



WHA YU INDUSTRIAL CO., LTD.(HEAD OFFICE)
 DONGGUAN AEON TECH CO.,LTD.(CHINA)
 SUZHOU AEON TECH CO.,LTD.(CHINA)
 AEON TECH (SHANGHAI) CO.,LTD(CHINA)
 DONGGUAN PARNER TECH CO.,LTD.(CHINA)

SPECIFICATION FOR APPROVAL

CUSTOMER: 永洋科技股份有限公司

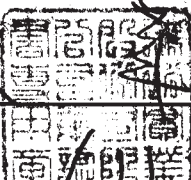
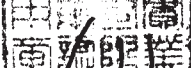
PART NAME: RF Antenna Cable Assembly

PART NO.: 11320Y11164A1

REVISION:

W. Y. P/NO.: C381-510215-A(SSR-30612)

REV.: X1

	MANUFACTURER SIGNATURE	CUSTOMER
APPROVED BY :	  	
DATE :	2013 / 4 	

WHA YU GROUP

WHA YU INDUSTRIAL CO., LTD.(HEAD OFFICE)

譚裕實業股份有限公司

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Fax: +886-3-5713853 · +886-3-5723600

DONGGUAN AEON TECH CO., LTD.(CHINA)

東莞台霖電子通訊有限公司

Address: Hupan Industrial District, Tai Ling Shan Town, Dong Guan City, Guangdong, China

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Fax: +86-769-85655258

SUZHOU AEON TECH CO., LTD(CHINA)

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Fax: +86-512-63627981

AEON TECH (SHANGHAI) CO., LTD(CHINA)

普翔電子貿易(上海)有限公司

Address: Flat 501, 5F, Build 27, NO.68, Guiqing Road, Huhui District, Shanghai, China

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Fax: +86-21-64959059

DONGGUAN PARNER TECH CO., LTD.(CHINA)

東莞倍能電子有限公司

Address: Hupan Industrial District, Shida Road, Tai Ling Shan Town,

Dong Guan City, Guangdong, China

Tel: +86-769-81662366

Fax: +86-769-81602681

Contents

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4.	Cable 規格	 6
5.	SGS 測試	 7~97

RF Antenna Cable Assembly

Specification

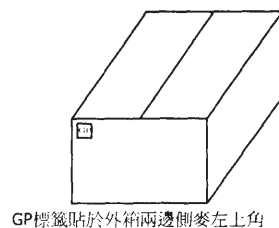
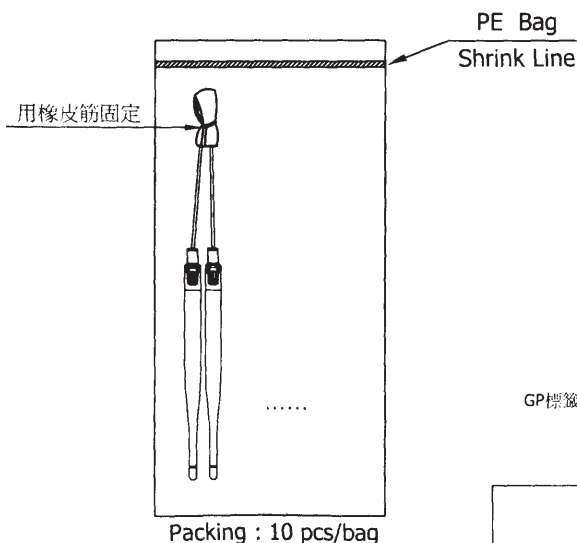
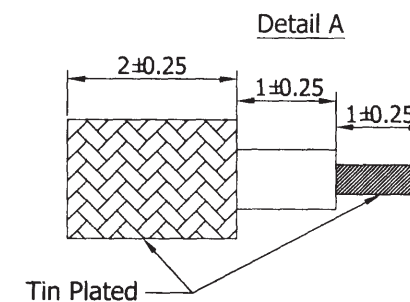
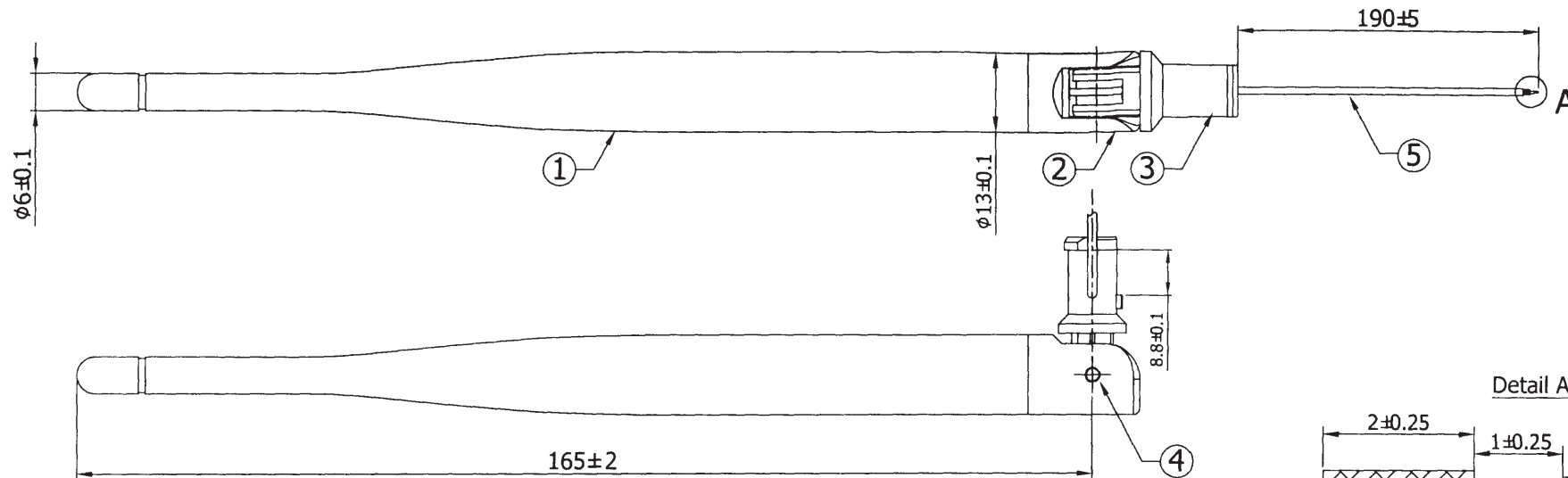
1. Electrical Properties :

