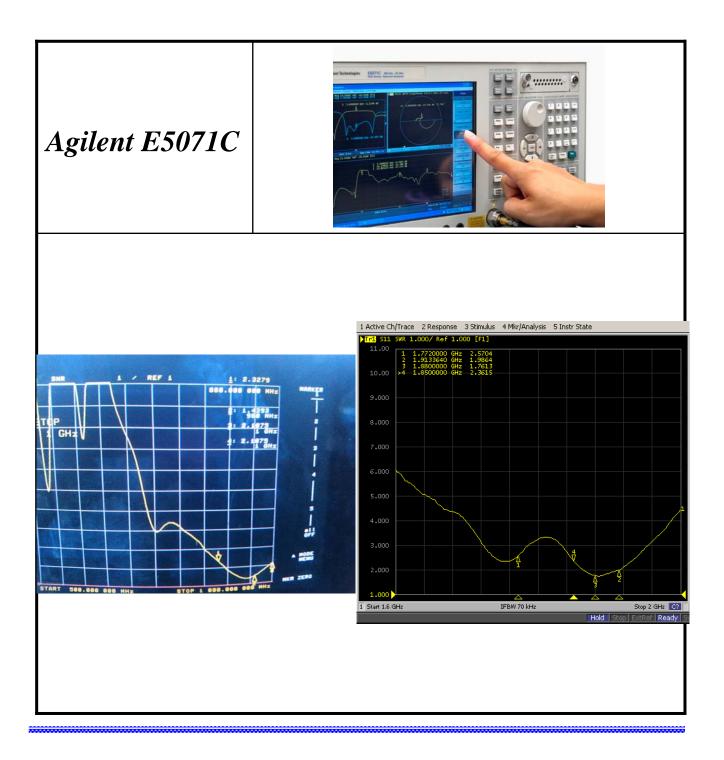


电性测试报告 Test Reports

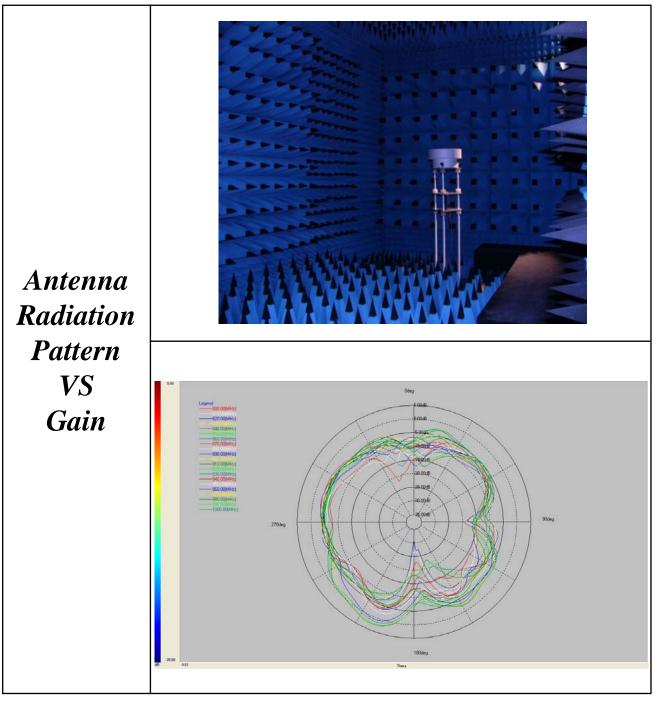
Electrical Properties		
FrequencyÁÁ	GÙT	
Impedance	50 0hm Nominal	
V.S.W.R	3.0 : 1 Max	
Return Loss	-6 dB Max	
Radiation	Omni-directional	
Gain (Peak)	2 dBi	
Cable Loss	2.4 dB / m Max	
Polarization	Linear, Vertical	
Admitted Power	2 W	
Connector	Mini Connector	
Physical Properties		
Antenna Material	FPCB	
Cable Type	O.D. 1.13 mm // 35 mm	
Operating Temp.	-10 ~ +60 °C	
Storage Temp.	-10 ~ +70 °C	
Cable Color	Ó æ&\	

add:东莞市长安镇 (!% Tel:0769-85076210 Fax:0769-85315877

S参数测试 S Parameter Test



增 益 测 试 Gain Test





No. CANML1401714221

日期: 2014年02月26日 第1页,共9页

珠海亚泰电子科技有限公司

中国广东省珠海市金鼎科技工业园金峰西路23号厂房一层A、B区,二层B区

以下测试之样品是由申请者所提供及确认:有胶柔性覆铜板

SGS工作编号:	GC140200575 - GZ
样品接收日期:	2014年02月20日
测试周期:	2014年02月20日 - 2014年02月26日
测试要求:	根据客户要求测试
测试方法:	请参见下一页
测试结果:	请参见下一页
结论:	基于所送样品进行的测试,镉、铅、汞、六价铬、多溴联苯(PBB)、多溴二苯 醚(PBDE)的测试结果符合欧盟RoHS指令2002/95/EC的重订指令2011/65/EU附 录II的限值要求。

通标标准技术服务有限公司 授权签名

为夏风

Merry Lv吕爱凤 批准签署人

备注:本报告是编号为CANML1401714220报告的中文版本。



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No. CANML1401714221

测试结果:

测试样品描述:

样品编号	SGS样品ID	描述
SN1	CAN14-017142.006	带棕色表层的铜色片

备注:

- (1) 1 mg/kg = 1 ppm = 0.0001%
- (2) MDL = 检测极限值
- (3) ND = 未检出 (< MDL)
- (4) "-" = 未规定

<u>RoHS指令2011/65/EU</u>

测试方法: (1)参考IEC 62321-5:2013,用ICP-OES测定镉的含量
(2)参考IEC 62321-5:2013,用ICP-OES测定铅的含量
(3)参考IEC 62321-4:2013,用ICP-OES测定汞的含量
(4)参考IEC 62321:2008,用紫外-可见分光光度计比色法测定六价铬的含量
(5)参考IEC 62321:2008,用GC-MS测定PBBs(多溴联苯)和PBDEs(多溴二苯醚)的含量

