

# CENTRE OF TESTING SERVICE INTERNATIONAL

**OPERATE ACCORDING TO ISO/IEC 17025** 

# **TEST REPORT**

# **RoHS 2011/65/EU**

Test Report Number: CGZ3150703-01997-C



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### **General Information**

### **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 7500 mAh powerbank with stand

Model No. PU014921 P324.60

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	With reference to IEC 02321.2000	GC-IVIS		

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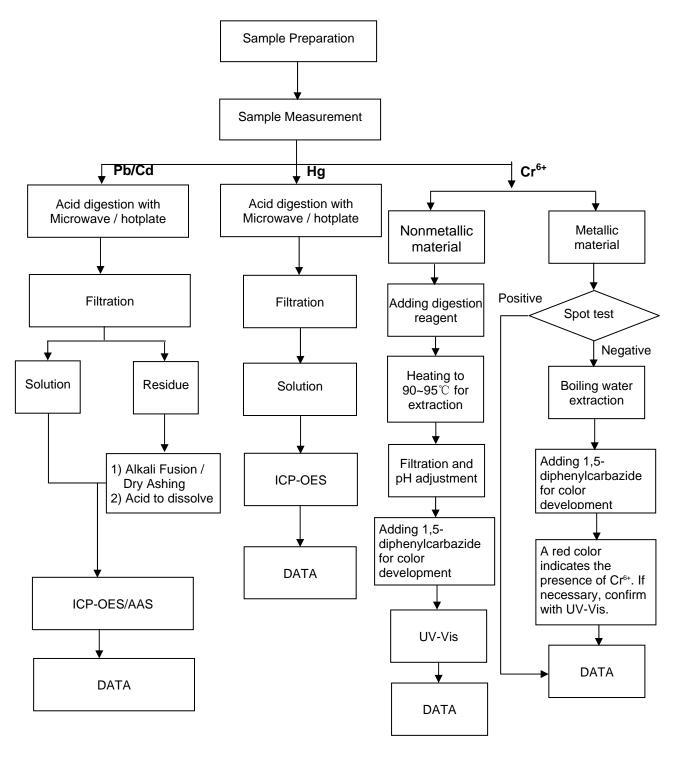




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### 2.5 Chemical Test Method Flow Chart



The measurement results only apply to the submitted samples.

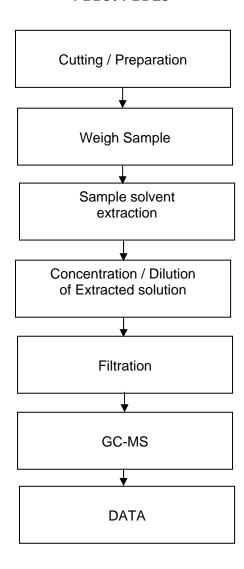




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#### **PBBs / PBDEs**



### 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			F	Result	Chemical Confirmation Result		
INO.	Sa	Pb Cd Hg		Hg	Cr	Br	(Unit=mg/kg)	
1	Bla	ack plastic cover	Р	Р	Р	Р	Р	
2	Sil	very metal block	Р	Р	Р	Р	/	
3		Black rubber	Р	Р	Р	Р	Р	
4	Black ta	ape with white printing	Р	Р	Р	Р	Р	
5	Sil	very metal screw	Р	Р	Р	Р	/	
6	BI	ack metal screw	Р	Р	Р	Р	/	
7	Silvery metal wafer		Р	Р	Р	Р	/	
8	Black EVA		Р	Р	Р	Р	Р	
9	Red tape		Р	Р	Р	Р	Р	
10	Black jacket		Р	Р	Р	Р	Р	
11	Black cable jacket		Р	Р	Р	Р	Р	
12	Wire	Red cable jacket	Р	Р	Р	Р	Р	
13		Silvery wire	Р	Р	Р	Р	/	
14	Copper Wire		Р	Р	Р	Р	/	
15	Black fiberboard		Р	Р	Р	Р	Р	
16	Copper foil PCB		Р	Р	Р	Р	/	
17	FUD	Solder tin	Р	Р	Р	Р	/	
18	Chip resistor		Х	Р	Р	Р	Р	1.4×10 <sup>3 △</sup>

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No.		Sample Description		Results				Chemical Confirmation Result	
INO.		Sample Description		Sample Description Pb Cd		Hg	Cr	Br	(Unit=mg/kg)
19		Chip	capacitor	Р	Р	Р	Р	Р	
20		Chi	p diode	Р	Р	Р	Р	Х	PBBs,PBDEs=N.D.
21		Chip	audion	Р	Р	Р	Р	Х	PBBs,PBDEs=N.D.
22		Ring	Enamelled wire	Р	Р	Р	Р	Р	
23		inductance	Winding column	Р	Р	Р	Р	Р	
24		IC	Black body	Р	Р	Р	Р	X	PBBs,PBDEs=N.D.
25		2	Pin	Р	Р	Р	Р	/	
26			Silvery metal cover	Р	Р	Р	Р	/	
27	РСВ	USB connection base	Black plastic frame	Р	Р	Р	Р	Р	
28			White plastic frame	Р	Р	Р	Р	Р	
29			Metal wafer	Р	Р	Р	Р	/	
30		Chip LED	Transparent body	Р	Р	Р	Р	Х	PBBs,PBDEs=N.D.
31			Black plastic	Р	Р	Р	Р	Р	
32		Lockless	Silvery metal piece	Р	Р	Р	Р	/	
33		switch	Metal dome	Р	Р	Р	Χ	/	CrVI=N.D.
34			Pin	Р	Р	Р	Р	/	
35		Aluminum	Black plastic jacket with white printing	Р	Р	Р	Р	Р	
36		electrolytic capacitor	Silvery metal cover	Р	Р	Р	Р	/	
37			Black rubber end closure	Р	Р	Р	Р	Р	

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No.		Sample Description		Results					Chemical Confirmation Result
INO.	Sample Description		Pb Cd Hg Cr Bi		Br	(Unit=mg/kg)			
38			Pin	Р	Р	Р	Р	/	
39	РСВ	Aluminum electrolytic capacitor	Capacitor anode film	Р	Р	Р	Р	Р	
40			Capacitor cathode film	Р	Р	Р	Р	Р	
41			Paper film	Р	Р	Р	Р	Р	
42	Black plug material		Р	Р	Р	Р	Р		
43		White plastic frame		Р	Р	Р	Р	Р	
44	USB Plug	RIACK DIACTIC TRAN		Р	Р	Р	Р	Р	
45	_	Silvery metal cover		Р	Р	Р	Р	/	
46		Metal wafer		Р	Р	Р	Р	/	

: P = Below Limit (Pass) Note

F = Over Limit (Fail) X = Inconclusive

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

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<sup>1</sup>mg/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).





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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 ≤ 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: Amma Inspected by: Annie Approved by:

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



The measurement results only apply to the submitted samples.

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### 3 Sample Reference Photo



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