- 1.1 Frequency Range.....2.4GHz ~ 2.5GHz
- 1.2 Impedance50Ω Nominal
- 1.3 VSWR1.92:1 Max.
- 1.4 Return Loss.....-10 dB Max.
- 1.5 RadiationOmni-directional
- 1.6 Gain(peak)..... 4.4dBi (excluding cable loss)
- 1.7 Cable Loss.....0.9dB Max.
- 1.8 Polarization..... Linear ; Vertical
- 1.9 Admitted Power.....1W
- 1.10 Cable.....Φ1.13mm Coaxial Cable

2. Physical Properties :

- 2.1 Antenna Cap..... TPE
- 2.2 Antenna Base.....PC
- 2.3 Antenna Base.....PC
- 2.4 Operating Temp.-10°C ~ +60°C
- 2.5 Storage Temp.-10°C ~ +70°C
- 2.6 ColorBlack

REV	DATE	DESCRIPTION
X1	03/26-2013	New Issue



5	Cable	Φ1.13mm Cable,Gray,50Ω	1	
4	Rivet	POM,Color:Black	2	
3	Antenna Base	(CD-585)PC,Color:Black	1	
2	Antenna Base	(CD-384)PC,Color:Black	1	
1	Antenna Body	(CD-383)TPE,Color:Black	1	
NO	DESCRIPTION		QTY	REMARK

CUSTOMER'S SINGATURE

XX.	±5.0	APPROVED
X.	±3.0	CHECKED
.X	±1.0	
.XX	±0.5	
.XXX	±0.1	DRAWING
⊙	⊙	

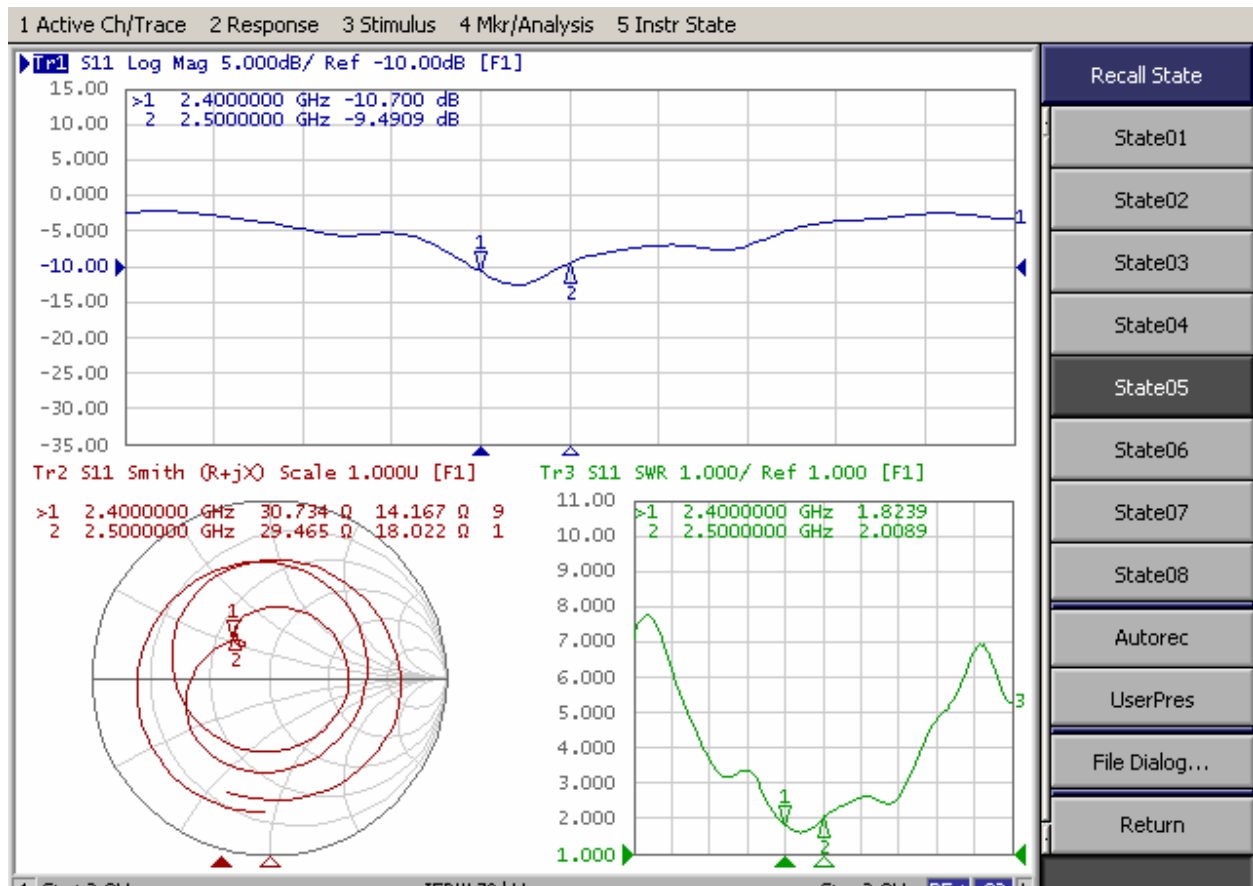
CUSTOMER: 永洋		
PART NO :	11320Y11164A1	
PART NAME:	RF Antenna Cable Assembly	
W.Y P/NO :	C381-510215-A	
REV	UNIT	FILE : SSR-30612
X1	mm	SHEET : 1/1

