Verification Report

Applicant	**Eway Energy Technology (Wuhan) Co.,Ltd**
Address	**NO.18 Liufangyuan South Road, East Lake New Technology Development Zone, Wuhan City, Hubei PRO**
Report on the submitted samples said to be:	
Sample Name(s)	**Energy Storage System**
Trade Mark	**N/A**
Part No.	**ESS 100kWh,ESS 200kWh,ESS 215kWh,ESS 233kWh,ESS 263kWh**
Sample Received Date	**2025-02-05**
Testing Period	**2025-02-05 to 2025-02-12**
Date of Report	**2025-02-12**
Testing Location	**3/F, Block A1, No. 5, 8th Road, Yangyong Industrial Park, Shapu Community,Songgang Street, Bao'an District, Shenzhen, China**
Results	**Please refer to next page(s).**

TEST REQUEST	CONCLUSION
As specified by client, based on the performed tests on submitted sample, the result of Lead(Pb), Cadmium(Cd), Mercury(Hg), Hexavalent Chromium(Cr(VI)), PBBs, PBDEs, Dibutyl Phthalate(DBP), Butylbenzyl Phthalate(BBP), Di-2-ethylhexyl Phthalate(DEHP) and Diisobutyl phthalate(DIBP) content comply with the limits set by RoHS Directive 2011/65/EU with amendment (EU) 2015/863.	**PASS**

Test lab: LAB-QJRZ（Shenzhen）Co., Ltd

Date of Test: 2025-02-05 to 2025-02-12

Prepared by: Liu Xin

Approved by: Jack Zhang

(Shenzhen) Certification Co., Ltd. QJRZ *APPROVE*

A. EU RoHS Directive 2011/65/EU and its amendment directives

Test method: With reference to IEC 62321-1:2013&IEC 62321-2:2021&IEC 62321-3-1:2013, Screening by X-ray Fluorescence Spectroscopy (Wireless ESS 100kWh,ESS 200kWh,ESS 215kWh,ESS 233kWh,ESS 263kWh for doors and gates system)

Sample No.	Sample Description	Results						Date of sample submission/ Resubmission
		Cd	Pb	Hg	Cr▼	Br▼		
						PBBs	PBDEs	
1	Metal Enclosure	BL	BL	BL	BL	BL	BL	2025-02-10
2	PC Transparent Panel	BL	BL	BL	BL	BL	BL	2025-02-10
3	DC Busbar	BL	BL	BL	BL	BL	BL	2025-02-10
4	Electronic Control Unit	BL	BL	BL	BL	BL	BL	2025-02-10
5	Copper Wire	BL	BL	BL	BL	BL	BL	2025-02-10
6	PVC/PE Wire Insulation	BL	BL	BL	BL	BL	BL	2025-02-10
7	EBattery Management System	BL	BL	BL	BL	BL	BL	2025-02-10
8	LiFePO4 Battery Module	BL	BL	BL	BL	BL	BL	2025-02-10
9	Heat Sink Components	BL	BL	BL	BL	BL	BL	2025-02-10
10	AC Output Ports	BL	BL	BL	BL	BL	BL	2025-02-10
11	DC Input/Output Ports	BL	BL	BL	BL	BL	BL	2025-02-10
12	Stainless Steel Screws	BL	BL	BL	BL	BL	BL	2025-02-10
13	Metal Battery Contacts	BL	BL	BL	BL	BL	BL	2025-02-10
14	Cooling Fan Assembly	BL	BL	BL	BL	BL	BL	2025-02-10
15	Waterproof Connectors	BL	BL	BL	BL	BL	BL	2025-02-10

Note:

1. Results were obtained by Wireless ESS 100kWh,ESS 200kWh,ESS 215kWh,ESS 233kWh,ESS 263kWh for doors and gates system for primary screening, and further chemical testing by ICP(for Cd, Pb, Hg), UV-Vis(for Cr(VI)) and GC-MS(for PBBs, PBDEs) are recommended to be performed, if the
concentration exceeds the below warning value according to IEC 62321-3-1:2013(Unit: mg/kg).

