

APPLICATION FOR RoHS DIRECTIVE

On Behalf of

Car Charger

YC690

Prepared for:

Address:

Prepared By: **Shenzhen Alpha Product Testing Co., Ltd.**

Building B, East Area of Nanchang Second Industrial Zone, Gushu 2nd Road, Bao'an District, Shenzhen 518126, P.R. Address:

China

July 04 - 06, 2015 **Date of Test:**

July 06, 2015 **Date of Report:**

Report Number: T1850770 03

Version Number: REV0

TEST REPORT IEC 62321-3-1:2013

Restriction of Hazardous Substance

Report Reference No...... T1850770 03

Tested by (name + signature) Rev Yuan

Approved by (name + signature).....: Susan Chen

Testing Laboratory Shenzhen Alpha Product Testing Co., Ltd.

Address...... Building B, East Area of Nanchang Second Industrial Zone, Gushu

2nd Road, Bao'an District, Shenzhen 518126, P.R. China

Testing location / procedure TL [√] SMT [] TMP []

Testing location / address..... (Same as above.)

Applicant's name.....

Address....

Test specification:

Standard IEC 62321-3-1:2013

Test procedure RoHS procedure

Non-standard test method..... N/A

Test item description Car Charger

Model/Type reference...... YC690

Manufacturer.....

Address....

Possible test case verdicts:

P=Pass, F=Fail, IC=Inconclusive, -- = Not Regulated

Testing

Date of receipt of test item July 04, 2015

Date (s) of performance of tests July 04 - 06, 2015

General remarks:

The test results presented in this report relate only to the object tested.

This report shall not be reproduced, except in full, without the written approval of the Issuing testing

laboratory.

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Test Result of XRF

As per IEC 62321-3-1:2013, screened by XRF spectroscopy.

No.	Component Description	Test Item	XRF Result
		Cadmium (Cd)	Р
		Lead (Pb)	Р
1	White plastic shell	Mercury (Hg)	Р
		Chromium (Cr)	Р
		Bromine (Br)	Р
		Cadmium (Cd)	Р
		Lead (Pb)	Р
2	Transparent plastic cover	Mercury (Hg)	Р
		Chromium (Cr)	Р
		Bromine (Br)	Р
		Cadmium (Cd)	Р
		Lead (Pb)	Р
3	Silver color metal head	Mercury (Hg)	Р
		Chromium (Cr)	Р
		Bromine (Br)	
	Silver color metal shrapnel	Cadmium (Cd)	Р
		Lead (Pb)	Р
4		Mercury (Hg)	Р
		Chromium (Cr)	Р
		Bromine (Br)	
		Cadmium (Cd)	Р
		Lead (Pb)	Р
5	Spring	Mercury (Hg)	Р
		Chromium (Cr)	Р
		Bromine (Br)	
	Black wire covering	Cadmium (Cd)	Р
		Lead (Pb)	Р
6		Mercury (Hg)	Р
		Chromium (Cr)	Р
		Bromine (Br)	Р
	Wire core	Cadmium (Cd)	Р
		Lead (Pb)	Р
7		Mercury (Hg)	Р
		Chromium (Cr)	Р
		Bromine (Br)	
		Cadmium (Cd)	Р
		Lead (Pb)	Р
8	LED	Mercury (Hg)	Р
		Chromium (Cr)	Р
		Bromine (Br)	Р

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Test Result of XRF

No.	Component Description	Test Item	XRF Result
9		Cadmium (Cd)	Р
		Lead (Pb)	Р
	Cover of inductor	Mercury (Hg)	Р
		Chromium (Cr)	Р
		Bromine (Br)	Р
		Cadmium (Cd)	Р
		Lead (Pb)	Р
10	Inductor	Mercury (Hg)	Р
		Chromium (Cr)	Р
		Bromine (Br)	
		Cadmium (Cd)	Р
		Lead (Pb)	Р
11	Capacitor	Mercury (Hg)	Р
	·	Chromium (Cr)	Р
		Bromine (Br)	Р
		Cadmium (Cd)	Р
		Lead (Pb)	Р
12	Capacitor	Mercury (Hg)	Р
	· ·	Chromium (Cr)	Р
		Bromine (Br)	Р
		Cadmium (Cd)	Р
		Lead (Pb)	Р
13	Resistor	Mercury (Hg)	Р
		Chromium (Cr)	Р
		Bromine (Br)	Р
		Cadmium (Cd)	Р
	IC	Lead (Pb)	Р
14		Mercury (Hg)	Р
		Chromium (Cr)	Р
		Bromine (Br)	Р
	Silver color metal pin of USB base	Cadmium (Cd)	P
		Lead (Pb)	P
15		Mercury (Hg)	 P
.0		Chromium (Cr)	P
		Bromine (Br)	
	Silver color metal of USB base	Cadmium (Cd)	P
		Lead (Pb)	P
16		Mercury (Hg)	P
		Chromium (Cr)	P
		Bromine (Br)	
	1	Diolilile (DI)	

