

Test Report No. NGBEC1905414713 Date: 08 Nov 2019 Page 1 of 5

NINGBO DEGSON ELECTRICAL CO., LTD NO.1585 XIAOLIN ROAD XIAOLIN TOWN CIXI NINGBO CHINA

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

SGS Job No.: NP19-004516 - NB

Date of Sample Received: 25 Oct 2019

Testing Period: 25 Oct 2019 - 08 Nov 2019

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 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 Co., Ltd. Ningbo Branch

Iris Xiao

Approved Signatory



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 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 is usues 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) 83071443 or email: CN.Doccheck@sgs.com

1.5F West of Building 4, Lingxun Industry Park, No.1177 Lingxun Road, Ningbo, Niadonal H-Tech Zone, Ningbo, Ziefarra, China 315.040 t E.S.E (86–574)89070249 中国・新江・宁波市国家資新区凌云盛1177号凌云产业図4号楼西1-5层 邮第:315.040 t H.L (86–574)89070271

邮编: 315040 tHL (86-574)89070271 tML (86-574)89070242 e sgs.china@sgs.com

www.sasgroup.com.cn



Test Report No. NGBEC1905414713 Date: 08 Nov 2019 Page 2 of 5

Test Results:

Test Part Description:

Specimen No. SGS Sample ID Description NGB19-054147.013 SN₁ Silver metal

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: With reference to IEC 62321-4:2013+A1:2017, IEC62321-5:2013 and IEC 62321-7-1:2015, analyzed by ICP-OES and UV-Vis.

Test Item(s)	<u>Limit</u>	<u>Unit</u>	<u>MDL</u>	<u>013</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))▼	-	µg/cm²	0.10	ND

Notes:

- (1) The maximum permissible limit is quoted from RoHS Directive (EU) 2015/863. IEC 62321 series is equivalent to EN 62321 series https://www.cenelec.eu/dyn/www/f?p=104:30:1742232870351101::::FSP_ORG_ID,FSP_LANG_ID:
- (2) ▼ = a. The sample is positive for Cr(VI) if the Cr(VI) concentration is greater than 0.13 μg/cm². 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/cm²). The coating is considered a non-Cr(VI) based coating
- c. The result between 0.10 µg/cm² and 0.13 µg/cm² 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.



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

ion report & certificate, please contact us at telephone: (86-755) 8307 1443. 1-5F West of Building 4, Linguum Industry Park, No. 1177 Linguum Road, Mingto Nadional H-Tech Zone, Mingto, Zinejiang, China 315040 t E&E (86-574)89070249

中国・浙江・宁波市国家高新区凌云路1177号凌云产业园4号楼西1-5层

邮编: 315040 tHL (86-574)89070271 tML (86-574)89070242 e sgs.china@sgs.com

www.sgsgroup.com.cn



Test Report

No. NGBEC1905414713

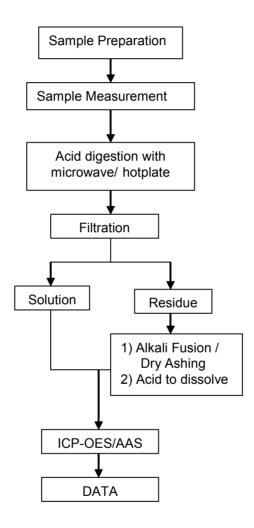
Page 3 of 5

Date: 08 Nov 2019

ATTACHMENTS

Pb / Cd / Hg Testing Flow Chart

1) These samples were dissolved totally by pre-conditioning method according to below 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 http://www.sgs.com/en/Terms-and-Conditions/Terms-e-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 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.

To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443.

1-5F West of Building 4, Lingum Industry Park, No. 1177 Lingum Road, Mingbo National H-Tech Zone, Ningbo, Zhejiang, China 315040 t E&E (86–574)89070249 中国・浙江・宁波市国家高新区凌云路1177号凌云产业园4号楼西1-5层

邮编: 315040 tHL (86-574)89070271 tML (86-574)89070242 e sgs.china@sgs.com

www.sgsgroup.com.cn



Test Report

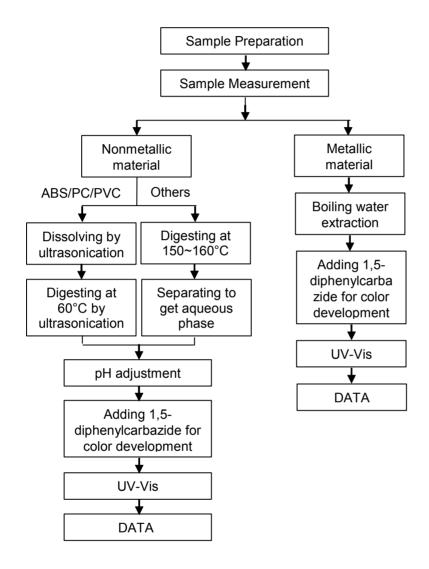
No. NGBEC1905414713

Page 4 of 5

Date: 08 Nov 2019

ATTACHMENTS

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 http://www.sgs.com/en/Terms-and-Conditions/Terms-e-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 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.

To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443,

1-5F West of Building 4, Linguun Industry Park, No.1177 Linguun Road, Mingbo Malonal H-Tech Zone, Mingbo, Zhejiang, China 315040 t E&E (86-574)89070249

中国・浙江・宁波市国家高新区凌云路1177号凌云产业园4号楼西1-5层

www.sgsgroup.com.cn 邮编: 315040 tHL (86-574)89070271 tML (86-574)89070242 e sgs.china@sgs.com



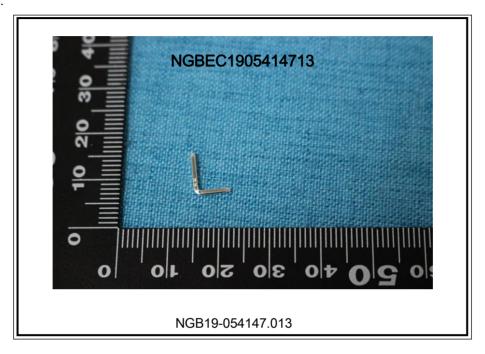
Test Report

No. NGBEC1905414713

Page 5 of 5

Date: 08 Nov 2019

Sample photo:



SGS authenticate the photo on original report only

*** End of Report ***



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 http://www.sgs.com/en/Terms-and-Conditions/Terms-e-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 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.

To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443,

1-5F West of Building 4, Lingyun Industry Park, No. 1177 Lingyun Road, Mingbo National H-Tech Zone, Ningbo, Zhejiang, China 315040 t E&E (86–574)89070249

中国・浙江・宁波市国家高新区凌云路1177号凌云产业园4号楼西1-5层

邮编: 315040 tHL (86-574)89070271 tML (86-574)89070242 e sgs.china@sgs.com

www.sgsgroup.com.cn