SHANGHAI RICHENG ELECTRONICS CO., LTD

XINSHENG INDUSTRIAL AREA, ZHELIN, FENGXIAN, SHANGHAI

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

| | |
|---|---|
| SGS Job No. : | SP16-012500 - SH |
| Composition : | EPDM |
| Date of Sample Received : | 16 Apr 2016 |
| Testing Period : | 16 Apr 2016 - 21 Apr 2016 |
| 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). |
| Conclusion : | Based on the performed tests on submitted sample(s), the results of Lead, Mercury, Cadmium, Hexavalent chromium, Polybrominated biphenyls (PBBs), Polybrominated diphenyl ethers (PBDEs) and Phthalates such as Bis(2-ethylhexyl) phthalate (DEHP), Butyl benzyl phthalate (BBP), Dibutyl phthalate (DBP) and Diisobutyl phthalate (DIBP) 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

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Test Results :

Test Part Description :

| Specimen No. | SGS Sample ID | Description |
|---|---|---|
| SN1 | SHA16-075231.002 | Black soft solid |

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 Colorimetric Method using UV-Vis.
(5) With reference to IEC 62321-6:2015, determination of PBBs and PBDEs by GC-MS.
(6) With reference to IEC 62321-8 (111/321/CD), determination of phthalates by GC-MS.

| Test Item(s) | Limit | Unit | MDL | *002* |
|---|---|---|---|---|
| Cadmium (Cd) | 100 | mg/kg | 2 | ND |
| Lead (Pb) | 1000 | mg/kg | 2 | 13 |
| Mercury (Hg) | 1000 | mg/kg | 2 | ND |
| Hexavalent Chromium (Cr(VI)) | 1000 | mg/kg | 2 | ND |
| Sum of PBBs | 1000 | mg/kg | - | ND |
| Monobromobiphenyl | - | mg/kg | 5 | ND |
| Dibromobiphenyl | - | mg/kg | 5 | ND |
| Tribromobiphenyl | - | mg/kg | 5 | ND |
| Tetrabromobiphenyl | - | mg/kg | 5 | ND |
| Pentabromobiphenyl | - | mg/kg | 5 | ND |
| Hexabromobiphenyl | - | mg/kg | 5 | ND |
| Heptabromobiphenyl | - | mg/kg | 5 | ND |
| Octabromobiphenyl | - | mg/kg | 5 | ND |
| Nonabromobiphenyl | - | mg/kg | 5 | ND |
| Decabromobiphenyl | - | mg/kg | 5 | ND |
| Sum of PBDEs | 1000 | mg/kg | - | ND |

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| Test Item(s) | Limit | Unit | MDL | *002* |
|---|---|---|---|---|
| Monobromodiphenyl ether | - | mg/kg | 5 | ND |
| Dibromodiphenyl ether | - | mg/kg | 5 | ND |
| Tribromodiphenyl ether | - | mg/kg | 5 | ND |
| Tetrabromodiphenyl ether | - | mg/kg | 5 | ND |
| Pentabromodiphenyl ether | - | mg/kg | 5 | ND |
| Hexabromodiphenyl ether | - | mg/kg | 5 | ND |
| Heptabromodiphenyl ether | - | mg/kg | 5 | ND |
| Octabromodiphenyl ether | - | mg/kg | 5 | ND |
| Nonabromodiphenyl ether | - | mg/kg | 5 | ND |
| Decabromodiphenyl ether | - | mg/kg | 5 | ND |
| Di-butyl Phthalate (DBP) | 1000 | mg/kg | 50 | ND |
| Benzyl Butyl Phthalate (BBP) | 1000 | mg/kg | 50 | ND |
| Di-2-Ethyl Hexyl Phthalate (DEHP) | 1000 | mg/kg | 50 | ND |
| Diisobutyl Phthalates (DIBP) | 1000 | mg/kg | 50 | ND |

Notes :

