



**CENTRE OF TESTING SERVICE
INTERNATIONAL**

OPERATE ACCORDING TO ISO/IEC 17025

TEST REPORT

RoHS 2011/65/EU

Test Report Number : CGZ3150703-01995-C



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1 General Information

1.1 Application Details

Name : Xindao B.V.
Address : P.O. Box 3082, 2280 GB, Rijswijk, The Netherlands
Contact : kevin
Telephone : /
Fax : /
Mobile telephone : /
Email : kevin.zsz@xindao.com

1.2 Manufacturer & Buyer

Manufacturer name : Xindao B.V.
Address : P.O. Box 3082, 2280 GB, Rijswijk, The Netherlands
Contact : kevin
Telephone : /
Fax : /
Mobile telephone : /
Email : kevin.zsz@xindao.com
Buyer name : /

1.3 Description of the Test Item

Sample name : 2200 mAh solar powerbank
Model No. : PU014921 P323.15
Order No. : PU014921
Brand name : /
Condition of sample(s) : EFFECTIVE

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2 Test results

2.1 Sample Receiving Date

Jul. 03, 2015

2.2 Testing Period

Jul. 03, 2015 to Jul. 07, 2015

2.3 Test Requested

In accordance with the RoHS Directive 2011/65/EU Annex II.

2.4 Test Method

1. X-Ray Fluorescence Spectrometry method in reference to IEC 62321-3-1:2013.
2. Chemical test method

Test Item(s)	Test Method	Test Instrument
Lead (Pb)	With reference to IEC 62321-5:2013	ICP-AES
Cadmium (Cd)	With reference to IEC 62321-5:2013	ICP-AES
Mercury (Hg)	With reference to IEC 62321-4:2013	ICP-AES
Chromium VI (Cr VI)	With reference to IEC 62321:2008	UV-Vis
PBBs	With reference to IEC 62321:2008	GC-MS
PBDEs		

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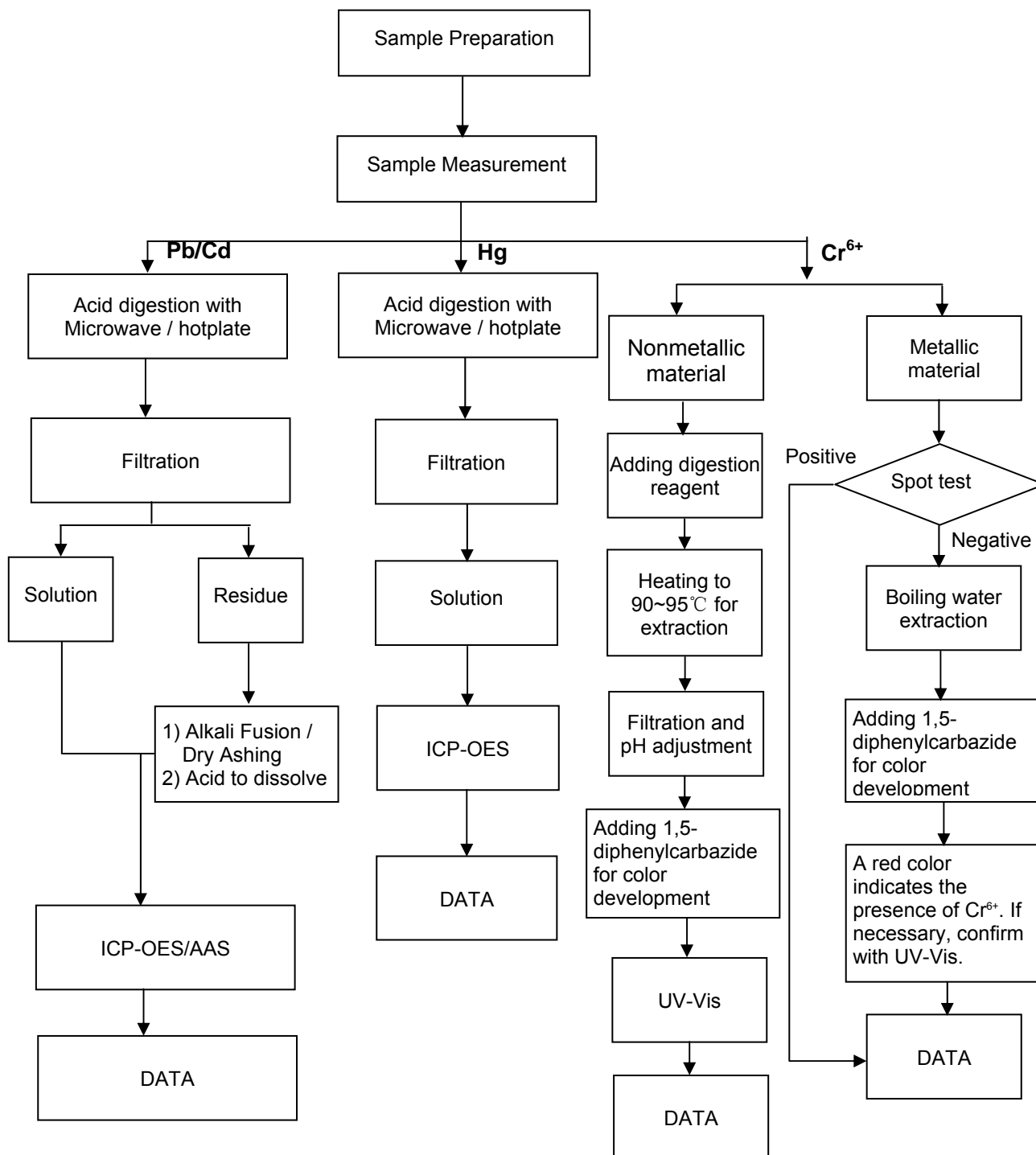
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2.5 Chemical Test Method Flow Chart



