



## SHENZHEN YARUI TESTING CO., LTD.

No.1107-1109, Weidonglong Technology Building, Meilong Avenue, Qinghu Longhua District ,  
Shenzhen 518109, Guangdong, China

Tel : +86-755-27912080

Fax: +86-755-27916936

# RoHS TEST REPORT

**Product name**..... : Wireless Bluetooth Earphone  
**Trademark**..... : --  
**Model No**..... : 38508(HRD-N9), 38510(HRD-E11), 38511(HRD-E11),  
38512(HRD-N8), 38513(HRD-N8+)  
**Test Standards**..... : IEC62321-3-1: 2013  
IEC62321-4: 2013+A1:2017  
IEC62321-5: 2013  
IEC62321-6: 2015  
IEC62321-7-1: 2015  
IEC62321-7-2: 2017  
IEC62321-8:2017  
**Applicant**..... :   
**Address**..... :   
**Manufacturer**..... :   
**Address**..... :   
**Tested Date**..... : Jul. 20, 2020 - Jul. 24, 2020  
**Issued Date**..... : Jul. 27, 2020  
**Report No**..... : YRT202007346R  
**Tested By**..... : Lynn Chen / Engineer  
**Approved By**..... : Lily Yu /Manager



TEST REQUEST	CONCLUSION
According to the customer's request, based on the performed tests on submitted sample, the result of Lead, Cadmium, Mercury, Hexavalent Chromium, PBBs, PBDEs, Dibutyl Phthalate(DBP), Benzylbutyl Phthalate(BBP), Bis(2-ethylhexyl) Phthalate(DEHP), Diisobutyl phthalate(DIBP) content comply with the limit as set of RoHS Directive (EU) 2015/863 amending Annex II to Directive 2011/65/EU.	Pass

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## Test Method:

(1) With reference to as follows:

Testing item	Pretreatment method	Measuring instrument	MDL
Lead(Pb)	IEC 62321-5:2013	ICP-OES	2 mg/kg
Cadmium(Cd)	IEC 62321-5:2013	ICP-OES	2 mg/kg
Mercury(Hg)	IEC 62321-4:2013+A1:2017	ICP-OES	2 mg/kg
Chromium(Cr VI)	IEC62321-7-1: 2015 IEC62321-7-2: 2017	UV-Vis	2 mg/kg
PBBs/ PBDEs	IEC 62321-6:2015	GC-MS	5 mg/kg

(2) With reference to IEC 62321-8:2017

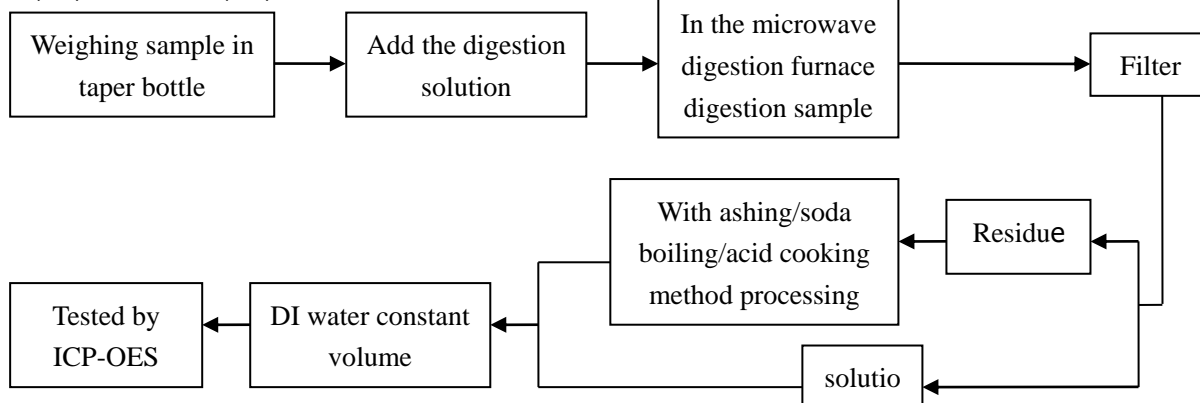
Testing item	Pretreatment method	Measuring instrument	MDL
DIBP	EPA3540:1996	GC-MS	10 mg/kg

