

Report No.: 180236791a 001

Page 1 of 8

Client: REPT BATTERO ENERGY CO., LTD.

Contact Information: No. 205, Binhai 6th Road, Konggang New District, Longwan District,  
Wenzhou Zhejiang, P.R. China

Identification/  
Model No(s): Rechargeable Prismatic Lithium-ion Cell  
CB3914895EA

Sample obtaining method: Sending by customer

Condition at delivery: Test item complete and undamaged.

Sample Receiving date: 2022-06-10

Testing Period: 2022-06-10 to 2022-06-20

Place of testing: Chemical laboratory Ningbo

**Test Specification:**

**Test result:**

Customer's requirement:

1. Cadmium, Lead, Chromium (VI), Mercury, Polybrominated biphenyls (PBB) and Polybrominated diphenyl ethers (PBDE), ROHS Phthalates (BBP, DBP, DEHP, DIBP)  
According to RoHS(recast): Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment, 2011/65/EU Annex II and its amendment Directive (EU) 2015/863

PASS

**Other information:**

Country of Origin: China

For and on behalf of  
TÜV Rheinland/CCIC (Ningbo) Co., Ltd.



2022-06-22

Zhou Zoey / Project Manager

Date

Name/Position

Sample information is provided by customer. Test result is drawn according to the kind and extent of tests performed.

This test report relates to the above mentioned test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any safety mark on this or similar products.

"Decision Rule" document announced in our website (<https://www.tuv.com/landingpage/en/qm-gcn/>) describes the statement of conformity and its rule of enforcement for test results are applicable throughout this test report.

**Test Report No.: 180236791a 001**

Page 2 of 8

**Material List:**

Item: Rechargeable Prismatic Lithium-ion Cell  
CB3914895EA

Material No.	Material	Color	Location
A001	Metal	silver	refer to photo
A002	Metal	silver	refer to photo
A003	Metal	silver	refer to photo
A004	Metal	golden	refer to photo
A005	Metal	golden	refer to photo
A006	Plastic	black	refer to photo
A007	Plastic	blue	refer to photo
A008	Plastic	blue	refer to photo
A009	Plastic	white	refer to photo
A010	Plastic	transparent	refer to photo
A011	Plastic	black	refer to photo
A012	Metal	copper	refer to photo
A013	Plastic	black	refer to photo
A014	Metal	silver	refer to photo
A015	Plastic	transparent	refer to photo

**Test Report No.: 180236791a 001**

Page 3 of 8

**1.Screening Test by XRF spectroscopy**

 Test Method: Cadmium, Lead, Mercury, Chromium, Bromine  
 -- With reference to IEC 62321-3-1:2013

**Test Result:**

Material No.	Cd	Cr	Pb	Hg	Br
A001	BL	BL	BL	BL	n.a.
A002	BL	BL	BL	BL	n.a.
A003	BL	BL	BL	BL	n.a.
A004	BL	BL	BL	BL	n.a.
A005	BL	BL	BL	BL	n.a.
A006	BL	BL	BL	BL	d.(*1)
A007	BL	BL	BL	BL	BL
A008	BL	BL	BL	BL	BL
A009	BL	BL	BL	BL	BL
A010	BL	BL	BL	BL	BL
A011	BL	BL	BL	BL	BL
A012	BL	BL	BL	BL	n.a.
A013	BL	BL	BL	BL	BL
A014	BL	BL	BL	BL	n.a.
A015	BL	BL	BL	BL	BL

**Abbreviation:** Pb = Lead  
 Cd = Cadmium  
 Hg = Mercury  
 Cr = Chromium  
 Br = Bromine  
 n.a. = Not applicable  
 BL = Below limit  
 OL = Over limit  
 d. = Detected

**Test Report No.: 180236791a 001**

Page 4 of 8

**Remark:**

- (\*1) The screening result was detected in the inconclusive region or over limits, thus the further wet chemistry tests are suggested.
- (\*2) Component(s)/ materials(s) with an area of less than 2 mm x 2 mm will not be selected for testing according to RoHS Directive 2011/65/EU due to technical reason.  
For the test sample does not have detail materials information provided by client, visually identical materials (e.g. wire insulation, solder points, etc.) will be considered as the same material.  
Solder points on a printing circuit board will be examined several times based on optical anomalies or discoloration of the solder point(s) unless the solder point(s) is obviously generated automatically during production.  
All other materials will be sampled and tested at one test point representatively.

