

Test Report

Report No.: PTC-HX-04161100303ENA

Date: Nov. 05, 2016

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Applicant:

Address:

The following merchandise was (were) submitted and identified by client as:Sample Name:GEOMETRIC WIRELESS SPEAKERSample Model:P326.24XSample Received Date:Nov. 01, 2016Completed Date:Nov. 05, 2016

Test Requested and Conclusion(s):

No.	Test Sample	Standard and Requirement	Conclusion(s)
1	Submitted sample	RoHS Directive 2011/65/EU	PASS

Test Result(s): Please refer to next page(s).



DongGuan Precise Testing and Certification Corp. Ltd.

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Test Result(s):

 $RoHS\ -\ Lead\ (Pb)/Cadmium(Cd)/Mercury(Hg)/Hexavalent\ Chromium(Cr^{6+})/PBBs/PBDEs$

Method: IEC 62321: 2008, analyzed by EDXRF & AAS & ICP-AES & GC-MS & UV-Vis.

Material No.	Substances	EDXRF Result *	Chemical Result #(mg/kg)	Conclusion
	Pb	BL		PASS
	Cd	BL		PASS
4	Hg	BL		PASS
1	Cr ⁶⁺	BL		PASS
	PBBs	ם		PASS
	PBDEs	BL		PASS
	Pb	BL		PASS
	Cd	BL		PASS
2	Hg	BL		PASS
2	Cr ⁶⁺	BL		PASS
	PBBs			PASS
	PBDEs	BL		PASS
	Pb	BL		PASS
	Cd	BL		PASS
2	Hg	BL		PASS
3	Cr ⁶⁺	BL		PASS
	PBBs			
	PBDEs			
	Pb	BL		PASS
	Cd	BL		PASS
4	Hg	BL		PASS
4	Cr ⁶⁺	BL		PASS
	PBBs			
	PBDEs			
	Pb	BL		PASS
	Cd	BL		PASS
-	Hg	BL		PASS
5	Cr ⁶⁺	BL		PASS
	PBBs			PASS
	PBDEs	BL		PASS

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Material No.	Substances	EDXRF Result *	Chemical Result #(mg/kg)	Conclusion
	Pb	BL		PASS
	Cd	BL		PASS
6	Hg	BL		PASS
6	Cr ⁶⁺	BL		PASS
	PBBs	BL		PASS
	PBDEs	DL		PASS
	Pb	BL		PASS
	Cd	BL		PASS
7	Hg	BL		PASS
1	Cr ⁶⁺	BL		PASS
	PBBs	Ы		PASS
	PBDEs	BL		PASS
	Pb	BL		PASS
	Cd	BL		PASS
8	Hg	BL		PASS
8	Cr ⁶⁺	BL		PASS
	PBBs			PASS
	PBDEs	BL		PASS
	Pb	BL		PASS
	Cd	BL		PASS
9	Hg	BL		PASS
9	Cr ⁶⁺	BL		PASS
	PBBs			
	PBDEs			
	Pb	BL		PASS
	Cd	BL		PASS
10	Hg	BL		PASS
10	Cr ⁶⁺	BL		PASS
	PBBs	BL		PASS
	PBDEs	DL		PASS

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Material No.	Substances	EDXRF Result *	Chemical Result #(mg/kg)	Conclusion
	Pb	BL		PASS
	Cd	BL		PASS
44	Hg	BL		PASS
11	Cr ⁶⁺	BL		PASS
	PBBs			PASS
	PBDEs	BL		PASS
	Pb	BL		PASS
	Cd	BL		PASS
12	Hg	BL		PASS
12	Cr ⁶⁺	BL		PASS
	PBBs			
	PBDEs			
	Pb	BL		PASS
	Cd	BL		PASS
13	Hg	BL		PASS
15	Cr ⁶⁺	BL		PASS
	PBBs	IN	N.D.	PASS
	PBDEs	lin	N.D.	PASS
	Pb	BL		PASS
	Cd	BL		PASS
14	Hg	BL		PASS
14	Cr ⁶⁺	BL		PASS
	PBBs			
	PBDEs			
	Pb	BL		PASS
	Cd	BL		PASS
15	Hg	BL		PASS
GI	Cr ⁶⁺	BL		PASS
	PBBs	PI		PASS
	PBDEs	BL		PASS

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Material No.	Substances	EDXRF Result *	Chemical Result #(mg/kg)	Conclusion
	Pb	BL		PASS
	Cd	BL		PASS
40	Hg	BL		PASS
16	Cr ⁶⁺	BL		PASS
	PBBs			
	PBDEs			
	Pb	BL		PASS
	Cd	BL		PASS
47	Hg	BL		PASS
17	Cr ⁶⁺	BL		PASS
	PBBs			PASS
	PBDEs	BL		PASS
	Pb	BL		PASS
	Cd	BL		PASS
40	Hg	BL		PASS
18	Cr ⁶⁺	BL		PASS
	PBBs			
	PBDEs			
	Pb	BL		PASS
	Cd	BL		PASS
10	Hg	BL		PASS
19	Cr ⁶⁺	BL		PASS
	PBBs			
	PBDEs			
	Pb	BL		PASS
	Cd	BL		PASS
00	Hg	BL		PASS
20	Cr ⁶⁺	BL		PASS
	PBBs			
	PBDEs			