Element	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
Cr	BL≤(700-3σ)<X	BL≤(700-3σ)<X	BL≤(500-3σ)<X
Br	BL≤(300-3σ)<X	N/A	BL≤(250-3σ)<X

Remark:
- BL= Below Limit
- OL= Over Limit
- X= The range of needing to do further testing
- 3σ= The reproducibility of analytical instruments
- N/A= Not applicable
- LOD= Detection limit

2. The Wireless ESS 100kWh,ESS 200kWh,ESS 215kWh,ESS 233kWh,ESS 263kWh for doors and gates system screening test for RoHS elements – The reading may be different to the actual content in the sample be of non-uniformity composition.
3. The maximum permissible limit is quoted from the document RoHS Directive 2011/65/EU with amendment (EU) 2015/863.
4. ▼=For restricted substances PBBs and PBDEs, the results show the total Br content, the restricted substance was Cr(VI), and the results showed the total Cr content.

RoHS Restricted Substances	Maximum Concentration Value (mg/kg) (by weight in homogenous materials)
Cadmium(Cd)	100
Lead(Pb)	1000
Mercury(Hg)	1000
Hexavalent Chromium(Cr(VI))	1000
Polybrominated biphenyls(PBBs)	1000
Polybrominated diphenylethers(PBDEs)	1000
Dibutyl Phthalate(DBP)	1000
Butylbenzyl Phthalate(BBP)	1000
Di-(2-ethylhexyl) Phthalate(DEHP)	1000
Diisobutyl phthalate(DIBP)	1000

Disclaimers:

This Wireless ESS 100kWh,ESS 200kWh,ESS 215kWh,ESS 233kWh,ESS 263kWh for doors and gates system Screening report is for reference purposes only. The applicant shall make its/his/her own judgment as to whether the information provided in this Wireless ESS 100kWh,ESS 200kWh,ESS 215kWh,ESS 233kWh,ESS 263kWh for doors and gates system screening report is sufficient for its/his/her purposes. The result shown in this Wireless ESS 100kWh,ESS 200kWh,ESS 215kWh,ESS 233kWh,ESS 263kWh for doors and gates system screening report will differ based on various factors, including but not limited to, the sample size, thickness, area, surface flatness, equipment parameters and matrix effect (e.g.plastic, rubber, metal, glass, ceramic etc.). Further wet chemical pre-treatment with relevant chemical equipment analysis are required to obtain quantitative data.

B. EU RoHS Directive 2011/65/EU with amendment (EU) 2015/863 on Lead(Pb), Cadmium(Cd), Mercury(Hg), Hexavalent Chromium(Cr(VI)), PBBs, PBDEs, DBP, BBP, DEHP & DIBP content

Test method:

Lead(Pb) & Cadmium(Cd) Content:

With reference to IEC 62321-5:2013, by acid digestion and analysis was performed by inductively coupled plasma atomic emission spectrometer (ICP-OES) or Atomic absorption spectrometer (AAS).

Mercury(Hg) Content:

With reference to IEC 62321-4:2013+AMD1:2017 CSV, by acid digestion and analysis was performed by inductively coupled plasma atomic emission spectrometer (ICP-OES).

Hexavalent Chromium(Cr(VI)) Content:

With reference to IEC 62321-7- 1:2015 or IEC 62321-7-2:2017, analysis was performed by UV-visible spectrophotometer (UV-Vis).

PBBs & PBDEs Content:

With reference to IEC 62321-6:2015, by solvent extraction and analysis was performed by gas chromatographic-mass spectrometer (GC-MS).

Phthalates(DBP, BBP, DEHP &DIBP) Content:

With reference to IEC 62321-8:2017, by solvent extraction and analysis was performed by gas chromatographic-mass spectrometer (GC-MS).

1) The test results of Phthalates(DBP, BBP, DEHP &DIBP)

Tested Items	MDL (mg/kg)	Results (mg/kg)				Limit (mg/kg)
		9	37	38	43	
Dibutyl Phthalate(DBP) Content	100	N.D.	N.D.	N.D.	N.D.	1000
Butylbenzyl Phthalate(BBP) Content	100	N.D.	N.D.	N.D.	N.D.	1000
Di-(2-ethylhexyl) Phthalate(DEHP) Content	100	N.D.	N.D.	N.D.	N.D.	1000
Diisobutyl phthalate(DIBP) Content	100	N.D.	N.D.	N.D.	N.D.	1000