测试项目	<u>限值</u>	<u>单位</u>	MDL	<u>006</u>
镉 (Cd)	100	mg/kg	2	ND
铅 (Pb)	1,000	mg/kg	2	ND
汞 (Hg)	1,000	mg/kg	2	ND
六价铬(Cr(VI))	1,000	mg/kg	2	ND
多溴联苯之和(PBBs)	1,000	mg/kg	-	ND
一溴联苯	-	mg/kg	5	ND
二溴联苯	-	mg/kg	5	ND
三溴联苯	-	mg/kg	5	ND
四溴联苯	-	mg/kg	5	ND
五溴联苯	-	mg/kg	5	ND
六溴联苯	-	mg/kg	5	ND
七溴联苯	-	mg/kg	5	ND
八溴联苯	-	mg/kg	5	ND
九溴联苯	-	mg/kg	5	ND
十溴联苯	-	mg/kg	5	ND
多溴二苯醚之和(PBDEs)	1,000	mg/kg	-	ND
一溴二苯醚	-	mg/kg	5	ND
二溴二苯醚	-	mg/kg	5	ND



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No. CANML1401714221

日期: 2014年02月26日 第3页,共9页

测试项目	限值	单位	MDL	<u>006</u>
三溴二苯醚	-	mg/kg	5	ND
四溴二苯醚	-	mg/kg	5	ND
五溴二苯醚	-	mg/kg	5	ND
六溴二苯醚	-	mg/kg	5	ND
七溴二苯醚	-	mg/kg	5	ND
八溴二苯醚	-	mg/kg	5	ND
九溴二苯醚	-	mg/kg	5	ND
十溴二苯醚	-	mg/kg	5	ND

备注:

(1) 最大允许极限值引用自指令2011/65/EU 附录II.

测试方法: 参照EN 14582:2007方法测定,采用IC进行分析.

测试项目	<u>单位</u>	<u>MDL</u>	<u>006</u>
氟 (F)	mg/kg	50	ND
氯 (CI)	mg/kg	50	113
溴 (Br)	mg/kg	50	ND
碘 (I)	mg/kg	50	ND

<u>六溴环十二烷(HBCDD)</u>

测试方法: 参考IEC 62321:2008, 用GC-MS分析。

测试项目	<u>单位</u>	<u>MDL</u>	<u>006</u>
六溴环十二烷(HBCDD)	mg/kg	10	ND

备注:

(1)参考信息: RoHS指令2002/95/EC的重订指令2011/65/EU: 六溴环十二烷(HBCDD)被列为需优先进行风险评估和考虑进行限制的物质。

邻苯二甲酸盐(或酯)

测试方法: 参考EN 14372: 2004的方法测定, 采用GC-MS进行分析.



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测试报告	No. CANML1401714221		日期: 2014年02月26日		第4页,共9页
<u>测试项目</u> 邻苯二甲酸二丁酯 (DBP)	<u>CAS NO.</u> 84-74-2	<u>单位</u> %(w/w)	<u>MDL</u> 0.003	<u><i>006</i></u> ND	
邻苯二甲酸丁酯苄酯 (BBP)	85-68-7	%(w/w)	0.003	ND	
邻苯二甲酸二(2-乙基己基) 酯(DEHP)	117-81-7	%(w/w)	0.003	ND	

备注:

(1)参考信息: RoHS指令2002/95/EC的重订指令2011/65/EU: 邻苯二甲酸二(2-乙基己基)酯(DEHP),邻苯二甲酸丁酯苄酯(BBP)和邻苯二甲酸二丁酯(DBP)被列为需优先 进行风险评估和考虑进行限制的物质。



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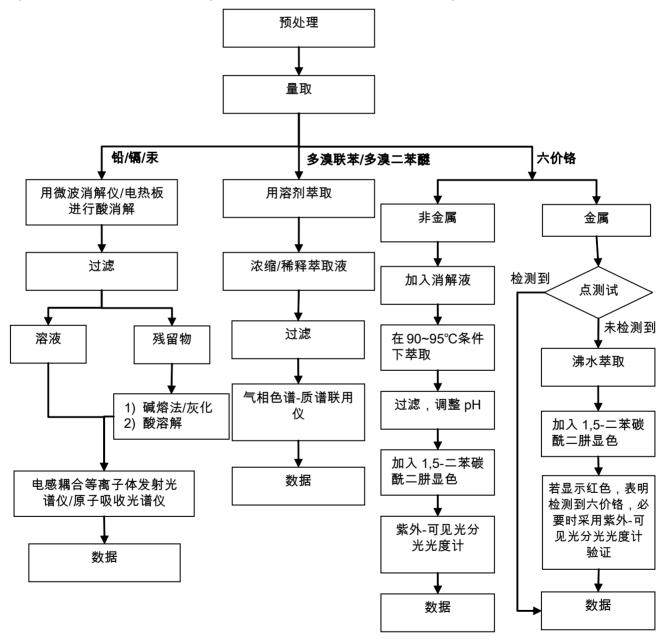


No. CANML1401714221

附件

RoHS 测试流程图

- 1) 分析人员:曹阳 / 余晓璐
- 2) 项目负责人:余奕东/魏红
- 3) 样品按照下述流程被完全消解(六价铬和多溴联苯/多溴二苯醚测试除外)。



たかりまた。 を加き用意 Esting Service Standards Technical Service Sco., Ltd. Guanorhou B - Technical Service Sco., Ltd. Guanorhou B - Technical Service Sco., Ltd.

