

## Test Report

No.: CANEC25000502704

Date: Jan 13, 2025

Page 1 of 8

Client Name: FOSHAN BLUE ROCKET ELECTRONICS CO.,LTD.

Client Address: NO.45 GUXIN ROAD, CHANCHENG DISTRICT, FOSHAN, GUANGDONG, P.R.C CHINA

Sample Name: TS-2 Semiconductor Device

Model No.: TS-2

The above sample(s) and information were provided by the client.

SGS Job No.: GZP25-000433

Sample Receiving Date: Jan 07, 2025

Testing Period: Jan 07, 2025 ~ Jan 13, 2025

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

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

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

| Test Requirement  | Conclusion |
|---|------------|
| EU RoHS Directive (EU) 2015/863 amending Annex II to Directive 2011/65/EU - Lead, Mercury, Cadmium, Hexavalent chromium, Polybrominated biphenyls (PBB), Polybrominated diphenyl ethers (PBDE), Bis(2-ethylhexyl) phthalate (DEHP), Butyl benzyl phthalate (BBP), Dibutyl phthalate (DBP) and Diisobutyl phthalate (DIBP) | Pass       |
| EU RoHS Directive (EU) 2015/863 amending Annex II to Directive 2011/65/EU- Lead, Mercury, Cadmium and Hexavalent chromium   | Pass       |

Signed for and on behalf of  
SGS-CSTC Standards Technical Services Co., Ltd. Guangzhou Branch

**Arsene Ye**

Arsene Ye  
Approved Signatory

scan to see the report



34D442EC



SGS-CSTC Standards Technical Services Co., Ltd.  
Guangzhou Branch

Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. 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.  
**Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com**

No.198, Kezhu Road, Science City, Economic & Technological Development Area, Guangzhou, Guangdong, China 510663  
中国·广东·广州高新技术产业开发区科学城科珠路198号 邮编: 510663

t (86-20) 82155555 www.sgsgroup.com.cn  
t (86-20) 82155555 sgs.china@sgs.com

**Test Result(s):**

**Test Part Description:**

| SN ID | Sample No. | SGS Sample ID           | Description       |
|-------|------------|-------------------------|-------------------|
| SN1   | A1         | CAN25-0005027-0001.C001 | Black body        |
| SN2   | A2         | CAN25-0005027-0001.C002 | Black body        |
| SN3   | A3         | CAN25-0005027-0001.C003 | Silvery metal pin |

**Remarks:**

- (1) 1 mg/kg = 1 ppm = 0.0001%
- (2) MDL = Method Detection Limit
- (3) ND = Not Detected (< MDL)
- (4) "-" = Not Regulated

**EU RoHS Directive (EU) 2015/863 amending Annex II to Directive 2011/65/EU - Lead, Mercury, Cadmium, Hexavalent chromium, Polybrominated biphenyls (PBB), Polybrominated diphenyl ethers (PBDE), Bis(2-ethylhexyl) phthalate (DEHP), Butyl benzyl phthalate (BBP), Dibutyl phthalate (DBP) and Diisobutyl phthalate (DIBP)**

**Test Method:** With reference to IEC 62321-4:2013+AMD1:2017, IEC 62321-5:2013, IEC 62321-7-2:2017 and IEC 62321-12:2023, analysis was performed by ICP-OES/AAS, UV-Vis and GC-MS.

