
RoHS Test Report

Report No. : AGC07686211101-003S1

SAMPLE NAME : GX12 female plug+ male panel mount connector
MODEL NAME : GX12,GX14,GX15,GX16,GX17,GX18,GX19,GX20,
GX25,GX30,GX35,GX40,GX48,GX50,GX60
APPLICANT : Shenzhen Renhotec Technology Electronics Co., Ltd
STANDARD(S) : Please refer to the following page(s).
DATE OF ISSUE : Dec.20, 2021

Attestation of Global Compliance (Shenzhen) Std & Tech Co., Ltd.



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Applicant : Shenzhen Renhotec Technology Electronics Co., Ltd
Address : 8th Floor, Building 1, Yongfu Science and Technology Innovation Center
Industrial Park, Nanzha District 5, Humen Town, Dongguan 523939,China
Test Site : 6/F., Building 2, Sanwei Chaxi Industrial Park, Sanwei Community,
Hangcheng Street, Bao'an District, Shenzhen, Guangdong, China

Report on the submitted sample(s) said to be:

Sample Name : GX12 female plug+ male panel mount connector
Model No. : GX12,GX14,GX15,GX16,GX17,GX18,GX19,GX20,GX25,GX30,
GX35,GX40,GX48,GX50,GX60
Manufacturer : Shenzhen Renhotec Technology Electronics Co., Ltd
Address : 8th Floor, Building 1, Yongfu Science and Technology Innovation Center
Industrial Park, Nanzha District 5, Humen Town, Dongguan 523939,China
Difference between test model and series model : The size and number of cores are different
Sample Received Date : Nov.17, 2021
Testing Period : Nov.17, 2021 to Nov.25, 2021

Test Requested:

As specified by client, to determine the Pb, Cd, Hg, Cr⁶⁺, PBBs, PBDEs, DBP, BBP, DEHP, DIBP content in the submitted sample in accordance with Directive 2011/65/EU (RoHS) and its amendment directive (EU) 2015/863 on XRF and Chemical Method.

Conclusion**Pass**Approved by: 

Liangdan, Jessie.Liang

Technical Director



Test Point Description

Test point	Test parts	Test point description
1	GX12 female plug+ male panel mount connector	Metal threaded ring
4		Silver screw
6		Metal nut
7		Black plastic plug
8		Pin

Test Result:

(Test Method/ Instrument/ MDL and Limit: See Appendix)

Test point	Test result (mg/kg)										Conclusion	
	Pb	Cd	Hg	Cr ⁶⁺	PBBs	PBDEs	DIBP	DBP	BBP	DEHP		
1	21044*	N.D.	N.D.	N.D.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Conformity
4	N.D.	N.D.	N.D.	N.D.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Conformity
6	N.D.	N.D.	N.D.	N.D.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Conformity
7	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.*	N.D.*	N.D.*	N.D.*	N.D.*	Conformity
8	22795*	N.D.	N.D.	N.D.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Conformity

Note:

mg/kg = milligram per kilogram

 $\mu\text{g}/\text{cm}^2$ = microgram per square centimeter

MDL = Method Detection Limit

N.D.=Not Detected (less than method detection limit)

N/A= Not applicable

Exemption

Test point	Exemption clause	Content
1, 7	6(c)	Copper alloy containing up to 4 % lead by weight

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Attestation of Global Compliance(Shenzhen)Co., Ltd

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Tel: +86-755 2523 4088 E-mail: agc@agc-cert.com Web: http://cn.agc-cert.com/



Remark:

- *denotes as reported result(s) was (were) performed by wet chemistry method. Others were screened by XRF. For XRF screening, the result(s) of Cr VI was (were) reported as total chromium and the result(s) of PBBs and PBDEs was (were) reported as total bromine. Also, the XRF result(s) may be different to the actual content based on various factors including, but not limit to, sample size, thickness, area, nonuniformity composition, surface flatness.
- This XRF Scanning report is for reference purposes only. The applicant shall make its/his/her own judgment as to whether the information provided in this XRF screening report is sufficient for its/his/her purposes.

The result shown in this XRF scanning report will differ based on various factors, including but not limited to, the sample size, thickness, area, surface flatness, equipment parameters and matrix effect (e.g. plastic, rubber, metal, glass, ceramic etc.). Further wet chemical pre-treatment with relevant chemical equipment analysis are required to obtain quantitative data.