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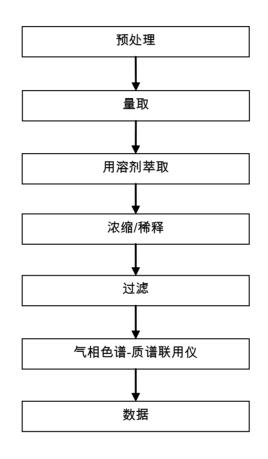
No. CANML1401714221

日期: 2014年02月26日 第6页,共9页

附件

HBCDD 测试流程图

- 1) 分析人员:余晓璐
- 2) 项目负责人:魏红





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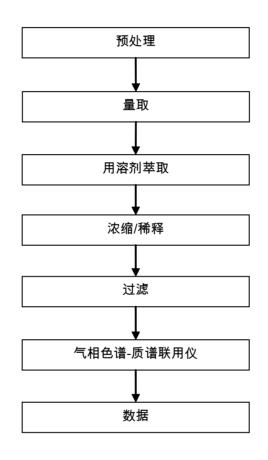
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附件

Phthalates 测试流程图

- 1) 分析人员:刘琼
- 2) 项目负责人:魏红





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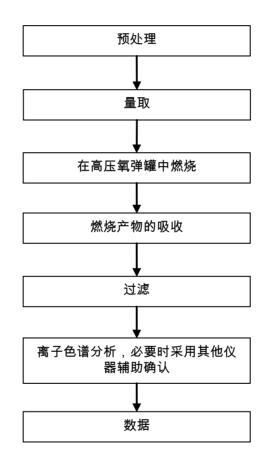


No. CANML1401714221

附件

Halogen 测试流程图

- 1) 分析人员:汪丹
- 2) 项目负责人:余奕东





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报告编号 RHS05F011891004E 第1页 共 8 页 **Report No.** RHS05F011891004E Page 1 of 8 申请单位 苏州市华诺线缆科技有限公司 SUZHOU HUANUO CABLE TECHNOLOGY CO., LTD Applicant 苏州市相城区太平镇太平大街 地 址 TAIPING STREET TAIPING TOWN XIANGCHENG, SUZHOU Address 以下测试之样品及样品信息由申请者提供并确认 The following sample(s) and sample information was/were submitted and identified by/on the behalf of the client 样品名称 电线电缆料 Sample Name Wire and cable materials 样品型号 镀银铜丝 Part No. Silver-plated copper wire 样品接收日期 2013.08.22 Sample Received Date Aug. 22, 2013 样品检测日期 2013.08.22-2013.08.26 **Testing Period** Aug. 22, 2013 to Aug. 26, 2013 检测要求 根据客户要求,对所提交样品中的六溴环十二烷(HBCDD),铅(Pb),镉(Cd),汞 (Hg), 六价铬(Cr(VI)), 多溴联苯(PBBs), 多溴二苯醚(PBDEs), 邻苯二甲酸酯 进行测试。 As specified by client, to test Hexabromocyclododecane (HBCDD), Lead(Pb), **Test Requested** Cadmium(Cd), Mercury(Hg), Hexavalent Chromium (Cr(VI)), Polybrominated Biphenyls (PBBs), Polybrominated Diphenyl Ethers (PBDEs), Phthalates in the submitted sample(s). 检测依据/检测结果 请参见下页。 Please refer to the following page(s). Test Method/Test Result(s) 检 主 宙 核 Zhong Tijun Tested bv Reviewed by 批 准 H 期 2013.08.26 Approved by Date Su Hongwei No. 1102121596 Senior Laboratory Manager 深圳市华测检测技术股份有限公司上海分公司 上海市浦东新区新金桥路1996号 Centre Testing International Corporation Shanghai Branch No.1996, New Jinqiao Road, Pudong District, Shanghai, China



报告编号 RHS05F011891004E Report No. RHS05F011891004E

第2页 共8页 Page 2 of 8

检测依据 Test Method

۰.			
	测试项目 Test Item(s)	测试方法 Test Method	测试仪器 Measured Equipment(s)
	铅 (Pb) Lead(Pb)	IEC 62321:2008 Ed.1 Sec.9	ICP-OES
	镉 (Cd) Cadmium(Cd)	IEC 62321:2008 Ed.1 Sec.9	ICP-OES
	汞(Hg) Mercury(Hg)	IEC 62321:2008 Ed.1 Sec.7	ICP-OES
1	六价铬 (Cr (VI)) Hexavalent Chromium (Cr(VI))	IEC 62321:2008 Ed.1 Annex B	UV-Vis
	多溴联苯 (PBBs) Polybrominated Biphenyls (PBBs)	IEC 62321:2008 Ed.1 Annex A	GC-MS
	多溴二苯醚 (PBDEs) Polybrominated Diphenyl Ethers (PBDEs)	IEC 62321:2008 Ed.1 Annex A	GC-MS
	六溴环十二烷 (HBCDD) Hexabromocyclododecane (HBCDD)	参考 US EPA 3550C:2007 Refer to US EPA 3550C:2007	GC-MS
	邻苯二甲酸酯 Phthalates	参考EN 14372:2004(E) Refer to EN 14372:2004(E)	GC-MS

检测结果 Test Result(s)

测试项目 Test Item(s)	结果 Result	方法检测限 MDL
铅 (Pb) Lead(Pb)	N.D.	2 mg/kg
镉 (Cd) Cadmium (Cd)	N.D.	2 mg/kg
汞(Hg) Mercury(Hg)	N.D.	2 mg/kg
六价铬 (Cr(VI)) Hexavalent Chromium (Cr(VI))	阴性 Negative	1
测试项目 Test Item(s)	结果 Result	方法检测限 MDL
多溴联苯(PBBs) Polybrominated Biphenyls (PBBs)		(A)
一溴联苯 Monobromobiphenyl	N.D.	5 mg/kg
二溴联苯 Dibromobiphenyl	N.D.	5 mg/kg
三溴联苯 Tribromobiphenyl	N.D.	5 mg/kg
四溴联苯 Tetrabromobiphenyl	N.D.	5 mg/kg
五溴联苯 Pentabromobiphenyl	N.D.	5 mg/kg
六溴联苯 Hexabromobiphenyl	N.D.	5 mg/kg
七溴联苯 Heptabromobiphenyl	N.D.	5 mg/kg
八溴联苯 Octabromobiphenyl	N.D.	5 mg/kg