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Material No.	Substances	EDXRF Result *	Chemical Result #(mg/kg)	Conclusion
	Pb	BL		PASS
	Cd	BL		PASS
04	Hg	BL		PASS
21	Cr ⁶⁺	BL		PASS
	PBBs			PASS
	PBDEs	BL		PASS
	Pb	BL		PASS
	Cd	BL		PASS
00	Hg	BL		PASS
22	Cr ⁶⁺	BL		PASS
	PBBs			
	PBDEs			
	Pb	BL		PASS
	Cd	BL		PASS
00	Hg	BL		PASS
23	Cr ⁶⁺	BL		PASS
	PBBs	DI		PASS
	PBDEs	BL		PASS
	Pb	BL		PASS
	Cd	BL		PASS
0.4	Hg	BL		PASS
24	Cr ⁶⁺	BL		PASS
	PBBs			PASS
	PBDEs	BL		PASS
	Pb	BL		PASS
	Cd	BL		PASS
05	Hg	BL		PASS
25	Cr ⁶⁺	BL		PASS
	PBBs			PASS
	PBDEs	BL		PASS

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Material No.	Substances	EDXRF Result *	Chemical Result #(mg/kg)	Conclusion
	Pb	BL		PASS
	Cd	BL		PASS
00	Hg	BL		PASS
26	Cr ⁶⁺	BL		PASS
	PBBs			PASS
	PBDEs	BL		PASS
	Pb	BL		PASS
	Cd	BL		PASS
07	Hg	BL		PASS
27	Cr ⁶⁺	BL		PASS
	PBBs			
	PBDEs			
	Pb	BL		PASS
	Cd	BL		PASS
28	Hg	BL		PASS
20	Cr ⁶⁺	BL		PASS
	PBBs	BBs		
	PBDEs			
	Pb	BL		PASS
	Cd	BL		PASS
29	Hg	BL		PASS
29	Cr ⁶⁺	OL	Negative	PASS
	PBBs			
	PBDEs			
	Pb	BL		PASS
	Cd	BL		PASS
20	Hg	BL		PASS
30	Cr ⁶⁺	OL	Negative	PASS
	PBBs			
	PBDEs			

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Material No.	Substances	EDXRF Result *	Chemical Result #(mg/kg)	Conclusion
	Pb	BL		PASS
	Cd	BL		PASS
24	Hg	BL		PASS
31	Cr ⁶⁺	BL		PASS
	PBBs			
	PBDEs			
	Pb	BL		PASS
	Cd	BL		PASS
20	Hg	BL		PASS
32	Cr ⁶⁺	BL		PASS
	PBBs			PASS
	PBDEs	BL		PASS

Note: 1. mg/kg = milligram per kilogram (ppm).

- 2. N.D. = Not Detected (<RL).
- RL(Reporting Limit): 5 mg/kg for Pb/ Cd/ Hg/ Cr⁶⁺(Nonmetal material); 5 mg/kg for PBBs & PBDEs.
- 4. Negative = Absence of Cr^{6+} .
- 5. Positive = Presence of Cr^{6+} : the detected concentration in boiling-water-extraction solution is equal or greater than 0.02 mg/kg with 50 cm² sample surface area.
- 6. "*" = It is the result on total Cr and Br while test substances are Cr^{6+} and PBBs & PBDEs.
- 7. "#" = Result are obtained by EDXRF for primary screening, if the result exceeds the below limit (BL), and further chemical testing.
- 8. "E" = This material is tin-lead solder or copper alloy proved by client, lead in tin-lead solder or copper alloy is exempted on the requirements of RoHS directive(EU Directive 2002/95/EC).

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Screening limits in mg/kg for regulated elements in various matrices