(3) With reference to IEC 62321-8:2017

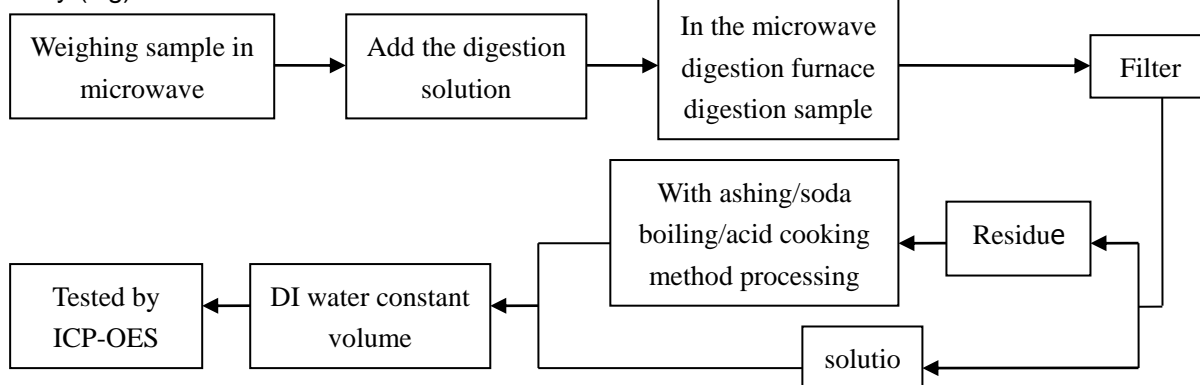
Testing item	Pretreatment method	Measuring instrument	MDL
DEHP、DBP、BBP	EN 14372:2004	GC-MS	0.003 mg/kg

## Test Flow:

1. Lead(Pb), Cadmium(Cd)



2. Mercury (Hg)

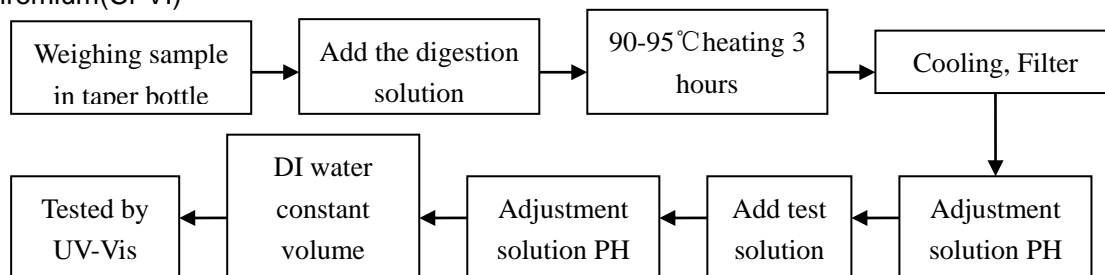


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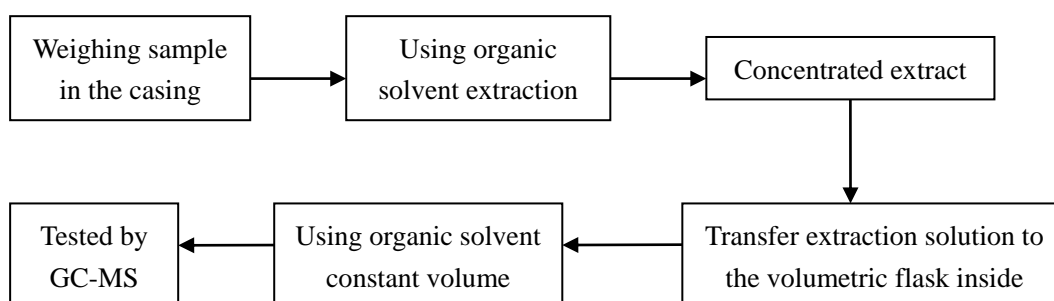
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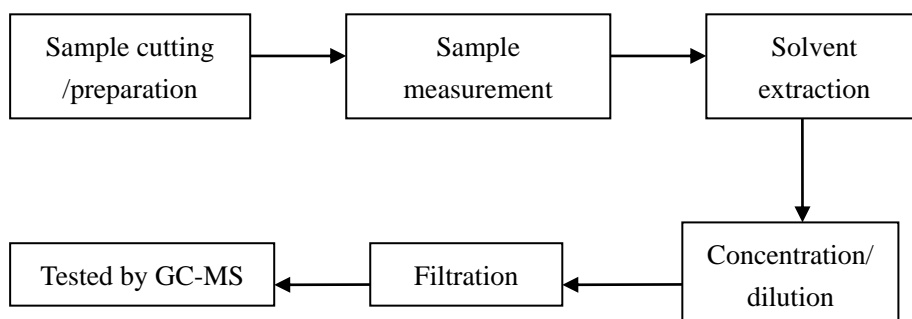
### 3. Chromium(Cr VI)



