



# Test Report

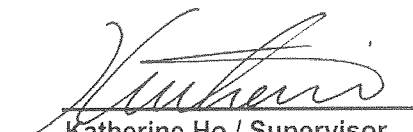
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The following sample(s) was/were submitted and identified by/on behalf of the client as :

Sample Description : TRANSISTOR,DIODE,MOSFET,THYRISTOR,TVS  
Style/Item No. : TO-3/TO-66(ROHS PRODUCTS)  
Sample Receiving Date : 2009/02/26  
Testing Period : 2009/02/26 TO 2009/3/4

=====  
**Test Result(s)** : - Please see the next page(s) -

  
Katherine Ho / Supervisor  
Signed for and on behalf of  
SGS Taiwan Limited

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## Test Result(s)

PART NAME NO.1 : SILVER BODY

PART NAME NO.2 : SILVER PIN

Test Item (s)	Unit	Method	MDL	Result	
				No.1	No.2
Cadmium (Cd)	mg/kg	With reference to IEC 62321/2nd CDV (111/95/CDV). Determination of Cadmium by ICP-AES.	2	n.d.	---
Cadmium (Cd)	mg/kg	With reference to IEC 62321/2nd CDV (111/95/CDV). Determination of Cadmium by ICP-AES.	2	---	n.d.
Hexavalent Chromium Cr(VI) by alkaline extraction	mg/kg	With reference to IEC 62321/2nd CDV (111/95/CDV). Determination of Hexavalent Chromium for non-metallic samples by UV/Vis Spectrometry.	2	n.d.	---
Hexavalent Chromium Cr(VI) by Spot test / boiling water extraction	**	With reference to IEC 62321/2nd CDV (111/95/CDV). Determination of Hexavalent Chromium for metallic samples by Spot test / boiling water extraction Method.	0.02mg/kg with 50 cm <sup>2</sup> surface area	---	Negative
Lead (Pb)	mg/kg	With reference to IEC 62321/2nd CDV (111/95/CDV). Determination of Lead by ICP-AES.	2	n.d.	---
Lead (Pb)	mg/kg	With reference to IEC 62321/2nd CDV (111/95/CDV). Determination of Lead by ICP-AES.	2	---	15.3
Mercury (Hg)	mg/kg	With reference to IEC 62321/2nd CDV (111/95/CDV). Determination of Mercury by ICP-AES.	2	n.d.	n.d.

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- Note :
1. mg/kg = ppm; 0.1wt% = 1000ppm
  2. n.d. = Not Detected
  3. MDL = Method Detection Limit
  4. Spot-test:
    - Negative = Absence of Cr(VI) coating / surface layer, Positive = Presence of Cr(VI) coating /
    - (The tested sample should be further verified by boiling-water-extraction method if the
    - spot test result cannot be confirmed.)
  - Boiling-water-extraction:
    - Negative = Absence of Cr(VI) coating / surface layer,
    - Positive = Presence of Cr(VI) coating / surface layer 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.
  5. " - " = Not Regulated
  6. " --- " = Not Conducted
  7. \*\* = Qualitative analysis (No Unit)

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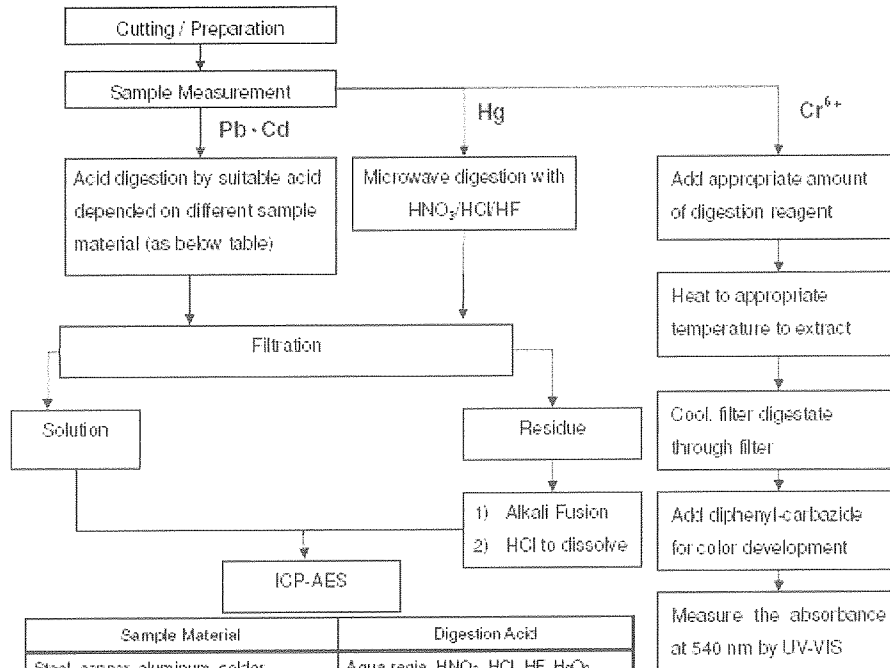


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- 1) These samples were dissolved totally by pre-conditioning method according to below flow chart. (Cr<sup>6+</sup> test method excluded)
- 2) Name of the person who made measurement: Hungming Li
- 3) Name of the person in charge of measurement: Ray Chang



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

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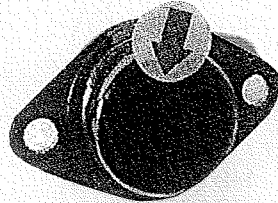
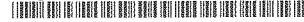


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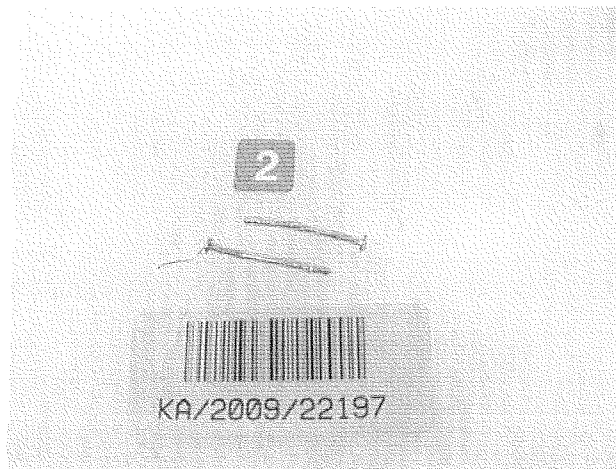


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\*\* End of Report \*\*

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