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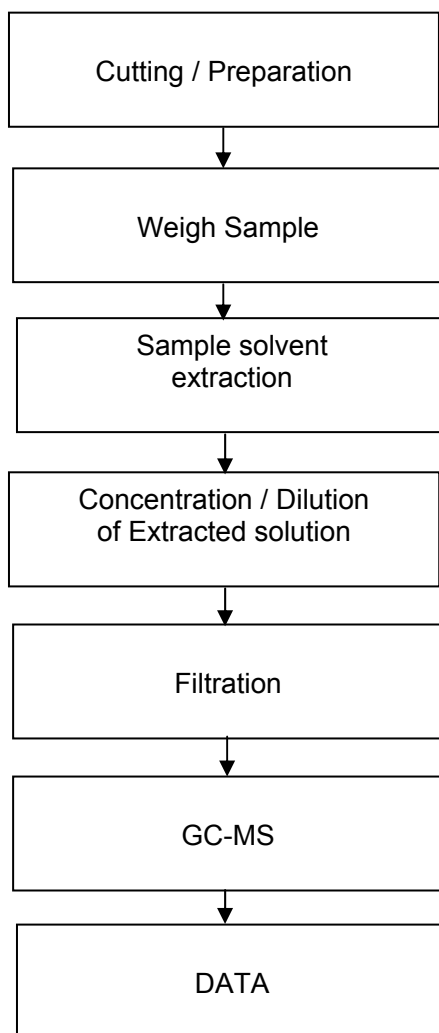
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PBBs / PBDEs



2.6 Conclusion

Based on the performed tests on submitted samples, the results of Lead, Cadmium, Mercury, Hexavalent chromium, Polybrominated biphenyls (PBB), Polybrominated diphenyl ethers (PBDE) comply with the limits as set by RoHS Directive 2011/65/EU Annex II; recasting 2002/95/EC.

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2.7 Test Results

2.7.1 Test results of all parts by EDXRF and chemical confirmation

No.	Sample Description		Results					Chemical Confirmation Result (Unit=mg/kg)
			Pb	Cd	Hg	Cr	Br	
1	Black tape with white printing		P	P	P	P	P	
2	Silvery metal		P	P	P	X	/	CrVI=N.D.
3	Black plating		P	P	P	P	P	
4	Blue plating		P	P	P	P	P	
5	White coating		P	P	P	P	P	
6	Silvery metal screw		P	P	P	X	/	CrVI=N.D.
7	Silvery metal wafer		P	P	P	X	/	CrVI=N.D.
8	Black plastic		P	P	P	P	P	
9	Red tape		P	P	P	P	P	
10	Solar panels	Fiberboard	P	P	P	P	X	PBBs,PBDEs=N.D.
11		Copper foil	P	P	P	P	/	
12		Solar chip	P	P	P	P	P	
13		Transparent encapsulation material	P	P	P	P	P	
14	Wire	Black jacket	P	P	P	P	P	
15		Black cable jacket	P	P	P	P	P	
16		Red cable jacket	P	P	P	P	P	
17		Silvery wire	P	P	P	P	/	
18		Copper Wire	P	P	P	P	/	

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No.	Sample Description		Results					Chemical Confirmation Result (Unit=mg/kg)	
			Pb	Cd	Hg	Cr	Br		
19	PCB	Green fiberboard		P	P	P	P	X	PBBs,PBDEs=N.D.
20		Copper foil		P	P	P	P	/	
21		Solder tin		P	P	P	P	/	
22		Chip resistor		X	P	P	P	P	Pb=1.4×10 ³ △
23		Chip capacitor		P	P	P	P	P	
24		Chip diode		P	P	P	P	X	PBBs,PBDEs=N.D.
25		Chip audion		P	P	P	P	X	
26		Chip inductance	Enamelled wire	P	P	P	P	P	
27			Winding column	P	P	P	P	P	
28		IC	Black body	P	P	P	P	X	PBBs,PBDEs=N.D.
29			Pin	P	P	P	P	/	
30		USB connection base	Silvery metal cover	P	P	P	P	/	
31			Black plastic frame	P	P	P	P	P	
32			Metal wafer	P	P	P	P	/	
33		Chip LED	Transparent body	P	P	P	P	X	PBBs,PBDEs=N.D.
34		LED	Transparent body	P	P	P	P	X	PBBs,PBDEs=N.D.
35			Pin	P	P	P	P	/	
36		Lockless switch	Black plastic	P	P	P	P	P	
37			Silvery metal piece	P	P	P	P	/	