| Test Item(s)                              | Limit | Unit(s) | MDL | A1 | A2 |
|---|-------|---------|-----|----|----|
| Lead (Pb)                                 | 1000  | mg/kg   | 2   | ND | ND |
| Mercury (Hg)                              | 1000  | mg/kg   | 2   | ND | ND |
| Cadmium (Cd)                              | 100   | mg/kg   | 2   | ND | ND |
| Hexavalent Chromium (Cr(VI))              | 1000  | mg/kg   | 8   | ND | ND |
| Polybrominated biphenyls (PBB)            | 1000  | mg/kg   | -   | ND | ND |
| Monobrominated biphenyl (MonoBB)          | -     | mg/kg   | 25  | ND | ND |
| Dibrominated biphenyl (DiBB)              | -     | mg/kg   | 25  | ND | ND |
| Tribrominated biphenyl (TriBB)            | -     | mg/kg   | 25  | ND | ND |
| Tetrabrominated biphenyl (TetraBB)        | -     | mg/kg   | 25  | ND | ND |
| Pentabrominated biphenyl (PentaBB)        | -     | mg/kg   | 25  | ND | ND |
| Hexabrominated biphenyl (HexaBB)          | -     | mg/kg   | 25  | ND | ND |
| Heptabrominated biphenyl (HeptaBB)        | -     | mg/kg   | 25  | ND | ND |
| Octabrominated biphenyl (OctaBB)          | -     | mg/kg   | 25  | ND | ND |
| Nonabrominated biphenyl (NonaBB)          | -     | mg/kg   | 25  | ND | ND |
| Decabrominated biphenyl (DecaBB)          | -     | mg/kg   | 25  | ND | ND |
| Polybrominated diphenyl ethers (PBDE)     | 1000  | mg/kg   | -   | ND | ND |
| Monobrominated diphenyl ether (MonoBDE)   | -     | mg/kg   | 25  | ND | ND |
| Dibrominated diphenyl ether (DiBDE)       | -     | mg/kg   | 25  | ND | ND |
| Tribrominated diphenyl ether (TriBDE)     | -     | mg/kg   | 25  | ND | ND |
| Tetrabrominated diphenyl ether (TetraBDE) | -     | mg/kg   | 25  | ND | ND |
| Pentabrominated diphenyl ether (PentaBDE) | -     | mg/kg   | 25  | ND | ND |
| Hexabrominated diphenyl ether (HexaBDE)   | -     | mg/kg   | 25  | ND | ND |



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. 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.  
**Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com**

# Test Report

No.: CANEC25000502704

Date: Jan 13, 2025

Page 3 of 8

| Test Item(s)                              | Limit | Unit(s) | MDL | A1 | A2 |
|---|-------|---------|-----|----|----|
| Heptabrominated diphenyl ether (HeptaBDE) | -     | mg/kg   | 25  | ND | ND |
| Octabrominated diphenyl ether (OctaBDE)   | -     | mg/kg   | 25  | ND | ND |
| Nonabrominated diphenyl ether (NonaBDE)   | -     | mg/kg   | 25  | ND | ND |
| Decabrominated diphenyl ether (DecaBDE)   | -     | mg/kg   | 25  | ND | ND |
| Di-2-Ethyl Hexyl Phthalate (DEHP)         | 1000  | mg/kg   | 50  | ND | ND |
| Benzyl Butyl Phthalate (BBP)              | 1000  | mg/kg   | 50  | ND | ND |
| Dibutyl Phthalate (DBP)                   | 1000  | mg/kg   | 50  | ND | ND |
| Diisobutyl Phthalate (DIBP)               | 1000  | mg/kg   | 50  | ND | ND |

**Notes:**

- (1) The maximum permissible limit is quoted from RoHS Directive (EU) 2015/863.
- (2) IEC 62321 series is equivalent to EN 62321 series.
- (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.

**EU RoHS Directive (EU) 2015/863 amending Annex II to Directive 2011/65/EU- Lead, Mercury, Cadmium and Hexavalent chromium**

**Test Method:** With reference to IEC 62321-4:2013+AMD1:2017, IEC 62321-5:2013 and IEC 62321-7-1:2015, analysis was performed by ICP-OES/AAS and UV-Vis.

| Test Item(s)                              | Limit | Unit(s)            | MDL  | A3 |
|---|-------|--------------------|------|----|
| Lead (Pb)                                 | 1000  | mg/kg              | 2    | ND |
| Mercury (Hg)                              | 1000  | mg/kg              | 2    | ND |
| Cadmium (Cd)                              | 100   | mg/kg              | 2    | ND |
| Hexavalent Chromium (Cr(VI)) <sup>▼</sup> | -     | µg/cm <sup>2</sup> | 0.10 | ND |