M.gear Wha Yu Group

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RF Antenna Assembly

P/No.C381-510215-A SSR-30612 Spec:2.4~2.5GHz



RF Antenna Assembly

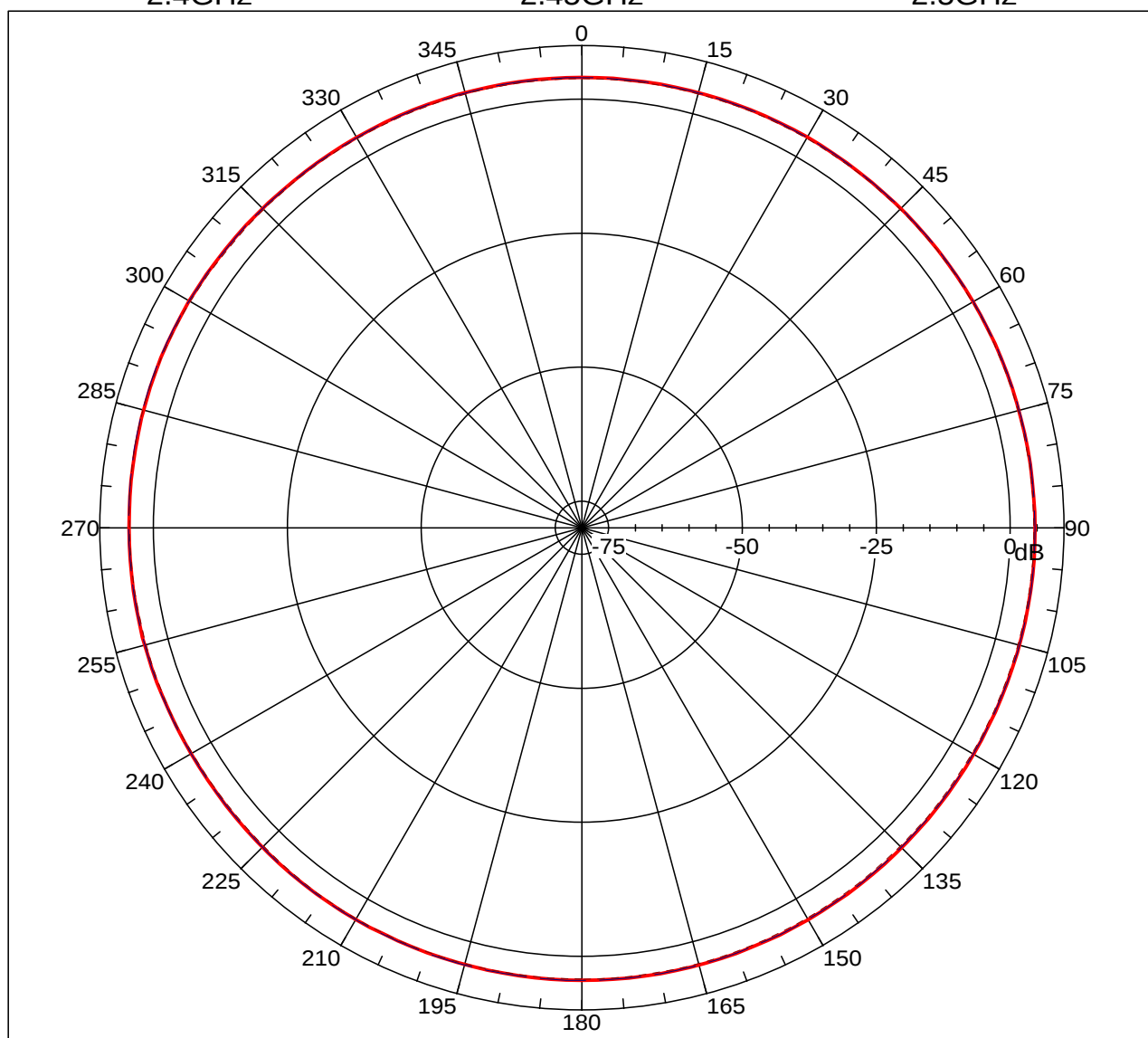
SPEC : 2.4 ~ 2.5GHz

Far-field amplitude of antenna-3-h.nsi

 2.4GHz

 2.45GHz

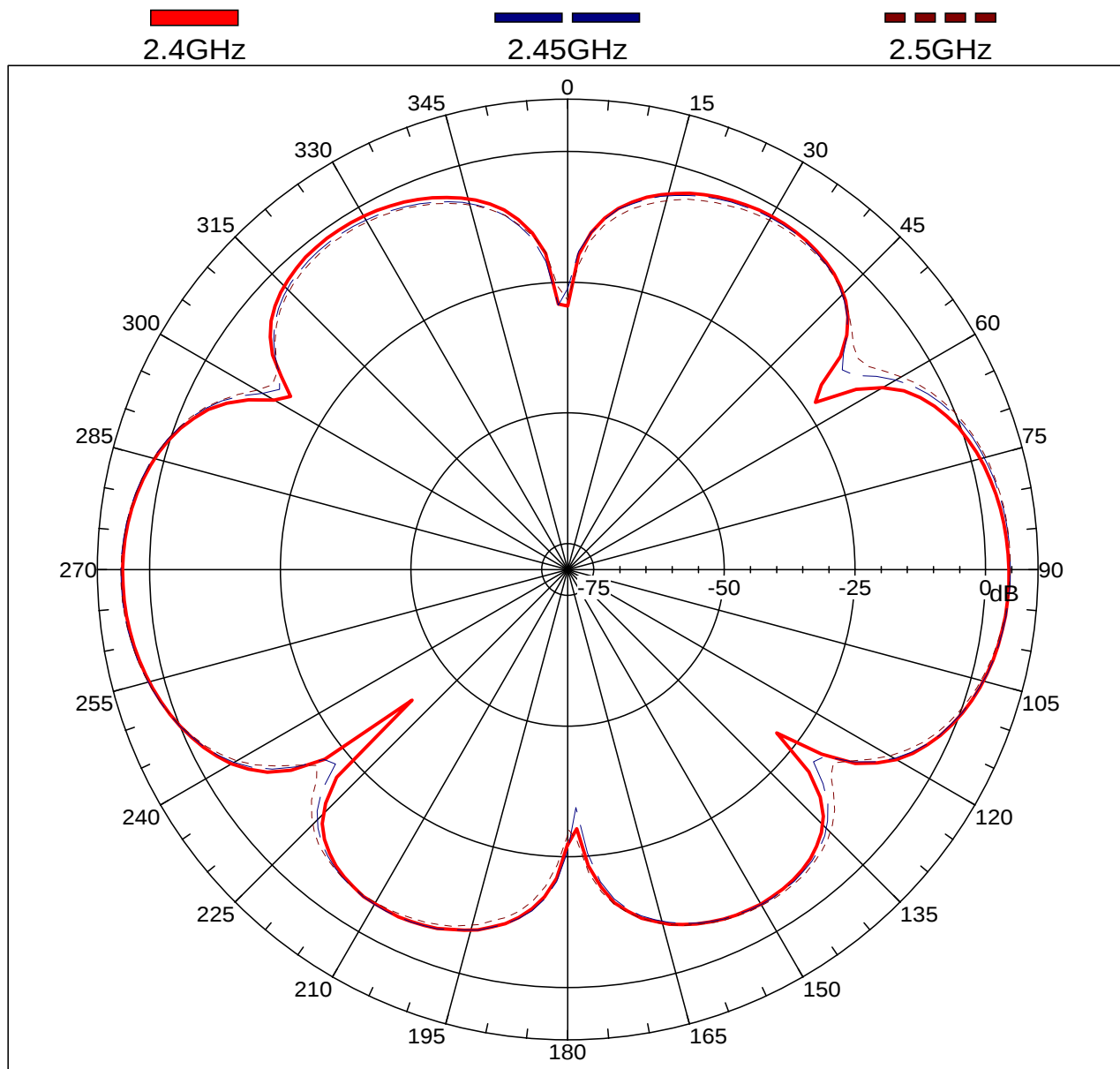
 2.5GHz



RF Antenna Assembly

SPEC : 2.4 ~ 2.5GHz

Far-field amplitude of antenna-3-e.nsi



型号 Type	RF-1.13/50	料号 P/N	SY113/50-028(Gray)	
结构图 Structure drawing				
结构特性 Structure characteristics				
结构 Structure	项目 Item		标准值 Standard value	
①内导体 Inner conductor	材料 Material		镀银铜线 Silverplated copper wire	
	组成:总根数/单根外径(mm) Makeup:total / O.D. of every wire(mm)		7/0.083	
	(绞合)标称外径(mm) (Intertwist)NOM.O.D.(mm)		0.249±0.02	
②绝缘层 Insulation	材料 Material		聚全氟乙丙烯 FEP	
	颜色 Color		透明 Clarity	
	标称外径(mm) NOM.O.D.(mm)		0.7±0.03	
③外导体 Outer conductor	材料 Material		镀锡铜线 Tinned copper wire	
	组成:总根数/单根外径(mm) Makeup:total / O.D. of every wire(mm)		4/0.05	
	标称外径(mm) NOM.O.D.(mm)		0.92±0.05	
	覆盖率(%) Coverage ratio(%)		90±5	
④护套层 Jacket	材料 Material		聚全氟乙丙烯 FEP	
	颜色 Color		灰 Gray	
	标称外径(mm) NOM.O.D.(mm)		1.13±0.05	
电性能特性 Electrical characteristics				
项目 Item	标准值 Standard value	项目 Item	频率 Frequency	标准值 Standard value 单位 Unit:dB/m
电容(pF/m) Capacitance(pF/m)	98	衰减 Attenuation	1GHz	≤2.2