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No.	Sample Description			Results					Chemical Confirmation Result (Unit=mg/kg)
				Pb	Cd	Hg	Cr	Br	
38	PCB	Lockless switch	Metal dome	P	P	P	X	/	CrVI=N.D.
39			Pin	P	P	P	P	/	
40		Toggle switch	Metal cover	P	P	P	P	/	
44			Silvery metal wafer	P	P	P	P	/	
42			Pin	P	P	P	P	/	
43			White plastic	P	P	P	P	P	
44			Black plastic	P	P	P	P	P	
45		Chip tantalum capacitor		P	P	P	P	P	
46		Chip voltage regulator diode		X	P	P	P	P	Pb=3.4×10 ⁴ ▲
47		Black plug material		P	P	P	P	P	
48	USB Plug	White plastic frame		P	P	P	P	P	
49		Black plastic frame		P	P	P	P	P	
50		Silvery metal cover		P	P	P	P	/	
51		Silvery metal wafer		P	P	P	P	/	

Note : P = Below Limit (Pass)
 F = Over Limit (Fail)
 X = Inconclusive
 N.D. = not detected (less than MDL)
 1mg/kg=1ppm=0.0001%
 △ According to the declaration from client, the source of lead in the sample could be from the ceramic parts. Lead in electronic ceramic parts is exempted from the requirement of RoHS Directive (2011/65/EU).
 ▲ According to the declaration from client, the source of lead in the sample could be from the glass material. Lead in glass of electronic components (cathode ray tubes/fluorescent tubes) is exempted from the requirement of RoHS Directive (2011/65/EU).

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Remarks:

- (1) Results are obtained by EDXRF for primary screening, and further chemical testing is recommended to be performed, if the concentration exceeds the below warning value according to IEC 62321-3-1: 2013.

Element	Polymer Materials	Metallic Materials	Electronic Materials
Pb	$P \leq 500 < X < 1300 \leq F$	$P \leq 500 < X < 1300 \leq F$	$P \leq 500 < X < 1300 \leq F$
Cd	$P \leq 50 < X < 130 \leq F$	$P \leq 50 < X < 130 \leq F$	$X < 130 \leq F$
Hg	$P \leq 500 < X < 1300 \leq F$	$P \leq 500 < X < 1300 \leq F$	$P \leq 500 < X < 1300 \leq F$
Cr	$P \leq 700 < X$	$P \leq 700 < X$	$P \leq 500 < X$
Br	$P \leq 250 < X$	/	$P \leq 250 < X$

- (2) Chemical Confirmation Result acceptable Limit:

Test items	Lead (Pb)	Cadmium (Cd)	Mercury (Hg)	Chromium (CrVI)	PBBs	PBDEs
Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Acceptable Limit	1000	100	1000	1000	1000	1000

- (3) The test results only apply to the materials requested by applicant.

Written by:

Amanda

Inspected by:

Annie

Approved by:

lyt

End of Report



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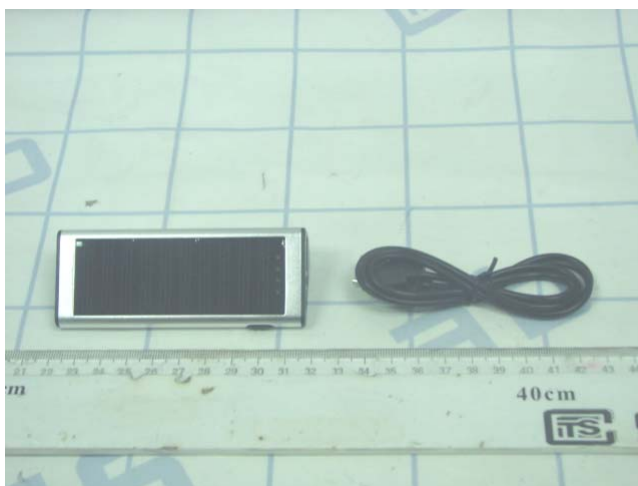
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3 Sample Reference Photo

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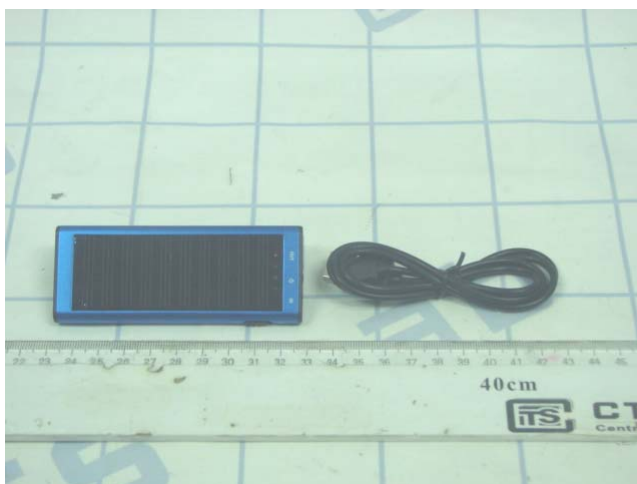
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