**Notes:**

- (1) The maximum permissible limit is quoted from RoHS Directive (EU) 2015/863.
- (2) IEC 62321 series is equivalent to EN 62321 series.
- (3) <sup>▼</sup> =
  - a. The sample is positive for Cr(VI) if the Cr(VI) concentration is greater than 0.13 µg/cm<sup>2</sup>. The sample coating is considered to contain Cr(VI).
  - b. The sample is negative for Cr(VI) if Cr(VI) is ND (concentration less than 0.10 µg/cm<sup>2</sup>). The coating is considered a non-Cr(VI) based coating.
  - c. The result between 0.10 µg/cm<sup>2</sup> and 0.13 µg/cm<sup>2</sup> is considered to be inconclusive-unavoidable coating variations may influence the determination.

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

Remark: Results & photo(s) of this report refer to test report CANEC25000502701. Unless otherwise stated, the decision rule for conformity reporting is based on Binary Statement for Simple Acceptance Rule (w=0) stated in ILAC-G8:09/2019.



SGS-CSTC Standards Technical Services Co., Ltd.  
Guangzhou Branch, Technical Laboratory

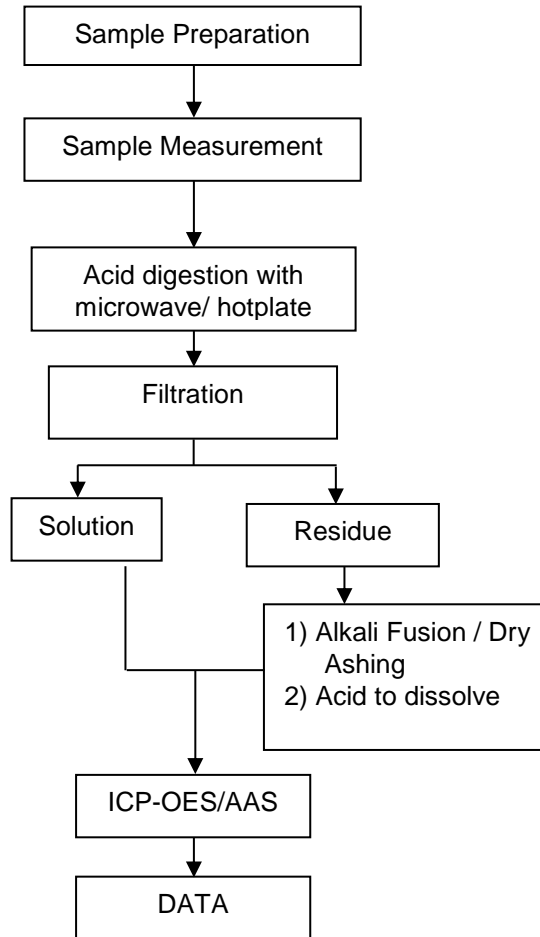
Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction 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.  
**Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com**

No.198, Kezhu Road, Science City, Economic & Technological Development Area, Guangzhou, Guangdong, China 510663  
中国·广东·广州高新技术产业开发区科学城科珠路198号 邮编: 510663

