



## Test Report No. F690101/LF-CTSAYAA12-43798

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To: **SAMYANG CORP.**  
407, 3-ga  
Deokjin-gu  
Jeonju-city  
Jeongbuk  
Korea

The following merchandise was submitted and identified by the client as :

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**SGS File No.** : AYAA12-43798  
**Product Name** : TRIBS 640U SILVER  
**Item No./Part No.** : N/A  
**Received Date** : 2012. 12. 07  
**Test Period** : 2012. 12. 10 to 2012. 12. 12  
**Test Results** : For further details, please refer to following page(s)  
**Test Performed** : SGS Korea tested the sample(s) selected by applicant with following results.

Timothy Jeon  
Jinhee Kim  
Cindy Park  
Jerry Jung/ Testing Person

SGS Korea Co., Ltd.

Jeff Jang / Chemical Lab Mgr



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**Sample No.** : AYAA12-43798.001  
**Sample Description** : TRIBS 640U SILVER  
**Item No./Part No.** : N/A  
**Materials** : N/A

### Heavy Metals

| Test Items                  | Unit  | Test Method                              | MDL | Results |
|-----------------------------|-------|------------------------------------------|-----|---------|
| Cadmium (Cd)                | mg/kg | With reference to IEC 62321:2008, ICP    | 0.5 | N.D.    |
| Lead (Pb)                   | mg/kg | With reference to IEC 62321:2008, ICP    | 5   | N.D.    |
| Mercury (Hg)                | mg/kg | With reference to IEC 62321:2008, ICP    | 2   | N.D.    |
| Hexavalent Chromium (Cr VI) | mg/kg | With reference to IEC 62321:2008, UV-VIS | 1   | N.D.    |

### Flame Retardants-PBBs/PBDEs

| Test Items               | Unit  | Test Method                             | MDL | Results |
|--------------------------|-------|-----------------------------------------|-----|---------|
| Monobromobiphenyl        | mg/kg | With reference to IEC 62321:2008, GC-MS | 5   | N.D.    |
| Dibromobiphenyl          | mg/kg | With reference to IEC 62321:2008, GC-MS | 5   | N.D.    |
| Tribromobiphenyl         | mg/kg | With reference to IEC 62321:2008, GC-MS | 5   | N.D.    |
| Tetrabromobiphenyl       | mg/kg | With reference to IEC 62321:2008, GC-MS | 5   | N.D.    |
| Pentabromobiphenyl       | mg/kg | With reference to IEC 62321:2008, GC-MS | 5   | N.D.    |
| Hexabromobiphenyl        | mg/kg | With reference to IEC 62321:2008, GC-MS | 5   | N.D.    |
| Heptabromobiphenyl       | mg/kg | With reference to IEC 62321:2008, GC-MS | 5   | N.D.    |
| Octabromobiphenyl        | mg/kg | With reference to IEC 62321:2008, GC-MS | 5   | N.D.    |
| Nonabromobiphenyl        | mg/kg | With reference to IEC 62321:2008, GC-MS | 5   | N.D.    |
| Decabromobiphenyl        | mg/kg | With reference to IEC 62321:2008, GC-MS | 5   | N.D.    |
| Monobromodiphenyl ether  | mg/kg | With reference to IEC 62321:2008, GC-MS | 5   | N.D.    |
| Dibromodiphenyl ether    | mg/kg | With reference to IEC 62321:2008, GC-MS | 5   | N.D.    |
| Tribromodiphenyl ether   | mg/kg | With reference to IEC 62321:2008, GC-MS | 5   | N.D.    |
| Tetrabromodiphenyl ether | mg/kg | With reference to IEC 62321:2008, GC-MS | 5   | N.D.    |
| Pentabromodiphenyl ether | mg/kg | With reference to IEC 62321:2008, GC-MS | 5   | N.D.    |
| Hexabromodiphenyl ether  | mg/kg | With reference to IEC 62321:2008, GC-MS | 5   | N.D.    |
| Heptabromodiphenyl ether | mg/kg | With reference to IEC 62321:2008, GC-MS | 5   | N.D.    |
| Octabromodiphenyl ether  | mg/kg | With reference to IEC 62321:2008, GC-MS | 5   | N.D.    |
| Nonabromodiphenyl ether  | mg/kg | With reference to IEC 62321:2008, GC-MS | 5   | N.D.    |
| Decabromodiphenyl ether  | mg/kg | With reference to IEC 62321:2008, GC-MS | 5   | N.D.    |

#### NOTE:

- (1) N.D. = Not detected. (<MDL)
- (2) mg/kg = ppm
- (3) MDL = Method Detection Limit
- (4) - = No regulation
- (5) Negative = Undetectable / Positive = Detectable
- (6) \*\* = Qualitative analysis (No Unit)
- (7) \* = Boiling-water-extraction:  
Negative = Absence of CrVI coating  
Positive = Presence of CrVI 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.

