

Test Report

No. : KA/2013/40955

Date : 2013/04/19

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HAU SHIUNN ENTERPRISE CO., LTD.
NO.211, CHU LIAO RD., TA-SHU DIST., KAOHSIUNG CITY., TAIWAN

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

Sample Description : BRASS TIN-PLATE FOR TERMINAL
Style/Item No. : BRASS TIN-PLATE/PHOSPHOR BRONZE TIN-PLATED
Sample Receiving Date : 2013/04/15
Testing Period : 2013/04/15 TO 2013/04/19
Sample Submitted By : HAU SHIUNN ENTERPRISE CO., LTD.

Test Requested : As specified by client, with reference to RoHS Directive 2011/65/EU Annex II to determine Cadmium, Lead, Mercury, Cr(VI) contents in the submitted sample.
Test Method : With reference to IEC 62321: 2008.
Test Result(s) : Please refer to next page(s).


Ray Chang / Asst. Manager
Signed for and on behalf of
SGS Taiwan Limited



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Test Result(s)

PART NAME No.1 : SILVER BRASS TIN-PLATE FOR TERMINAL

Test Item(s)	Unit	Method	MDL	Result
				No.1
Cadmium (Cd)	mg/kg	With reference to IEC 62321: 2008 and performed by ICP-AES.	2	n.d.
Lead (Pb)	mg/kg	With reference to IEC 62321: 2008 and performed by ICP-AES.	2	10.3
Mercury (Hg)	mg/kg	With reference to IEC 62321: 2008 and performed by ICP-AES.	2	n.d.
Hexavalent Chromium Cr(VI)	**	With reference to IEC 62321: 2008 and performed by Boiling water extraction Method.#	#	Negative

Note :

1. mg/kg = ppm ; 0.1wt% = 1000ppm
2. n.d. = Not Detected
3. MDL = Method Detection Limit
4. ** = Qualitative analysis (No Unit)
5. # = a. Positive means the presence of CrVI on the tested areas
b. Negative means the absence of CrVI on the tested areas

The detected concentration in boiling-water-extraction solution is equal or greater than 0.02 mg/kg with 50 cm² tested areas.

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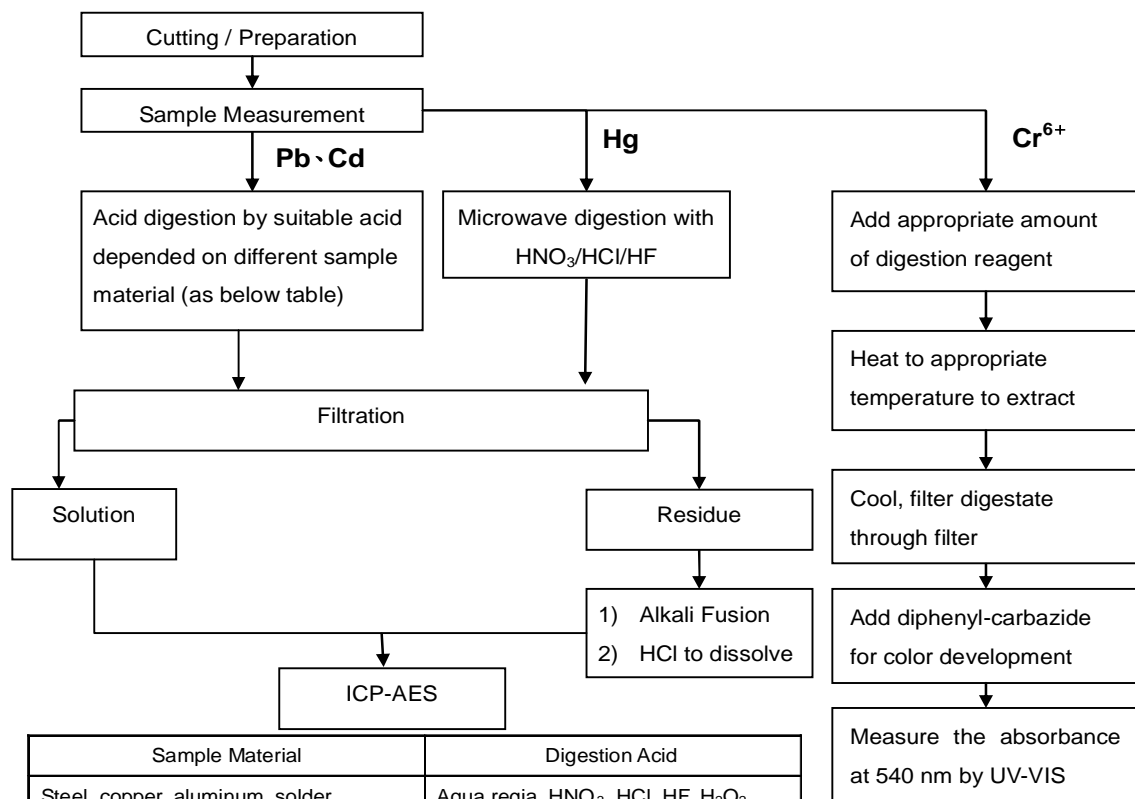
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- 1) These samples were dissolved totally by pre-conditioning method according to below flow chart. (Cr⁶⁺ test method excluded)
- 2) Name of the person who made measurement: Alex Chang
- 3) Name of the person in charge of measurement: Ray Chang



Sample Material	Digestion Acid
Steel, copper, aluminum, solder	Aqua regia, HNO ₃ , HCl, HF, H ₂ O ₂
Glass	HNO ₃ /HF
Gold, platinum, palladium, ceramic	Aqua regia
Silver	HNO ₃
Plastic	H ₂ SO ₄ , H ₂ O ₂ , HNO ₃ , HCl
Others	Any acid to total digestion

Note :** (1) For non-metallic material, add alkaline digestion reagent and heat to 90~95 °C.
 (2) For metallic material, add pure water and heat to boiling.

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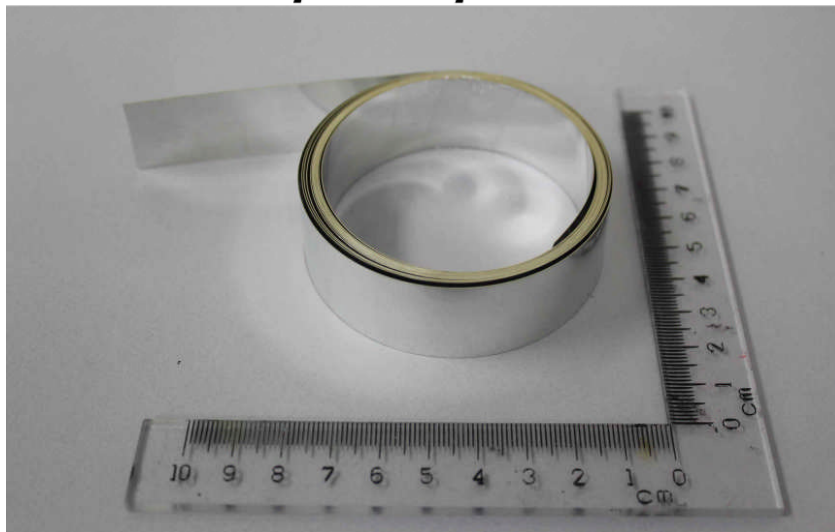
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* The tested sample / part is marked by an arrow if it's shown on the photo. *

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** End of Report **

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