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L溴联苯 Nonabromobiphenyl	N.D.	5 mg/kg
十溴联苯 Decabromobiphenyl	N.D.	5 mg/kg
测试项目 Test Item(s)	结果 Result	方法检测限 MDL
多溴二苯醚(PBDEs) Polybrominated Diphenyl Ethers	(PBDEs)	
一溴二苯醚 Monobromodiphenyl ether	N.D.	5 mg/kg
二溴二苯醚 Dibromodiphenyl ether	N.D.	5 mg/kg
三溴二苯醚 Tribromodiphenyl ether	N.D.	5 mg/kg
四溴二苯醚 Tetrabromodiphenyl ether	N.D.	5 mg/kg
五溴二苯醚 Pentabromodiphenyl ether	N.D.	5 mg/kg
六溴二苯醚 Hexabromodiphenyl ether	N.D.	5 mg/kg
七溴二苯醚 Heptabromodiphenyl ether	N.D.	5 mg/kg
八溴二苯醚 Octabromodiphenyl ether	N.D.	5 mg/kg
九溴二苯醚 Nonabromodiphenyl ether	N.D.	5 mg/kg
十溴二苯醚 Decabromodiphenyl ether	N.D.	5 mg/kg
测试项目 Test Item(s)	结果 Result	方法检测限 MDL
六溴环十二烷 (HBCDD) Hexabromocyclododecane (HBCDD)	N.D.	5 mg/kg
测试项目 Tested Item(s)	结果 Result	方法检测限 MDL
邻苯二甲酸酯 Phthalates		(\mathcal{A})
邻苯二甲酸二正丁酯(DBP) Dibutyl phthalate(DBP) CAS#:84-74-2	N.D.	50 mg/kg
邻苯二甲酸丁基苄酯(BBP) Benzylbutyl phthalate(BBP) CAS#:85-68-7	N.D.	50 mg/kg
邻苯二甲酸二 (2- 乙基己基)酯 (DEHP) Bis(2-ethyl(hexyl)) phthalate (DEHP) CAS#:117-81-7	N.D.	50 mg/kg

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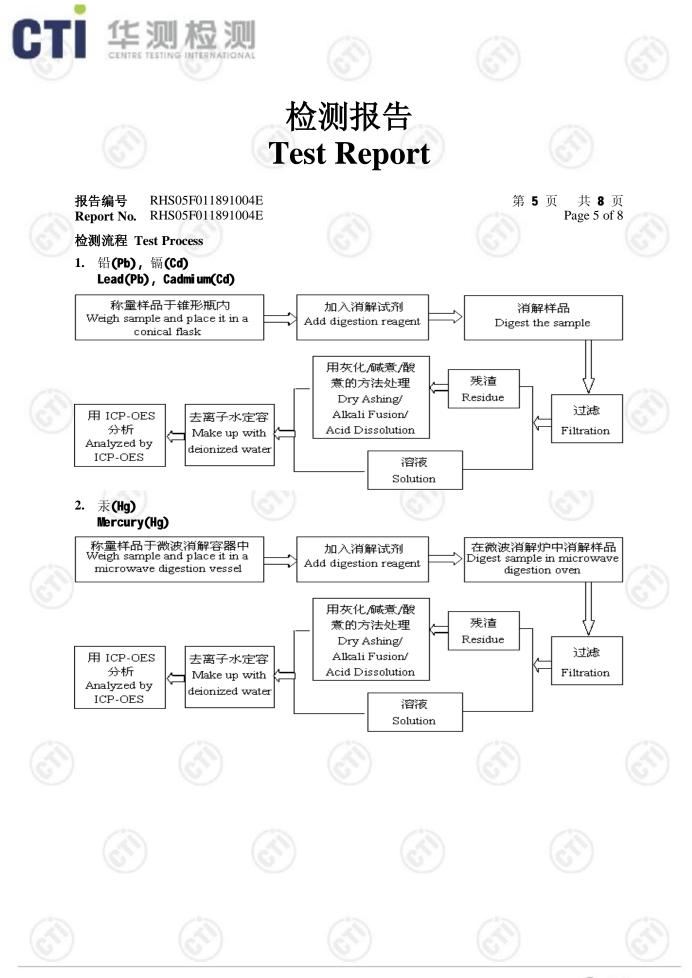


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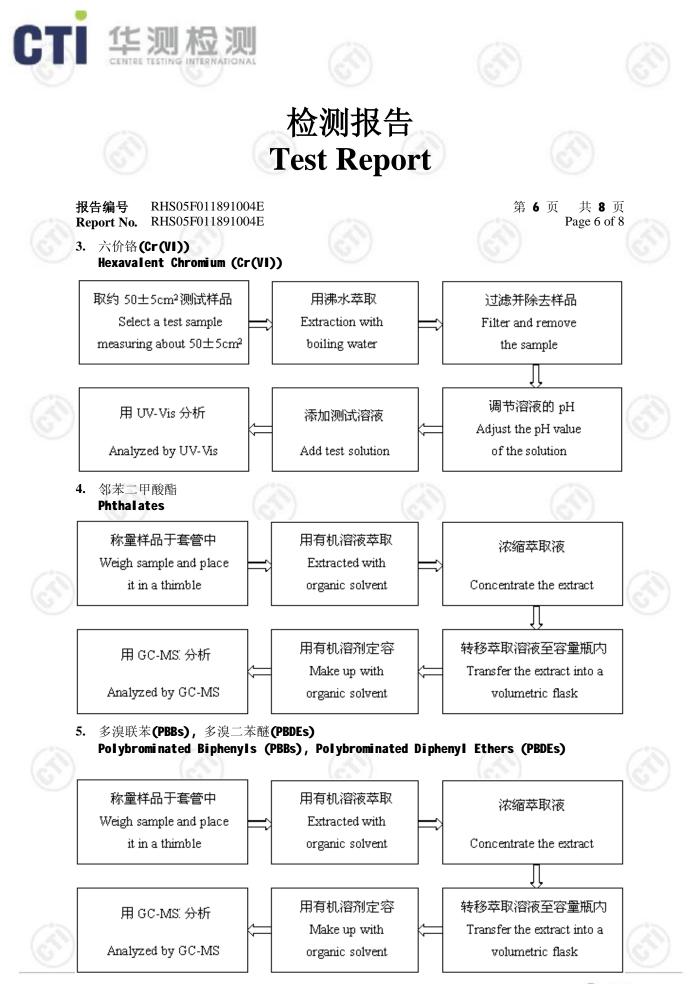


