



# TEST REPORT

**Applicant** : Paul Stricker, SA  
**Address** : Núcleo Ind. Murtede, Lt 5, 3060-372 Murtede, Portugal

## REPORT ON THE SUBMITTED SAMPLE SAID TO BE:

**Sample name** : Bluetooth Speaker  
**Manufacturer** :   
**Address** :   
**Model** : 97253  
**Testing period** : Nov. 05, 2018 to Nov. 21, 2018  
**Report No.** : HSO181105559ARH  
**Test request** : Selected test(s) as requested by client.  
**Test method** : Please refer to next page(s).  
**Test Result** : Please refer to next page(s).  
**Conclusion** : Based on the performed tests on submitted sample(s). the results of Lead.Mercury.Cadmium.Hexavalent chromium comply with the limits as set by ROHS Directive (EU)2015/863 amending Annex II to Directive 2011/65/EU

**Signed for and on behalf of HSO**



Frank Liu , Senior Manager

This Test Report is issued by the Company subject to its Conditions of Issuance of Test Report printed overleaf or attached. The results shown in this Test Report refer only to the sample(s) tested unless otherwise stated and such sample(s) are retained for 30days only. This Test Report shall not be reproduced expected in full, without written approval of the Company.

**Test Results :****Test Part Description :.**

Specimen No.

SN1 "Bluetooth Speaker "(mixed)

**Remarks :**

- (1) 1 mg/kg = 1 ppm = 0.0001%
- (2) MDL = Method Detection Limit
- (3) ND = Not Detected ( < MDL )
- (4) "-" = Not Regulated

**Elementary Analysis & Flame Retardants & Phthalates.**

Test Method :

- (1)With reference to IEC 62321-5:2013, determination of Cadmium by ICP-OES.
- (2)With reference to IEC 62321-5:2013, determination of Lead by ICP-OES.
- (3)With reference to IEC 62321-4:2013, determination of Mercury by ICP-OES.
- (4)With reference to IEC 62321-7-2:2017, determination of Hexavalent Chromium by Colorimetric Method using UV-Vis and/or with reference to IEC 62321-5:2013, determination of Chromium by ICP-OES.
- (5)With reference to IEC 62321-6:2015, determination of PBBs and PBDEs by GC-MS.
- (6)With reference to IEC 62321-8:2017, determination of phthalates by GC-MS.

Test Item(s).	Limit.	Unit.	MDL.	001.
Cadmium (Cd)	100	mg/kg	5	ND
Lead (Pb)	1,000	mg/kg	2	ND
Mercury (Hg)	1,000	mg/kg	1	ND
Hexavalent Chromium (CrVI)	1,000	mg/kg	3	ND
Sum of PBBs	1,000	mg/kg	-	ND
Monobromobiphenyl	--	mg/kg	5	ND
Dibromobiphenyl	--	mg/kg	5	ND
Tribromobiphenyl	--	mg/kg	5	ND
Tetrabromobiphenyl	--	mg/kg	2	ND
Pentabromobiphenyl	--	mg/kg	1	ND
Hexabromobiphenyl	--	mg/kg	3	ND
Heptabromobiphenyl	--	mg/kg	5	ND
Octabromobiphenyl	--	mg/kg	3	ND
Nonabromobiphenyl	--	mg/kg	5	ND
Decabromobiphenyl	--	mg/kg	5	ND

This Test Report is issued by the Company subject to its Conditions of Issuance of Test Report printed overleaf or attached. The results shown in this Test Report refer only to the sample(s) tested unless otherwise stated and such sample(s) are retained for 30days only. This Test Report shall not be reproduced expected in full, without written approval of the Company.



Test Item(s).	Limit.	Unit.	MDL.	001.
Sum of PBDEs	1000	mg/kg	-	ND
Monobromodiphenyl ether	--	mg/kg	5	ND
Dibromodiphenyl ether	--	mg/kg	5	ND
Tribromodiphenyl ether	--	mg/kg	5	ND
Tetrabromodiphenyl ether	--	mg/kg	5	ND
Pentabromodiphenyl ether	--	mg/kg	5	ND
Hexabromodiphenyl ether	--	mg/kg	5	ND
Heptabromodiphenyl ether	--	mg/kg	5	ND
Octabromodiphenyl ether	--	mg/kg	5	ND
Nonabromodiphenyl ether	--	mg/kg	5	ND
Decabromodiphenyl ether	--	mg/kg	5	ND
Dibutyl phthalate (DBP)	1,000	mg/kg	80	ND
Butyl benzyl phthalate (BBP)	1,000	mg/kg	51	ND
Bis (2-ethylhexyl) phthalate (DEHP)	1,000	mg/kg	40	ND
Diisobutyl Phthalates (DIBP)	1,000	mg/kg	50	ND

