

DATE: 01/04/2017

Report No. : PN:EE:8560000701

\*8560000701\* TIBREWALA ELECTRONICS LTD. 6-56/2/40, BOMBAY, HIGHWAY,, BALANAGAR, HYDERABAD HYDERABAD-500037 INDIA

CONTACT PERSON : P RATNA RAJU

THE FOLLOWING SAMPLE(S) WAS/WERE SUBMITTED AND IDENTIFIED BY/ON BEHALF OF THE CUSTOMER AS: SAMPLE DESCRIPTION **PVC WIRE** COLOUR GREEN **PVC WIRE** STYLE NO. ARTICLE NO. EX4-2295 SUPPLIER: VI-SION WIRE **REFERENCE NO. TIBREWALA ELECTRONICS LTD** BUYFR NOT PROVIDED **BUYING HOUSE COUNTRY OF DESTINATION** INDIA **COUNTRY OF ORIGIN** INDIA SAMPLE RECD ON 24/03/2017 TESTING PERIOD : 29/03/2017 to 01/04/2017 **ROHS 6E TEST TEST(S) REQUESTED TEST METHOD** :IEC 62321 : 2008 / 2013 / 2015

**CONCLUSION :** Based on the performed tests on selected part of submitted samples, the results of Lead, Mercury, Cadmium, Hexavalent chromium, Polybrominated biphenyls (PBB), Polybrominated diphenyl ethers (PBDE), **comply** with the limits as set by Directive (EU) 2015/863 amending Annex II to Directive 2011/65/EU.

Test result:

#### RoHS Directive 2011/65/EU Annex II[amended by Directive (EU) 2015/863]

| Test Item(s):                   | Unit   | Test Method  | <u>Results</u> | <u>MDL</u> | <u>Limit</u> |
|---------------------------------|--------|--|----------------|------------|--------------|
| Cadmium(Cd)                     | mg/kg  | With reference to IEC 62321-5:2013<br>(Determination of Cd by ICP-OES)       | n.d.           | 5          | 100          |
| Lead (Pb)                       | mg/kg  | With reference to IEC 62321-5:2013<br>(Determination of Pb by ICP-OES)       | n.d.           | 5          | 1000         |
| Mercury (Hg)                    | mg/kg  | With reference to IEC 62321-4:2013<br>(Determination of Hg by ICP-OES)       | n.d.           | 5          | 1000         |
| Hexavalent Chromium<br>(CrVI) # | µg/cm² | With reference to<br>IEC 62321-7-1:2015<br>(Determination of CrVI by UV-VIS) |                | 0.1        |              |
| Hexavalent Chromium<br>(CrVI)   | mg/kg  | With reference to<br>IEC 62321:2008<br>(Determination of CrVI by UV-VIS)     | n.d.           | 2          | 1000         |

#### JOE No. : 1756800091

Page -1 of 7

Control No.:8565000679

"This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="http://www.sgsgroup.in/Service-Terms">http://www.sgsgroup.in/Service-Terms</a> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents a <a href="http://www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. 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 from 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 and such sample(s) are retained for 15 days (in case of perishable items) and 30 days for all other samples from the date of issue of report. The samples from the regulatory bodies are to be retained as specified. This document cannot be reproduced, except in full, without prior written approval of the company.

 Testing Laboratory–Transportation, Consumer and Retail, Gat No. : 624/2, Kuruli, Chakan, Taluka – Khed, Pune-410501, Maharashtra, India, Phone: +91 2135 615300, Fax: +91 2135 615333

 SGS India Pvt. Ltd
 Regd. & Corp. Off: SGS House, 4B, A.S. Marg, Vikhroli (West), Mumbai-400083. t: (022) 25798421 to 28 f: (022) 25798431 to 25798431 to 25798435
 www.sgs.com