### 4. PBBs/ PBDEs



### 5. DIBP / DEHP/ BBP/ DBP





## Test Data Summary:

SAMPLE NO.	COMPONENTS	Item	Results of EDXRF (P/F/D)	Results of testing (mg/kg)	Chemical testing limit (mg/kg)	Conclusion (P/F)
1	Black plastic	Cd	P	N.D.	<100	P
		Cr	P	N.D.	<1000	P
		Hg	P	N.D.	<1000	P
		Pb	P	N.D.	<1000	P
		PBBs	P	N.D.	<1000	P
		PBDEs	P	N.D.	<1000	P
		DIBP	P	N.D.	<1000	P
		DEHP	P	N.D.	<1000	P
		DBP	P	N.D.	<1000	P
		BBP	P	N.D.	<1000	P
2	White plastic	Cd	P	N.D.	<100	P
		Cr	P	N.D.	<1000	P
		Hg	P	N.D.	<1000	P
		Pb	P	N.D.	<1000	P
		PBBs	P	N.D.	<1000	P
		PBDEs	P	N.D.	<1000	P
		DIBP	P	N.D.	<1000	P
		DEHP	P	N.D.	<1000	P
		DBP	P	N.D.	<1000	P
		BBP	P	N.D.	<1000	P
3	Wood	Cd	P	N.D.	<100	P
		Cr	P	N.D.	<1000	P
		Hg	P	N.D.	<1000	P
		Pb	P	N.D.	<1000	P
		PBBs	P	N.D.	<1000	P
		PBDEs	P	N.D.	<1000	P
		DIBP	P	N.D.	<1000	P
		DEHP	P	N.D.	<1000	P
		DBP	P	N.D.	<1000	P
		BBP	P	N.D.	<1000	P

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SAMPLE NO.	COMPONENTS	Item	Results of EDXRF (P/F/D)	Results of testing (mg/kg)	Chemical testing limit (mg/kg)	Conclusion (P/F)
4	IC	Cd	P	N.D.	<100	P
		Cr	P	N.D.	<1000	P
		Hg	P	N.D.	<1000	P
		Pb	P	N.D.	<1000	P
		PBBs	P	N.D.	<1000	P
		PBDEs	P	N.D.	<1000	P
		DIBP	P	N.D.	<1000	P
		DEHP	P	N.D.	<1000	P
		DBP	P	N.D.	<1000	P
		BBP	P	N.D.	<1000	P
5	Mosfet	Cd	P	N.D.	<100	P
		Cr	P	N.D.	<1000	P
		Hg	P	N.D.	<1000	P
		Pb	P	N.D.	<1000	P
		PBBs	P	N.D.	<1000	P
		PBDEs	P	N.D.	<1000	P
		DIBP	P	N.D.	<1000	P
		DEHP	P	N.D.	<1000	P
		DBP	P	N.D.	<1000	P
		BBP	P	N.D.	<1000	P
6	Resistor	Cd	P	N.D.	<100	P
		Cr	P	N.D.	<1000	P
		Hg	P	N.D.	<1000	P
		Pb	P	N.D.	<1000	P
		PBBs	P	N.D.	<1000	P
		PBDEs	P	N.D.	<1000	P
		DIBP	P	N.D.	<1000	P
		DEHP	P	N.D.	<1000	P
		DBP	P	N.D.	<1000	P
		BBP	P	N.D.	<1000	P

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SAMPLE NO.	COMPONENTS	Item	Results of EDXRF (P/F/D)	Results of testing (mg/kg)	Chemical testing limit (mg/kg)	Conclusion (P/F)
7	Capacitor	Cd	P	N.D.	<100	P
		Cr	P	N.D.	<1000	P
		Hg	P	N.D.	<1000	P
		Pb	P	N.D.	<1000	P
		PBBs	P	N.D.	<1000	P
		PBDEs	P	N.D.	<1000	P
		DIBP	P	N.D.	<1000	P
		DEHP	P	N.D.	<1000	P
		DBP	P	N.D.	<1000	P
		BBP	P	N.D.	<1000	P
8	PCB	Cd	P	N.D.	<100	P
		Cr	P	N.D.	<1000	P
		Hg	P	N.D.	<1000	P
		Pb	P	N.D.	<1000	P
		PBBs	P	N.D.	<1000	P
		PBDEs	P	N.D.	<1000	P
		DIBP	P	N.D.	<1000	P
		DEHP	P	N.D.	<1000	P
		DBP	P	N.D.	<1000	P
		BBP	P	N.D.	<1000	P
9	Battery	Cd	P	N.D.	<100	P
		Cr	P	N.D.	<1000	P
		Hg	P	N.D.	<1000	P
		Pb	P	N.D.	<1000	P
		PBBs	--	N.D.	<1000	P
		PBDEs	--	N.D.	<1000	P
		DIBP	--	N.D.	<1000	P
		DEHP	--	N.D.	<1000	P
		DBP	--	N.D.	<1000	P
		BBP	--	N.D.	<1000	P

