

# **Test Report**

Report No. : AGC07686200901-002

SAMPLE NAME : Please refer to follow page(s).
MODEL NAME : Please refer to follow page(s).
APPLICANT : Shenzhen Renhotec Technology Electronics Co., Ltd
STANDARD(S) : Please refer to follow page(s).
DATE OF ISSUE : Nov.10, 2020







Applicant	:	Shenzhen Renhotec Technology Electronics Co., Ltd
Address		No 5, Xinyuan North Fifth Road, Ludong Village, Humen Town,
Address		Dongguan,523939, Guangdong, China
Test Site		6/F., Building 2, Sanwei Chaxi Industrial Park, Sanwei Community,
Test She	:	Hangcheng Street, Bao'an District, Shenzhen, Guangdong, China

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

Manufacturer	:	Shenzhen Renhotec Technology Electronics Co., Ltd
Address		No 5, Xinyuan North Fifth Road, Ludong Village, Humen Town,
	·	Dongguan,523939, Guangdong, China
Sample Received Date	:	Sep.29, 2020
Testing Period	:	Sep.29, 2020 to Nov.10, 2020

No.	Sample name	Material	Model No.	Series model	Difference between test model and series model
1	MS5015	aluminium	MS3102 10SL-	MS5015	The appearance and size are
circular connectors		alloy	4P		different
	VG95234	aluminium	MS3106 10SL-	VG95234	The appearance and size are
2	circular connectors	alloy	4S		different

## **Test Requested:**

As specified by client, to determine the Pb, Cd, Hg, Cr<sup>6+</sup>, 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: Jossie ling

Liangdan, Jessie.Liang

**Technical Director** 



No.	Sample Description
	MS3106 10SL-4S
1.	Silver metal buckle
2.	Metal screw
3.	Metal screw washer
4.	Black sealing ring
5.	Metal threaded sleeve
6.	Black rubber ring
7.	Silver metal seat
8.	Plug black rubber
9.	Copper pin
	MS3102 10SL-4P
10.	Silver metal pin

# **Test Result:**

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

No		Test result (mg/kg)						Conclusion			
No.	Pb	Cd	Hg	Cr <sup>6+</sup>	PBBs	PBDEs	DIBP	DBP	BBP	DEHP	Conclusion
1	N.D.	N.D.	N.D.	N.D.	N/A	N/A	N/A	N/A	N/A	N/A	Conformity
2	N.D.	N.D.	N.D.	353	N/A	N/A	N/A	N/A	N/A	N/A	Conformity
3	N.D.	N.D.	N.D.	487	N/A	N/A	N/A	N/A	N/A	N/A	Conformity
4	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.*	N.D.*	N.D.*	N.D.*	Conformity
5	N.D.	N.D.	N.D.	N.D.	N/A	N/A	N/A	N/A	N/A	N/A	Conformity
6	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.*	N.D.*	N.D.*	N.D.*	Conformity
7	N.D.	N.D.	N.D.	N.D.	N/A	N/A	N/A	N/A	N/A	N/A	Conformity
8	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.*	N.D.*	N.D.*	N.D.*	Conformity
9	22088*	N.D.	N.D.	273	N/A	N/A	N/A	N/A	N/A	N/A	Conformity
10	23555*	N.D.	N.D.	229	N/A	N/A	N/A	N/A	N/A	N/A	Conformity

# Note:

mg/kg = milligram per kilogram MDL = Method Detection Limit N/A= Not applicable  $\mu g/cm^2 = microgram per square centimeter$ 

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

#### Exemption

No.	Exemption clause	Content
9 10	6(c)	Copper alloy containing up to 4 % lead by weight



## 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="" cm<sup="" µg="">2 equivalent comparison standard solution</the>	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 $\geq$ the 0,10 µg/cm <sup>2</sup> and $\leq$ the 0,13 µg/cm <sup>2</sup> 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 $\mu$ g/cm <sup>2</sup> 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.

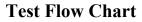
Uncertainty indicates the absence of Cr(VI) on the tested areas unavoidable coating variations may influence the determination.

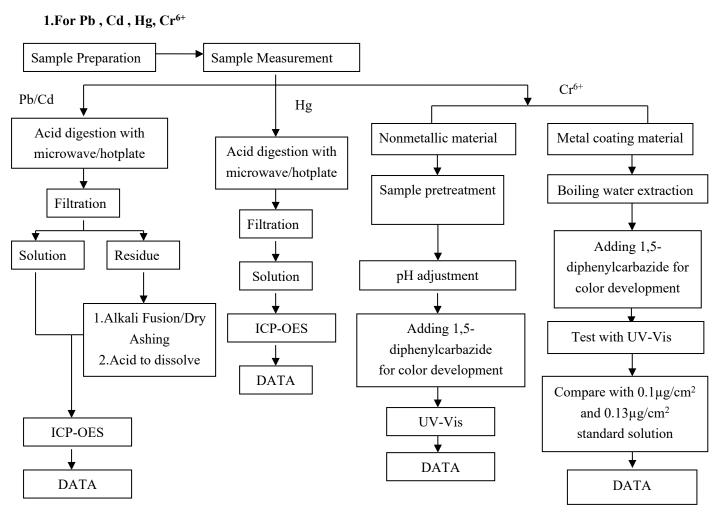
Positive indicates the presence of Cr(VI) on the tested areas concentration is above the limit of quantification and the statistical margin of error. The sample coating is considered to contain Cr(VI). Storage conditions and production date of the tested sample are unavailable and thus result of Cr(VI)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