**Notes :**

(1) The maximum permissible limit is quoted from RoHS Directive (EU) 2015/863.IEC 62321 series is

equivalent to EN 62321 series

[http://www.cenelec.eu/dyn/www/f?p=104:30:1742232870351101:::FSP\\_ORG\\_ID,FSP\\_LAN G\\_ID:1258637,25](http://www.cenelec.eu/dyn/www/f?p=104:30:1742232870351101:::FSP_ORG_ID,FSP_LAN G_ID:1258637,25).

(2) The result of Hexavalent Chromium (Cr(VI)) is "ND" as the result of Chromium (Cr) is "ND", and confirmation test of Hexavalent Chromium (Cr(VI)) is not required.

(3) If the Chromium (Cr) content is greater than the MDL of Hexavalent Chromium (Cr(VI)). And confirmation test of Hexavalent Chromium (Cr(VI)) is required.

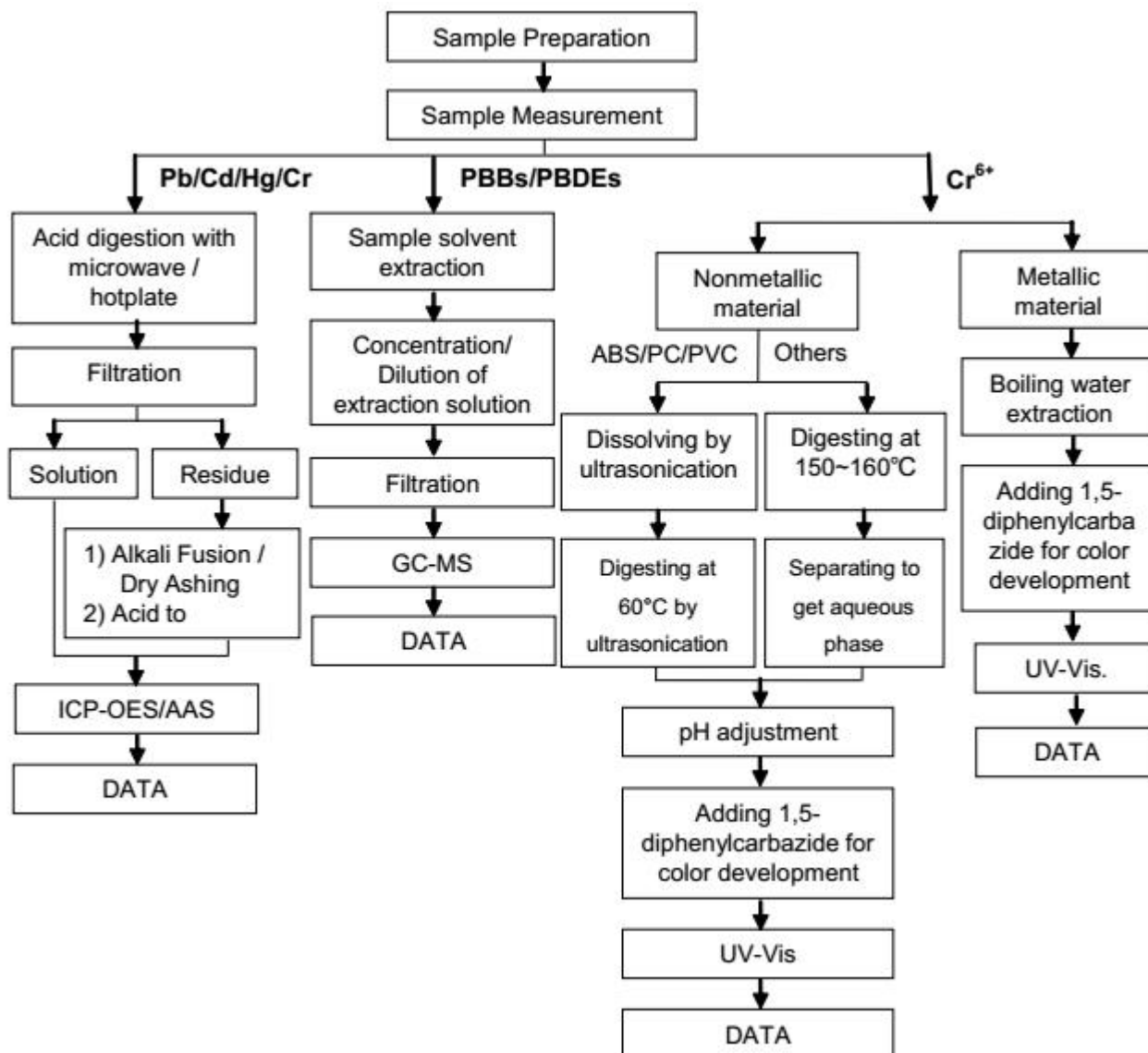
**Remark:**

The sample(s) was/were analyzed on behalf of the applicant as mixing sample in one testing. The above result(s) was/were only given as the informality value and only for reference.

