Test Report

Client Name	:	**EVVA TECHNOLOGY CO., LIMITED**
Client Address	:	**BLD. A4, NO. 1 Chenwu Road, Zhongkai High-tech District, Huizhou 516025, China**
Product Name	:	**Lithium-ion rechargeable battery pack**
Report Date	:	**2024.11.25**

Shenzhen Anbotek Compliance Laboratory Limited

Test Report

Applicant	:	EVVA TECHNOLOGY CO., LIMITED
Address	:	BLD. A4, NO. 1 Chenwu Road, Zhongkai High-tech District, Huizhou 516025, China

The submitted sample and sample information was/were submitted and identified by/on the behalf of the client

Sample Name	:	Lithium-ion rechargeable battery pack
Test Model No.	:	AXC18650-1S3P-MH1
Manufacturer	:	EVVA TECHNOLOGY CO., LIMITED
Supplier	:	EVVA TECHNOLOGY CO., LIMITED
Sample Received Date	:	2024.11.06; 2024.11.19
Testing Period	:	2024.11.06~2024.11.22
Test Requested	:	As specified by client, to test the Lead(Pb), Cadmium(Cd), Mercury(Hg), Hexavalent Chromium(Cr(VI)), Polybrominated Biphenyl(PBBs), Polybrominated Diphenyl Ethers (PBDEs), Diisobutyl phthalate (DIBP), Dibutyl phthalate(DBP), Benzyl butyl phthalate(BBP), Di-2-ethylhexyl phthalate(DEHP) in the selected material of the submitted sample in accordance with the RoHS Directive 2011/65/EU and amendment Commission Delegated Directive (EU) 2015/863.

Test Method: Please refer to the following page(s).

Test Result(s): Please refer to the following page(s).

Edited by Wei Jia Xin Reviewed by Zoe zheng Authorized Signatory

Test Report

Test Method:

A. XRF Screening Test

XRF screening limits in mg/kg for regulated elements according to IEC 62321-3-1:2013.

Element	Limit of IEC 62321-3-1:2013 Unit (mg/kg)		
	Polymers	Metals	Composite material
Cd	BL≤(70-3σ)<X <(130+3σ)≤OL	BL≤(70-3σ) <X <(130+3σ)≤OL	LOD<X <(150+3σ)≤OL
Pb	BL≤(700-3σ) <X <(1300+3σ)≤OL	BL≤(700-3σ) <X <(1300+3σ)≤OL	BL≤(500-3σ)<X <(1500+3σ)≤OL
Hg	BL≤(700-3σ)<X <(1300+3σ)≤OL	BL≤(700-3σ)<X <(1300+3σ)≤OL	BL≤(500-3σ)<X <(1500+3σ)≤OL
Br	BL≤(300-3σ)< X	N.A.	BL≤(250-3σ)< X
Cr	BL≤(700-3σ)< X	BL≤(700-3σ)< X	BL≤(500-3σ)< X

Note:

-N.A. = Not Applicable

-BL = Under the XRF screening limit

-OL = Further chemical test will be conducted while result is above the screening limit

-X= Inconclusive result (Further chemical test)

-3σ= The reproducibility of analytical instruments

-LOD= Detection limit

B. Chemical Test

Test Item(s)	Test Method	Measured Equipment(s)	MDL	Limit
Lead (Pb)	IEC 62321-5:2013	ICP-OES	2 mg/kg	1000 mg/kg
Cadmium (Cd)	IEC 62321-5:2013		2 mg/kg	100 mg/kg
Mercury (Hg)	IEC 62321-4:2013+AMD1:2017		2 mg/kg	1000 mg/kg
Hexavalent Chromium Cr(VI)	IEC 62321-7-1:2015	UV-VIS	0.10μg/cm^2	---
	IEC 62321-7-2:2017		8 mg/kg	1000 mg/kg
Polybrominated Biphenyls (PBBs)	IEC 62321-6:2015	GC-MS	5 mg/kg	1000 mg/kg
Polybrominated Diphenyl Ethers (PBDEs)	IEC 62321-6:2015		5 mg/kg	1000 mg/kg
Phthalates (DIBP, DBP, BBP, DEHP)	IEC 62321-8:2017		50 mg/kg	1000 mg/kg

Test Report

Test Results:

Sample No.	Sample Description	Tested Items	XRF Screening Test Unit (mg/kg)	Chemical Test Unit (mg/kg)	Conclusion
1	Black foam patch	Pb	BL	/	PASS
		Cd	BL	/	
		Hg	BL	/	
		Cr(Cr(VI))	BL	/	
		Br(PBBs&PBDEs)	X	N.D.	
		DBP	N.A.	N.D.	
		BBP	N.A.	N.D.	
		DEHP	N.A.	N.D.	
		DIBP	N.A.	N.D.	
2	Black plastic scarfskin	Pb	BL	/	PASS
		Cd	BL	/	
		Hg	BL	/	
		Cr(Cr(VI))	BL	/	
		Br(PBBs&PBDEs)	BL	/	
		DBP	N.A.	N.D.	
		BBP	N.A.	N.D.	
		DEHP	N.A.	N.D.	
		DIBP	N.A.	N.D.	
3	Silvery label	Pb	BL	/	PASS
		Cd	BL	/	
		Hg	BL	/	
		Cr(Cr(VI))	BL	/	
		Br(PBBs&PBDEs)	BL	/	
		DBP	N.A.	N.D.	
		BBP	N.A.	N.D.	
		DEHP	N.A.	N.D.	
		DIBP	N.A.	N.D.	

