

Test Report

Report No. A2160001562101

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Applicant SHENZHEN HAOTIAN ELECTRONICS CO LTD.

Address B13 AROUND MAOXHOU INDUSTRIAL SA COMMUNITY SONGGANG
STREET STBAOAN SHENZHEN

The following sample(s) and sample information was/were submitted and identified by/on the behalf of the client

Sample Name 电容器
Color 蓝色
Sample Received Date Nov. 17, 2016
Testing Period Nov. 17, 2016 to Nov. 23, 2016

Test Requested As specified by client, to test Lead(Pb), Cadmium(Cd), Mercury(Hg), Hexavalent Chromium(Cr(VI)), Polybrominated Biphenyls(PBBs), Polybrominated Diphenyl Ethers(PBDEs), Phthalates(DBP, BBP, DEHP, DIBP) in the submitted sample(s).

Test Method Please refer to the following page(s).

Test Result(s) Please refer to the following page(s).

Tested by

Francis Zhang

Reviewed by

Cathy Huang

Approved by

Danny Liu

Date

Nov. 23, 2016

Danny Liu

Technical Manager

No. R187211896

Centre Testing International Group Co., Ltd.

Hongwei Industrial Zone, Bao'an 70 District, Shenzhen, Guangdong, China

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Test Method

Tested Item(s)	Test Method	Measured Equipment(s)
Lead(Pb)	IEC 62321-5:2013 Ed.1.0	ICP-OES
Cadmium(Cd)	IEC 62321-5:2013 Ed.1.0	ICP-OES
Mercury(Hg)	IEC 62321-4:2013 Ed.1.0	ICP-OES
Hexavalent Chromium(Cr(VI))	IEC 62321:2008 Ed.1 Annex C	UV-Vis
	IEC 62321-7-1:2015	
Polybrominated Biphenyls(PBBs)	IEC 62321-6:2015	GC-MS
Polybrominated Diphenyl Ethers (PBDEs)	IEC 62321-6:2015	GC-MS
Phthalates(DBP, BBP, DEHP, DIBP)	Refer to IEC 62321-8 CDV	GC-MS

Test Result(s)

Tested Item(s)	Result		MDL
	(1)	(2)	
Lead(Pb)	N.D.	N.D.	2 mg/kg
Cadmium(Cd)	N.D.	N.D.	2 mg/kg
Mercury(Hg)	N.D.	N.D.	2 mg/kg
Hexavalent Chromium(Cr(VI))	N.D.	---	2 mg/kg
	---	N.D.▼	0.10 µg/cm ² (LOQ)

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Test Result(s)

Tested Item(s)	Result	MDL
	(1)	
Polybrominated Biphenyls(PBBs)		
Monobromobiphenyl	N.D.	5 mg/kg
Dibromobiphenyl	N.D.	5 mg/kg
Tribromobiphenyl	N.D.	5 mg/kg
Tetrabromobiphenyl	N.D.	5 mg/kg
Pentabromobiphenyl	N.D.	5 mg/kg
Hexabromobiphenyl	N.D.	5 mg/kg
Heptabromobiphenyl	N.D.	5 mg/kg
Octabromobiphenyl	N.D.	5 mg/kg
Nonabromobiphenyl	N.D.	5 mg/kg
Decabromobiphenyl	N.D.	5 mg/kg
Polybrominated Diphenyl Ethers(PBDEs)		
Monobromodiphenyl ether	N.D.	5 mg/kg
Dibromodiphenyl ether	N.D.	5 mg/kg
Tribromodiphenyl ether	N.D.	5 mg/kg
Tetrabromodiphenyl ether	N.D.	5 mg/kg
Pentabromodiphenyl ether	N.D.	5 mg/kg
Hexabromodiphenyl ether	N.D.	5 mg/kg
Heptabromodiphenyl ether	N.D.	5 mg/kg
Octabromodiphenyl ether	N.D.	5 mg/kg
Nonabromodiphenyl ether	N.D.	5 mg/kg
Decabromodiphenyl ether	N.D.	5 mg/kg