#### DATE: 01/04/2017

Report No. : PN:EE:8560000701

| *85                         | 6000070 | )1*  |                |      |              |
|-----------------------------|---------|--|----------------|------|--------------|
| Test Item(s):               | Unit    | Test Method  | <u>Results</u> | MDL  | <u>Limit</u> |
| Sum of PBBs                 | mg/kg   | With reference to IEC 62321-6:2015<br>(Determination of PBB by GC-MS)  | n.d.           | n.d. | 1000         |
| Monobromobiphenyl           | mg/kg   | With reference to IEC 62321-6:2015<br>(Determination of PBB by GC-MS)  | n.d.           | 50   | -            |
| Dibromobiphenyl             | mg/kg   | With reference to IEC 62321-6:2015<br>(Determination of PBB by GC-MS)  | n.d.           | 50   | -            |
| Tribromobiphenyl            | mg/kg   | With reference to IEC 62321-6:2015<br>(Determination of PBB by GC-MS)  | n.d.           | 50   | -            |
| Tetrabromobiphenyl          | mg/kg   | With reference to IEC 62321-6:2015<br>(Determination of PBB by GC-MS)  | n.d.           | 50   | -            |
| Hexabromobiphenyl           | mg/kg   | With reference to IEC 62321-6:2015<br>(Determination of PBB by GC-MS)  | n.d.           | 50   | -            |
| Pentabromobiphenyl          | mg/kg   | With reference to IEC 62321-6:2015<br>(Determination of PBB by GC-MS)  | n.d.           | 50   | -            |
| Heptabromobiphenyl          | mg/kg   | With reference to IEC 62321-6:2015<br>(Determination of PBB by GC-MS)  | n.d.           | 50   | -            |
| Octabromobiphenyl           | mg/kg   | With reference to IEC 62321-6:2015<br>(Determination of PBB by GC-MS)  | n.d.           | 50   | -            |
| Nonabromobiphenyl           | mg/kg   | With reference to IEC 62321-6:2015<br>(Determination of PBB by GC-MS)  | n.d.           | 50   | -            |
| Decabromobiphenyl           | mg/kg   | With reference to IEC 62321-6:2015<br>(Determination of PBB by GC-MS)  | n.d.           | 50   | -            |
| Sum of PBDEs                | mg/kg   | With reference to IEC 62321-6:2015<br>(Determination of PBDE by GC-MS) | n.d.           | -    | 1000         |
| Monobromodiphenyl<br>ether  | mg/kg   | With reference to IEC 62321-6:2015<br>(Determination of PBDE by GC-MS) | n.d.           | 50   | -            |
| Dibromodiphenyl ether       | mg/kg   | With reference to IEC 62321-6:2015<br>(Determination of PBDE by GC-MS) | n.d.           | 50   | -            |
| Tribromodiphenyl ether      | mg/kg   | With reference to IEC 62321-6:2015<br>(Determination of PBDE by GC-MS) | n.d.           | 50   | -            |
| Tetrabromodiphenyl<br>ether | mg/kg   | With reference to IEC 62321-6:2015<br>(Determination of PBDE by GC-MS) | n.d.           | 50   | -            |
| Pentabromodiphenyl<br>ether | mg/kg   | With reference to IEC 62321-6:2015<br>(Determination of PBDE by GC-MS) | n.d.           | 50   | -            |
| Hexabromodiphenyl<br>ether  | mg/kg   | With reference to IEC 62321-6:2015<br>(Determination of PBDE by GC-MS) | n.d.           | 50   | -            |
| Heptabromodiphenyl<br>ether | mg/kg   | With reference to IEC 62321-6:2015<br>(Determination of PBDE by GC-MS) | n.d.           | 50   | -            |
| Octabromodiphenyl<br>ether  | mg/kg   | With reference to IEC 62321-6:2015<br>(Determination of PBDE by GC-MS) | n.d.           | 50   | -            |
| Nonabromodiphenyl<br>ether  | mg/kg   | With reference to IEC 62321-6:2015<br>(Determination of PBDE by GC-MS) | n.d.           | 50   | -            |
| Decabromodiphenyl           | mg/kg   | With reference to IEC 62321-6:2015                                     | n.d.           | 50   | -            |

