

CENTRE OF TESTING SERVICE INTERNATIONAL

**OPERATE ACCORDING TO ISO/IEC 17025** 

# **TEST REPORT**

# RoHS 2011/65/EU

Test Report Number: CGZ3150520-01389-C



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#### **General Information** 1

### 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 : Address :	Xindao B.V. 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 powerbank
Model No.	:	P324.05
Order No.	:	PU014458
Brand name	:	/
Condition of sample(s)	:	EFFECTIVE

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#### 2 Test results

# 2.1 Sample Receiving Date

May 20, 2015

### 2.2 Testing Period

May 20, 2015 to May 21, 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		GC-1015		

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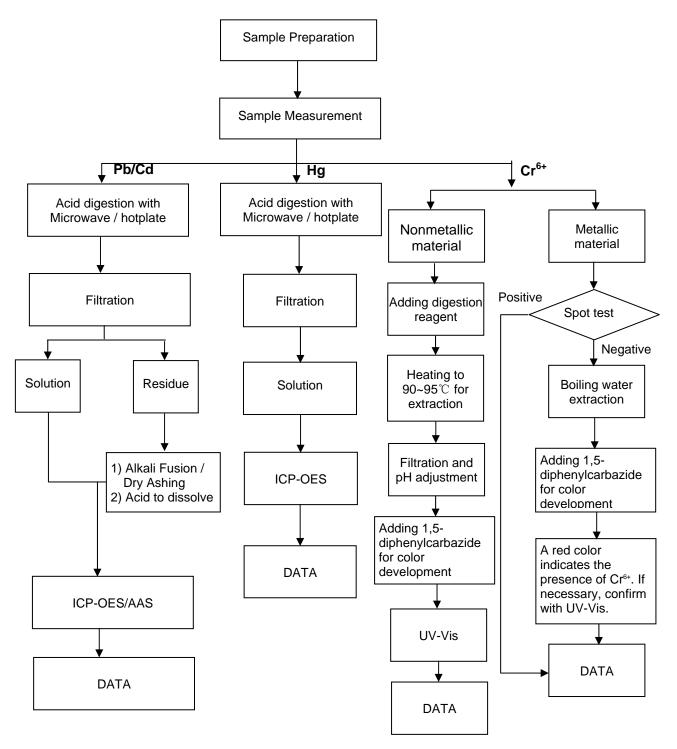
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# 2.5 Chemical Test Method Flow Chart



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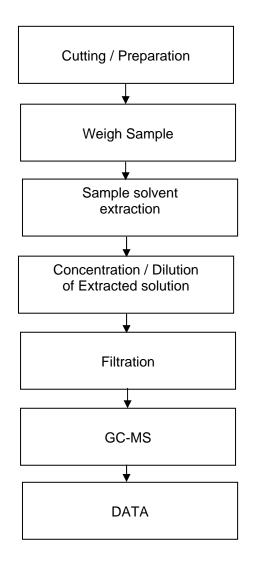
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### **PBBs / PBDEs**



# 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	No. Sample Description -			F	Result	Chemical Confirmation Result		
INO.			Pb	Cd	Hg	Cr	Br	(Unit=mg/kg)
1	Bl	Black plastic cover			Р	Ρ	Ρ	
2	G	rey plastic cover	Р	Р	Р	Ρ	Ρ	
3		White coating	Р	Р	Р	Ρ	Ρ	
4	Sil	very metal wafer	Р	Р	Р	Ρ	/	
5	Sil	very metal spring	Р	Р	Р	Ρ	/	
6		Black tape	Р	Р	Р	Ρ	Ρ	
7	White jacket		Р	Р	Р	Ρ	Ρ	
8		White cable jacket	Р	Р	Р	Ρ	Ρ	
9	Wire	Green cable jacket	Р	Р	Р	Ρ	Ρ	
10		Red cable jacket	Р	Р	Р	Ρ	Ρ	
11	Copper Wire		Р	Р	Р	Ρ	/	
12		Blue fiberboard	Р	Р	Р	Ρ	Ρ	
13		Copper foil	Р	Р	Р	Ρ	/	
14	РСВ	Solder tin	Р	Р	Р	Ρ	/	
15	FCD	Chip resistor	Х	Р	Р	Ρ	Ρ	Pb=1.4×10 <sup>3 <math>\triangle</math></sup>
16		Chip capacitor	Р	Р	Р	Ρ	Ρ	
17		Chip diode	Р	Р	Р	Р	Х	PBBs,PBDEs=N.D.

