

Test Report Date: 15 Mar 2019 No. SHAEC1904337401 Page 1 of 4

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: White zinc

SGS Job No.: SP19-006612 - SH

Date of Sample Received: 12 Mar 2019

Testing Period: 12 Mar 2019 - 15 Mar 2019

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

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

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

Based on the performed tests on selected part of submitted sample(s), the Conclusion:

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

Helen Liu

Approved Signatory

Hele Lin



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Test Results:

Test Part Description:

Specimen No. SGS Sample ID Description
SN1 SHA19-043374.001 Silver plating part

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: With reference to IEC 62321-4:2013+AMD1:2017, IEC62321-5:2013 and IEC62321-7-1:2015, analyzed by ICP-OES and UV-Vis.

Test Item(s)	<u>Limit</u>	<u>Unit</u>	<u>MDL</u>	<u>001</u>
Cadmium (Cd)	100	mg/kg	10	ND
Lead (Pb)	1000	mg/kg	10	ND
Mercury (Hg)	1000	mg/kg	10	ND
Hexavalent Chromium (Cr(VI))▼	-	µg/cm²	0.10	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_LANG_ID:1258637,25
- (2)▼ = a. The sample is positive for CrVI if the CrVI concentration is greater than 0.13 µg/cm². The sample coating is considered to contain CrVI
 - b. The sample is negative for CrVI if CrVI is ND (concentration less than $0.10 \,\mu g/cm^2$). The coating is considered a non-CrVI based coating
 - c. The result between 0.10 $\mu g/cm^2$ and 0.13 $\mu g/cm^2$ is considered to be inconclusive unavoidable coating variations may influence the determination
 - Information on storage conditions and production date of the tested sample is unavailable and thus Cr(VI) results represent status of the sample at the time of testing.



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Test Report

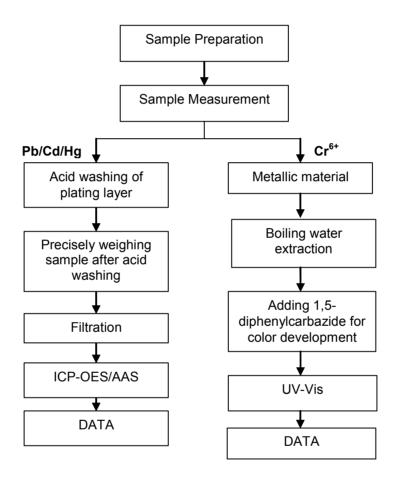
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ATTACHMENTS

Plating Pb/Cd/Hg/Cr⁶⁺ Testing Flow Chart





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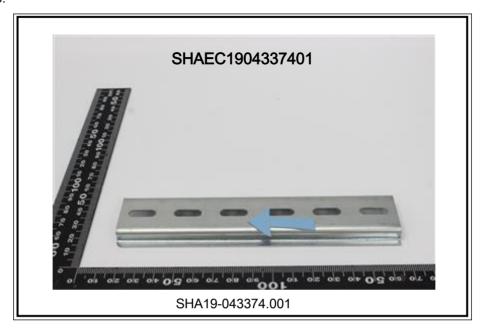
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Sample photo:



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