- Boiling-water-extraction:

Number	Colorimetric result (Cr(VI) concentration)	Qualitative result
1	The sample solution is < the 0,10 µg/cm ² equivalent comparison standard solution	The sample is negative for Cr(VI) – The Cr(VI) concentration is below the limit of quantification. The coating is considered a non-Cr(VI) based coating.
2	The sample solution is ≥ the 0,10 µg/cm ² and ≤ the 0,13 µg/cm ² equivalent comparison standard solutions	The result is considered to be inconclusive – Unavoidable coating variations may influence the determination.
3	The sample solution is > the 0,13 µg/cm ² equivalent comparison standard solution	The sample is positive for Cr(VI) – The Cr(VI) concentration is above the limit of quantification and the statistical margin of error. The sample coating is considered to contain Cr(VI).

- Negative indicates the absence of Cr(VI) on the tested areas concentration is below the limit of quantification.

The coating is considered a non-Cr(VI) based coating.

Uncertainty indicates the absence of Cr(VI) on the tested areas unavoidable coating variations may influence the determination.

Positive indicates the presence of Cr(VI) on the tested areas concentration is above the limit of quantification and the statistical margin of error. The sample coating is considered to contain Cr(VI). Storage conditions and production date of the tested sample are unavailable and thus result of Cr(VI) represent status of the sample at the time of testing.

- As specified by client, only test the designated sample.

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Appendix:

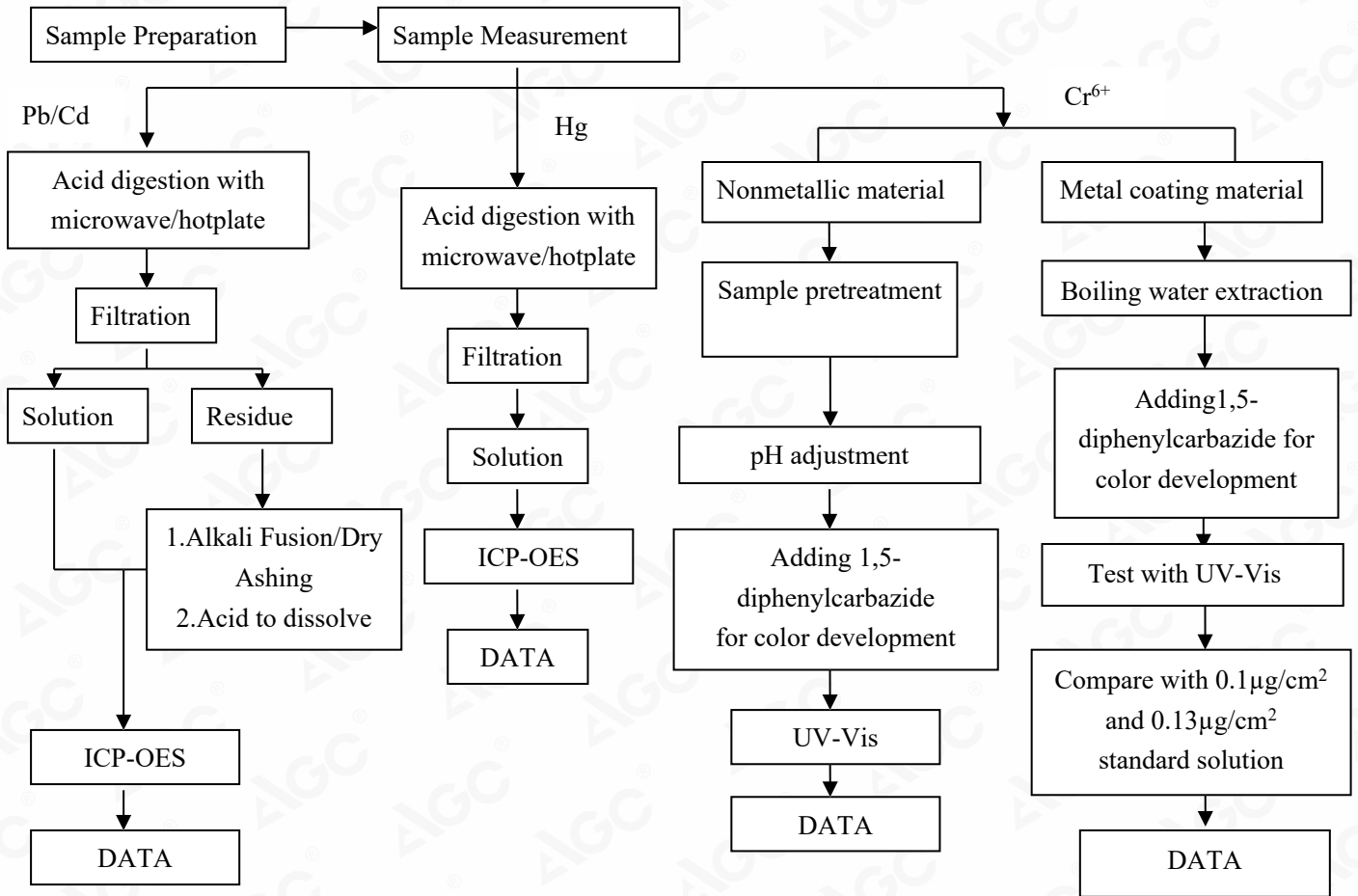
Test Item	Test Method/ Instrument	MDL	Maximum Limit
X-ray Fluorescence Spectrometry(XRF)			
Lead (Pb)	IEC 62321-3-1:2013 / XRF	200mg/kg	1000mg/kg
Cadmium (Cd)		50mg/kg	100mg/kg
Mercury (Hg)		200mg/kg	1000mg/kg
Total Chromium		200mg/kg	/
Total Bromine		200mg/kg	/
Wet Chemistry Method			