速率(%) Velocity(%)	70		2GHz	≤3.1
阻抗(Ω) Impedance(Ω)	50±2		3GHz	≤3.8
驻波比 Standing wave ratio	≤1.3@0~6GHz		4GHz	≤4.4
最大工作电压(V) Max.operating voltage(V)	1000		5GHz	≤4.9
最大工作频率(GHz) Max.operating frequency(GHz)	6		6GHz	≤5.4
可靠性 Dependability				
项目 Item		单位 Unit	标准值 Standard value	
最小弯曲半径(一次) Min.bending radius static		mm	4	
最小弯曲半径(重复) Min.bending radius repeated		mm	—	
工作温度范围 Operating temperature		℃	-55~+200	
包装 Packing				
项目 Item		单位 Unit	标准值 Standard value	
每盘长度 The length of each plate		m	500	
每盘接头数 Each connector plate number		/	≤3	
每段最短长度 The shortest length of each root		m	≥10	

SGS Test Report

Product : RF Antenna Cable Assembly

Contents

No	Description		Report No.	Page
1	Cable	Φ 1.13mm Cable	RLSHE001184460005 RLNBE000117020001 SHAEC1301214305 SHAEC1207662608	P.8~40
2	Antenna Body	TPE	CE/2012/44809 F690101/LF-CTSAYAA12-25742	P.41~51
3	Antenna Base	PC	GZ1208415927/CHEM F690101/LF-CTSAYAA12-25742	P.52~56 P.47~51
4	Antenna Base	PC	GZ1208415927/CHEM F690101/LF-CTSAYAA12-25742	P.52~56 P.47~51
5	Rivet	POM	CE/2013/81088A F690101/LF-CTSAYAA12-25742	P.57~63 P.47~51
6	Ground Tube	Brass, POM; Plated-Ni	CANEC1213021201 RLNBF000119930001 CANEC1212565501	P.64~76
7	Helix	碳鋼; Plated-Ni	SHAEC1222647204 CANEC1212565501	P.77~80 P.73~76
8	泡棉	EVA	RLSHE001285480003	P.81~86