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Test Result of XRF

No.	Component Description	Test Item	XRF Result
17	White plastic of USB base	Cadmium (Cd)	Р
		Lead (Pb)	Р
		Mercury (Hg)	Р
		Chromium (Cr)	Р
		Bromine (Br)	Р
18	Diode	Cadmium (Cd)	Р
		Lead (Pb)	Р
		Mercury (Hg)	Р
		Chromium (Cr)	Р
		Bromine (Br)	Р

Remark:

- (1) There are the results on total Br while test items on restricted substances are PBBs and PBDEs. There is the result on total Cr while test item on restricted substances is Cr(VI).
- (2) Results are obtained by EDXRF for primary screening, and further chemical testing by ICP-OES (for Cd, Pb, Hg), UV-Vis (for Cr(VI) and GC-MS (for PBBs, PBDEs) is recommended to be performed, if the concentration exceeds the below warning value according to IEC62321 (unit: mg/kg).

Element	Polymer Material	Metallic Material	Composite Material
Cadmium (Cd)	P≤70-3σ <ic<< td=""><td>P≤70-3σ<ic<< td=""><td>P ≤50-3σ<ic<< td=""></ic<<></td></ic<<></td></ic<<>	P≤70-3σ <ic<< td=""><td>P ≤50-3σ<ic<< td=""></ic<<></td></ic<<>	P ≤50-3σ <ic<< td=""></ic<<>
	130+3σ≤F	130+3σ≤F	150+3σ≤F
Lead (Pb)	P≤700-3σ <ic<< td=""><td>P≤700-3σ<ic<< td=""><td>P≤500-3σ<ic<< td=""></ic<<></td></ic<<></td></ic<<>	P≤700-3σ <ic<< td=""><td>P≤500-3σ<ic<< td=""></ic<<></td></ic<<>	P≤500-3σ <ic<< td=""></ic<<>
	1300+3σ≤F	1300+3σ≤F	1500+3σ≤F
Mercury (Hg)	P≤700-3σ <ic<< td=""><td>P≤700-3σ<ic<< td=""><td>P≤500-3σ<ic<< td=""></ic<<></td></ic<<></td></ic<<>	P≤700-3σ <ic<< td=""><td>P≤500-3σ<ic<< td=""></ic<<></td></ic<<>	P≤500-3σ <ic<< td=""></ic<<>
	1300+3σ≤F	1300+3σ≤F	1500+3σ≤F
Chromium (Cr)	P≤700-3σ <ic< td=""><td>P≤700-3σ<ic< td=""><td>P≤500-3σ<ic< td=""></ic<></td></ic<></td></ic<>	P≤700-3σ <ic< td=""><td>P≤500-3σ<ic< td=""></ic<></td></ic<>	P≤500-3σ <ic< td=""></ic<>
Bromine (Br)	P≤300-3σ <ic< td=""><td></td><td>P≤250-3σ<ic< td=""></ic<></td></ic<>		P≤250-3σ <ic< td=""></ic<>

(3) mg/kg = milligram per kilogram

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Tested sample photos





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Tested sample photos

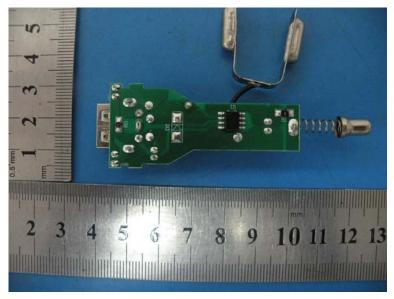




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Tested sample photos



--- End of report ---

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