#### JOE No. : 1756800091

#### Page -2 of 7

Control No.:8565000679

"This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at

http://www.sgsgroup.in/Service-Terms and, for electronic format documents, subject to Terms and Conditions for Electronic Documents a www.sgs.com/terms e-document.htm. 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 from 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 and such sample(s) are retained for 15 days (in case of perishable items) and 30 days for all other samples from the date of issue of report. The samples from the regulatory bodies are to be retained as specified. This document cannot be reproduced, except in full, without prior written approval of the company.

 SGS India Pvt. Ltd
 Testing Laboratory–Transportation, Consumer and Retail, Gat No. : 624/2, Kuruli, Chakan, Taluka – Khed, Pune-410501, Maharashtra, India, Phone: +91 2135 615330, Fax: +91 2135 615333

 SGS India Pvt. Ltd
 Regd. & Corp. Off: SGS House, 4B, A.S. Marg, Vikhroli (West), Mumbai-400083. t: (022) 25798421 to 28 f: (022) 25798431 to 25798431 to 25798435
 www.sgs.com



## DATE: 01/04/2017

## Report No. : PN:EE:8560000701

| Test Item(s): | Unit | Test Method                      | <u>Results</u> | <u>MDL</u> | <u>Limit</u> |  |
|---------------|------|----------------------------------|----------------|------------|--------------|--|
| ether         |      | (Determination of PBDE by GC-MS) |                |            |              |  |

Note :

(a) mg/kg = ppm ; 0.1wt% = 1000ppm

(b) n.d.= not detected

- (c) MDL = Method Detection Limit
- (d) = not regulated
- (e) IEC 62321 series is equivalent to EN 62321 series
- (f) Test has been performed on composite part as per client's request
- (g) # = a. The sample is positive for CrVI if the CrVI concentration is greater than 0.13  $\mu$ g/cm<sup>2</sup>. The sample coating is considered to contain CrVI

b. The sample is negative for CrVI if CrVI is n.d. (concentration less than 0.10  $\mu$ g/cm<sup>2</sup>). The coating is considered a non-CrVI based coating

c. The result between  $0.10 \ \mu g/cm^2$  and  $0.13 \ \mu g/cm^2$  is considered to be inconclusive - unavoidable coating variations may influence the determination

For corrosion protection coatings on metals: Information on storage conditions and production date of the tested sample is unavailable and thus results of Cr(VI) represent status of the sample at the time of testing represent status of the sample at the time of testing.

http://www.cenelec.eu/dyn/www/f?p=104:30:1742232870351101::::FSP\_ORG\_ID,FSP\_LANG\_ID:1258637,25

JOE No. : 1756800091

Page -3 of 7

Control No.:8565000679

"This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="http://www.sgsgroup.in/Service-Terms">http://www.sgsgroup.in/Service-Terms</a> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents a <a href="http://www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. 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 from 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 and such sample(s) are retained for 15 days (in case of perishable items) and 30 days for all other samples from the date of issue of report. The samples from the regulatory bodies are to be retained as specified. This document cannot be reproduced, except in full, without prior written approval of the company.