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Test Result(s)

Tested Item(s)	Result	MDL
	(1)	
Phthalates		
Dibutyl phthalate(DBP) CAS#:84-74-2	N.D.	50 mg/kg
Benzylbutyl phthalate(BBP) CAS#:85-68-7	N.D.	50 mg/kg
Di-2-ethylhexyl phthalate(DEHP) CAS#:117-81-7	N.D.	50 mg/kg
Diisobutyl phthalate(DIBP) CAS#:84-69-5	N.D.	50 mg/kg

Tested Sample/Part Description

- (1) Blue body(Tested as a whole)[#]
- (2) Metal pin with silvery plating

Remark: The sample(s) had been dissolved totally tested for Lead, Cadmium, Mercury.

-MDL = Method Detection Limit

-N.D. = Not Detected (<MDL or LOQ)

-mg/kg = ppm = parts per million

-LOQ = Limit of Quantification, The LOQ of Hexavalent chromium is 0.10 µg/cm²

-[▼]The sample is negative for Cr(VI) – The Cr(VI) concentration is below 0.10 µg/cm². The coating is considered a non-Cr(VI) based coating.

-[#]The sample(s) was tested as a whole, because it's impossible to disassemble or separate it by current equipment and technology. The result(s) shown on this report may be different from the content of any homogeneous material.

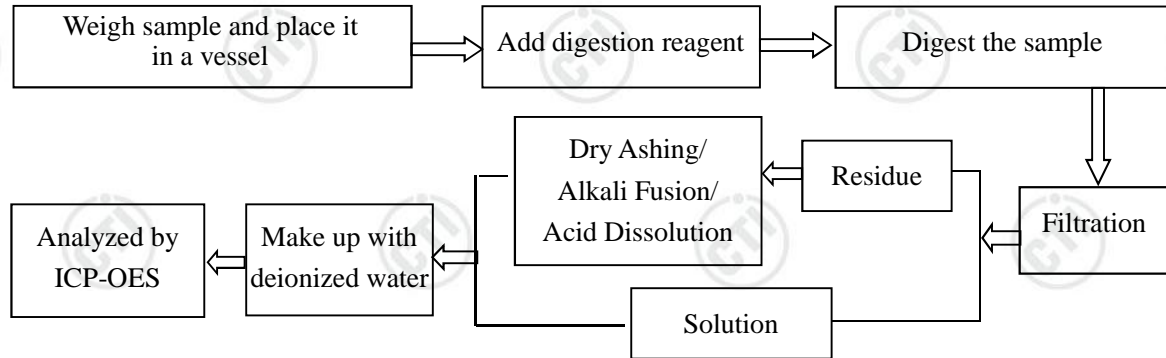
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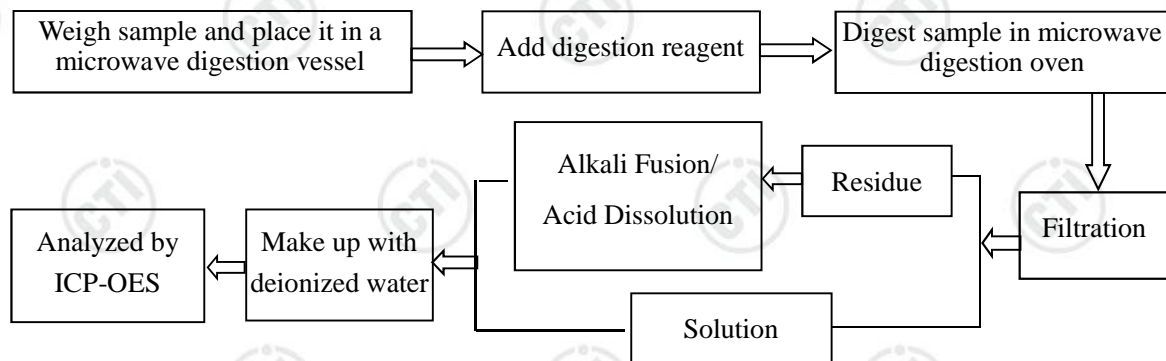
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Test Process