XRF Screening limits for different matrices :

Material	Concentration (%)				
	Cd	Cr	Pb	Hg	Br
<b>Polymeric</b>	BL≤0.006<X<0.014≤ OL	BL≤0.064<X	BL≤0.067<X<0.133≤ OL	BL≤0.066<X< 0.134≤OL	BL≤0.029<X
<b>Metallic</b>	BL≤0.006<X<0.014≤ OL	BL≤0.064<X	BL≤0.067<X<0.133≤ OL	BL≤0.066<X< 0.134≤OL	n.a.
<b>Composite materials</b>	BL≤0.004<X<0.016≤ OL	BL≤0.044<X	BL≤0.047<X<0.153≤ OL	BL≤0.046<X< 0.154≤OL	BL≤0.024<X

Remark: The symbol "X" marks the region where further investigation is necessary.

**Test Report No.: 180236791a 001**

Page 5 of 8

**2.Cadmium, Lead, Chromium (VI), Mercury, Polybrominated biphenyls (PBB) and Polybrominated diphenyl ethers (PBDE)**

Test Method: Total Cadmium, Lead, Mercury, Chromium  
- Ref. to IEC 62321-4:2013+AMD1:2017 and IEC 62321-5:2013

Chromium (VI)  
- For Metal material - Ref. to IEC 62321-7-1:2015  
- For Plastic or Electronic material - Ref. to IEC 62321-7-2:2017  
- For Leather material - Ref. to EN ISO 17075-1:2017

PBBs, PBDEs - Ref. to IEC 62321-6:2015

**Test Result:**

	<b>Cd</b>	<b>Cr(VI)</b>	<b>Pb</b>	<b>Hg</b>	<b>PBBs (*)</b>	<b>PBDEs (*)</b>
<b>Maximum Permissible Limit (%)</b>	0.01	0.1	0.1	0.1	0.1	0.1

<b>Material No.</b>	<b>(%)</b>					
	<b>Cd</b>	<b>Cr<sup>^</sup></b>	<b>Pb</b>	<b>Hg</b>	<b>PBBs (*)</b>	<b>PBDEs (*)</b>
	<b>RL (%)</b>					
	<b>0.001</b>	<b>0.001</b>	<b>0.001</b>	<b>0.001</b>	<b>0.01</b>	<b>0.01</b>
A006	n.a.	n.a.	n.a.	n.a.	< RL	< RL

**Abbreviation:** Pb = Lead  
Cd = Cadmium  
Hg = Mercury  
Cr = Chromium  
Cr (VI) = Chromium (VI)  
PBBs = Total Polybrominated Biphenyls  
PBDEs = Total Polybrominated Diphenyl Ethers  
< = less than  
RL = Reporting Limit  
n.a. = Not Applicable  
^ = The total Chromium have been determined  
% = percentage

**Test Report No.: 180236791a 001**

Page 6 of 8

**Remark:**

(\*) The reporting limit for each individual PBBs and individual PBDEs are :

Reporting Limit (%)		
<b>PBBs</b>	Bromobiphenyl	0.01
	Dibromobiphenyl	0.01
	Tribromobiphenyl	0.01
	Tetrabromobiphenyl	0.01
	Pentabromobiphenyl	0.01
	Hexabromobiphenyl	0.01
	Heptabromobiphenyl	0.01
	Octabromobiphenyl	0.01
	Nonabromobiphenyl	0.01
	Decabromobiphenyl	0.01
<b>PBDEs</b>	Bromodiphenylether	0.01
	Dibromodiphenyl ether	0.01
	Tribromodiphenyl ether	0.01
	Tetrabromodiphenyl ether	0.01
	Pentabromodiphenyl ether	0.01
	Hexabromodiphenyl ether	0.01
	Heptabromodiphenyl ether	0.01
	Octabromodiphenyl ether	0.01
	Nonabromodiphenyl ether	0.01
	Decabromodiphenyl ether	0.01