Test Report

Sample No.	Sample Description	Tested Items	XRF Screening Test Unit (mg/kg)	Chemical Test Unit (mg/kg)	Conclusion
4	Yellow plastic jacket	Pb	BL	/	PASS
		Cd	BL	/	
		Hg	BL	/	
		Cr(Cr(VI))	BL	/	
		Br(PBBs&PBDEs)	BL	/	
		DBP	N.A.	N.D.	
		BBP	N.A.	N.D.	
		DEHP	N.A.	N.D.	
		DIBP	N.A.	N.D.	
5	Blue plastic jacket	Pb	BL	/	PASS
		Cd	BL	/	
		Hg	BL	/	
		Cr(Cr(VI))	BL	/	
		Br(PBBs&PBDEs)	BL	/	
		DBP	N.A.	N.D.	
		BBP	N.A.	N.D.	
		DEHP	N.A.	N.D.	
		DIBP	N.A.	N.D.	
6	White plastic jacket	Pb	BL	/	PASS
		Cd	BL	/	
		Hg	BL	/	
		Cr(Cr(VI))	BL	/	
		Br(PBBs&PBDEs)	BL	/	
		DBP	N.A.	N.D.	
		BBP	N.A.	N.D.	
		DEHP	N.A.	N.D.	
		DIBP	N.A.	N.D.	

Test Report

Sample No.	Sample Description	Tested Items	XRF Screening Test Unit (mg/kg)	Chemical Test Unit (mg/kg)	Conclusion
7	Red plastic jacket	Pb	BL	/	PASS
		Cd	BL	/	
		Hg	BL	/	
		Cr(Cr(VI))	BL	/	
		Br(PBBs&PBDEs)	BL	/	
		DBP	N.A.	N.D.	
		BBP	N.A.	N.D.	
		DEHP	N.A.	N.D.	
		DIBP	N.A.	N.D.	
8	Black plastic jacket	Pb	BL	/	PASS
		Cd	BL	/	
		Hg	BL	/	
		Cr(Cr(VI))	BL	/	
		Br(PBBs&PBDEs)	BL	/	
		DBP	N.A.	N.D.	
		BBP	N.A.	N.D.	
		DEHP	N.A.	N.D.	
		DIBP	N.A.	N.D.	
9	Silvery metal sheet	Pb	BL	/	PASS
		Cd	BL	/	
		Hg	BL	/	
		Cr(Cr(VI))	BL	/	
		Br(PBBs&PBDEs)	N.A.	/	
		DBP	N.A.	/	
		BBP	N.A.	/	
		DEHP	N.A.	/	
		DIBP	N.A.	/	

Test Report

Sample No.	Sample Description	Tested Items	XRF Screening Test Unit (mg/kg)	Chemical Test Unit (mg/kg)	Conclusion
10	Green sticker	Pb	BL	/	PASS
		Cd	BL	/	
		Hg	BL	/	
		Cr(Cr(VI))	BL	/	
		Br(PBBs&PBDEs)	BL	/	
		DBP	N.A.	N.D.	
		BBP	N.A.	N.D.	
		DEHP	N.A.	N.D.	
		DIBP	N.A.	N.D.	
11	Black plastic sheet	Pb	BL	/	PASS
		Cd	BL	/	
		Hg	BL	/	
		Cr(Cr(VI))	BL	/	
		Br(PBBs&PBDEs)	BL	/	
		DBP	N.A.	N.D.	
		BBP	N.A.	N.D.	
		DEHP	N.A.	N.D.	
		DIBP	N.A.	N.D.	
12	Brown paper	Pb	BL	/	PASS
		Cd	BL	/	
		Hg	BL	/	
		Cr(Cr(VI))	BL	/	
		Br(PBBs&PBDEs)	BL	/	
		DBP	N.A.	N.D.	
		BBP	N.A.	N.D.	
		DEHP	N.A.	N.D.	
		DIBP	N.A.	N.D.	

Sample No.	Sample Description	Tested Items	XRF Screening Test Unit (mg/kg)	Chemical Test Unit (mg/kg)	Conclusion
13	Black plastic scarfskin	Pb	BL	/	PASS
		Cd	BL	/	
		Hg	BL	/	
		Cr(Cr(VI))	BL	/	
		Br(PBBs&PBDEs)	BL	/	
		DBP	N.A.	N.D.	
		BBP	N.A.	N.D.	
		DEHP	N.A.	N.D.	
		DIBP	N.A.	N.D.	
14	Silvery metal sheet	Pb	BL	/	PASS
		Cd	BL	/	
		Hg	BL	/	
		Cr(Cr(VI))	X	Negative	
		Br(PBBs&PBDEs)	N.A.	/	
		DBP	N.A.	/	
		BBP	N.A.	/	
		DEHP	N.A.	/	
		DIBP	N.A.	/	
15	Silvery metal soldering tin	Pb	BL	/	PASS
		Cd	BL	/	
		Hg	BL	/	
		Cr(Cr(VI))	X	Negative	
		Br(PBBs&PBDEs)	N.A.	/	
		DBP	N.A.	/	
		BBP	N.A.	/	
		DEHP	N.A.	/	
		DIBP	N.A.	/	

Sample No.	Sample Description	Tested Items	XRF Screening Test Unit (mg/kg)	Chemical Test Unit (mg/kg)	Conclusion
16	Black plastic jacket	Pb	BL	/	PASS
		Cd	BL	/	
		Hg	BL	/	
		Cr(Cr(VI))	BL	/	
		Br(PBBs&PBDEs)	BL	/	
		DBP	N.A.	N.D.	
		BBP	N.A.	N.D.	
		DEHP	N.A.	N.D.	
		DIBP	N.A.	N.D.	
17	Yellow transparent plastic sheet	Pb	BL	/	PASS
		Cd	BL	/	
		Hg	BL	/	
		Cr(Cr(VI))	BL	/	
		Br(PBBs&PBDEs)	BL	/	
		DBP	N.A.	N.D.	
		BBP	N.A.	N.D.	
		DEHP	N.A.	N.D.	
		DIBP	N.A.	N.D.	
18	Yellow transparent adhesive tape	Pb	BL	/	PASS
		Cd	BL	/	
		Hg	BL	/	
		Cr(Cr(VI))	BL	/	
		Br(PBBs&PBDEs)	BL	/	
		DBP	N.A.	N.D.	
		BBP	N.A.	N.D.	
		DEHP	N.A.	N.D.	
		DIBP	N.A.	N.D.	