1. Lead(Pb), Cadmium(Cd)

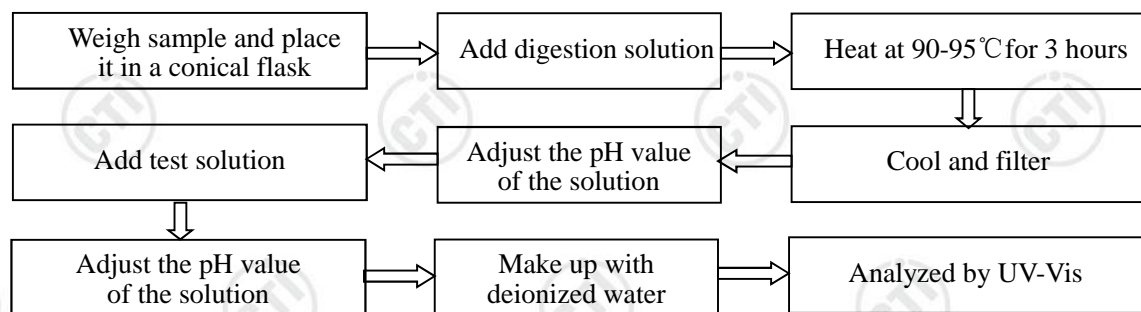


2. Mercury(Hg)

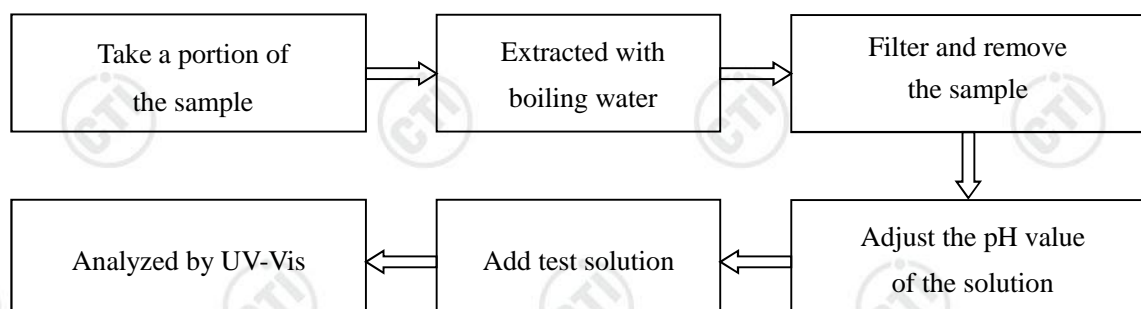


3. Hexavalent Chromium (Cr(VI))

(1) IEC 62321:2008 Ed.1 Annex C



(2) IEC 62321-7-1:2015

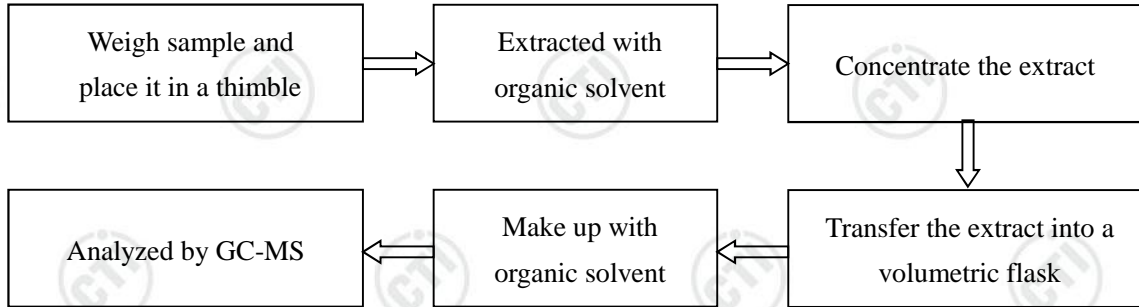


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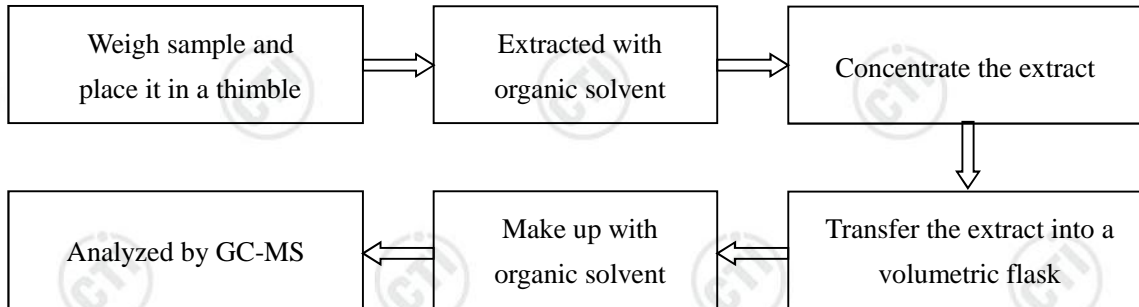