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No.		Sample Description		Results					Chemical Confirmation Result
NO.				Pb	Cd	Hg	Cr Br		(Unit=mg/kg)
18		Chip	Enamelled wire	Ρ	Р	Ρ	Ρ	Ρ	
19		inductance	Winding column	Ρ	Р	Ρ	Ρ	Ρ	
20		IC	Black body	Ρ	Р	Ρ	Ρ	Х	PBBs,PBDEs=N.D.
21			Pin	Ρ	Р	Р	Ρ	/	
22	PCB		Silvery metal cover	Ρ	Р	Р	Ρ	/	
23	23	USB connection	White plastic frame	Ρ	Р	Ρ	Ρ	Ρ	
24		base	Black plastic frame	Ρ	Р	Ρ	Ρ	Ρ	
25			Metal wafer	Ρ	Р	Р	Ρ	/	
26		White p	lug material	Ρ	Р	Ρ	Ρ	Ρ	
27		White plastic frame		Ρ	Р	Ρ	Ρ	Ρ	
28	USB Plug	Black plastic frame		Ρ	Р	Р	Ρ	Х	PBBs,PBDEs=N.D.
29	-	Silvery metal cover		Ρ	Р	Р	Ρ	/	
30		Silvery metal wafer		Ρ	Р	Р	Ρ	/	

Note : P = Below Limit (Pass)

F = Over Limit (Fail)

X = Inconclusive

N.D. = not detected (less than MDL)

1mg/kg=1ppm=0.0001%

 $^{\triangle}$  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).

### Remarks:

 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
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Pb	P ≤ 500 < X < 1300 ≤ F	P ≤ 500 < X < 1300 ≤ F	P ≤ 500 < X < 1300 ≤ F
Cd	P ≤ 50 < X < 130 ≤ F	P ≤ 50 < X < 130 ≤ F	X < 130 ≤ F
Hg	P ≤ 500 < X < 1300 ≤ F	P ≤ 500 < X < 1300 ≤ F	P ≤ 500 < X < 1300 ≤ F
Cr	P ≤ 700 < X	P ≤ 700 < X	P ≤ 500 < X
Br	P ≤ 250 < X	/	P ≤ 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: Hyb

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



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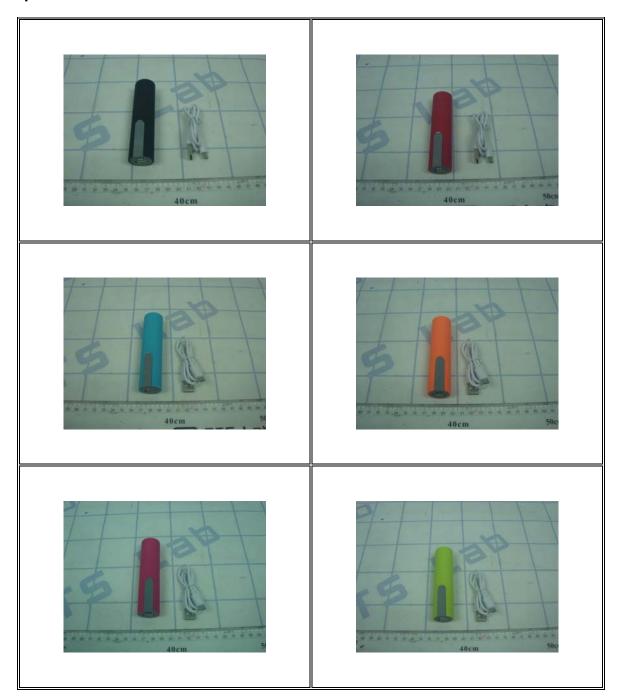


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### 3 Sample Reference Photo



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