Sample No.	Sample Description	Tested Items	XRF Screening Test Unit (mg/kg)	Chemical Test Unit (mg/kg)	Conclusion
19	Black sensor	Pb	BL	/	PASS
		Cd	BL	/	
		Hg	BL	/	
		Cr(Cr(VI))	BL	/	
		Br(PBBs&PBDEs)	BL	/	
		DBP	N.A.	N.D.	
		BBP	N.A.	N.D.	
		DEHP	N.A.	N.D.	
		DIBP	N.A.	N.D.	
20	White glue	Pb	BL	/	PASS
		Cd	BL	/	
		Hg	BL	/	
		Cr(Cr(VI))	BL	/	
		Br(PBBs&PBDEs)	BL	/	
		DBP	N.A.	N.D.	
		BBP	N.A.	N.D.	
		DEHP	N.A.	N.D.	
		DIBP	N.A.	N.D.	
21	Silvery metal pin	Pb	BL	/	PASS
		Cd	BL	/	
		Hg	BL	/	
		Cr(Cr(VI))	BL	/	
		Br(PBBs&PBDEs)	N.A.	/	
		DBP	N.A.	/	
		BBP	N.A.	/	
		DEHP	N.A.	/	
		DIBP	N.A.	/	

Sample No.	Sample Description	Tested Items	XRF Screening Test Unit (mg/kg)	Chemical Test Unit (mg/kg)	Conclusion
22	Silvery metal pin	Pb	BL	/	PASS
		Cd	BL	/	
		Hg	BL	/	
		Cr(Cr(VI))	BL	/	
		Br(PBBs&PBDEs)	N.A.	/	
		DBP	N.A.	/	
		BBP	N.A.	/	
		DEHP	N.A.	/	
		DIBP	N.A.	/	
23	IC	Pb	BL	/	PASS
		Cd	BL	/	
		Hg	BL	/	
		Cr(Cr(VI))	BL	/	
		Br(PBBs&PBDEs)	BL	/	
		DBP	N.A.	N.D.	
		BBP	N.A.	N.D.	
		DEHP	N.A.	N.D.	
		DIBP	N.A.	N.D.	
24	Chip resistor	Pb	BL	/	PASS
		Cd	BL	/	
		Hg	BL	/	
		Cr(Cr(VI))	BL	/	
		Br(PBBs&PBDEs)	BL	/	
		DBP	N.A.	N.D.	
		BBP	N.A.	N.D.	
		DEHP	N.A.	N.D.	
		DIBP	N.A.	N.D.	

Test Report

Sample No.	Sample Description	Tested Items	XRF Screening Test Unit (mg/kg)	Chemical Test Unit (mg/kg)	Conclusion
25	IC	Pb	BL	/	PASS
		Cd	BL	/	
		Hg	BL	/	
		Cr(Cr(VI))	BL	/	
		Br(PBBs&PBDEs)	BL	/	
		DBP	N.A.	N.D.	
		BBP	N.A.	N.D.	
		DEHP	N.A.	N.D.	
		DIBP	N.A.	N.D.	
26	Chip capacitor	Pb	BL	/	PASS
		Cd	BL	/	
		Hg	BL	/	
		Cr(Cr(VI))	BL	/	
		Br(PBBs&PBDEs)	BL	/	
		DBP	N.A.	N.D.	
		BBP	N.A.	N.D.	
		DEHP	N.A.	N.D.	
		DIBP	N.A.	N.D.	
27	Chip bead	Pb	BL	/	PASS
		Cd	BL	/	
		Hg	BL	/	
		Cr(Cr(VI))	BL	/	
		Br(PBBs&PBDEs)	BL	/	
		DBP	N.A.	N.D.	
		BBP	N.A.	N.D.	
		DEHP	N.A.	N.D.	
		DIBP	N.A.	N.D.	

Sample No.	Sample Description	Tested Items	XRF Screening Test Unit (mg/kg)	Chemical Test Unit (mg/kg)	Conclusion
28	Silvery metal soldering tin	Pb	BL	/	PASS
		Cd	BL	/	
		Hg	BL	/	
		Cr(Cr(VI))	BL	/	
		Br(PBBs&PBDEs)	N.A.	/	
		DBP	N.A.	/	
		BBP	N.A.	/	
		DEHP	N.A.	/	
		DIBP	N.A.	/	
29	Black PCB board	Pb	BL	/	PASS
		Cd	BL	/	
		Hg	BL	/	
		Cr(Cr(VI))	BL	/	
		Br(PBBs&PBDEs)	X	N.D.	
		DBP	N.A.	N.D.	
		BBP	N.A.	N.D.	
		DEHP	N.A.	N.D.	
		DIBP	N.A.	N.D.	
30	Silvery metal pin	Pb	BL	/	PASS
		Cd	BL	/	
		Hg	BL	/	
		Cr(Cr(VI))	BL	/	
		Br(PBBs&PBDEs)	N.A.	/	
		DBP	N.A.	/	
		BBP	N.A.	/	
		DEHP	N.A.	/	
		DIBP	N.A.	/	

Sample No.	Sample Description	Tested Items	XRF Screening Test Unit (mg/kg)	Chemical Test Unit (mg/kg)	Conclusion
31	White plastic terminal	Pb	BL	/	PASS
		Cd	BL	/	
		Hg	BL	/	
		Cr(Cr(VI))	BL	/	
		Br(PBBs&PBDEs)	BL	/	
		DBP	N.A.	N.D.	
		BBP	N.A.	N.D.	
		DEHP	N.A.	N.D.	
		DIBP	N.A.	N.D.	
32	White plastic ring	Pb	BL	/	PASS
		Cd	BL	/	
		Hg	BL	/	
		Cr(Cr(VI))	BL	/	
		Br(PBBs&PBDEs)	BL	/	
		DBP	N.A.	N.D.	
		BBP	N.A.	N.D.	
		DEHP	N.A.	N.D.	
		DIBP	N.A.	N.D.	
33	Silvery metal cover	Pb	BL	/	PASS
		Cd	BL	/	
		Hg	BL	/	
		Cr(Cr(VI))	BL	/	
		Br(PBBs&PBDEs)	N.A.	/	
		DBP	N.A.	/	
		BBP	N.A.	/	
		DEHP	N.A.	/	
		DIBP	N.A.	/	

