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**Applicant:** Ropla Elektronik sp. z o.o.

Contact information: ul.Wrocławska 1C,52-200 Suchy Dwór

The following sample(s) was (were) submitted and identified by client as:

Sample Name : Lithium Battery

Model No. : CR123A

Trade mark : 🥜

Manufacturer : Ropla Elektronik sp. z o.o.

Address : ul.Wrocławska 1C,52-200 Suchy Dwór

Received Date : Dec. 13, 2023

Testing Period : From Dec. 13, 2023 to Dec. 19, 2023

Test Request : Please refer to next page(s).

Test Result(s) : Please refer to next page(s).

Shen Zhen UONE Test Co., LTD.

Prepared by Checked by

Max Wu Thea Ye

Hedy Xu

red

Approved by



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Sum	mary of Test Results :			
TES	T REQUEST			CONCLUSION
RoH	S Directive 2011/65/EU and its s	ubsequent amendments Directive	(EU) 2015/863	
(1)		um(Cd), Mercury(Hg), Hexavalent s) and Polybrominated DiphenylE hemical test		PASS
(2)	To determine Phthalates (DBP,	BBP, DEHP, DIBP) content by che	emical test	PASS
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#### **Test Material List**

Material No.	Description (Location)	Photo(s) of tested materials
101 101 101	Silvery plastic with white/blue printing(label)	10 10 10 10 10 10 10 10 10 10 10 10 10 1
2	Black plastic(spacer)	4 4 4 4
3	White plastic(spacer)	140, 140, 140, 140, 140, 140, 140, 140,
4	Gray plastic packaging(battery)	1 2 3 <sub>1</sub> 12
5	Silvery metal case(battery)	
6	White plastic gasket(battery)	
<u>~7</u>	Silvery metal head(battery)	
8	Green translucent tape(battery)	
9	Copper metal foil with black coating(battery)	
10	Silvery metal foil with black coating(battery)	10 HO, 10 HO, 10 HO, 10 HO
11	White plastic insulating tape(battery)	
12	Silvery metal electrode(battery)	THE WE WE WE



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#### Test Result(s):

(1) Lead (Pb), Cadmium(Cd), Mercury(Hg), Hexavalent Chromium(Cr(VI)), Polybrominated Biphenyls (PBBs) and Polybrominated DiphenylEthers (PBDEs)

<u>Test Method:</u> IEC62321-3-1: 2013, IEC62321-4: 2013+A1:2017, IEC62321-5: 2013, IEC62321-6: 2015, IEC 62321-7-1:2015, IEC 62321-7-2: 2017, analyzed by EDXRF & ICP-OES & GC-MS & UV-Vis.

1019	701	EDXRF Result (1)				Chemical Result (2)	0	OHL TOHL
No.	Pb	Cd	Hg	Cr	Br	(mg/kg)	Remark <sup>(3)</sup>	Conclusion
1	BL	BL	BL	BL	BL	OHE - OHE	OHE -OHE	PASS
2	BL	BL	BL	BL	BL	100 -100 1	200	PASS
3	BL	BL	BL	BL	BL	alle - alle	all -all	PASS
4	BL	BL	BL	BL	BL	10, 10, 1	20. 70.	PASS
5	BL	BL	BL	BL	NA	de - de	& - &	PASS
6	BL	BL	BL	BL	BL	10 -10 L	10 - 10 E	PASS
7	BL	BL	BL	BL	NA	4 - 4	4 - 4	PASS
8	BL	BL	BL	BL	BL	10HF -10HF	0H1 .TOH1	PASS
9	BL	BL	BL	BL	NA	0 _0		PASS
10	BL	BL	BL	BL	NA	ME - ME	ME -ME	PASS
11	BL	BL	BL	BL	BL	120 -120 1	20 700	PASS
12	BL	BL	BL	BL	NA	16 - 16	16 - 16	PASS



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#### Remark:

- (1) ①Results are obtained by EDXRF for primary screening, and further wet chemical testing by ICP-OES (for Cd, Pb, Hg), UV-VIS (for Cr(VI)) and GC/MS (for PBBs, PBDEs) is recommended to be performed, if an inconclusive result was found (as "X" in below table) (unit: mg/kg).
  - ②OL = Over Limit, BL = Below Limit, X = Inconclusive, NA = Not Applicable.
  - ③The EDXRF screening test for RoHS elements The reading may be different to the actual content in the sample be of non-uniformity composition.

Element	Polymer	Metal	Composite Materials
Cd	BL ≤(70-3σ)< X <(130+3σ)≤ OL	BL ≤(70-3σ)< X <(130+3σ)≤ OL	LOD < X <(150+3σ)≤ OL
DI	BL ≤(700-3σ)< X <(1300+3σ)≤	BL ≤(700-3σ)< X <(1300+3σ)≤	BL ≤(500-3σ)< X
Pb	OL (	& & OL & &	<(1500+3σ)≤ OL
101-	BL ≤(700-3σ)< X <(1300+3σ)≤	BL ≤(700-3σ)< X <(1300+3σ)≤	BL ≤(500-3σ)< X
Hg	OL	OL	<(1500+3σ)≤ OL
Br	BL ≤ (300-3σ)< X	NA	BL ≤ (250-3σ)< X
Cr	BL ≤ (700-3σ)< X	BL ≤ (700-3σ)< X	BL ≤ (500-3σ)< X

#### Units and limits in EU RoHS Directive 2011/65/EU:

Element	Pb	Cd	Hg	Cr(VI)	PBBs(single)	PBDEs(single)
Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Limit	1000	100	1000	1000	1000	1000

(2) ① mg/kg = ppm = 0.0001%, N.D. = Not Detected (Less than MDL).