**Test Report No.: 180236791a 001**

Page 7 of 8

**3. BBP, DBP, DEHP, DIBP content**

Test Method: IEC 62321-8:2017

**Test Result:**

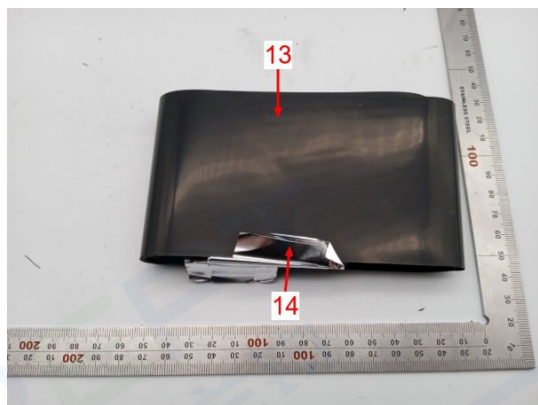
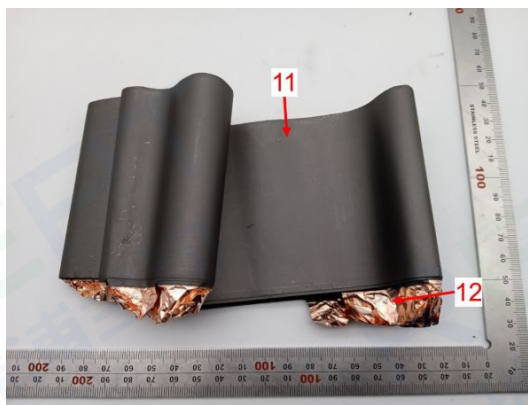
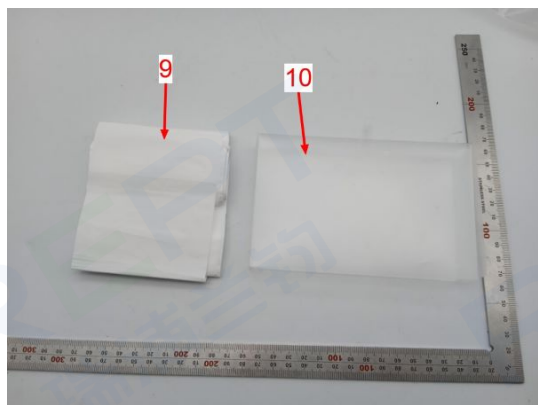
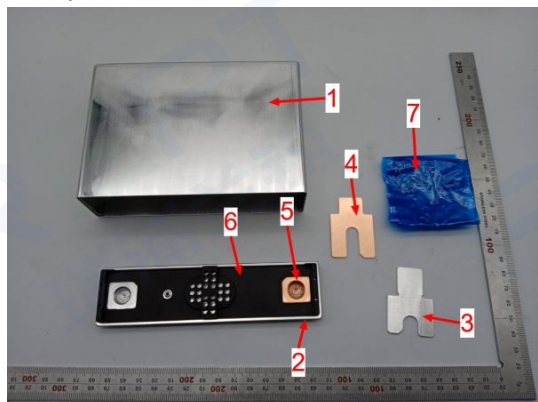
	BBP	DBP	DEHP	DIBP
Maximum permissible Limit (%)	0.1	0.1	0.1	0.1

Test No.	Material No.	RL (%)			
		BBP	DBP	DEHP	DIBP
		RL (%)			
		0.005	0.005	0.005	0.005
T001	A006 + A007 + A008	< RL	< RL	< RL	< RL
T002	A009 + A010 + A011	< RL	< RL	< RL	< RL
T003	A013 + A015	< RL	< RL	< RL	< RL

**Abbreviation:** BBP= Benzylbutyl phthalate  
 DBP= Dibutyl phthalate  
 DEHP= Bis(2-ethylhexyl) phthalate  
 DIBP= Diisobutyl phthalate  
 < = less than  
 RL = Reporting Limit  
 N.A. = Not Applicable  
 %= percentage



Sample Photos



- END -