This Test Report is issued by the Company subject to its Conditions of Issuance of Test Report printed overleaf or attached. The results shown in this Test Report refer only to the sample(s) tested unless otherwise stated and such sample(s) are retained for 30days only. This Test Report shall not be reproduced expected in full, without written approval of the Company.

**ATTACHMENTS****Pb/Cd/Hg/Cr<sup>6+</sup>/PBBs/PBDEs Testing Flow Chart**

- 1) Name of the person who made testing: Edith Zhang / Sunny Hu
- 2) Name of the person in charge of testing: Bella Wang / Qiong Liu
- 3) These samples were dissolved totally by pre-conditioning method according to below flow chart. (Cr<sup>6+</sup> and PBBs/PBDEs test method excluded).



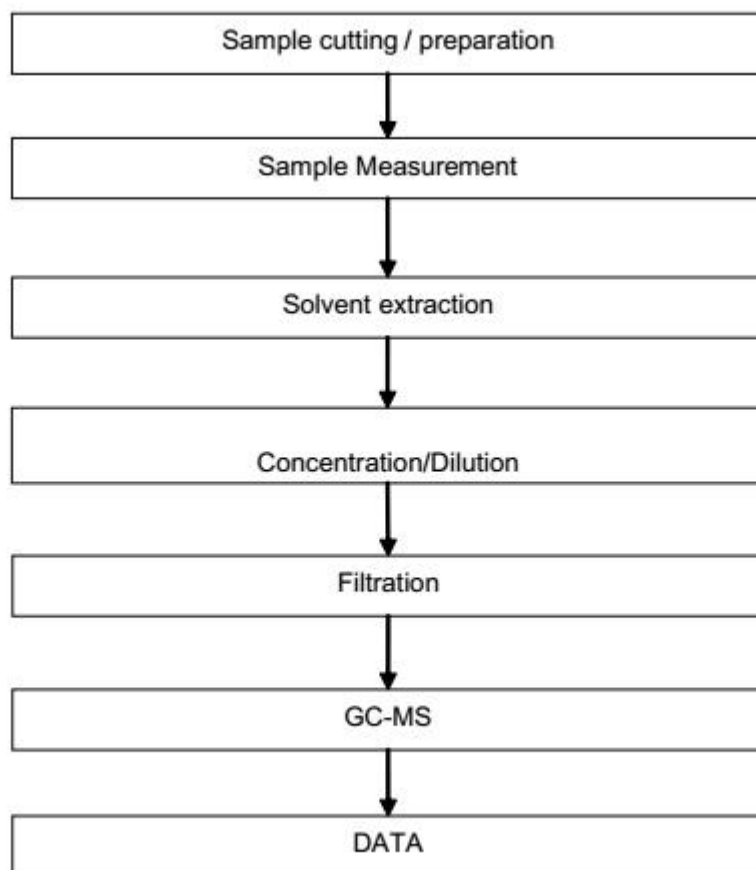
This Test Report is issued by the Company subject to its Conditions of Issuance of Test Report printed overleaf or attached. The results shown in this Test Report refer only to the sample(s) tested unless otherwise stated and such sample(s) are retained for 30days only. This Test Report shall not be reproduced expected in full, without written approval of the Company.