Sample No.	Sample Description	Tested Items	XRF Screening Test Unit (mg/kg)	Chemical Test Unit (mg/kg)	Conclusion
34	Blue plastic scarfskin	Pb	BL	/	PASS
		Cd	BL	/	
		Hg	BL	/	
		Cr(Cr(VI))	BL	/	
		Br(PBBs&PBDEs)	BL	/	
		DBP	N.A.	N.D.	
		BBP	N.A.	N.D.	
		DEHP	N.A.	N.D.	
		DIBP	N.A.	N.D.	
35	Transparent adhesive tape	Pb	BL	/	PASS
		Cd	BL	/	
		Hg	BL	/	
		Cr(Cr(VI))	BL	/	
		Br(PBBs&PBDEs)	BL	/	
		DBP	N.A.	N.D.	
		BBP	N.A.	N.D.	
		DEHP	N.A.	N.D.	
		DIBP	N.A.	N.D.	
36	Metal copper foil with negative electrode material	Pb	BL	/	PASS
		Cd	BL	/	
		Hg	BL	/	
		Cr(Cr(VI))	BL	/	
		Br(PBBs&PBDEs)	N.A.	/	
		DBP	N.A.	/	
		BBP	N.A.	/	
		DEHP	N.A.	/	
		DIBP	N.A.	/	

Test Report

Sample No.	Sample Description	Tested Items	XRF Screening Test Unit (mg/kg)	Chemical Test Unit (mg/kg)	Conclusion
37	Metal aluminum foil with positive electrode material	Pb	BL	/	PASS
		Cd	BL	/	
		Hg	BL	/	
		Cr(Cr(VI))	BL	/	
		Br(PBBs&PBDEs)	N.A.	/	
		DBP	N.A.	/	
		BBP	N.A.	/	
		DEHP	N.A.	/	
		DIBP	N.A.	/	

Note:

- The screening results are only used for reference.
- When conducting the test for PBBs&PBDEs, XRF was introduced to screen Br Exclusively; When conducting the test for Hexavalent Chromium, XRF was introduced to screen Chromium exclusively.

-BL = Under the XRF screening limit

-OL = Further chemical test will be conducted while result is above the screening limit

-X= Inconclusive result (Further chemical test)

-LOD= Detection limit

-MDL = Method Detection Limit

-N.A. = Not Applicable

-N.D. = Not Detected (<MDL)

-/=Not tested

-1mg/kg = 1ppm = 0.0001%

- μg/cm^2 = microgramme per square centimetre

- "---"=

a. -Negative = Absence of Cr(VI) , the detected Cr(VI) concentration in the boiling water extraction solution is less than 0.10μg/cm^2.

b. -Positive = Presence of Cr(VI), the detected Cr(VI) concentration in the boiling water extraction solution is greater than 0.13μg/cm^2.

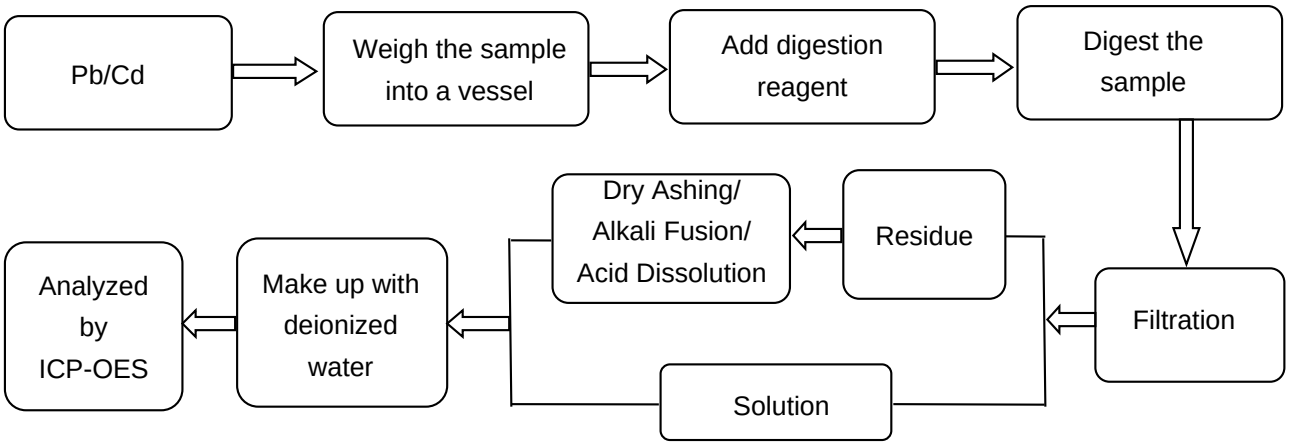
c. The result is between 0.10μg/cm^2 with 0.13μg/cm^2 is considered to be inconclusive-unavoidable coating variations may influence the determination.