(1) The maximum permissible limit is quoted from RoHS Directive (EU) 2015/863.
(2) On 4 June 2015, Commission Directive (EU) 2015/863 was published in the Official Journal of the European Union (OJEU) to include the phthalates BBP, DBP, DEHP and DIBP into ANNEX II of the Rohs Recast Directive. The new law restricts each phthalate to no more than 0.1% in each homogeneous material of an electrical product.
(3) The restriction of DEHP, BBP, DBP and DIBP shall apply to medical devices, including in vitro medical devices, and monitoring and control instruments, including industrial monitoring and control instruments, from 22 July 2021.
(4) The restriction of DEHP, BBP, DBP and DIBP shall not apply to cables or spare parts for the repair, the reuse, the updating of functionalities or upgrading of capacity of EEE placed on the market before 22 July 2019, and of medical devices, including in vitro medical devices, and monitoring and control instruments, including industrial monitoring and control instruments, placed on the market before 22 July 2021.
(5) The restriction of DEHP, BBP and DBP shall not apply to toys which are already subject to the restriction of DEHP, BBP and DBP through entry 51 of Annex XVII to Regulation (EC) No 1907/2006.

## Hexabromocyclododecane (HBCDD)

Test Method : With reference to US EPA 3550C: 2007, analysis was performed by GC-MS.

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| Test Item(s) | CAS NO. | Unit | MDL | *002* |
|---|---|---|---|---|
| Hexabromocyclododecane (HBCDD) | 25637-99-4, 3194- 55-6 | mg/kg | 10 | ND |

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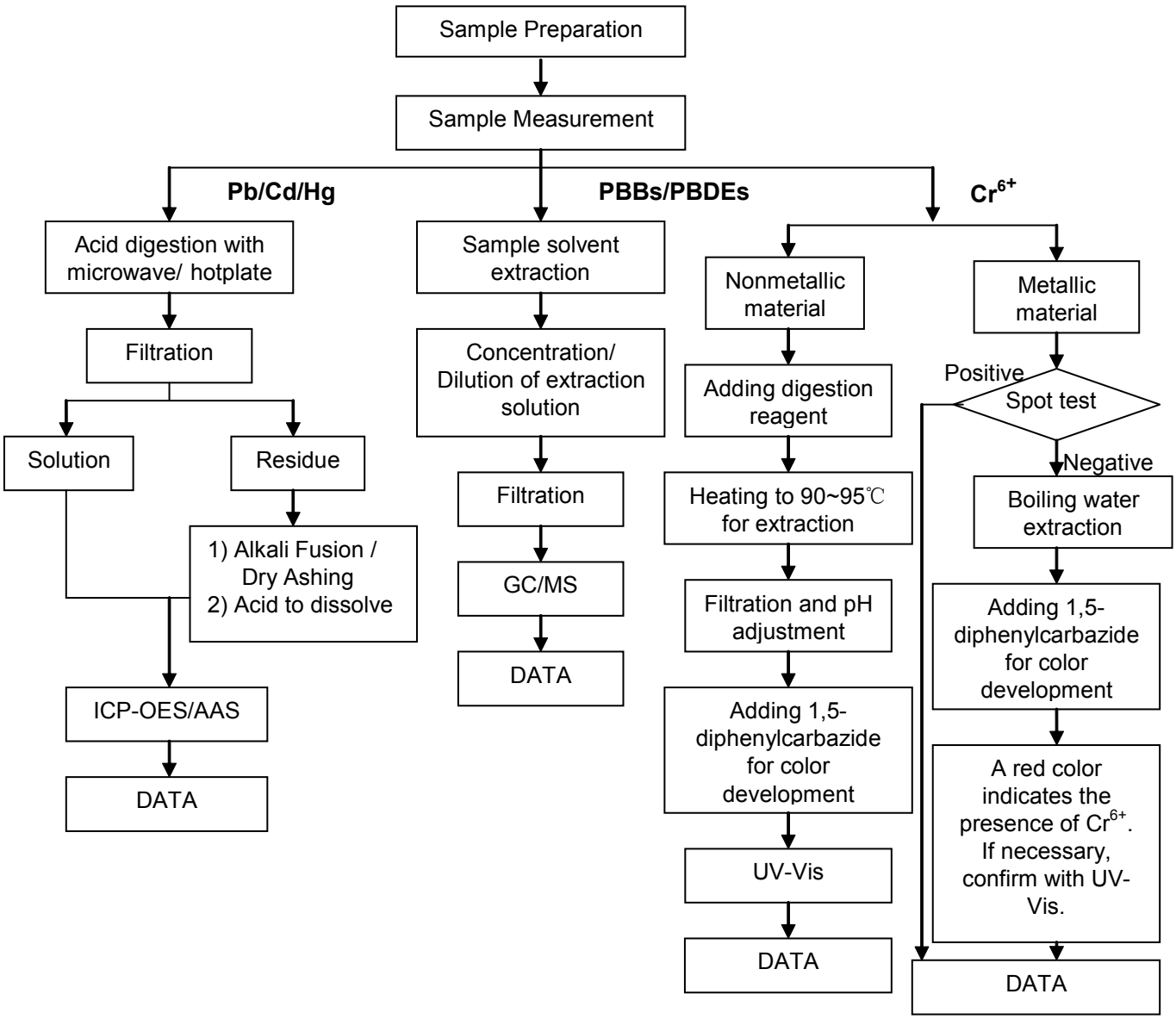
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### RoHS Testing Flow Chart