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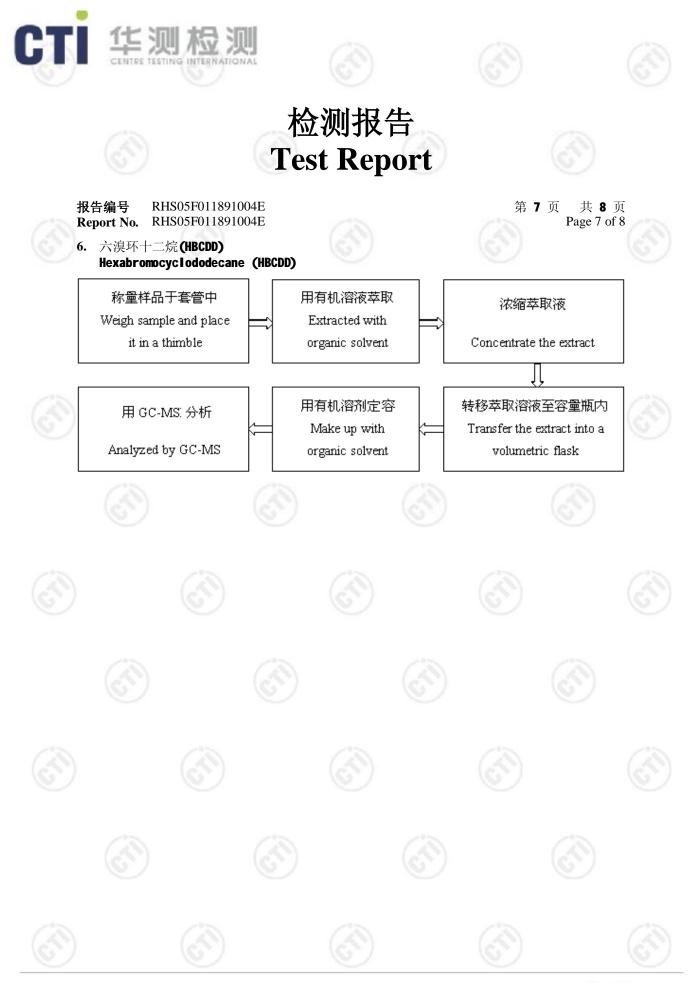
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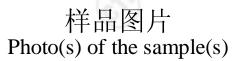






报告编号 R Report No. R

RHS05F011891004E



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报告结束 *** End of report ***

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POLYPLASTICS TAIWAN CO., LTD. NO.13, JIANYE RD., DALIAO DIST., KAOHSIUNG CITY 831, TAIWAN (R.O.C.)

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

Sample Description	:	PBT
Style/Item No.	:	315NF ED3002 / Lot No.1874090
Color	:	ED3002
Sample Receiving Date	:	2013/07/08
Testing Period	:	2013/07/08 TO 2013/07/15
Sample Submitted By	:	POLYPLASTICS TAIWAN CO., LTD.

Test Result(s)

5

Please refer to next page(s).

Ray Chang / Asst. Manage Signed for and on behalf of SGS Taiwan Limited

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POLYPLASTICS TAIWAN CO., LTD. NO.13, JIANYE RD., DALIAO DIST., KAOHSIUNG CITY 831, TAIWAN (R.O.C.)

Test Result(s)

PART NAME NO.1 :

ED3002 PBT

Test Item (s):	Unit	Method	MDL	Result
				No.1
Cadmium (Cd)	mg/kg	With reference to IEC 62321: 2008 and performed by ICP-AES.	2	n.d.
Lead (Pb)	mg/kg	With reference to IEC 62321: 2008 and performed by ICP-AES.	2	6.47
Mercury (Hg)	mg/kg	With reference to IEC 62321: 2008 and performed by ICP-AES.	2	n.d.
Hexavalent Chromium Cr(VI) by alkaline extraction	mg/kg	With reference to IEC 62321: 2008 and performed by UV-VIS.	2	n.d.
Sum of PBBs			-	n.d.
Monobromobiphenyl	Ì		5	n.d.
Dibromobiphenyl			5	n.d.
Tribromobiphenyl		With reference to IEC 62321: 2008 and performed by GC/MS.	5	n.d.
Tetrabromobiphenyl	Ī		5	n.d.
Pentabromobiphenyl	mg/kg		5	n.d.
Hexabromobiphenyl	Ī		5	n.d.
Heptabromobiphenyl	Ī		5	n.d.
Octabromobiphenyl	Ī		5	n.d.
Nonabromobiphenyl	Ī		5	n.d.
Decabromobiphenyl	1		5	n.d.
Sum of PBDEs			-	n.d.
Monobromodiphenyl ether	Ī		5	n.d.
Dibromodiphenyl ether	Ī		5	n.d.
Tribromodiphenyl ether	Ι		5	n.d.
Tetrabromodiphenyl ether	Ι	With reference to IEC 62221, 2008 and	5	n.d.
Pentabromodiphenyl ether	mg/kg	With reference to IEC 62321: 2008 and performed by GC/MS.	5	n.d.
Hexabromodiphenyl ether			5	n.d.
Heptabromodiphenyl ether	Ī		5	n.d.
Octabromodiphenyl ether	l		5	n.d.
Nonabromodiphenyl ether	Ī		5	n.d.
Decabromodiphenyl ether	†		5	n.d.

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POLYPLASTICS TAIWAN CO., LTD.

NO.13, JIANYE RD., DALIAO DIST., KAOHSIUNG CITY 831, TAIWAN (R.O.C.)

