



Test Report

Report No.: GZAFF1911022527S001

Date: Nov 27 2019

Client name: RuiNian New Material (Guangdong) Co., Ltd
 Client address: 1 of No139, Shangzhong Road, Liaobu Town, Dongguan City, Guangdong Pro.
 Sample name: Eco-friendly Aluminum-foil
 Sample Batch No.: /
 Product Date: /
 Manufacturer: RNNM
 Sample other information: W6006-1-SMB W146006-1-SMB W328006-1-SMB W6006-1-F (EVA coated+PET backed Thermafleect PVC free)

Above sample(s) was/were submitted and certified by the client, SGS quoted the information with no responsibility as to the accuracy, adequacy and/or completeness.

SGS Sample No.: GZAFF1911022527S.001
 SGS reference No.: CANAF1922923201, CANAF1922881101
 Date of sample received: Nov. 19, 2019
 Testing period: Nov. 19, 2019 ~ Nov. 26, 2019

TEST(S) REQUESTED:
Selected test(s) as requested by the applicant

TEST METHOD(S):
Please refer to next page(s)

TEST RESULT(S):
Please refer to next page(s)

RESULT SUMMARY: Please refer to next page(s)

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



SGS Authorized Signature
胡嘉颖 Karen Hu

This test report refers only to items tested. This document cannot be used for publicity, without prior written approval of the SGS.

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 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



SGS-CSTC Standards Technical Services Co., Ltd.
 Guangzhou Branch Testing, Calibration and Food Laboratory

No.198 Kezhu Road, Sciencetech Park, Guangzhou Economic & Technology Development District, Guangzhou, China 510663 t 400-691-0488 f (86-20) 82075027 www.sgsgroup.com.cn
 中国·广州·经济技术开发区科学城科珠路198号 邮编: 510663 t 400-691-0488 f (86-20) 82075027 e sgs.china@sgs.com

RESULT SUMMARY:

Test Requested	Conclusion
A: FDA 21 CFR 177.1350–Chloroform-soluble extractive residues	PASS
B: Verification for label claim validity - Bisphenol A free by Total Content of Bisphenol	PASS
C: US Model Toxics in Packaging Legislation (TPCH: Toxics in Packaging Clearing House) (formerly drafted by CONEG) – Total Lead, Cadmium, Mercury and Hexavalent Chromium content	PASS
D: American Society for Testing and Materials -ASTM F 963-17(Clause 4.3.5) - total Lead in Substrate Materials	PASS
E: American Society for Testing and Materials-ASTM F 963-17(Clause 4.3.5)-soluble heavy metal in Substrate Materials/paint and similar surface-coating materials	PASS
F: PVC (Polyvinyl chloride)	See Results
G: Phthalate(s)	See Results

TEST RESULT(S):

A: FDA 21 CFR 177.1350–Chloroform-soluble extractive residues

Test Method: With reference to US FDA 21 CFR 177.1350.

Simulant Used	Time	Temperature	Max. Permissible Limit	Test Result	Comment
Distilled Water	24.0 hr(s)	120 °F	0.5 mg/inch ²	< 0.2 mg/inch ²	PASS
8% Ethanol	24.0 hr(s)	120 °F	0.5 mg/inch ²	<0.2 mg/inch ²	PASS
50% Ethanol	24.0 hr(s)	120 °F	0.5 mg/inch ²	<0.2 mg/inch ²	PASS
n-Heptane	0.5 hr(s)	70 °F	0.5 mg/inch ²	<0.2 mg/inch ²	PASS

B: Verification for label claim validity - Bisphenol A free by Total Content of Bisphenol A

Test Method: With reference to Part II Section D2 of Testing Methods for Foodstuffs, Implements, Containers and Packaging, Toys, Detergents, JETRO, Japan External Trade Organization, 2009 (Dichloromethane extraction by ultrasonic bath). Analysis was performed by HPLC-MS

Test Item(s)	Unit	Method Detection Limit	Test Result
Total content of Bisphenol A	mg/kg	0.1	ND
Comment	-	-	PASS

Note: ND = Not Detected.