Test Report

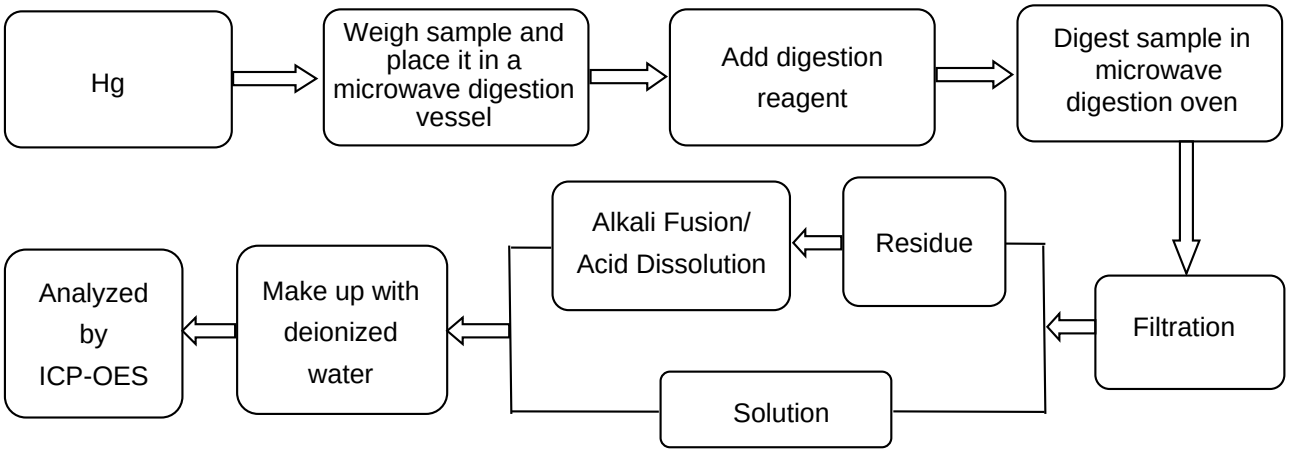
Test Process:

The sample(s) had been dissolved totally tested for Lead, Cadmium, Mercury.