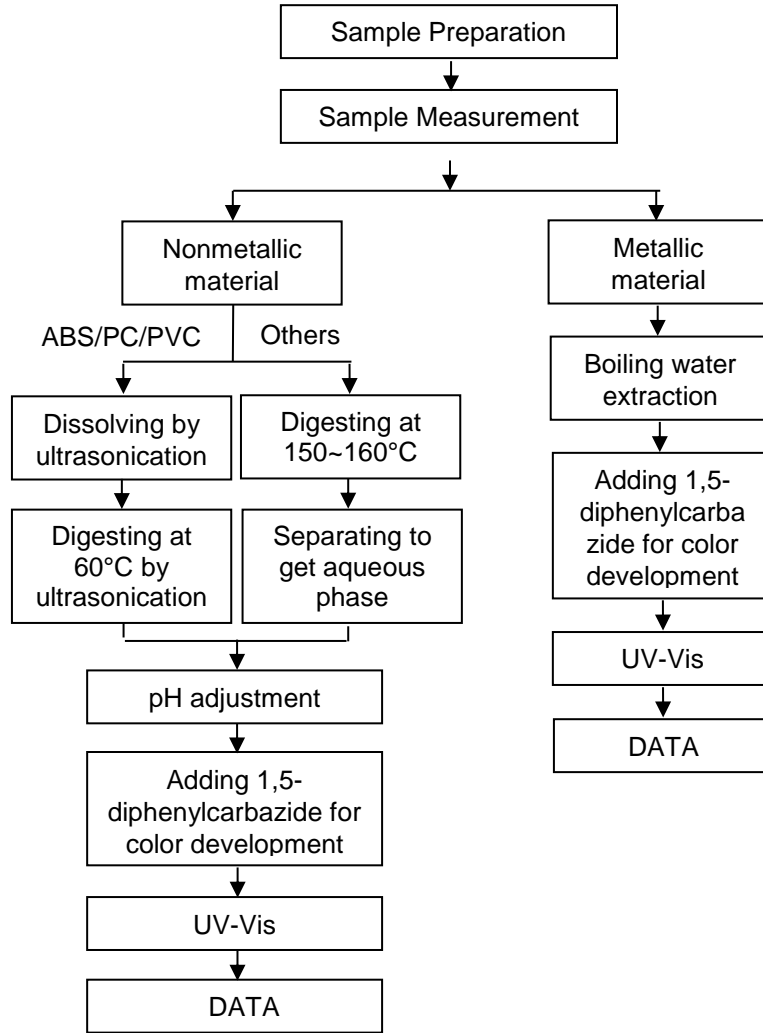
t (86-20) 82155555 www.sgsgroup.com.cn  
t (86-20) 82155555 sgs.china@sgs.com

**Elements Testing Flow Chart**

These samples were dissolved totally by pre-conditioning method according to below flow chart.



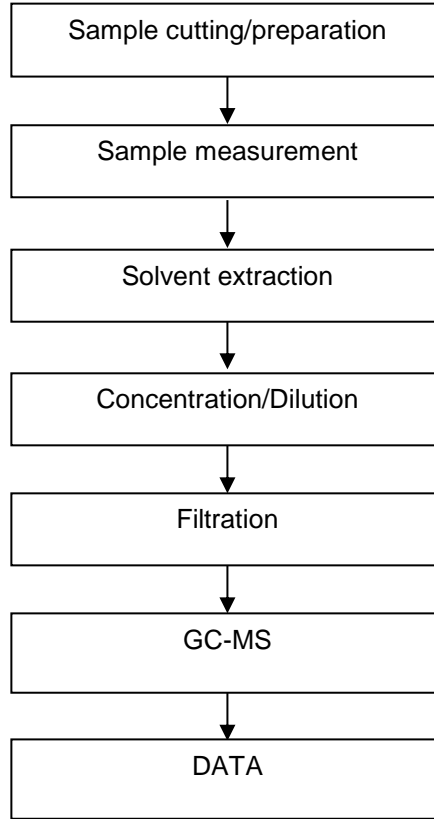
**Hexavalent Chromium (Cr(VI)) Testing Flow Chart**



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. 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.  
**Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com**



**PBB/PBDE/Phthalates Testing Flow Chart**



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. 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.  
**Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com**