②Unit and MDL (Method detection limit) in wet chemical test.

Element	Pb	Cd	Hg	Cr(VI)	PBBs(single)	PBDEs(single)
Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
MDL	2	2	2	8	5	5

③According to IEC 62321-7-1:2015, result on Cr(VI) for metal sample is shown as Positive/Negative.

Negative = Absence of Cr(VI) coating, Positive = Presence of Cr(VI) coating.

Storage condition and production date of the tested sample are unavailable and thus results of Cr(VI) represent status of the sample at the time of testing.

- According to IEC 62321-3-1:2013, this column represents the results of wet chem test.
- (3) This column represents the exempted decoration of material or other related testing sample's information.



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#### (2) Phthalates (DBP, BBP, DEHP, DIBP) content

Test Method: IEC 62321-8: 2017, analyzed by gas chromatographic- mass spectrometer (GC-MS).

		, 0	0 1		
Substances	DBP	BBP	DEHP	DIBP	110 110
CAS No.	84-74-2	85-68-7	117-81-7	84-69-5	all all
Limit (mg/kg)	1000	1000	1000	1000	Conclusion
MDL (mg/kg)	20	20	20	20	A 4
Material No.	nous nous	Result	(mg/kg)	John Holes	NOLE, NOLE,
1	N.D.	N.D.	N.D.	N.D.	PASS
2	N.D.	N.D.	N.D.	N.D.	PASS
3	N.D.	N.D.	N.D.	N.D.	PASS
4	N.D.	N.D.	N.D.	N.D.	PASS
6	N.D.	N.D.	N.D.	N.D.	PASS
8	N.D.	N.D.	N.D.	N.D.	PASS
10, 11/10,	N.D.	N.D.	N.D.	N.D.	PASS

Note:

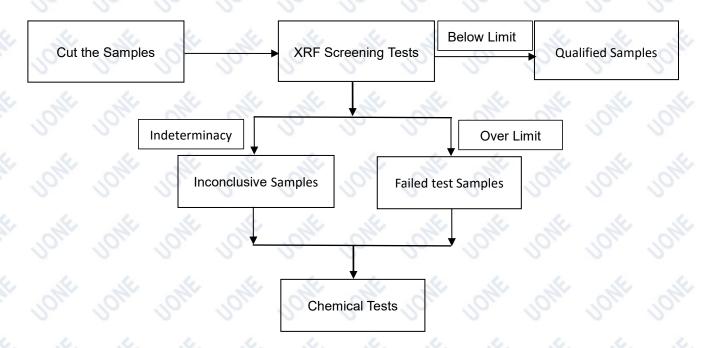
- 1. mg/kg = milligram per kilogram (ppm).
- 2. MDL= method detection limit.
- 3. N.D.=not detected(less than MDL).



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#### **Test Process Flow**

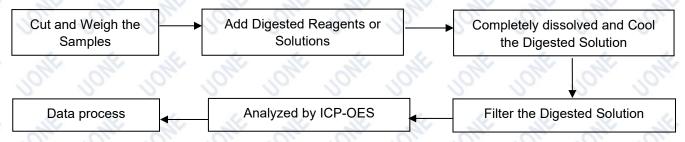
#### 1. XRF scan



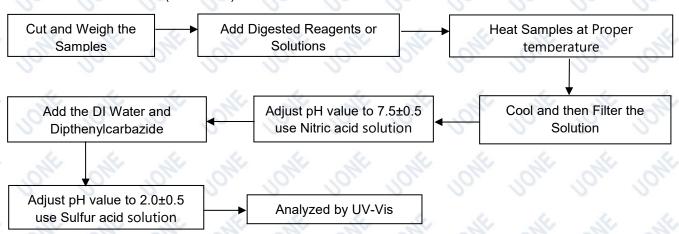


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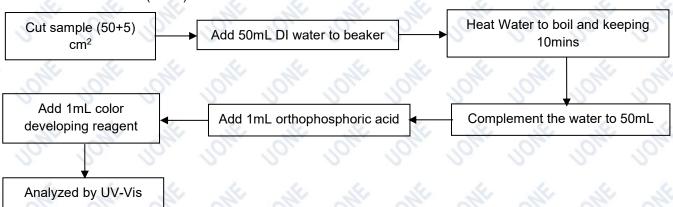
#### 2. Lead, Cadmium, Mercury



#### 3. Hexavalent Chromium (Non-metal)



#### Hexavalent Chromium (Metal)



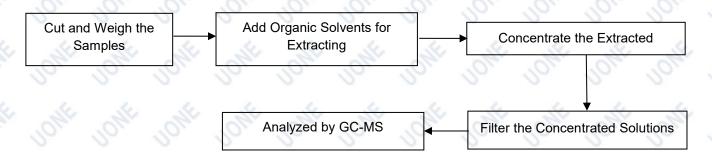
This report is valid only with a valid digital signature. The digital signature may be available only under the Adobe software above version 7.0.

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#### 4. PBBs & PBDEs, Phthalates



#### Photo(s) of Sample:



\*\*\*End of Report\*\*\*



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#### Statement

- 1. The information listed on the first page of this test report, except the date of receipt, test date, test result and test conclusion, is provided by the client. The client shall be responsible for the representativeness of sample and authenticity of materials, for which UONE shall bear no responsibilities.
- The test conclusion of this report are only applicable to the test samples submitted for inspection, and the samples submitted for inspection are only kept for 30 days, and the company does not bear other joint and several liabilities other than the test results.
- 3. The test report shall take effect only with the seal of the company, and this report shall not be deleted or modified.
- 4. This report shall not be reproduced in whole or in part without the written authorization of the Company.
- Objection should be issued in 15 days upon receiving the report, overdue opinion is inadmissible.
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