Test Item (s):	Unit	Method	MDL	Result
	•			No.1
Halogen				
Halogen-Fluorine (F) (CAS No.: 014762-94-8)	mg/kg	With reference to BS EN 14582:2007. Analysis was performed by IC.	50	731
Halogen-Chlorine (Cl) (CAS No.: 022537-15-1)	mg/kg	With reference to BS EN 14582:2007. Analysis was performed by IC.	50	n.d.
Halogen-Bromine (Br) (CAS No.: 010097-32-2)	mg/kg	With reference to BS EN 14582:2007. Analysis was performed by IC.	50	n.d.
Halogen-Iodine (I) (CAS No.: 014362-44-8)	mg/kg	With reference to BS EN 14582:2007. Analysis was performed by IC.	50	n.d.

- Note : 1. mg/kg = ppm ; 0.1wt% = 1000ppm
 - 2. n.d. = Not Detected
 - 3. MDL = Method Detection Limit
 - 4. "-" = Not Regulated

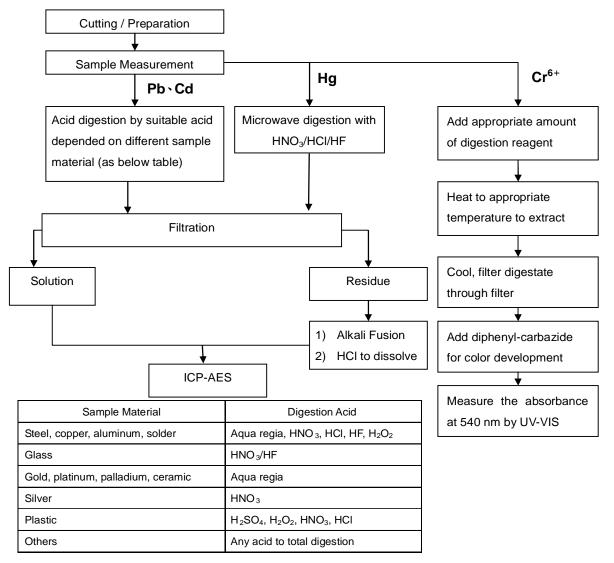
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POLYPLASTICS TAIWAN CO., LTD. NO.13, JIANYE RD., DALIAO DIST., KAOHSIUNG CITY 831, TAIWAN (R.O.C.)

- 1) These samples were dissolved totally by pre-conditioning method according to below flow chart. (Cr6+ test method excluded)
- 2) Name of the person who made measurement: Alex Chang
- 3) Name of the person in charge of measurement: Ray Chang



Note**: (1) For non-metallic material, add alkaline digestion reagent and heat to 90~95 °C. (2) For metallic material, add pure water and heat to boiling.

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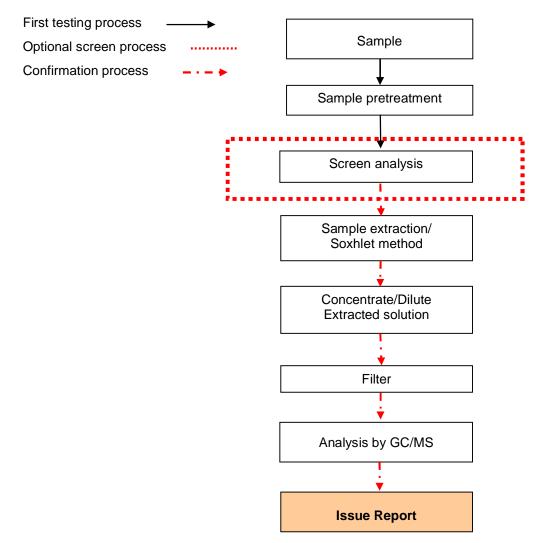


POLYPLASTICS TAIWAN CO., LTD. NO.13, JIANYE RD., DALIAO DIST., KAOHSIUNG CITY 831, TAIWAN (R.O.C.)

PBB/PBDE analytical FLOW CHART

1) Name of the person who made measurement: Anson Tsao

2) Name of the person in charge of measurement: Ray Chang



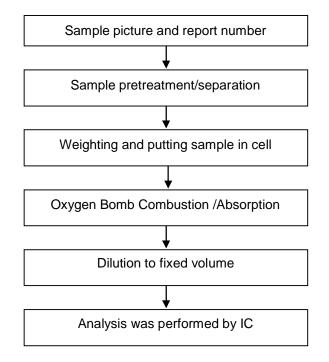
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POLYPLASTICS TAIWAN CO., LTD. NO.13, JIANYE RD., DALIAO DIST., KAOHSIUNG CITY 831, TAIWAN (R.O.C.)

Analytical flow chart of halogen content

- 1) Name of the person who made measurement: Jean Hung
- 2) Name of the person in charge of measurement: Ray Chang



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POLYPLASTICS TAIWAN CO., LTD. NO.13, JIANYE RD., DALIAO DIST., KAOHSIUNG CITY 831, TAIWAN (R.O.C.)

* The tested sample / part is marked by an arrow if it's shown on the photo. *

KA/2013/70363



** End of Report **

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測試報告 ^{號碼(No.)}: CE/2013/73960 **Test Report**

日期(Date) : 2013/07/25

宮前五金股份有限公司 KUON CHEN HARDWARE CO., LTD. 桃園縣龜山鄉頂湖一街24號 NO. 24, DINGHU 1ST ST, GUISHAN SHIANG, TAOYUAN COUNTY 333, TAIWAN (R. O. C.)

以下測試樣品係由申請廠商所提供及確認	(The following	sample(s)	was/were	submitted	and	identified	by/on
behalf of the applicant as):							

送樣廠商(Sample Submitted By)	:	宫前五金股份有限公司(KUON CHEN HARDWARE CO., LTD.)
樣品名稱(Sample Description)	:	FREE CUTTING BRASS BAR
樣品型號(Style/Item No.)	:	C3604
收件日期(Sample Receiving Date)	:	2013/07/19
測試期間(Testing Period)	:	2013/07/19 TO 2013/07/25

测試需求(Test Requested): 依據客户要求,參考RoHS 2011/65/EU Annex II 指令進行鎬,鉛,汞,六價鉻測試. (As specified by client, with reference to RoHS Directive 2011/65/EU Annex II to determine Cadmium, Lead, Mercury, Cr(VI) contents in the submitted sample.)