## ATTACHMENTS

### Phthalates Testing Flow Chart

- 1) Name of the person who made testing: Sunny Hu
- 2) Name of the person in charge of testing: Qiong Liu



This Test Report is issued by the Company subject to its Conditions of Issuance of Test Report printed overleaf or attached. The results shown in this Test Report refer only to the sample(s) tested unless otherwise stated and such sample(s) are retained for 30days only. This Test Report shall not be reproduced expected in full, without written approval of the Company.



## Photo Documentation

**Fig. 1**



**Fig. 2**



This Test Report is issued by the Company subject to its Conditions of Issuance of Test Report printed overleaf or attached. The results shown in this Test Report refer only to the sample(s) tested unless otherwise stated and such sample(s) are retained for 30days only. This Test Report shall not be reproduced expected in full, without written approval of the Company.





**Fig. 3**



**Fig. 4**



This Test Report is issued by the Company subject to its Conditions of Issuance of Test Report printed overleaf or attached. The results shown in this Test Report refer only to the sample(s) tested unless otherwise stated and such sample(s) are retained for 30days only. This Test Report shall not be reproduced expected in full, without written approval of the Company.



**Fig. 5**



**Fig. 6**



This Test Report is issued by the Company subject to its Conditions of Issuance of Test Report printed overleaf or attached. The results shown in this Test Report refer only to the sample(s) tested unless otherwise stated and such sample(s) are retained for 30days only. This Test Report shall not be reproduced expected in full, without written approval of the Company.

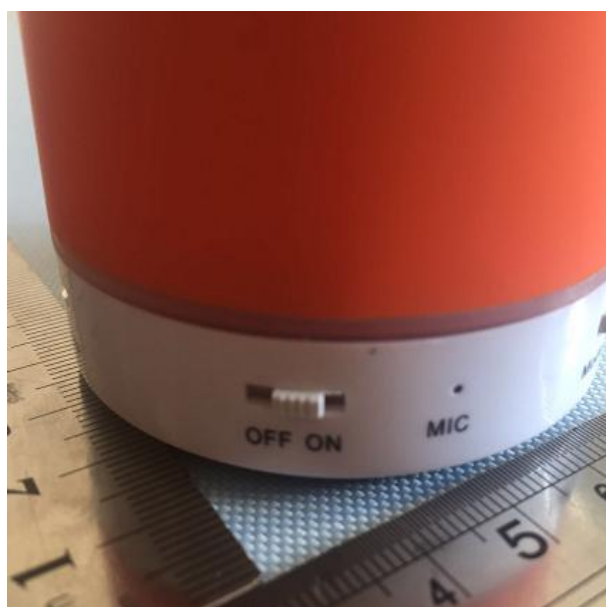




**Fig. 7**



**Fig. 8**



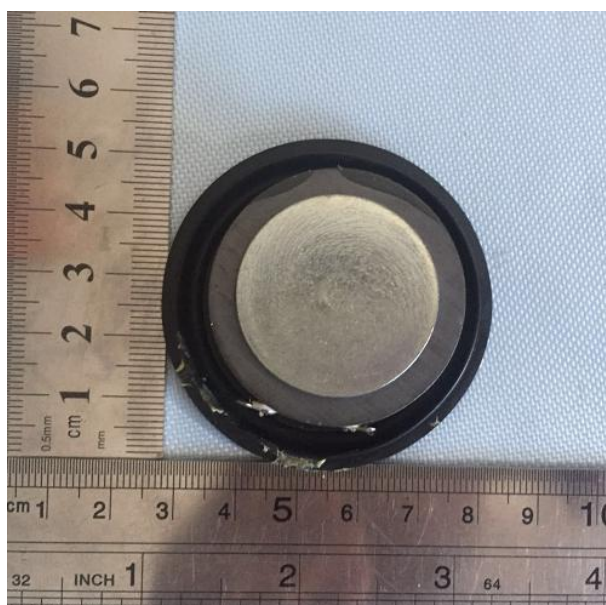
This Test Report is issued by the Company subject to its Conditions of Issuance of Test Report printed overleaf or attached. The results shown in this Test Report refer only to the sample(s) tested unless otherwise stated and such sample(s) are retained for 30days only. This Test Report shall not be reproduced expected in full, without written approval of the Company.