Testing Laboratory-Transportation, Consumer and Retail, Gat No.: 624/2, Kuruli, Chakan, Taluka - Khed, Pune-410501, Maharashtra, India, Phone: +91 2135 615300,

Fax: +91 2135 615333 SGS India Pvt. Ltd Regd. & Corp. Off: SGS House, 4B, A.S. Marg, Vikhroli (West), Mumbai-400083. t: (022) 25798421 to 28 f: (022) 25798431 to 25798435 www.sgs.com

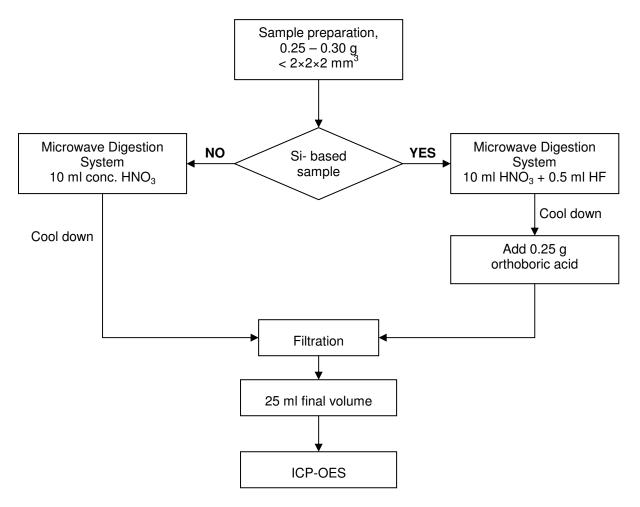


DATE: 01/04/2017

## Report No. : PN:EE:8560000701

\*8560000701\*

#### Process Flow for analysis of metal contents in plastics, metals and electronic components sample



Analyzed By: Deepali Binawade

Checked By: Amit Kulkarni

JOE No. : 1756800091

Page -4 of 7

Control No.:8565000679

"This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="http://www.sgsgroup.in/Service-Terms">http://www.sgsgroup.in/Service-Terms</a> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents a <a href="http://www.sgs.com/terms\_e-document.htm">www.sgs.com/terms\_e-document.htm</a>. 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 from 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 and such sample(s) are retained for 15 days (in case of perishable items) and 30 days for all other samples from the date of issue of report. The samples from the regulatory bodies are to be retained as specified. This document cannot be reproduced, except in full, without prior written approval of the company.

 SGS India Pvt. Ltd
 Testing Laboratory–Transportation, Consumer and Retail, Gat No. : 624/2, Kuruli, Chakan, Taluka – Khed, Pune-410501, Maharashtra, India, Phone: +91 2135 615330,

 Fax: +91 2135 615333
 Regd. & Corp. Off: SGS House, 4B, A.S. Marg, Vikhroli (West), Mumbai-400083. t: (022) 25798421 to 28 f: (022) 25798431 to 25798435
 www.sgs.com

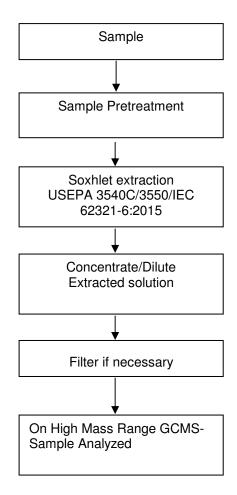


Report No. : PN:EE:8560000701

\*8560000701\*

DATE: 01/04/2017

## Process Flow for analysis of Flame Retardants in plastics, metals and electronic components sample



Analyzed By : Sachin Vibhute

Checked By : Amit Kulkarni

JOE No. : 1756800091

Page -5 of 7

Control No.:8565000679

"This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="http://www.sgsgoroup.in/Service-Terms">http://www.sgsgoroup.in/Service-Terms</a> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents a <a href="http://www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. 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 from 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 and such sample(s) are retained for 15 days (in case of perishable items) and 30 days for all other samples from the date of issue of report. The samples from the regulatory bodies are to be retained as specified. This document cannot be reproduced, except in full, without prior written approval of the company.