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4. Polybrominated Biphenyls(PBBs), Polybrominated Diphenyl Ethers(PBDEs)



5. Phthalates(DBP, BBP, DEHP, DIBP)



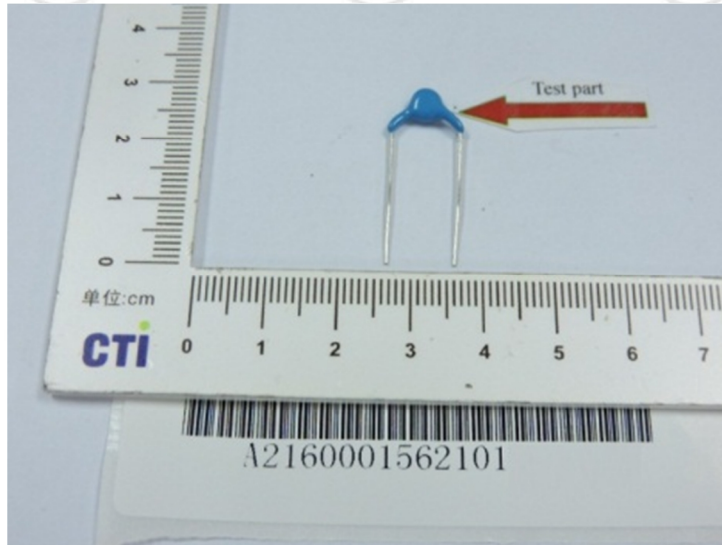
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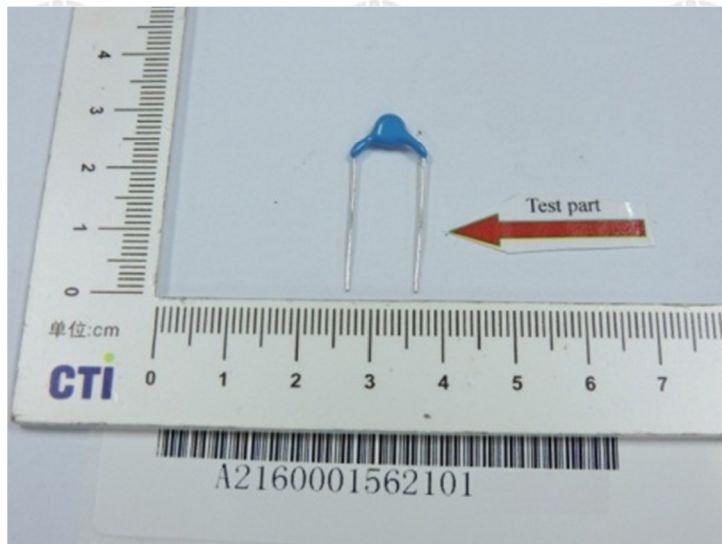
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Photo(s) of the sample(s)

(1)



(2)



*** End of Report ***

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