◆ **IEC 62321-5:2013**

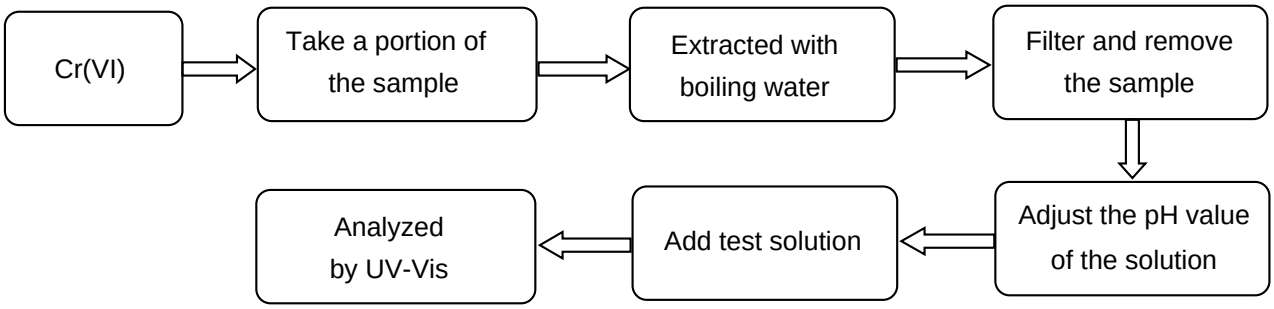


◆ **IEC 62321-4:2013+AMD1:2017**

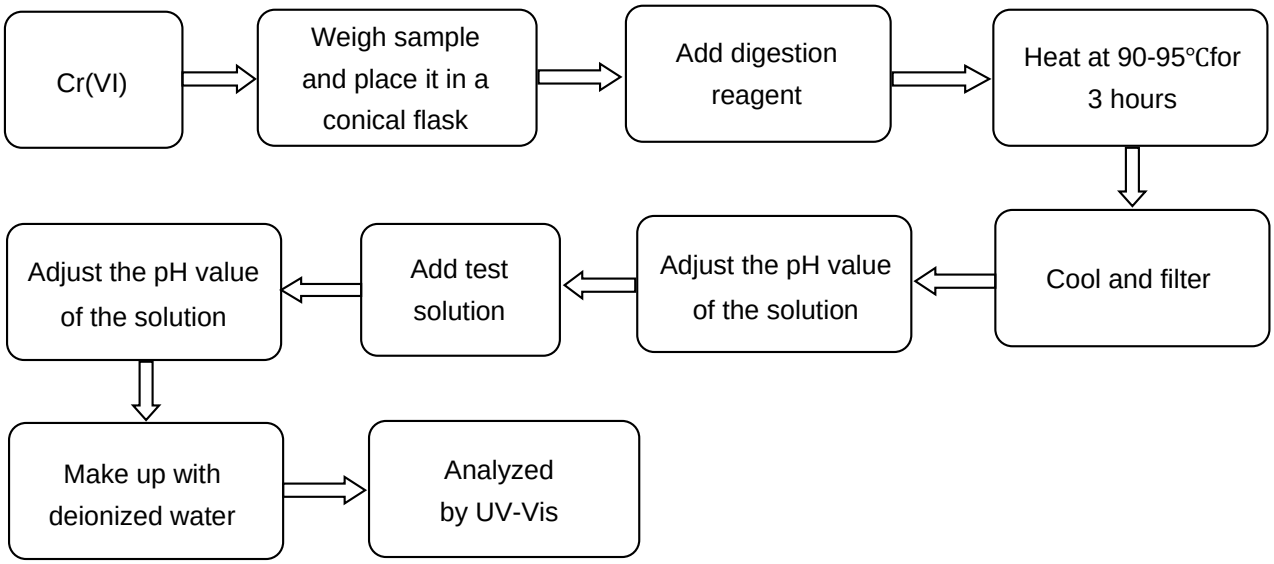


Test Report

◆ **IEC 62321-7-1:2015**

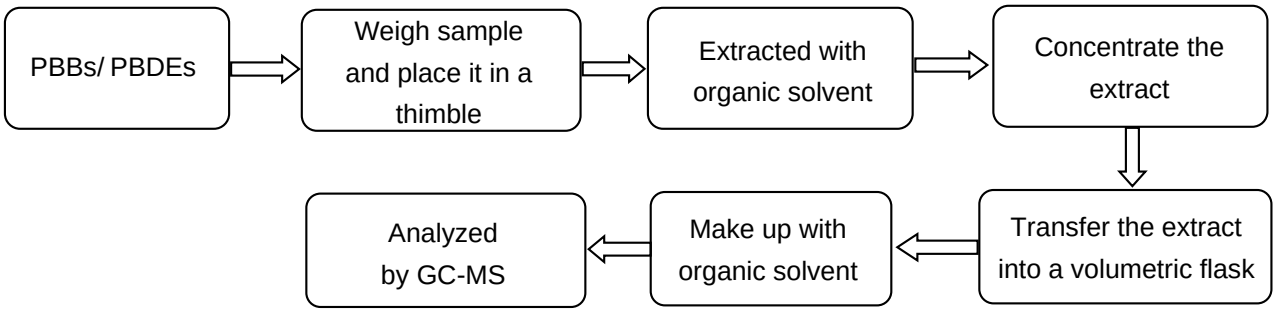


◆ **IEC 62321-7-2:2017**

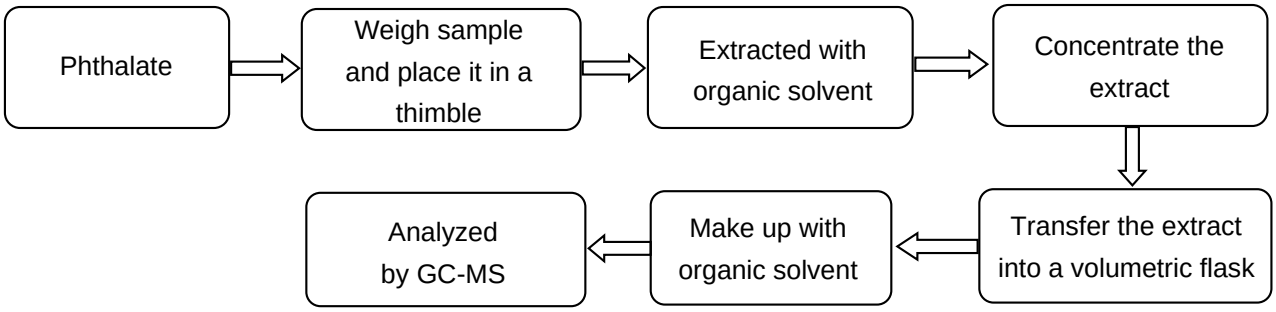


Test Report

◆ **IEC 62321-6:2015**



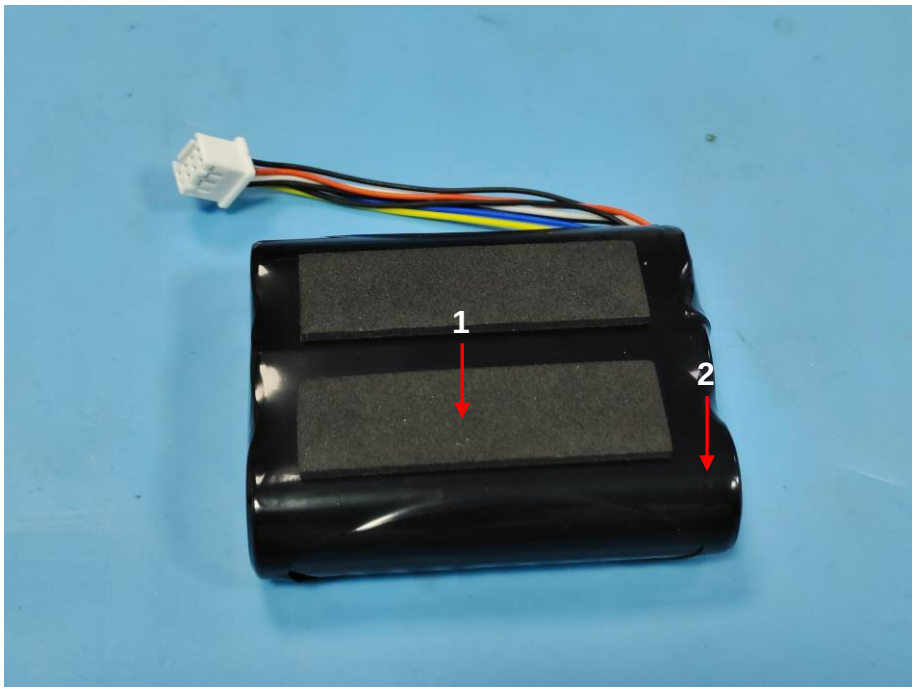
◆ **IEC 62321-8:2017**



Photograph of Sample

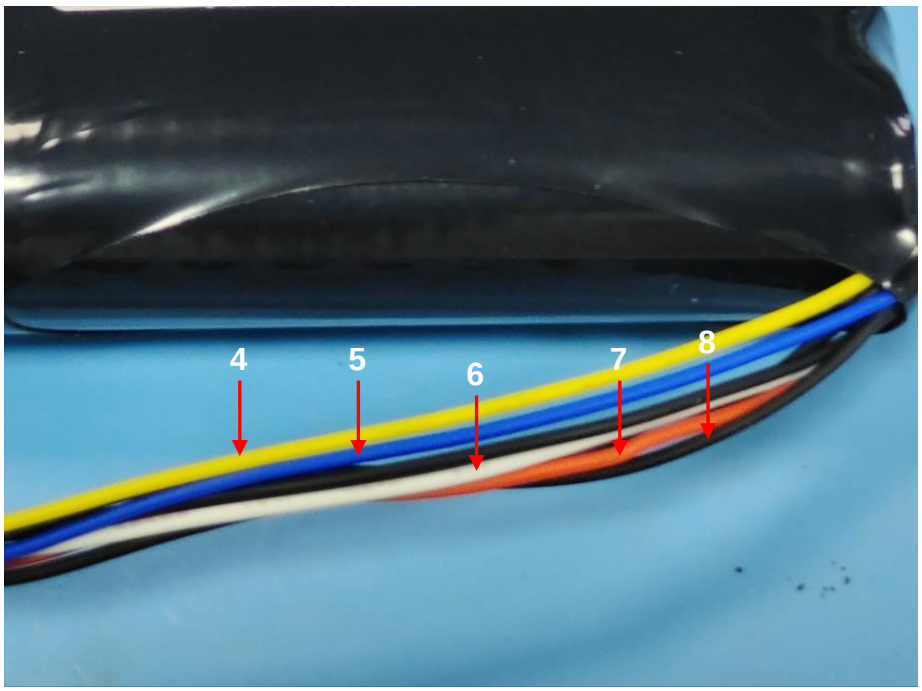


Photo(s) of the tested component(s)