Elements	Polymer	Metal	Composite Materials	
Pb	BL≤(700-3σ) <x<(1300+3σ)≤< th=""><th>BL≤(700-3σ)<x<(1300+3σ)≤< th=""><th>BL≤(500-3σ)<x<(1500+3σ)≤< th=""></x<(1500+3σ)≤<></th></x<(1300+3σ)≤<></th></x<(1300+3σ)≤<>	BL≤(700-3σ) <x<(1300+3σ)≤< th=""><th>BL≤(500-3σ)<x<(1500+3σ)≤< th=""></x<(1500+3σ)≤<></th></x<(1300+3σ)≤<>	BL≤(500-3σ) <x<(1500+3σ)≤< th=""></x<(1500+3σ)≤<>	
PD	OL	OL	OL	
Cd	BL≤(70-3σ) <x<(130+3σ)≤< th=""><th>BL≤(70-3σ)<x<(130+3σ)≤ ol<="" th=""><th colspan="2"></th></x<(130+3σ)≤></th></x<(130+3σ)≤<>	BL≤(70-3σ) <x<(130+3σ)≤ ol<="" th=""><th colspan="2"></th></x<(130+3σ)≤>		
Ca	OL	BE=(70-30) <x<(130+30)= oe<="" td=""><td>LOD<x<(150+3σ)≤ol< td=""></x<(150+3σ)≤ol<></td></x<(130+30)=>	LOD <x<(150+3σ)≤ol< td=""></x<(150+3σ)≤ol<>	
Ца	BL≤(700-3σ) <x<(1300+3σ)≤< th=""><th>BL≤(700-3σ)<x<(1300+3σ)≤< th=""><th>BL≤(500-3σ)<x<(1500+3σ)≤< th=""></x<(1500+3σ)≤<></th></x<(1300+3σ)≤<></th></x<(1300+3σ)≤<>	BL≤(700-3σ) <x<(1300+3σ)≤< th=""><th>BL≤(500-3σ)<x<(1500+3σ)≤< th=""></x<(1500+3σ)≤<></th></x<(1300+3σ)≤<>	BL≤(500-3σ) <x<(1500+3σ)≤< th=""></x<(1500+3σ)≤<>	
Hg	OL	OL	OL	
Cr	BL≤(700-3σ)<Χ	BL≤(700-3σ)<Χ	BL≤(500-3σ)<Χ	
Br	BL≤(300-3σ)<Χ		BL≤(250-3σ)<Χ	

BL = Below Limit, OL = Over Limit, IN = Inconclusive, LOD = Limit of Detection

Test Material	List	
The following r	naterials apply only to the samples submitted for	or chemical testing.
Material No.	Description	Location
1	Black plastic with white printing	Shell P326.24X
2	Black sponge with glue	Shell P326.24X
3	Silvery metal with black oxide layer	Shell P326.24X
4	Silvery metal	Square head bolts P326.24X
5	Black plastic	Key P326.24X
6	Black plastic	Inner bracket P326.24X
7	Black sponge	Inner battery scarfskin P326.24X
8	Blue plastic	Inner battery scarfskin P326.24X
9	Silvery metal	Inner battery P326.24X
10	Black plastic	Inner power wire ecderon P326.24X
11	Red plastic	Inner power wire ecderon P326.24X
12	Copper metal	Inner power wire core P326.24X
13	White epoxy resin plate with green/white	Inner PCB board P326.24X
13	coating	
14	Silvery metal	USB socket P326.24X
15	Grey plastic	USB socket inner P326.24X
16	Silvery metal	USB socket inner pin P326.24X
17	Black plastic	Inner key P326.24X

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18	Silvery metal	Inner key base P326.24X
19	Black ceramic	Inner integrated circuit P326.24X
20	Silvery metal	Inner crystal oscillator P326.24X
21	Black plastic with grey printing	Inner electrolytic capacitor scarfskin P326.24X
22	Silvery metal	Inner electrolytic capacitor shell P326.24X
23	White paper with black/green printing	Inner QC sticker P326.24X
24	Bright black plastic	Inner horn dust cover P326.24X
25	Black plastic	Inner horn cone basin P326.24X
26	Brown fabric	Inner horn damper P326.24X
27	Copper metal	Inner horn connecting wire P326.24X
28	Silvery metal with rose red plating	Inner horn voice coil P326.24X
29	Silvery metal with black printing	Inner horn T iron P326.24X
30	Silvery metal	Inner horn basin stand P326.24X
31	Silvery magnet	Inner horn magnet P326.24X
32	White plastic	Inner horn connecting wire base P326.24X

Photo(s) of Sample:



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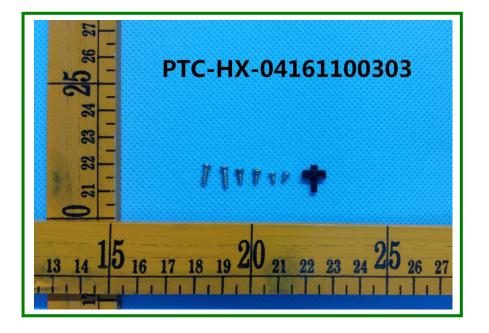
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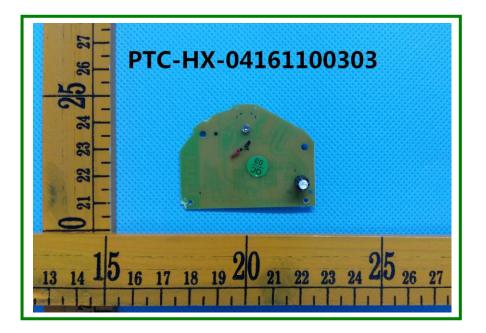
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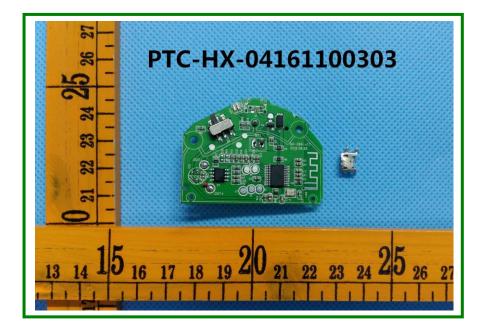




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End of Report

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