Testing Laboratory–Transportation, Consumer and Retail, Gat No. : 624/2, Kuruli, Chakan, Taluka – Khed, Pune-410501, Maharashtra, India, Phone: +91 2135 615300, Fax: +91 2135 615333 SGS India Pvt. Ltd Regd. & Corp. Off: SGS House, 4B, A.S. Marg, Vikhroli (West), Mumbai-400083. t: (022) 25798421 to 28 f: (022) 25798431 to 25798435 www.sgs.com

Member of the SGS Group (SGS SA)



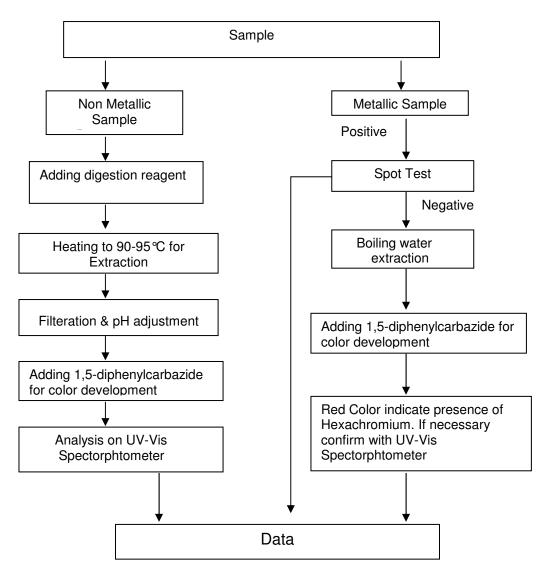
## DATE: 01/04/2017

## Report No. : PN:EE:8560000701

\*8560000701\*

## Process Flow for analysis of Hexachromium contents in plastics, metals and electronic components

<u>sample</u>



#### Analyzed By: Sachin Vibhute

Checked By: Amit Kulkarni

JOE No. : 1756800091

#### Page -6 of 7

Control No.:8565000679

"This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="http://www.sgsgroup.in/Service-Terms">http://www.sgsgroup.in/Service-Terms</a> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents a <a href="http://www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. 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 from 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 and such sample(s) are retained for 15 days (in case of perishable items) and 30 days for all other samples from the date of issue of report. The samples from the regulatory bodies are to be retained as specified. This document cannot be reproduced, except in full, without prior written approval of the company.

Testing Laboratory-Transportation, Consumer and Retail, Gat No. : 624/2, Kuruli, Chakan, Taluka - Khed, Pune-410501, Maharashtra, India, Phone: +91 2135 615300,

|                    | Fax: +91 2135 615333   |             |
|--------------------|--|-------------|
| SGS India Pvt. Ltd | Regd. & Corp. Off: SGS House, 4B, A.S. Marg, Vikhroli (West), Mumbai-400083. t: (022) 25798421 to 28 f: (022) 25798431 to 25798435 | www.sgs.com |



## DATE: 01/04/2017

## Report No. : PN:EE:8560000701

## \*8560000701\*

Sample Photo:



SGS authenticate the photo on original report only

Per Pro SGS India Private Ltd

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

AMIT M. KULKARNI MANAGER-CHEMICAL Authorized Signatory Email your Test Report Related Enquiries at Feedback.HLT@sgs.com

JOE No. : 1756800091

Page -7 of 7

Control No.:8565000679

"This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="http://www.sgsgroup.in/Service-Terms">http://www.sgsgroup.in/Service-Terms</a> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents a <a href="www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm. 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 from 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 and such sample(s) are retained for 15 days (in case of perishable items) and 30 days for all other samples from the date of issue of report. The samples from the regulatory bodies are to be retained as specified. This document cannot be reproduced, except in full, without prior written approval of the company.

Testing Laboratory-Transportation, Consumer and Retail, Gat No.: 624/2, Kuruli, Chakan, Taluka - Khed, Pune-410501, Maharashtra, India, Phone: +91 2135 615300,

 Fax:
 +91
 2135
 615333

 SGS India Pvt. Ltd
 Regd. & Corp. Off: SGS House, 4B, A.S. Marg, Vikhroli (West), Mumbai-400083. t: (022)
 25798421 to 28 f: (022)
 25798431 to 25798435
 www.sgs.com