

## **Test Report**

No: 10367142(2)

Date: 21-May-2015

Kester Components Pte Ltd 500 Chai Chee Lane Singapore 469024

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

| Sample Description                      | : | 5768                                                       |
|-----------------------------------------|---|------------------------------------------------------------|
| Sample Receiving Date<br>Testing Period | : | 14-May-2015<br>14-May-2015 to 21-May-2015                  |
| Test Requested                          | : | In accordance with the RoHS Directive 2011/65/EU Annex II. |

| Test Result(s) | : | Please refer to next page(s).                                                                                                                                |  |
|----------------|---|--------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| Conclusion     | : | Based on the performed tests on submitted sample(s), the results <b>comply</b><br><b>with</b> the RoHS Directive 2011/65/EU Annex II ; recasting 2002/95/EC. |  |

Signed for and on behalf of SGS Testing & Control Services Singapore Pte Ltd

Y.C. Tham Laboratory Manager

Test Location: 3 Toh Tuck Link, #01-02, Singapore 596228

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Page 2 of 5

### Test Result(s):

Sample Description : 5768

| Test Item(s):              | Unit  | Method                                                                                       | Results | MDL | RoHS Limit |
|----------------------------|-------|----------------------------------------------------------------------------------------------|---------|-----|------------|
| Cadmium(Cd)                | mg/kg | With reference to IEC62321-5<br>:2013. Analysis was performed<br>by ICP/AES                  | n.d.    | 2   | 100        |
| Lead (Pb)                  | mg/kg | With reference to IEC62321-5<br>:2013. Analysis was performed<br>by ICP/AES                  | n.d.    | 2   | 1000       |
| Mercury (Hg)               | mg/kg | With reference to IEC62321-4<br>:2013. Analysis was performed<br>by ICP/AES                  | n.d.    | 2   | 1000       |
| Hexavalent Chromium (CrVI) | mg/kg | With reference to IEC62321,<br>Ed1:2008. Analysis was<br>performed by UV/Vis<br>Spectrometry | n.d.    | 2   | 1000       |
| Sum of PBBs                | mg/kg |                                                                                              | n.d.    | -   | 1000       |
| Monobromobiphenyl          | mg/kg | 1                                                                                            | n.d.    | 5   | -          |
| Dibromobiphenyl            | mg/kg | 1                                                                                            | n.d.    | 5   | -          |
| Tribromobiphenyl           | mg/kg | 1                                                                                            | n.d.    | 5   | -          |
| Tetrabromobiphenyl         | mg/kg | 1                                                                                            | n.d.    | 5   | -          |
| Pentabromobiphenyl         | mg/kg | 1                                                                                            | n.d.    | 5   | -          |
| Hexabromobiphenyl          | mg/kg | 1                                                                                            | n.d.    | 5   | -          |
| Heptabromobiphenyl         | mg/kg |                                                                                              | n.d.    | 5   | -          |
| Octabromobiphenyl          | mg/kg |                                                                                              | n.d.    | 5   | -          |
| Nonabromobiphenyl          | mg/kg | With reference to IEC62321,                                                                  | n.d.    | 5   | -          |
| Decabromobiphenyl          | mg/kg | Ed1:2008. Analysis was                                                                       | n.d.    | 5   | -          |
| Sum of PBDEs               | mg/kg | performed by GC/MS                                                                           | n.d.    | -   | 1000       |
| Monobromodiphenyl ether    | mg/kg | performed by GC/MS                                                                           | n.d.    | 5   | -          |
| Dibromodiphenyl ether      | mg/kg |                                                                                              | n.d.    | 5   | -          |
| Tribromodiphenyl ether     | mg/kg | ]                                                                                            | n.d.    | 5   | -          |
| Tetrabromodiphenyl ether   | mg/kg | ]                                                                                            | n.d.    | 5   | -          |
| Pentabromodiphenyl ether   | mg/kg | ]                                                                                            | n.d.    | 5   | -          |
| Hexabromodiphenyl ether    | mg/kg | ]                                                                                            | n.d.    | 5   | -          |
| Heptabromodiphenyl ether   | mg/kg | ]                                                                                            | n.d.    | 5   | -          |
| Octabromodiphenyl ether    | mg/kg | ]                                                                                            | n.d.    | 5   | -          |
| Nonabromodiphenyl ether    | mg/kg | ]                                                                                            | n.d.    | 5   | -          |
| Decabromodiphenyl ether    | mg/kg | 1                                                                                            | n.d.    | 5   | -          |

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No: 10367142(2)

Note:

- (1) mg/kg = ppm ; 0.1wt% = 1000ppm
  (2) n.d.= Not Detected
  (3) MDL = Method Detection Limit
  (4) "-" = Not regulated
  - (5) \* : Exceeds limit

Remarks: Sample received was totally dissolved by preconditioning method. Lab Analyst(s): Shaun, Pheng and ZH

Sample photo:

| Sample Description | : | 5768 |
|--------------------|---|------|
|--------------------|---|------|

SGS authenticate the photo on original report only



Test Location: 3 Toh Tuck Link, #01-02, Singapore 596228

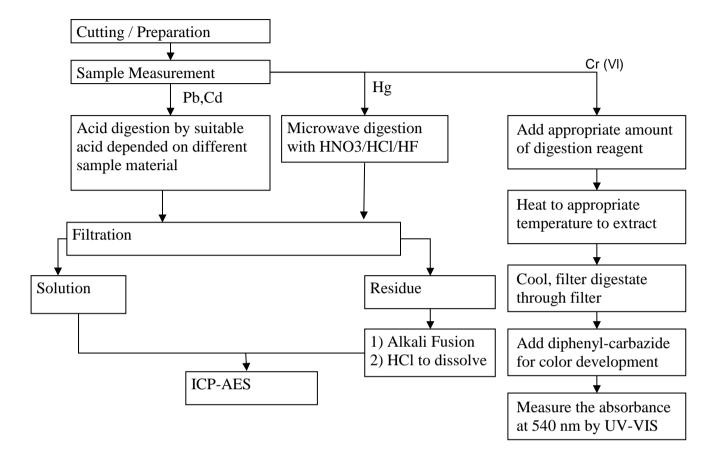
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### Process Flow of IEC 62321 (Pb, Cd, Hg & Cr<sup>6+</sup>)



Remarks: Sample received was totally dissolved by preconditioning method. (CrVI method excluded)

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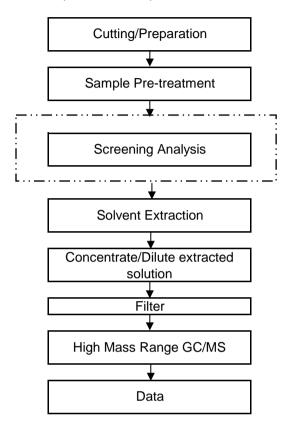
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#### Process Flow of PBBs and PBDEs by GC/MS (IEC 62321)



\*\*\*End of Report\*\*\*

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