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SAMPLE NO.	COMPONENTS	Item	Results of EDXRF (P/F/D)	Results of testing (mg/kg)	Chemical testing limit (mg/kg)	Conclusion (P/F)
10	PU leather	Cd	P	N.D.	<100	P
		Cr	P	N.D.	<1000	P
		Hg	P	N.D.	<1000	P
		Pb	P	N.D.	<1000	P
		PBBs	P	N.D.	<1000	P
		PBDEs	P	N.D.	<1000	P
		DIBP	P	N.D.	<1000	P
		DEHP	P	N.D.	<1000	P
		DBP	P	N.D.	<1000	P
		BBP	P	N.D.	<1000	P
11	Ports	Cd	P	N.D.	<100	P
		Cr	P	N.D.	<1000	P
		Hg	P	N.D.	<1000	P
		Pb	P	N.D.	<1000	P
		PBBs	P	N.D.	<1000	P
		PBDEs	P	N.D.	<1000	P
		DIBP	P	N.D.	<1000	P
		DEHP	P	N.D.	<1000	P
		DBP	P	N.D.	<1000	P
		BBP	P	N.D.	<1000	P
12	White PVC	Cd	P	N.D.	<100	P
		Cr	P	N.D.	<1000	P
		Hg	P	N.D.	<1000	P
		Pb	P	N.D.	<1000	P
		PBBs	P	N.D.	<1000	P
		PBDEs	P	N.D.	<1000	P
		DIBP	P	N.D.	<1000	P
		DEHP	P	N.D.	<1000	P
		DBP	P	N.D.	<1000	P
		BBP	P	N.D.	<1000	P

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SAMPLE NO.	COMPONENTS	Item	Results of EDXRF (P/F/D)	Results of testing (mg/kg)	Chemical testing limit (mg/kg)	Conclusion (P/F)
13	Speaker	Cd	P	N.D.	<100	P
		Cr	P	N.D.	<1000	P
		Hg	P	N.D.	<1000	P
		Pb	P	N.D.	<1000	P
		PBBs	--	N.D.	<1000	P
		PBDEs	--	N.D.	<1000	P
		DIBP	--	N.D.	<1000	P
		DEHP	--	N.D.	<1000	P
		DBP	--	N.D.	<1000	P
		BBP	--	N.D.	<1000	P
14	Black PVC	Cd	P	N.D.	<100	P
		Cr	P	N.D.	<1000	P
		Hg	P	N.D.	<1000	P
		Pb	P	N.D.	<1000	P
		PBBs	P	N.D.	<1000	P
		PBDEs	P	N.D.	<1000	P
		DIBP	P	N.D.	<1000	P
		DEHP	P	N.D.	<1000	P
		DBP	P	N.D.	<1000	P
		BBP	P	N.D.	<1000	P
15	Silver Paint	Cd	P	N.D.	<100	P
		Cr	P	N.D.	<1000	P
		Hg	P	N.D.	<1000	P
		Pb	P	N.D.	<1000	P
		PBBs	P	N.D.	<1000	P
		PBDEs	P	N.D.	<1000	P
		DIBP	P	N.D.	<1000	P
		DEHP	P	N.D.	<1000	P
		DBP	P	N.D.	<1000	P
		BBP	P	N.D.	<1000	P

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SAMPLE NO.	COMPONENTS	Item	Results of EDXRF (P/F/D)	Results of testing (mg/kg)	Chemical testing limit (mg/kg)	Conclusion (P/F)
16	Solder tin	Cd	P	N.D.	<100	P
		Cr	P	N.D.	<1000	P
		Hg	P	N.D.	<1000	P
		Pb	P	N.D.	<1000	P
		PBBs	--	N.D.	<1000	P
		PBDEs	--	N.D.	<1000	P
		DIBP	--	N.D.	<1000	P
		DEHP	--	N.D.	<1000	P
		DBP	--	N.D.	<1000	P
		BBP	--	N.D.	<1000	P

## Notes:

1mg/kg=1ppm = 0.0001%

N.D. = Not Detected (&lt;MDL)

MDL = Method Detection Limit



/=Not Regulated

---=Not Applicable

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**Photo Documentation:**

<p>Photo 1</p>	
<p>Photo 2</p>	

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Photo 3



Photo 4

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Photo 5



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