C: US Model Toxics in Packaging Legislation (TPCH: Toxics in Packaging Clearing House) (formerly drafted by CONEG) – Total Lead, Cadmium, Mercury and Hexavalent Chromium content

Test Method: With reference to GZTC CHEM-TOP-174-01. Analysis of Cadmium, Lead and Mercury was performed by ICP-OES. Analysis of Hexavalent Chromium (Cr(VI)) was performed by UV-Vis



<u>Test Item(s)</u>	<u>Limit</u>	<u>Unit</u>	<u>Method Detection Limit</u>	<u>Test Result</u>
Lead (Pb)	-	mg/kg	5	ND
Hexavalent Chromium (CrVI)	-	mg/kg	8	ND
Cadmium (Cd)	-	mg/kg	5	ND
Mercury (Hg)	-	mg/kg	5	ND
Total (Pb + Cd + Cr VI + Hg)	100	mg/kg	-	ND

Notes:

- The TPCB legislation has been enacted by California, Connecticut, Florida, Georgia, Illinois, Iowa, Maine, Maryland, Minnesota, Missouri, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont, Virginia, Washington and Wisconsin.
- ND = Not Detected.

D: American Society for Testing and Materials -ASTM F 963-17(Clause 4.3.5) - total Lead in Substrate Materials

Test Method: With reference to CPSC-CH-E1002-08.3. Analysis was performed by ICP-OES.

<u>Test Item(s)</u>	<u>Limit</u>	<u>Unit</u>	<u>Method Detection Limit</u>	<u>Test Result</u>
Total Lead (Pb)	100	mg/kg	20	ND
Comment	-	-	-	PASS

Note: ND = Not Detected.

E: American Society for Testing and Materials-ASTM F 963-17(Clause 4.3.5)-soluble heavy metal in Substrate Materials/paint and similar surface-coating materials

Test Method: With reference to ASTM F 963-17(Clause 8.3), analysis was performed by ICP-OES.

<u>Test Item(s)</u>	<u>Limit</u>	<u>Unit</u>	<u>Method Detection Limit</u>	<u>Test Result</u>
Soluble Lead (Pb)	90	mg/kg	5	ND
Soluble Antimony (Sb)	60	mg/kg	5	ND
Soluble Arsenic (As)	25	mg/kg	2.5	ND
Soluble Barium (Ba)	1000	mg/kg	10	ND
Soluble Cadmium (Cd)	75	mg/kg	5	ND
Soluble Chromium (Cr)	60	mg/kg	5	ND
Soluble Mercury (Hg)	60	mg/kg	5	ND
Soluble Selenium (Se)	500	mg/kg	10	ND
Comment	-	-	-	PASS

Notes:

- Results shown are of the adjusted analytical results.



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-Documents.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, or email: CN.Doccheck@sgs.com

2. ND = Not Detected.

F: PVC (Polyvinyl chloride)

Test Method: With reference to ASTM E 1252-98 (2013), analysis was performed by FTIR.

Test Item(s)	Unit	Method	Detection Limit	Test Result
PVC	-	-	-	Negative

Note: Negative=Undetectable, Positive=Detectable.

G: Phthalate(s)

Test Method: With reference to IEC 62321-8:2017, analysis was performed by GC-MS.

Test Item(s)	CAS NO.	Unit	Method	Detection Limit	Test Result
Dibutyl phthalate (DBP)	84-74-2	%(w/w)		0.005	ND
Butyl benzyl phthalate (BBP)	85-68-7	%(w/w)		0.005	ND
Bis (2-ethylhexyl) phthalate (DEHP)	117-81-7	%(w/w)		0.005	ND
Diisononyl Phthalate (DINP)	28553-12-0 / 68515-48-0	%(w/w)		0.005	ND
Diisodecyl Phthalate (DIDP)	26761-40-0 / 68515-49-1	%(w/w)		0.005	ND
Di-n-hexyl Phthalate (DnHP)	84-75-3	%(w/w)		0.005	ND
Di-n-octyl Phthalate (DNOP)	117-84-0	%(w/w)		0.005	ND

Note: ND = Not Detected.



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-Documents.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, or email: CN.Doccheck@sgs.com

SAMPLE DESCRIPTION: Plastic product

Photo Appendix



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.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-Documents.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, or email: CN.Doccheck@sgs.com

No.198 Kezhu Road, Sciencetech Park, Guangzhou Economic & Technology Development District, Guangzhou, China 510663 t 400-691-0488 f (86-20) 82075027 www.sgsgroup.com.cn

中国·广州·经济技术开发区科学城科珠路198号 邮编: 510663 t 400-691-0488 f (86-20) 82075027 e sgs.china@sgs.com