1) Name of the person who made testing: David Lee/Gary Xu/Shimin Zhang/Sunny Qin
2) Name of the person in charge of testing: Jan Shi/Luna Xu/Jessy Huang/Stone Chen
3) These samples were dissolved totally by pre-conditioning method according to below flow chart. ($Cr^{6+}$ and PBBs/PBDEs test method excluded)

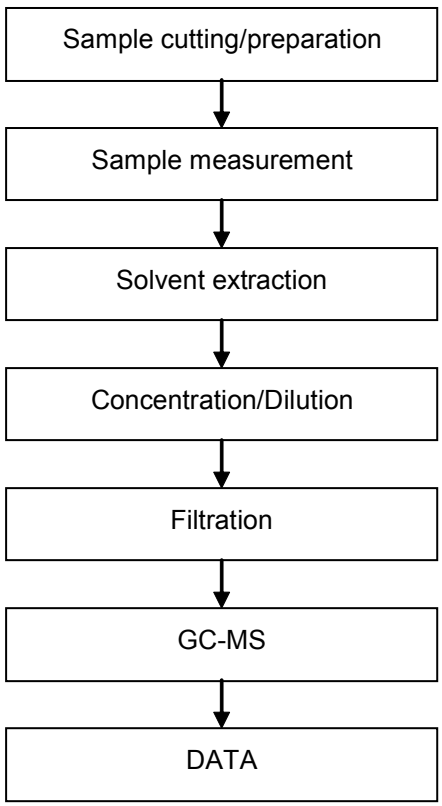



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### Phthalates Testing Flow Chart

1) Name of the person who made testing: Sherlock Gao
2) Name of the person in charge of testing: Jessy Huang

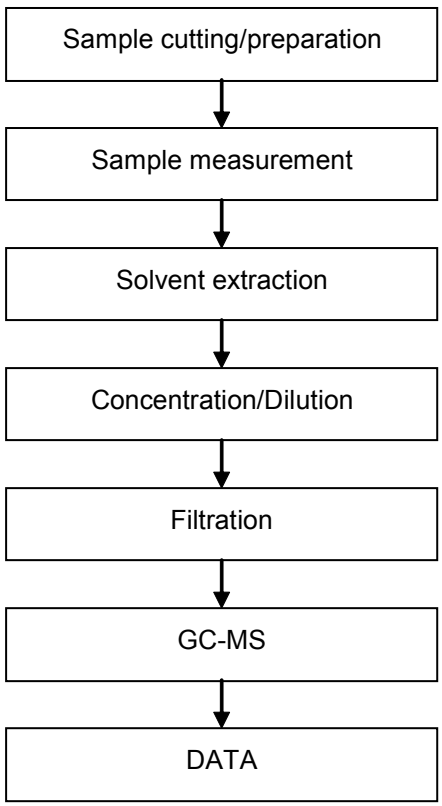



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### HBCDD Testing Flow Chart

1) Name of the person who made testing: Gary Xu
2) Name of the person in charge of testing: Jessy Huang




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