

**Test Report** Date: 27 Jun 2017 Page 1 of 5 No. SHAEC1713261502

SHANGHAI RICHENG ELECTRONICS CO.,LTD XINSHEN INDUSTRIAL AREA, ZHELIN, FENGXIAN, SHANGHAI

The following sample(s) was/were submitted and identified on behalf of the clients as: Stannising

SGS Job No.: SP17-022283 - SH

Date of Sample Received: 23 Jun 2017

Testing Period: 23 Jun 2017 - 27 Jun 2017

Test Requested: Selected test(s) as requested by client.

Please refer to next page(s). Test Method: Test Results: Please refer to next page(s).

Based on the performed tests on submitted sample(s), the results of Lead, Conclusion:

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 SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd.

Marry Ma

Approved Signatory



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Test Results:

#### Test Part Description:

Specimen No. SGS Sample ID Description SN<sub>1</sub> SHA17-132615.002 Copper metal

#### Remarks:

(1) 1 mg/kg = 0.0001%

(2) MDL = Method Detection Limit

(3) ND = Not Detected ( < MDL)

(4) "-" = Not Regulated

### RoHS Directive (EU) 2015/863 amending Annex II to Directive 2011/65/EU

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 62321:2008, determination of Hexavalent Chromium by spot test / Colorimetric Method using UV-Vis.

Test Item(s)	<u>Limit</u>	<u>Unit</u>	<u>MDL</u>	002
Cadmium (Cd)	100	mg/kg	2	ND
Lead (Pb)	1000	mg/kg	2	154
Mercury (Hg)	1000	mg/kg	2	ND
Hexavalent Chromium (Cr(VI))	-	-	$\Diamond$	Negative

#### 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\_LANG\_ID: 1258637,25

(2) Spot-test:

Negative = Absence of Cr(VI) coating, Positive = Presence of Cr(VI) coating;

(The tested sample should be further verified by boiling-water-extraction method if the spot test result is Negative or cannot be confirmed.)

Boiling-water-extraction:

Negative = Absence of Cr(VI) coating

Positive = Presence of Cr(VI) coating; the detected concentration in boiling-water-extraction solution is equal or greater than 0.02 mg/kg with 50 cm<sup>2</sup> sample surface area.

Information on storage conditions and production date of the tested sample is unavailable and thus



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Cr(VI) results represent status of the sample at the time of testing.



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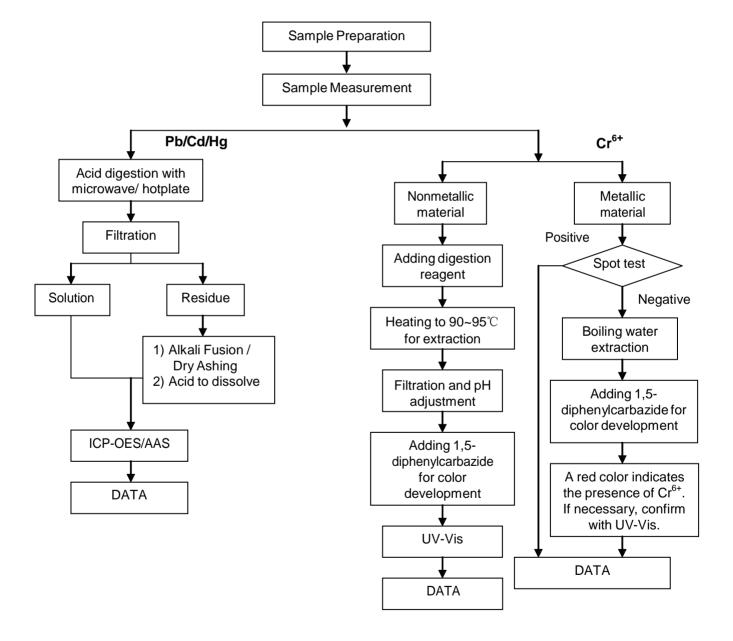
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### **ATTACHMENTS**

# Pb/Cd/Hg/Cr<sup>6+</sup> Testing Flow Chart

- 1) Name of the person who made testing: Meria Jin/Sielina Song/Sean Li
- 2) Name of the person in charge of testing: Jan Shi/Luna Xu/Shara Wang
- 3) These samples were dissolved totally by pre-conditioning method according to below flow chart. (Cr<sup>6+</sup> test method excluded)





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Sample photo:



SGS authenticate the photo on original report only

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



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