Tested Items	MDL (mg/kg)	Results (mg/kg)	Limit (mg/kg)
		1+2+4+6+7+10	
Dibutyl Phthalate(DBP) Content	600	N.D.	1000
Butylbenzyl Phthalate(BBP) Content	600	N.D.	1000
Di-(2-ethylhexyl) Phthalate(DEHP) Content	600	N.D.	1000
Diisobutyl phthalate(DIBP) Content	600	N.D.	1000

Tested Items	MDL (mg/kg)	Results (mg/kg)	Limit (mg/kg)
		11+13+14+15+16+19	
Dibutyl Phthalate(DBP) Content	600	N.D.	1000
Butylbenzyl Phthalate(BBP) Content	600	N.D.	1000
Di-(2-ethylhexyl) Phthalate(DEHP) Content	600	N.D.	1000
Diisobutyl phthalate(DIBP) Content	600	N.D.	1000

Tested Items	MDL (mg/kg)	Results (mg/kg)	Limit (mg/kg)
		20+21+22+23+26+27	
Dibutyl Phthalate(DBP) Content	600	N.D.	1000
Butylbenzyl Phthalate(BBP) Content	600	N.D.	1000
Di-(2-ethylhexyl) Phthalate(DEHP) Content	600	N.D.	1000
Diisobutyl phthalate(DIBP) Content	600	N.D.	1000

Tested Items	MDL (mg/kg)	Results (mg/kg)	Limit (mg/kg)
		28+30+31+33+35+39	
Dibutyl Phthalate(DBP) Content	600	N.D.	1000
Butylbenzyl Phthalate(BBP) Content	600	N.D.	1000
Di-(2-ethylhexyl) Phthalate(DEHP) Content	600	N.D.	1000
Diisobutyl phthalate(DIBP) Content	600	N.D.	1000

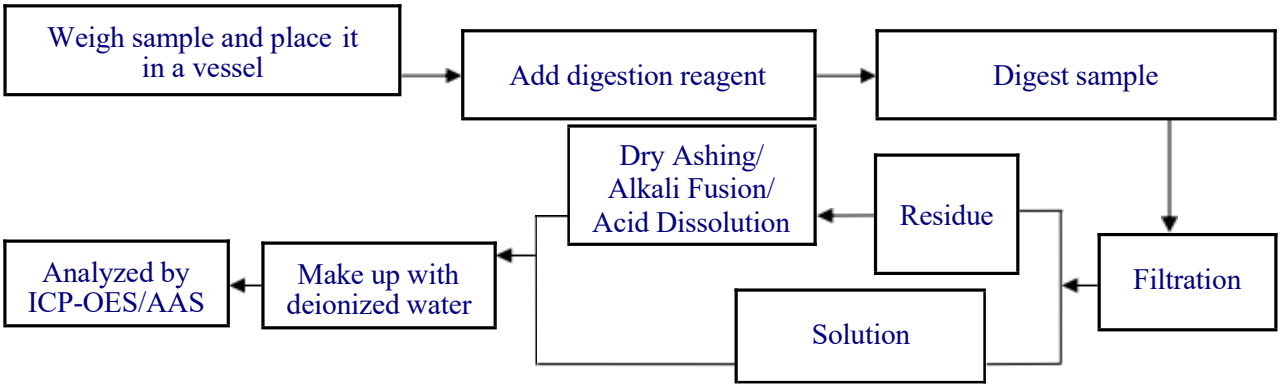
Tested Items	MDL (mg/kg)	Results (mg/kg)	Limit (mg/kg)
		41+42+44	
Dibutyl Phthalate(DBP) Content	600	N.D.	1000
Butylbenzyl Phthalate(BBP) Content	600	N.D.	1000
Di-(2-ethylhexyl) Phthalate(DEHP) Content	600	N.D.	1000
Diisobutyl phthalate(DIBP) Content	600	N.D.	1000

Note:

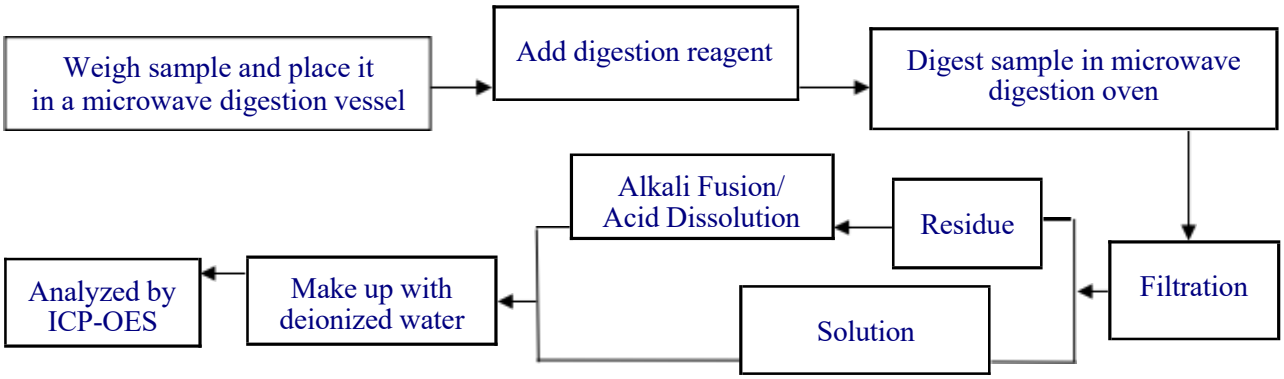
- MDL = Method Detection Limit
- N.D. = Not Detected (<MDL)
- mg/kg = milligrams per kilogram
- According to customer's requirement, only the appointed materials have been tested.