- **測試方法(Test Method)** : 參考IEC 62321: 2008方法 / With reference to IEC 62321: 2008.
- **測試結果(Test Results)** : 請見下一頁 (Please refer to next pages).



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測試報告 **Test Report** ^{號碼(No.)}: CE/2013/73960

日期(Date) : 2013/07/25

頁數(Page): 2 of 4

宮前五金股份有限公司 KUON CHEN HARDWARE CO., LTD. 桃園縣龜山鄉頂湖一街24號 NO. 24, DINGHU 1ST ST, GUISHAN SHIANG, TAOYUAN COUNTY 333, TAIWAN (R. O. C.)

<u>測試結果(Test Results)</u>

測試部位(PART NAME)No.1 : 銅色金屬 (COPPER COLORED METAL)

測試項目 (Test Items)	單位 (Unit)	測試方法 (Method)	方法偵測 極限値 (MDL)	結果 (Result) No.1
鎬 / Cadmium (Cd)	mg/kg	參考IEC 62321: 2008方法,以感應耦合	2	60
鉛 / Lead (Pb)	mg/kg	電漿原子發射光譜儀檢測. / With reference to IEC 62321: 2008 and	2	31000
汞 / Mercury (Hg)	mg/kg	performed by ICP-AES.	2	n.d.
六價鉻 / Hexavalent Chromium Cr(VI)	**	參考IEC 62321: 2008方法,以沸水萃取 法檢測. / With reference to IEC 62321: 2008 and performed by Boiling water extraction Method.#	#	Negative

備註(Note):

- 1. mg/kg = ppm; 0.1wt% = 1000ppm
- 2. n.d. = Not Detected (未檢出)
- 3. MDL = Method Detection Limit (方法偵測極限值)

4. **= Qualitative analysis (No Unit) 定性分析(無單位)

5.# = a. Positive means the presence of CrVI on the tested areas
 (Positive表示測試區域偵測到六價路)

b. Negative means the absence of CrVI on the tested areas (Negative表示測試區域未偵測到六價鉻)

The detected concentration in boiling-water-extraction solution is equal or greater than 0.02 mg/kg with 50 cm² tested areas. / 該溶液濃度≧0.02 mg/kg with 50 cm² (tested areas)

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測試報告 Test Report

號碼(No.): CE/2013/73960

日期(Date): 2013/07/25

頁數(Page): 3 of 4

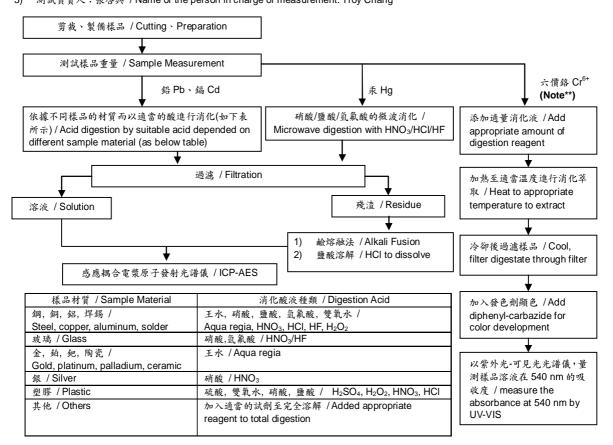
宫前五金股份有限公司

KUON CHEN HARDWARE CO., LTD.

桃園縣龜山鄉頂湖一街24號

NO. 24, DINGHU 1ST ST, GUISHAN SHIANG, TAOYUAN COUNTY 333, TAIWAN (R. O. C.)

- 根據以下的流程圖之條件,樣品已完全溶解。(六價錄測試方法除外) / These samples were dissolved totally by pre-conditioning method according to below flow chart. (Cr⁶⁺ test method excluded)
 測試人員:楊登偉 / Name of the person who made measurement: Climbareat Yang
- 測試人員:楊登偉 / Name of the person who made measurement: Climbgreat Yang
 測試負責人:張啓興 / Name of the person in charge of measurement: Troy Chang



Note**:(1) 针對非金屬材料加入鹼性消化液,加熱至90~95℃萃取./For non-metallic material, add alkaline digestion reagent and heat to 90~95℃.

(2) 針對金屬材料加入純水,加熱至沸騰萃取. / For metallic material, add pure water and heat to boiling.

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測試報告 Test Report

號碼(No.) : CE/2013/73960

日期(Date) : 2013/07/25

頁數(Page): 4 of 4

宮前五金股份有限公司 KUON CHEN HARDWARE CO., LTD. 桃園縣龜山鄉頂湖一街24號 NO. 24, DINGHU 1ST ST, GUISHAN SHIANG, TAOYUAN COUNTY 333, TAIWAN (R. O. C.)

> * 照片中如有箭頭標示,則表示為實際檢測之樣品/部位. * (The tested sample / part is marked by an arrow if it's shown on the photo.)

CE/2013/73960

** 報告結尾 (End of Report) **

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No. CANML1316491802

Date: 25 Oct 2013

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SHENZHEN TONGFA ELECTRONICS CO., LTD

TONG PLAZA LONG TAN INDUSTRIAL ZONE LOU GANG TOWN SHEN ZHEN CHINA

The following sample(s) was/were submitted and identified on behalf of the clients as : Au terminal

SGS Job No. :	SZML131004854 - SZ
Internal Reference No. :	2.2
Date of Sample Received :	17 Oct 2013
Testing Period :	17 Oct 2013 - 23 Oct 2013
Test Requested :	Selected test(s) as requested by client.
Test Method :	Please refer to next page(s).
Test Results :	Please refer to next page(s).
Conclusion :	Based on the performed tests on submitted samples, the results of Lead, Mercury, Cadmium, Hexavalent chromium comply with the limits as set by RoHS Directive 2011/65/EU Annex II; recasting 2002/95/EC.

