equipment</b>	<input type="radio"/>	N/A	<input checked="" type="radio"/>	YES	NO	<input type="radio"/>
<b>18.d) Confirmation that the equipment when transported by air fulfills the defined air transport standards for electromagnetic radiation according to DO-160</b>	<input type="radio"/>	N/A	<input checked="" type="radio"/>	YES	NO	<input type="radio"/>

<b>19. Place, Date</b>	<b>20. Title, Surname, First name</b>	<b>21. Company stamp and signature</b>
Jinhua, 2022. 5. 24	Merchandise, [REDACTED]	 胡善霞 HU JINXIA