

# Test Report

Report No.: AGC07709200601-004

Date: Jul.20, 2020

Page 1 of 6

Applicant: Dongguan Dosin Hardware Electronics Co.,Ltd  
Address: No 5,Xinyuan Fifth Road, Humen Town, Dongguan,Guangdong  
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: F female connector  
Model: DOSIN-803  
Series model: F connector series  
Supplier: Dosin  
Difference between test model and series model: Appearance and size difference  
Manufacturer: Dongguan Dosin Hardware Electronics Co.,Ltd  
Address: No 5,Xinyuan Fifth Road, Humen Town, Dongguan,Guangdong  
Sample Received Date: Jun.22, 2020  
Testing Period: Jun.22, 2020 to Jun.28, 2020

## 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:   
Liangdan, Jessie Liang  
Technical Director



The results shown in this test report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by AGC, this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at <http://www.agc-cert.com>.



# Test Report

Report No.: AGC07709200601-004

Date: Jul.20, 2020

Page 2 of 6

No.	Sample Description	
1.	Connector	Silver metal shell
2.		Silver pin
3.		White plastic

**Test Result:**

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

No.	Test result (mg/kg)										Conclusion	
	Pb	Cd	Hg	Cr <sup>6+</sup>	PBBs	PBDEs	DIBP	DBP	BBP	DEHP		
1	25166*	N.D.	N.D.	N.D.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Conformity
2	N.D.	N.D.	N.D.	N.D.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Conformity
3	N.D.	N.D.	N.D.	N.D.	N.D.*	N.D.*	N.D.*	N.D.*	N.D.*	N.D.*	N.D.*	Conformity

**Note:**

mg/kg = milligram per kilogram

μg/cm<sup>2</sup> = microgram per square centimeter

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

N/A= Not applicable

MDL = Method Detection Limit

**Exemption**

No.	Exemption clause	Content
1	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.

The results shown in this test report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by AGC, this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at <http://www.agc-cert.com>.



# Test Report

Report No.: AGC07709200601-004

Date: Jul.20, 2020

Page 3 of 6

- Boiling-water-extraction:

Number	Colorimetric result (Cr(VI) concentration)	Qualitative result
1	The sample solution is < the 0,10 $\mu\text{g}/\text{cm}^2$ 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 $\geq$ the 0,10 $\mu\text{g}/\text{cm}^2$ and $\leq$ the 0,13 $\mu\text{g}/\text{cm}^2$ 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 $\mu\text{g}/\text{cm}^2$ 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.

The results shown in this test report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by AGC, this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at <http://www.agc-cert.com>.





# Test Report

Report No.: AGC07709200601-004

Date: Jul.20, 2020

Page 4 of 6

**Appendix:**

Test Item	Test Method/ Instrument	MDL	Limit
<b>X-ray Fluorescence Spectrometry(XRF)</b>			
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	/
<b>Wet Chemistry Method</b>			
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> )	IEC 62321-7-1:2015/ UV-Vis	0.1µg/cm <sup>2</sup>	/
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

**Note:**

“≤”= Less than or equal to

The results shown in this test report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by AGC, this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at <http://www.agc-cert.com>.