**Fig. 9**



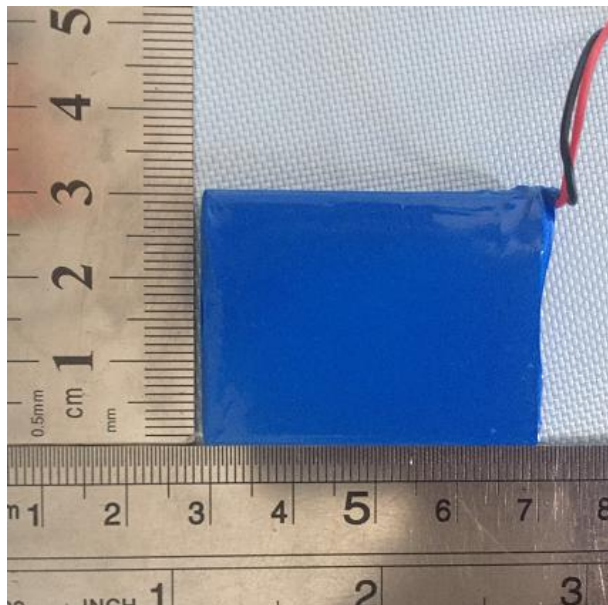
**Fig. 10**



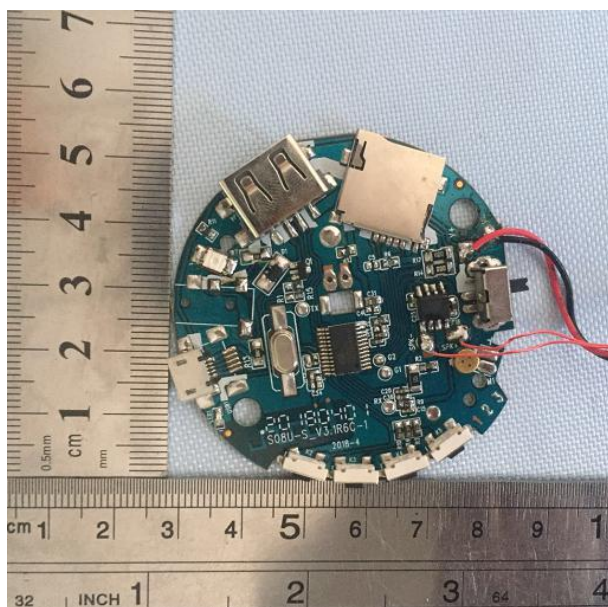
This Test Report is issued by the Company subject to its Conditions of Issuance of Test Report printed overleaf or attached. The results shown in this Test Report refer only to the sample(s) tested unless otherwise stated and such sample(s) are retained for 30days only. This Test Report shall not be reproduced expected in full, without written approval of the Company.



**Fig. 11**



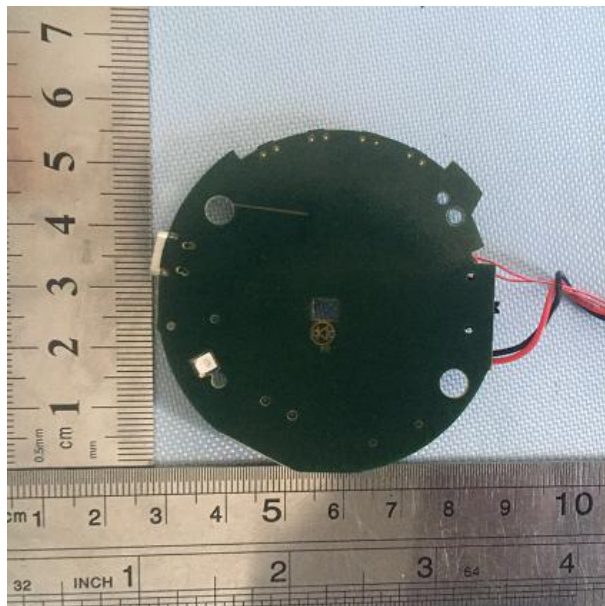
**Fig. 12**



This Test Report is issued by the Company subject to its Conditions of Issuance of Test Report printed overleaf or attached. The results shown in this Test Report refer only to the sample(s) tested unless otherwise stated and such sample(s) are retained for 30days only. This Test Report shall not be reproduced expected in full, without written approval of the Company.



**Fig. 13**



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

This Test Report is issued by the Company subject to its Conditions of Issuance of Test Report printed overleaf or attached. The results shown in this Test Report refer only to the sample(s) tested unless otherwise stated and such sample(s) are retained for 30days only. This Test Report shall not be reproduced expected in full, without written approval of the Company.