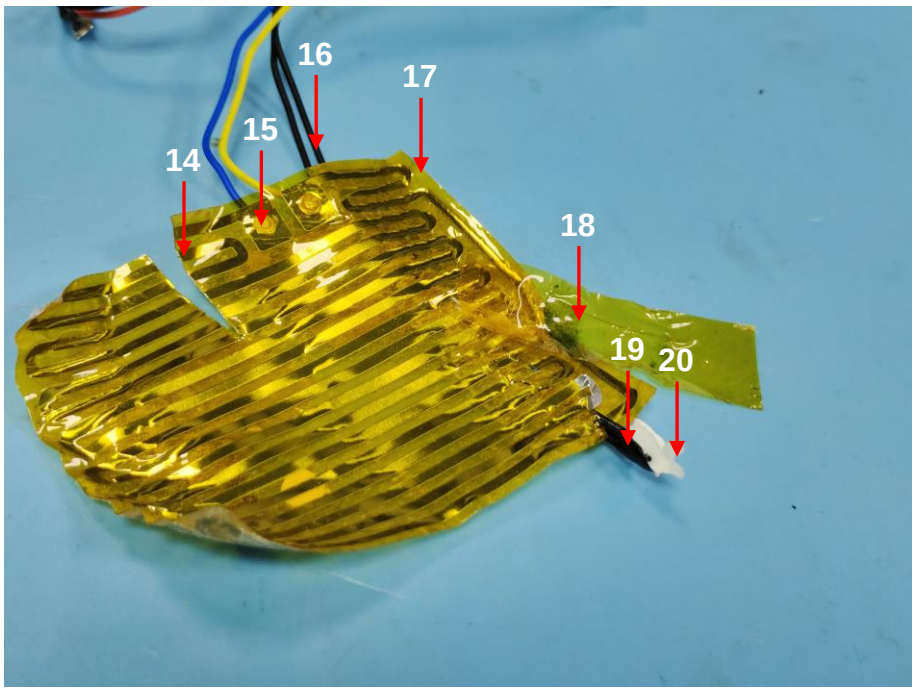


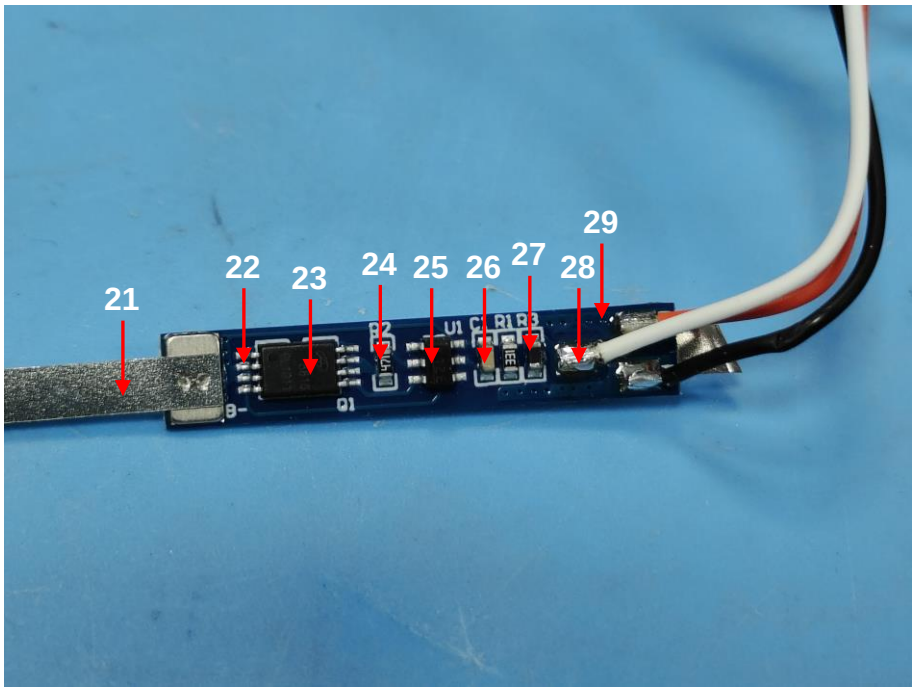
Test Report

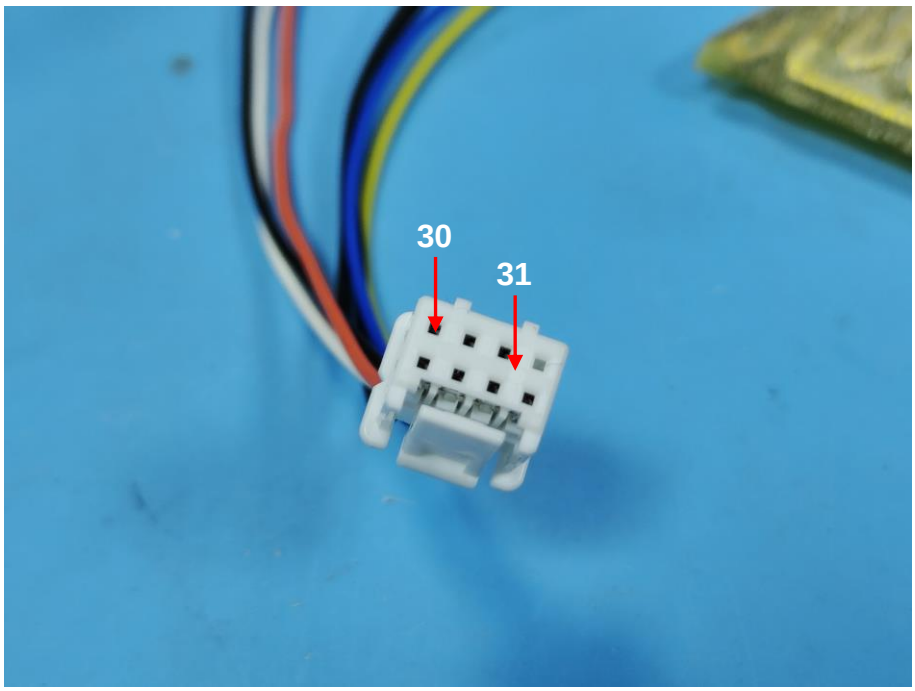

Lithium-ion Rechargeable Battery
Model: AXC18650-1S3P-MH1 (1INR19/66-3)
Nominal Voltage:3.6V
Max. Charge:4.2V
Part NO.: 20A0100036
Net Weight: 148g approx.
Min.9300mAh,33.48Wh
Typ.9600mAh,34.56Wh
Mfg. Date: 24-11
3
Manufacturer: EVVA TECHNOLOGY CO., LIMITED
WARNING: Battery may explode or catch fire if mistreated.
Do not disassemble or dispose of in fire.
Do not charge except under specified charging conditions.