Test Process

1. Lead(Pb) & Cadmium(Cd): IEC 62321-5:2013

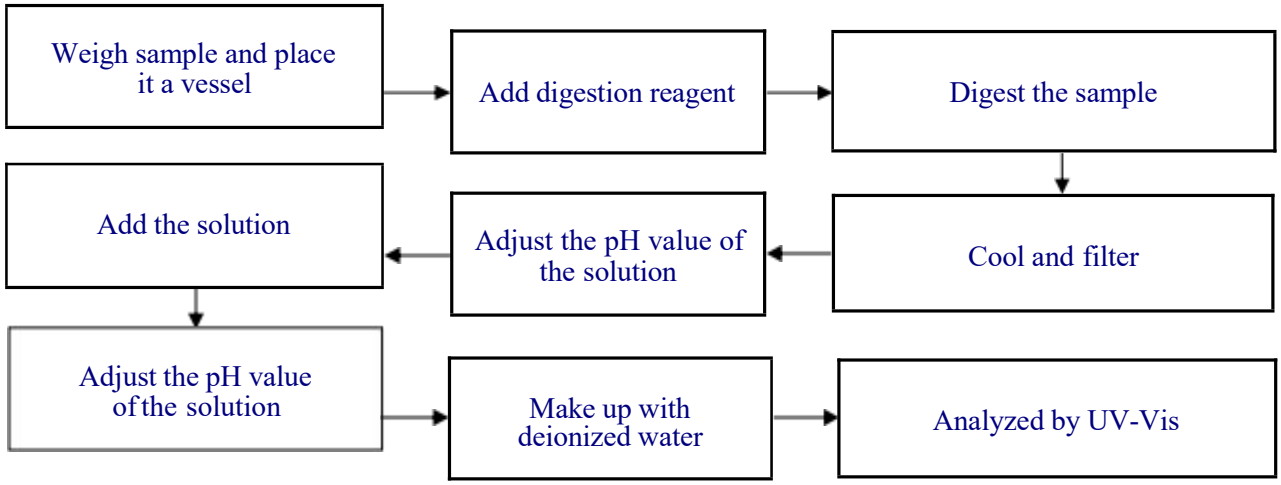


2. Mercury(Hg): IEC 62321-4:2013+AMD1:2017 CSV

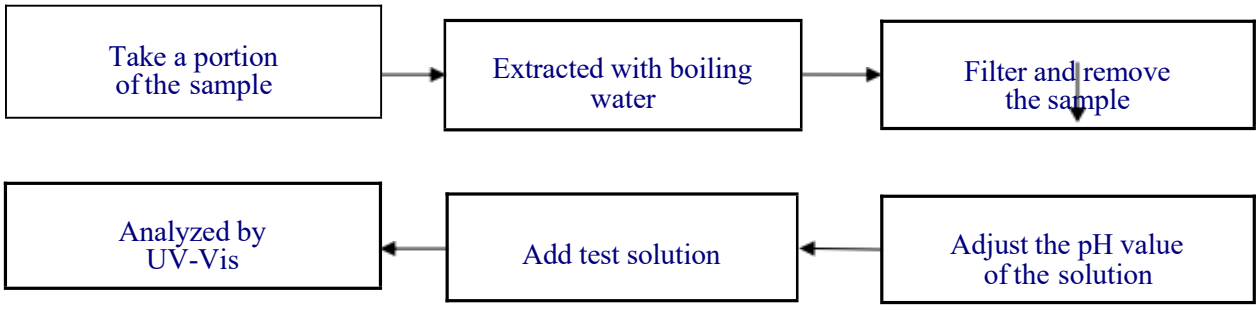


3. Hexavalent Chromium(Cr(VI))

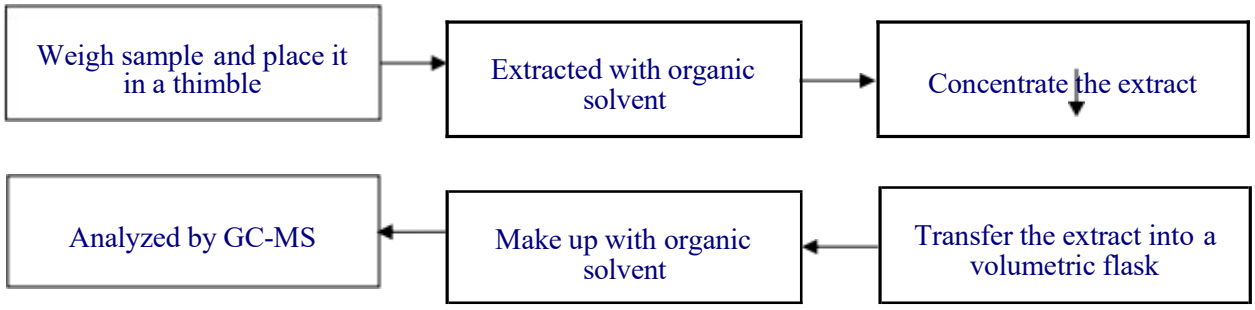
1) IEC 62321-7-2:2017



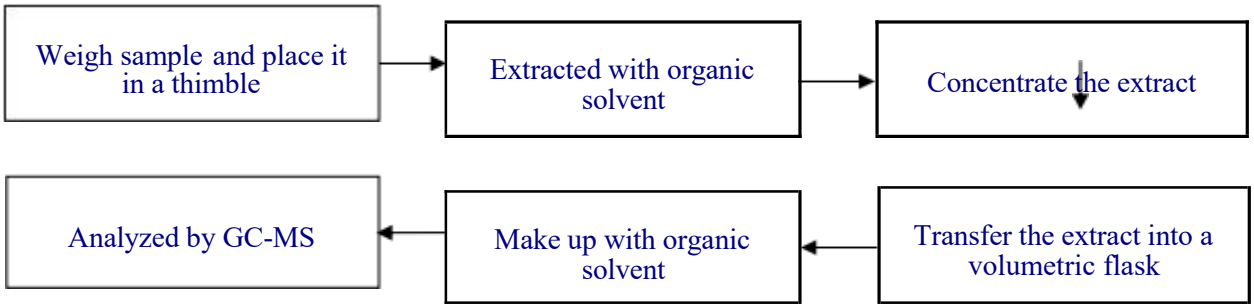
2) IEC 62321-7-1:2015



4. Polybrominated Biphenyls(PBBs) & Polybrominated Diphenyl Ethers(PBDEs) : IEC 62321-6:2015



5. Phthalates(DBP, BBP, DEHP & DIBP) : IEC 62321-8:2017



The photo(s) of the sample

Statement:

1. The test report is invalid without the signature of the approver and the special seal for the company's report;
2. The company name, address and sample information shown on the report were provided by the applicant who should be responsible for the authenticity which are not verified by LAB-QJRZ;
3. The test results in this report are only responsible for the tested samples;
4. Without written approval of LAB-QJRZ, this report can't be reproduced except in full;
5. In case of any discrepancy between the corresponding Chinese and English contents in the test report, the Chinese version shall prevail.

*** End of Report ***