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Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

**Picture of Sample as Received:**



**NOTE:**

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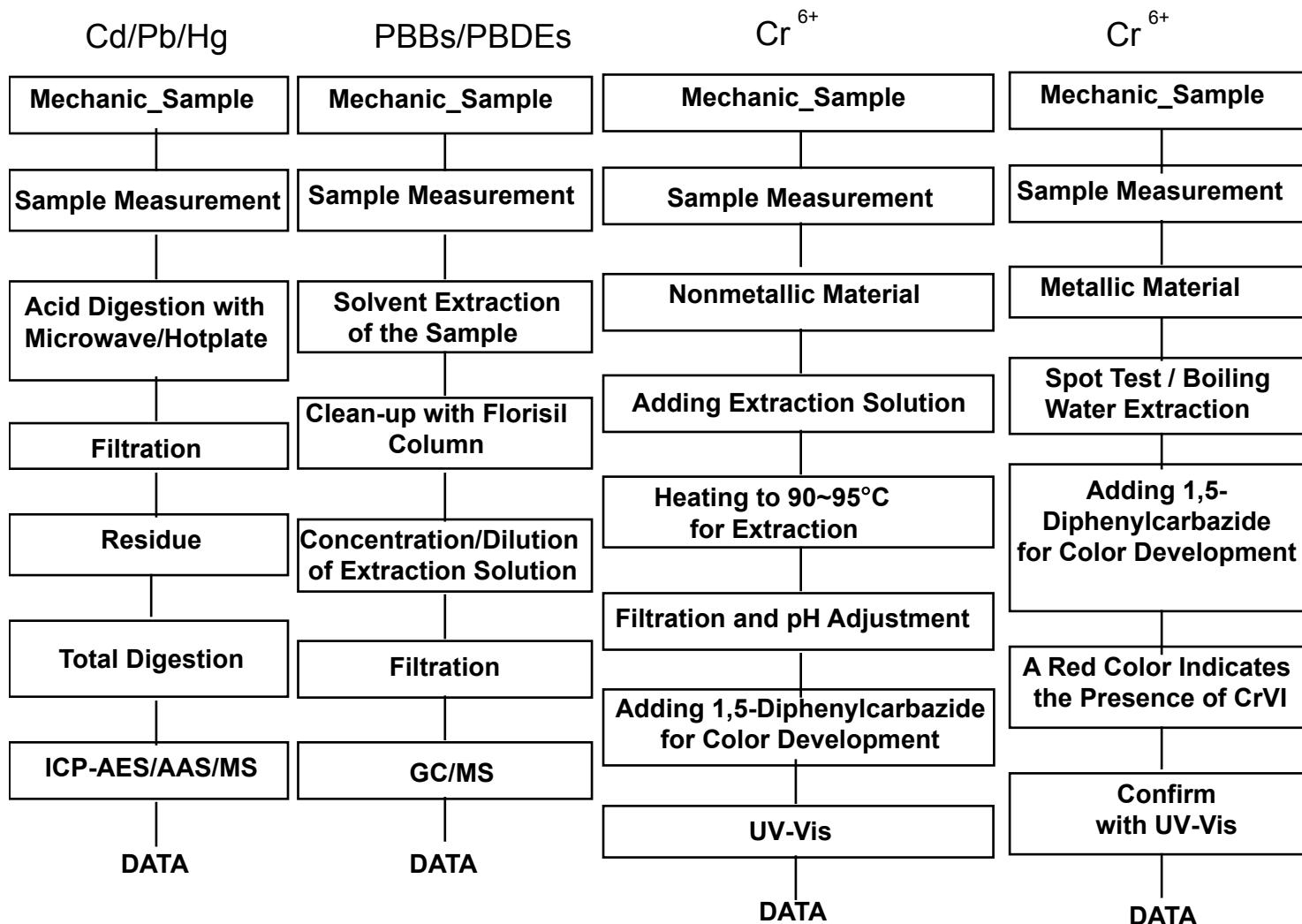
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## Testing Flow Chart for RoHS:Cd/Pb/Hg/Cr<sup>6+</sup> /PBBs&PBDEs Testing



The samples were dissolved totally by pre-conditioning method according to above flow chart for Cd,Pb,Hg.

Section Chief : Gilsae Yi

\*\*\* End \*\*\*

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