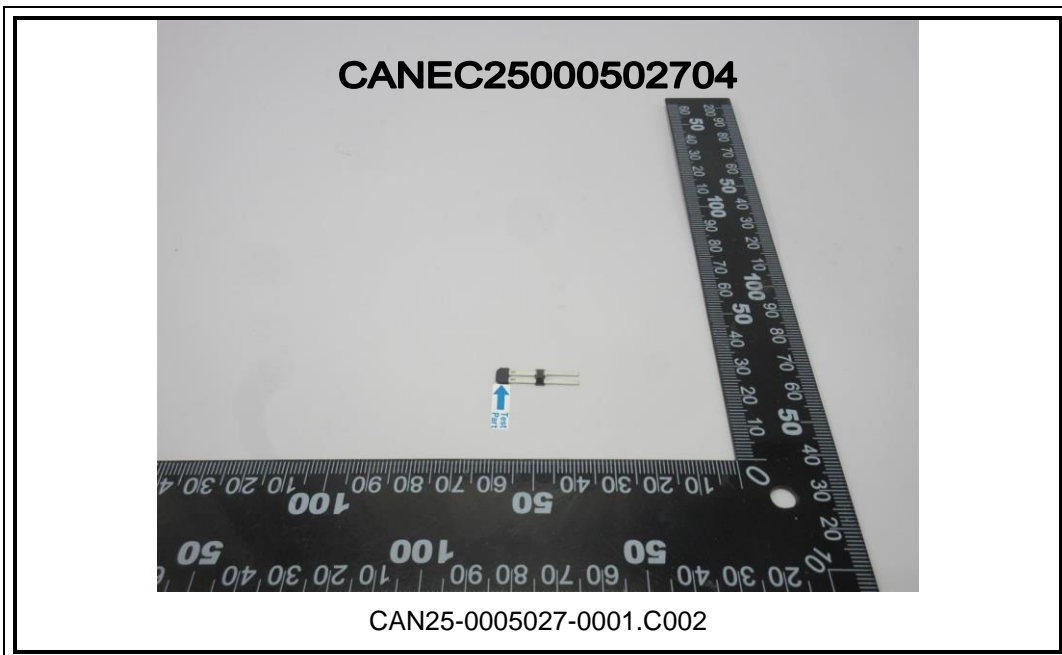
## Test Report

No.: CANEC25000502704

Date: Jan 13, 2025

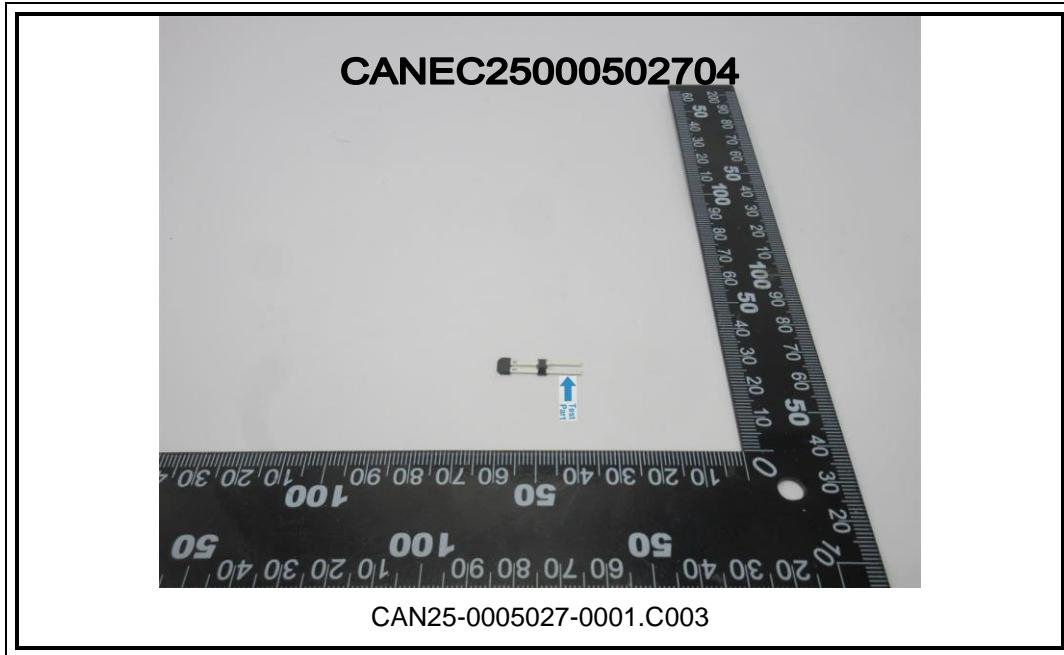
Page 7 of 8

### Sample Photo:



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained herein 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.

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



SGS authenticate the photo on original report only

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