Signed for and on behalf of SGS-CSTC Ltd.

sene

Alkene_Liang Approved Signatory

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No. CANML1316491802

Test Results :

Test Part Description :

Specimen No.	SGS Sample ID	Description
1	CAN13-164918.001	Golden plated metal

Remarks :

- (1) 1 mg/kg = 1 ppm = 0.0001%
- (2) MDL = Method Detection Limit
- (3) ND = Not Detected (< MDL)
- (4) "-" = Not Regulated

RoHS Directive 2011/65/EU

Test Method : (1)With reference to IEC 62321-5:2013, determination of Cadmium by ICP-OES.
(2)With reference to IEC 62321-5:2013, determination of Lead by ICP-OES.
(3)With reference to IEC 62321-4:2013, determination of Mercury by ICP-OES.
(4)With reference to IEC 62321:2008, determination of Hexavalent Chromium by spot test / Colorimetric Method using UV-Vis.

<u>Test Item(s)</u>	<u>Limit</u>	<u>Unit</u>	MDL	<u>001</u>
Cadmium (Cd)	100	mg/kg	2	ND
Lead (Pb)	1,000	mg/kg	2	10
Mercury (Hg)	1,000	mg/kg	2	ND
Hexavalent Chromium (CrVI)	-	-	\diamond	Negative

Notes :

(1) The maximum permissible limit is quoted from the directive 2011/65/EU, Annex II (2) Spot-test:

Negative = Absence of CrVI coating, Positive = Presence of CrVI coating;

(The tested sample should be further verified by boiling-water-extraction method if the spot test result is Negative or cannot be confirmed.)

◇Boiling-water-extraction:

Negative = Absence of CrVI coating

Positive = Presence of CrVI coating; the detected concentration in boiling-water-extraction solution is equal or greater than 0.02 mg/kg with 50 cm2 sample surface area.

Information on storage conditions and production date of the tested sample is unavailable

and thus Cr(VI) results represent status of the sample at the time of testing.

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Perfluorooctane Sulfonates (PFOS) and Perfluorooctanoic Acid (PFOA)

Test Method : With reference to US EPA Method 3550C:2007, analysis was performed by HPLC-MS.

<u>DL</u> <u>001</u>
1 ND
1 ND

Notes :

- (1) PFOS Reference Information: Entry 53 of Regulation (EC) No 552/2009 amending Annex XVII of REACH Regulation (EC) No 1907/2006 (previously restricted under Directive 2006/122/EC)
 - (i) May not be placed on the market or used as a substance or constituent of preparations in a concentration equal to or higher than 0.005 % by mass.
 - (ii) May not be placed on the market in semi-finished products or articles, or parts thereof, if the concentration of PFOS is equal to or higher than 0.1 % by mass calculated with reference to the mass of structurally or microstructurally distinct parts that contain PFOS or, for textiles or other coated materials, if the amount of PFOS is equal to or higher than 1µg /m² of the coated material.
 Please refer to Regulation (EC) No 552/2009 to get more detail information

Remark: Results & photo(s) of this report refer to test report CANML1315991001.

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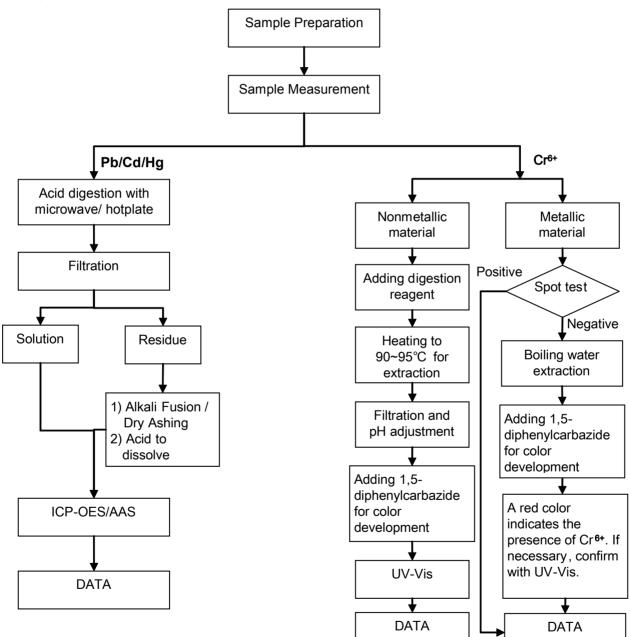
Date: 25 Oct 2013

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ATTACHMENTS

RoHS Testing Flow Chart

- 1) Name of the person who made testing: Michael Tso
- 2) Name of the person in charge of testing: Adams Yu
- These samples were dissolved totally by pre -conditioning method according to below flow chart (Cr6+ test method excluded).



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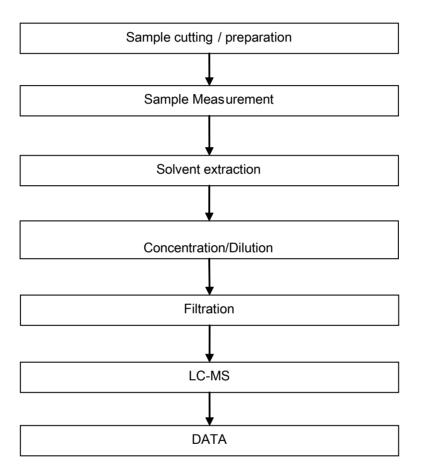
Date: 25 Oct 2013

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ATTACHMENTS

PFOA / PFOS Testing Flow Chart

- 1) Name of the person who made testing: Tina Zhao
- 2) Name of the person in charge of testing: Yolanda Wei



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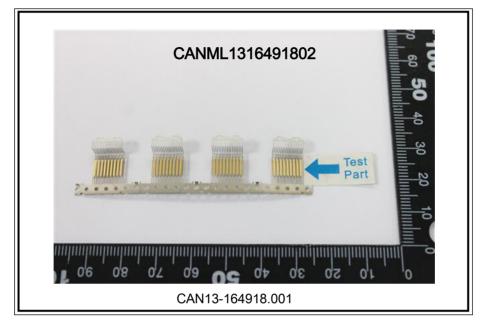


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No. CANML1316491802

Sample photo:



SGS authenticate the photo on original report only

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