

**Test Report** Page 1 of 5 No. TSNEC1401554101 Date: 15 Dec 2014

The following sample(s) was/were submitted and identified on behalf of the clients as: 1000

SGS Job No.: TP14-007101 - TJ

Client Ref. Info.: MIXED:120;120C;NC200;208;NC210;NC220;NC265;304;320;350;

400;440;456;460;495;498;NC500;NC510;NC510C;513;538;NC550;

580;586;710;710C;765N;800;850

10 Dec 2014 Date of Sample Received:

Testing Period: 10 Dec 2014 - 15 Dec 2014

Test Requested: Selected test(s) as requested by client.

Please refer to next page(s). Test Method:

Test Results: Please refer to next page(s).

Based on the performed tests on submitted sample(s), the results of Lead, Conclusion:

> Mercury, Cadmium, Hexavalent chromium, Polybrominated biphenyls (PBBs), Polybrominated diphenyl ethers (PBDEs) comply with the limits as set by RoHS

Directive 2011/65/EU Annex II; recasting 2002/95/EC.

Signed for and on behalf of SGS-CSTC Ltd.

Reabeca Zhou Approved Signatory



This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction mexercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company, Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN\_Doccheck@egs.com



**Test Report** No. TSNEC1401554101 Date: 15 Dec 2014 Page 2 of 5

Test Results:

## **Test Part Description:**

Specimen No. SGS Sample ID Description
SN1 TSN14-015541.001 gray black paste

### Remarks:

(1) 1 mg/kg = 0.0001%

(2) MDL = Method Detection Limit

(3) ND = Not Detected ( < MDL)

(4) "-" = Not Regulated

## RoHS 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 62321:2008, determination of PBBs and PBDEs by GC-MS.

| Test Item(s)                 | <u>Limit</u> | <u>Unit</u> | <u>MDL</u> | <u>001</u> |
|------------------------------|--------------|-------------|------------|------------|
| Cadmium (Cd)                 | 100          | mg/kg       | 2          | ND         |
| Lead (Pb)                    | 1000         | mg/kg       | 2          | ND         |
| 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         |
| Monobromodiphenyl ether      | -            | mg/kg       | 5          | ND         |



This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx. Attention is drawn to the limitation of liability indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN\_Doccheck@egs.com

SGS Mansion, No.41, The 5th Avenue TEDA, Tianjin, China 300457 t (86-22) 65288000 f (86-22) 25295252 中国 • 天津市经济技术开发区第五大街41号SGS大厦 邮编: 300457 t (86-22) 65288000 f (86-22) 25295252

www.sgsgroup.com.cn

e sgs.china@sgs.com



| Test Report              | No. TSNEC1401554101 |             | Date: 15 Dec 2014 |            | Page 3 of 5 |
|--------------------------|---------------------|-------------|-------------------|------------|-------------|
| Test Item(s)             | <u>Limit</u>        | <u>Unit</u> | <u>MDL</u>        | <u>001</u> |             |
| Dibromodiphenyl ether    | -                   | mg/kg       | 5                 | ND         | V           |
| Tribromodiphenyl ether   | -                   | mg/kg       | 5                 | ND         |             |
| Tetrabromodiphenyl ether | -                   | mg/kg       | 5                 | ND         | A .         |
| 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         |             |

#### Notes:

(1) The maximum permissible limit is quoted from directive 2011/65/EU, Annex II.

Result shown is of the total weight of dried sample



This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized atteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested .

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN\_Doccheck@egs.com



# **Test Report**

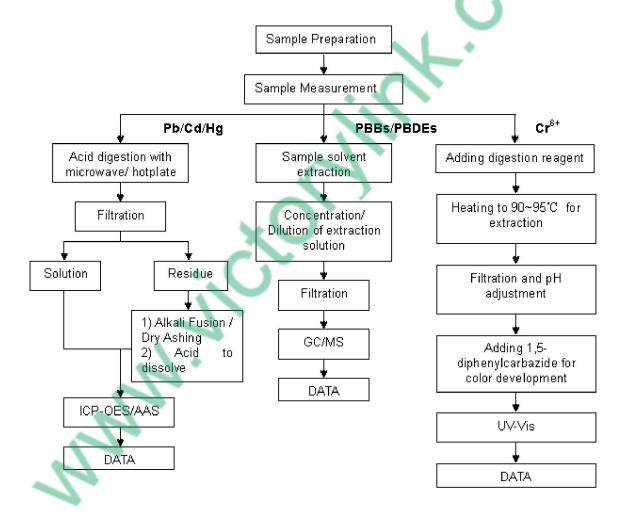
No. TSNEC1401554101

Date: 15 Dec 2014 Page 4 of 5

## **ATTACHMENTS**

# Cd/Pb/Hg/Cr<sup>8+</sup>/PBBs&PBDEs Flow Chart

- 1) Name of the person who made testing: Teresa Wei/Ivy Hou/Carry Yao
- 2) Name of the person in charge of testing: Aaron Wang/Angell Yao/Rex Zhu
- 3) These samples were dissolved totally by pre-conditioning method according to below flow chart. (Cr<sup>8+</sup> and PBBs/PBDEs test method excluded)





This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized atteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested .

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN\_Doccheck@egs.com



**Test Report** 

No. TSNEC1401554101

Date: 15 Dec 2014

Page 5 of 5

Sample photo:



SGS authenticate the photo on original report only

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



This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized atteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested .

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN\_Doccheck@egs.com