Do not heat above 100℃ or short circuit.
Do not crush or modify.
Made in China
Li-ion

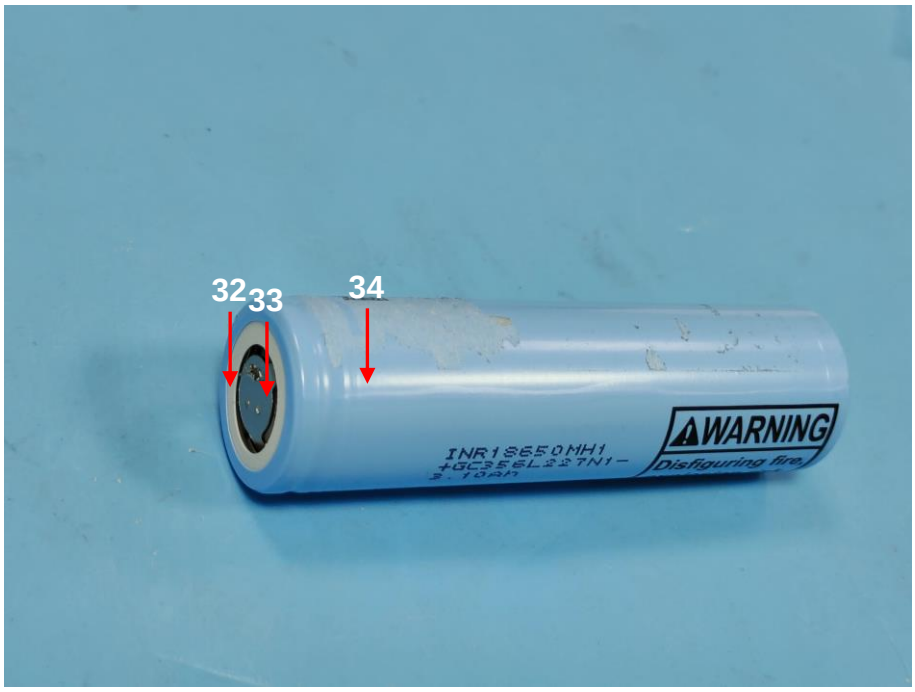

4
5
6
7
8

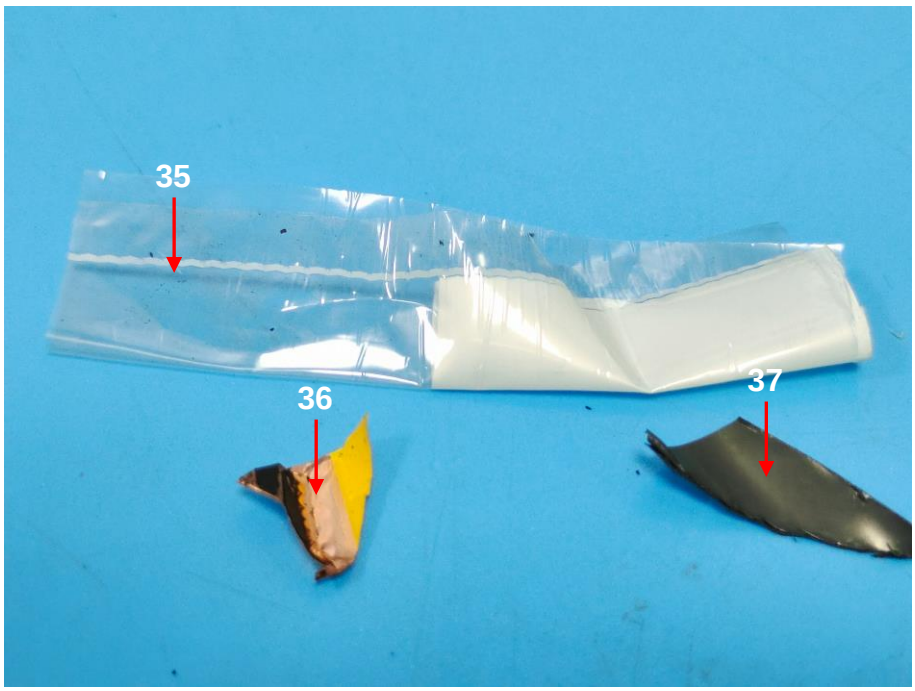

10
11
12
9
13


16
17
15
14
18
19
20


21
22
23
24
25
26
27
28
29


30
31





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

The test report is effective only with both signature and specialized stamp. The result(s) shown in this report refer only to the sample(s) tested. Without written approval of Anbotek, this report can't be reproduced except in full.