9	H.S. Tube	Heat Shrink Tube	CANEC1300355801	P.87~97

Result for RoHS : PASS

Test Report

Report No. RLSHE001184460005

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Applicant SWCC SHOWA CABLE SYSTEMS CO.,LTD

Address NO.3-1,TORANOMON 4-CHOME,MINATO-KU,TOKYO 105-6013

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

Sample Name Color masterbatch (GRAY)
Part No. Color masterbatch (GRAY) Material For KHCX series
Sample May Cover KHCX-□□AWG-SB-TA-2,(I)KHCX-□□AWG-SB-TA-2,
KHCX-□□AWG-SB-TA-2.1,KHCX-□□AWG-WSB-TA-2,
KHCX-□□AWG-SB-TA(TA)-2,KHCX-□□AWG-SB-TA(TA)-2.1,
KHCX-□□AWG-SLCB-OD1.13-2-GRAY
□□=30,32,36
Sample Received Date Sep.21,2012
Testing Period Sep.21,2012 to Oct.8,2012

TEST REQUEST

- 1.European standard on safety of toys:
- EN 71-3:1994 + A1:2000 + AC:2002 - Migration of Certain Elements
- 2.As specified by client, to test Lead(Pb), Cadmium(Cd), Mercury(Hg), Hexavalent Chromium (Cr(VI)), Polybrominated Biphenyls (PBBs), Polybrominated Diphenyl Ethers (PBDEs), Fluorine (F), Chlorine (Cl), Bromine (Br), Iodine (I), Phthalates, Perfluorooctane Sulfonates(PFOS), Polycyclic Aromatic Hydrocarbons (PAHs) in the submitted sample(s).

CONCLUSION

PASS

/

Test Method Please refer to the following pages.

Test Result Please refer to the following pages.