Lead (Pb)	IEC 62321-5:2013/ICP-OES	10mg/kg	1000mg/kg
Cadmium (Cd)	IEC 62321-5:2013/ ICP-OES	10mg/kg	100mg/kg
Mercury (Hg)	IEC 62321-4: 2013+A1:2017/ ICP-OES	10mg/kg	1000mg/kg
Non-metal Hexavalent Chromium (Cr ⁶⁺)	IEC 62321-7-2:2017/ UV-Vis	8mg/kg	1000mg/kg
Metal Hexavalent Chromium (Cr ⁶⁺)	IEC 62321-7-1:2015/ UV-Vis	0.1µg/cm ²	/
Polybrominated Biphenyls (PBBs) -Monobromobiphenyl (MonoBB) -Dibromobiphenyl (DiBB) -Tribromobiphenyl (TriBB) -Tetrabromobiphenyl (TetraBB) -Pentabromobiphenyl (PentaBB) -Hexabromobiphenyl (HexaBB) -Heptabromobiphenyl (HeptaBB) -Octabromobiphenyl (OctaBB) -Nonabromodiphenyl (NonaBB) -Decabromodiphenyl (DecaBB)	IEC 62321-6:2015/ GC-MS	Single 5mg/kg	Sum 1000mg/kg
Polybrominated Diphenylethers (PBDEs) -Monobromodiphenyl ether (MonoBDE) -Dibromodiphenyl ether (DiBDE) -Tribromodiphenyl ether (TriBDE) -Tetrabromodiphenyl ether (TetraBDE) -Pentabromodiphenyl ether (PentaBDE) -Hexabromodiphenyl ether (HexaBDE) -Heptabromodiphenyl ether (HeptaBDE) -Octabromodiphenyl ether (OctaBDE) -Nonabromodiphenyl ether (NonaBDE) -Decabromodiphenyl ether (DecaBDE)	IEC 62321-6:2015/ GC-MS	Single 5mg/kg	Sum 1000mg/kg
Di-iso-butyl phthalate (DIBP)	IEC 62321-8:2017/ GC-MS	50mg/kg	1000mg/kg
Dibutyl phthalate (DBP)		50mg/kg	1000mg/kg
Butylbenzyl phthalate (BBP)		50mg/kg	1000mg/kg
Di-(2-ethylhexyl) Phthalate (DEHP)		50mg/kg	1000mg/kg

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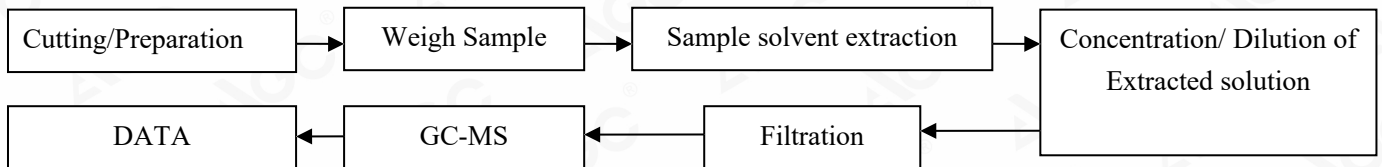
Test Flow Chart

1. For Pb, Cd, Hg, Cr⁶⁺



These sample were dissolved totally by pre-conditioning method according to above flow chart (Cr⁶⁺ test method excluded)

2. For PBBs, PBDEs, DBP, BBP, DEHP, DIBP



This report is to supersede the report with No.: AGC07686211101-003 dated on Nov.25, 2021.

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The photo of the sample



1

AGC07686211101-003S1

AGC authenticate the photo only on original report

*** End of Report ***

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