# Test Report

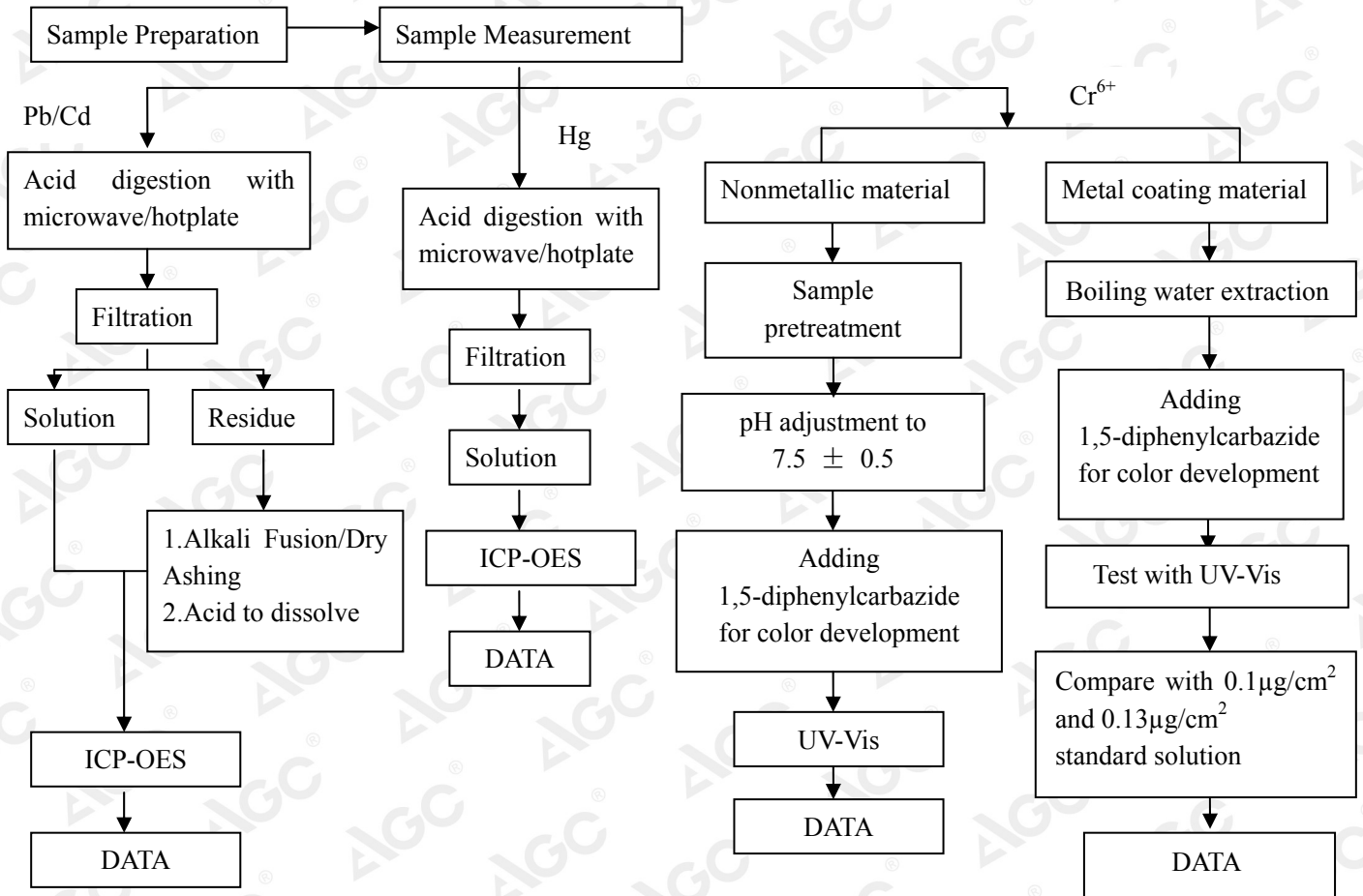
Report No.: AGC07709200601-004

Date: Jul.20, 2020

Page 5 of 6

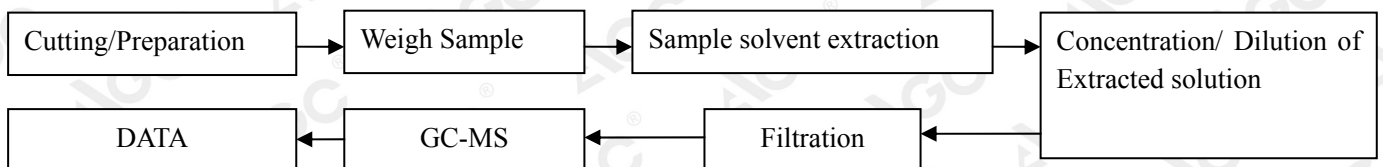
## Test Flow Chart

### 1.For Pb, Cd, Hg, Cr<sup>6+</sup>



These sample were dissolved totally by pre-conditioning method according to above flow chart (Cr<sup>6+</sup> test method excluded)

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



The results shown in this test report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by AGC, this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at <http://www.agc-cert.com>.



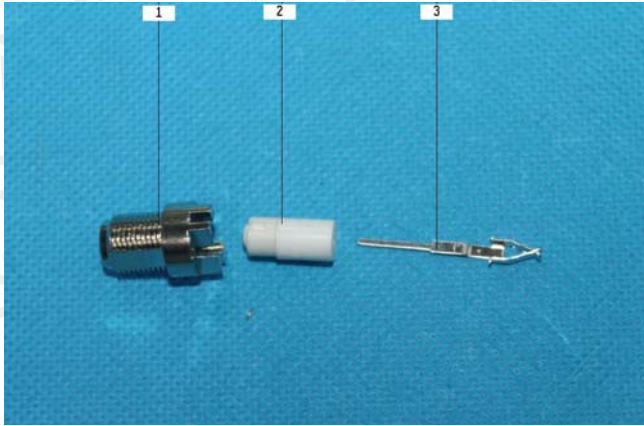
# Test Report

Report No.: AGC07709200601-004

Date: Jul.20, 2020

Page 6 of 6

## The photo of the sample



**AGC07709200601-004**

AGC authenticate the photo only on original report

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

The results shown in this test report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by AGC, this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at <http://www.agc-cert.com>.

Attestation of Global Compliance Std. & Tech.



Tel: +86-755 8358 3833 Fax: +86-755 2531 6612 E-mail: [agc01@agc-cert.com](mailto:agc01@agc-cert.com) 400 089 2118  
Add: Building 2, No.171, Meihua Road, Shangmeilin, Futian District, Shenzhen, Guangdong China

**No.18 C**