Tested by

Verna chen

Reviewed by

Wey Zhang

Approved by

Joy Su

Date

Oct.8,2012

Joy Su

Senior Laboratory Manager

No. 12488489

Centre Testing International (Shenzhen) Co., Ltd.Shanghai Branch No.1996,New Jinqiao Road, Pudong District,Shanghai

Test Report

Report No. RLSHE001184460005

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1.1 EIGHT SOLUBLE HEAVY METAL CONTENT TEST

As Specified in European Standard on Safety of Toys EN 71-3:1994 + A1:2000 + AC:2002 – Migration of Certain Elements. Acid Extraction Method was Used and Toxic Elements Content were Determined by Inductively Coupled Plasma Optical Emission Spectrometer (ICP-OES)

1.2 Test Result

Tested Item	Result (mg/kg)	M.D.L. (mg/kg)	Limit(mg/kg)
Soluble Antimony (Sb)	<5	5	60
Soluble Arsenic (As)	<2.5	2.5	25
Soluble Barium (Ba)	<5	5	1000
Soluble Cadmium (Cd)	<5	5	75
Soluble Chromium (Cr)	<2.5	2.5	60
Soluble Lead (Pb)	<5	5	90
Soluble Mercury (Hg)	<2.5	2.5	60
Soluble Selenium (Se)	<5	5	500

Tested Component(s): Grey plastic particle

Note:

- < = Less than
- M.D.L=Method Detection Limit
- mg/kg=ppm= parts per million based on dry weight of sample
- Results shown of soluble elements are of adjusted analytical results by subtracting analytical correction factor

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2.1 Test Method

Tested Item	Test Method	Measured Equipment	M.D.L.
Lead (Pb)	IEC 62321:2008 Ed.1 Sec.8	ICP-OES	2 mg/kg
Cadmium (Cd)	IEC 62321:2008 Ed.1 Sec.8	ICP-OES	2 mg/kg
Mercury (Hg)	IEC 62321:2008 Ed.1 Sec.7	ICP-OES	2 mg/kg
Hexavalent Chromium (Cr(VI))	IEC 62321:2008 Ed.1 Annex C	UV-Vis	2 mg/kg
Polybrominated Biphenyls (PBBs)	IEC 62321:2008 Ed.1 Annex A	GC-MS	5 mg/kg
Polybrominated Diphenyl Ethers (PBDEs)	IEC 62321:2008 Ed.1 Annex A	GC-MS	5 mg/kg
Fluorine (F)	Refer to BS EN 14582:2007	IC	10 mg/kg
Chlorine (Cl)	Refer to BS EN 14582:2007	IC	10 mg/kg
Bromine (Br)	Refer to BS EN 14582:2007	IC	10 mg/kg
Iodine (I)	Refer to BS EN 14582:2007	IC	10 mg/kg
Phthalates	Refer to EN 14372:2004	GC-MS	50mg/kg
Perfluorooctane Sulfonates(PFOS)	Refer to US EPA 3550C:2007	LC-MS-MS	5mg/kg
Polycyclic Aromatic Hydrocarbons (PAHs)	ZEK 01.4-08	GC-MS	0.2mg/kg

Test Report

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2.2 Test Result

Tested Item	Result
Lead (Pb)	N.D.
Cadmium (Cd)	N.D.
Mercury (Hg)	N.D.
Hexavalent Chromium (Cr(VI))	N.D.

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

Test Report

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Tested Item	Result
Halogen	
Fluorine (F)	$3.50 \times 10^5 \text{ mg/kg}$
Chlorine (Cl)	N.D.
Bromine (Br)	N.D.
Iodine (I)	N.D.

Tested Item	Result
Perfluorooctane Sulfonates(PFOS)	N.D.

Tested Item	CAS No.	EC No.	Result
Phthalates			
Dibutyl phthalate (DBP)	84-74-2	201-557-4	N.D.
Benzylbutyl phthalate (BBP)	85-68-7	201-622-7	N.D.
Bis(2-ethyl(hexyl)) phthalate (DEHP)	117-81-7	204-211-0	N.D.
Diisononyl phthalate (DINP)	28553-12-0	249-079-5	N.D.
Di-n-octyl phthalate (DNOP)	117-84-0	204-214-7	N.D.
Diisodecyl phthalate (DIDP)	26761-40-0	247-977-1	N.D.
Dimethyl phthalate (DMP)	131-11-3	205-011-6	N.D.
Diethyl phthalate (DEP)	84-66-2	201-550-6	N.D.
Dipropyl phthalate (DPrP)	131-16-8	205-015-8	N.D.
Diisobutyl phthalate (DIBP)	84-69-5	201-553-2	N.D.
Dipentyl phthalate (DPP)	131-18-0	205-017-9	N.D.
Dicyclohexyl phthalate (DCHP)	84-61-7	201-545-9	N.D.
Diheptyl phthalate (DHP)	3648-21-3	222-885-4	N.D.
Diisooctyl phthalate (DIOP)	27554-26-3	248-523-5	N.D.
Dinonyl phthalate(DNP)	84-76-4	201-560-0	N.D.
Diisononyl adipate(DINA)	33703-08-1	251-646-7	N.D.

Test Report

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Limits for PAHs content for material of (grip) surfaces, which are to be categorized on account of the results of the risk analysis.