Test Item	Test Method/ Instrument	MDL	Maximum Limit
X-ray Fluorescence Spectrometry(XRF)			
Lead (Pb)		200mg/kg	1000mg/kg
Cadmium (Cd)	1	50mg/kg	100mg/kg
Mercury (Hg)	IEC 62321-3-1:2013 / XRF	200mg/kg	1000mg/kg
Total Chromium		200mg/kg	/
Total Bromine		200mg/kg	/
Wet Chemistry Method		66	
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 <sup>6+</sup> )	IEC 62321-7-2:2017/ UV-Vis	8mg/kg	1000mg/kg
Metal Hexavalent Chromium (Cr <sup>6+</sup> ) Polybrominated Biphenyls (PBBs)	IEC 62321-7-1:2015/ UV-Vis	$0.1 \mu g/cm^2$	/
-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
PolybrominatedDiphenylethers (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)		50mg/kg	1000mg/kg
Dibutyl phthalate (DBP)		50mg/kg	1000mg/kg
Butylbenzyl phthalate (BBP)	IEC 62321-8:2017/ GC-MS	50mg/kg	1000mg/kg
Di-(2-ethylhexyl) Phthalate (DEHP)	-	50mg/kg	1000mg/kg

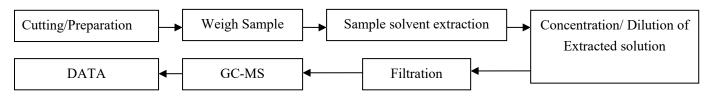






These sample were dissolved totally by pre-conditioning method according to above flow chart ( $Cr^{6+}$  test method excluded)

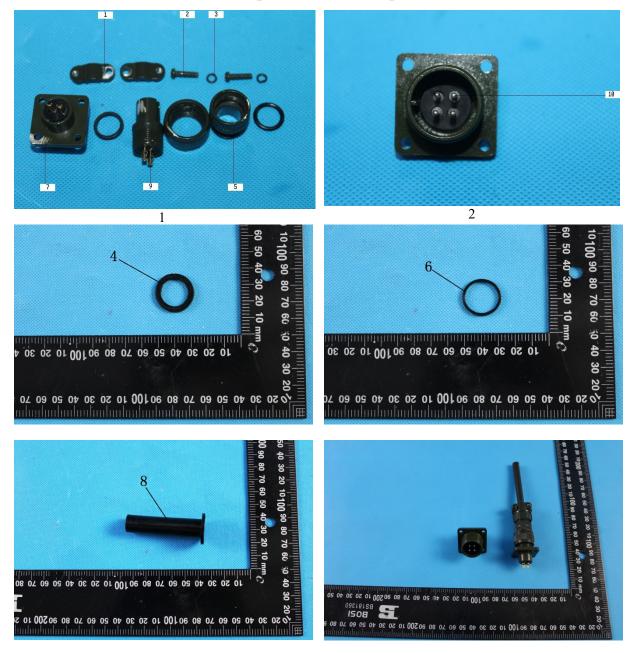




Test result on specimen No.4, No.6, No.8 were resubmitted on Nov.05, 2020

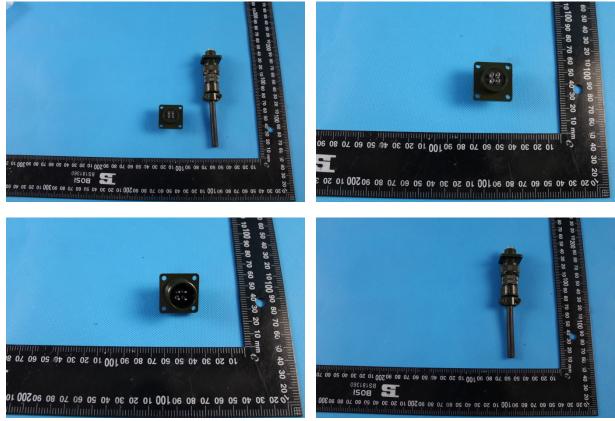


# The photo of the sample





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AGC07686200901-002 AGC authenticate the photo only on original report \*\*\* End of Report \*\*\*



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