Parameters	Category 1	Category 2	Category 3
	Materials intended to be put in the mouth or materials of toys for children aged <36 months with intended skin contact	Materials not covered by category 1, with foreseeable skin contact for longer than 30 seconds (long-term skin contact)	Materials not covered by category 1 or 2, with foreseeable skin contact up to 30 seconds (short term skin contact)
Benzo[a]pyrene	Not detectable (< 0.2mg/kg)	1mg/kg	20mg/kg
18 PAHs SUMs	Not detectable (< 0.2mg/kg)	10mg/kg	200mg/kg

Test Result

Tested Item	Result
Polycyclic Aromatic Hydrocarbons(PAHs)	
Naphthalene	N.D.
Acenaphthylene	N.D.
Acenaphthene	N.D.
Fluorene	N.D.
Phenanthrene	N.D.
Anthracene	N.D.
Fluoranthene	N.D.
Pyrene	N.D.
Chrysene	N.D.
Benzo[a]anthracene	N.D.
Benzo[b]fluoranthene	N.D.
Benzo[k]fluoranthene	N.D.
Benzo[j]fluoranthene	N.D.
Benzo[a]pyrene	N.D.
Benzo[e]pyrene	N.D.
Indenol[1,2,3-cd]pyrene	N.D.
Dibenz[a,h]anthracene	N.D.
Benzo[g,h,i]perylene	N.D.
18 PAHs SUMs	N.D.

Tested Component(s): Grey plastic particle

Note: The sample had been dissolved totally tested for Lead, Cadmium, Mercury .

-M.D.L. = Method Detection Limit

-N.D. = Not Detected (<M.D.L.)

-mg/kg = ppm = parts per million

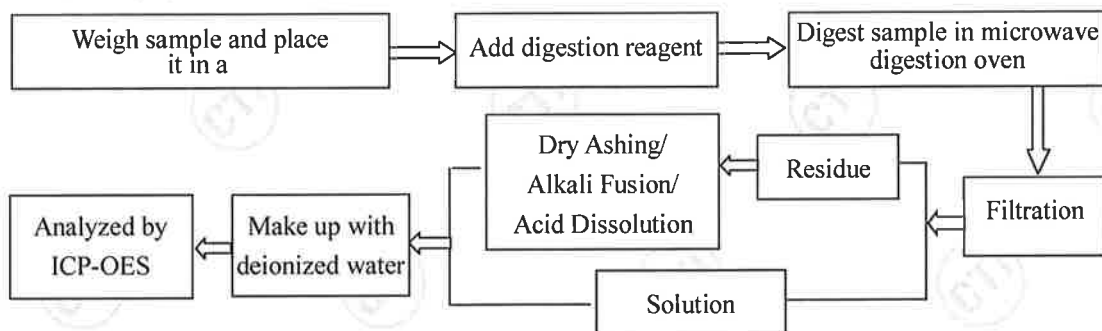
Test Report

Report No. RLSHE001184460005

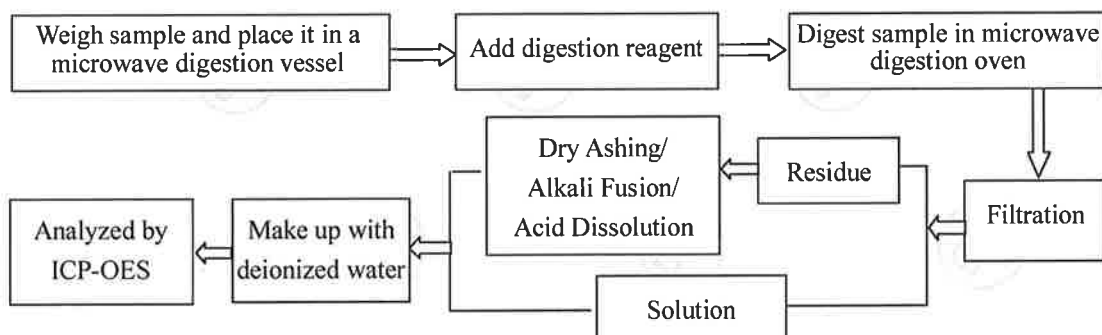
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2.3 Test Process

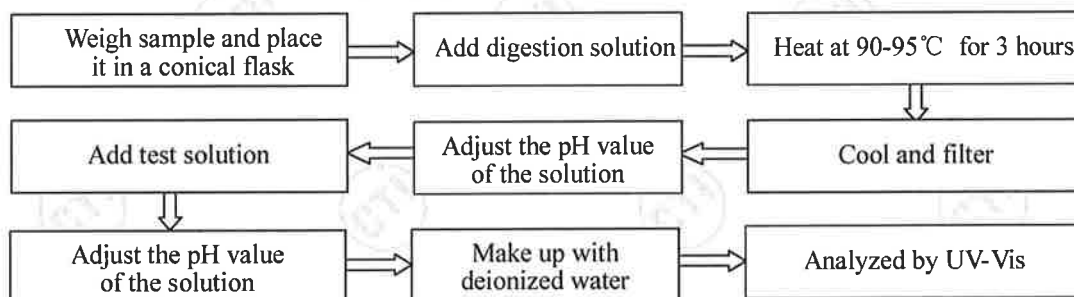
2.3.1. Lead(Pb) , Cadmium(Cd)



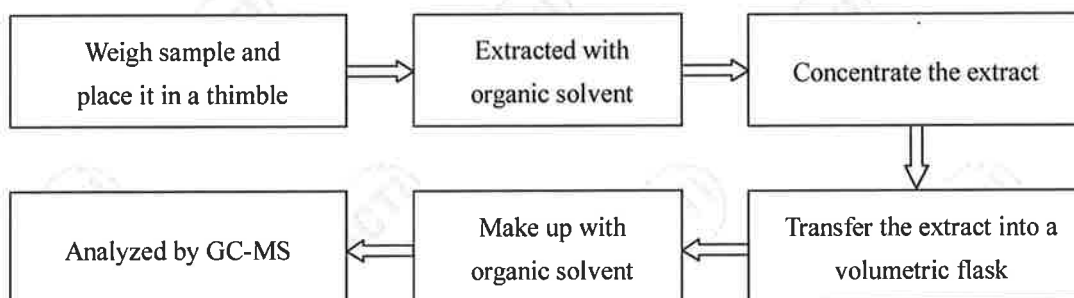
2.3.2. Mercury(Hg)



2.3.3. Hexavalent Chromium (Cr(VI))



2.3.4. PBBs /PBDEs

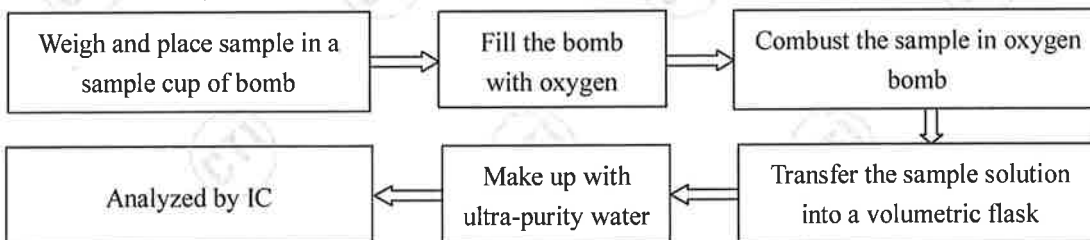


Test Report

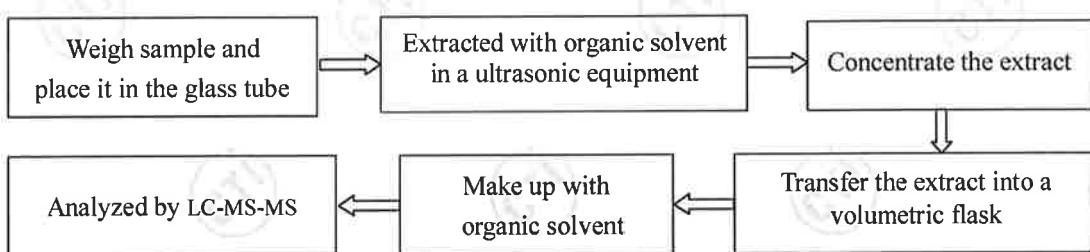
Report No. RLSHE001184460005

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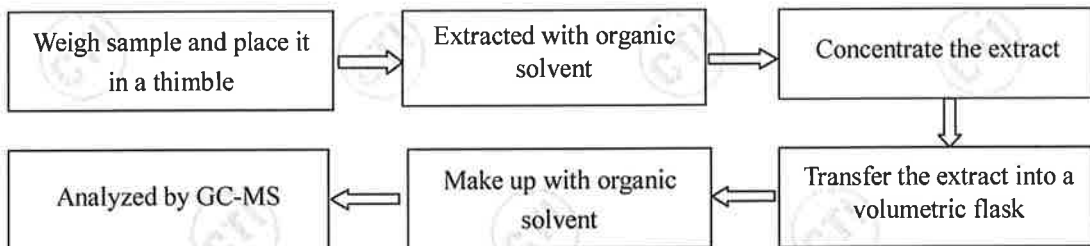
2.3.5. Fluorine (F), Chlorine (Cl), Bromine (Br), Iodine (I)



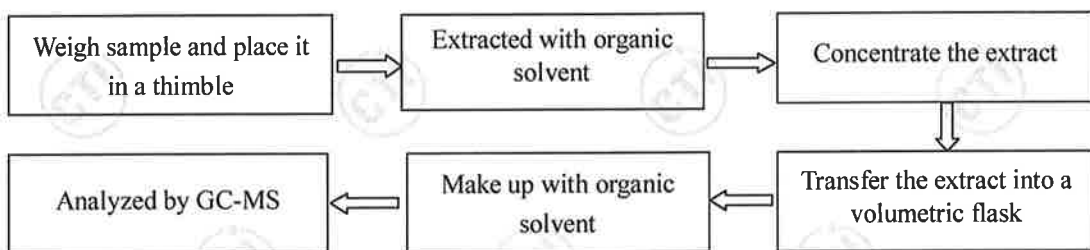
2.3.6. Perfluorooctane Sulfonates(PFOS)



2.3.7. Phthalates



2.3.8.PAHs



Test Report

Report No. RLSHE001184460005

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Photo of the sample



*** End of Report ***

The test report is effective only with both signature and specialized stamp. The result(s) shown in this report refer only to the sample(s) tested. Without written approval of CTI, this report can't be reproduced except in full.

检测报告 Test Report

报告编号 :RLNBE000117020001
Report No.:RLNBE000117020001

第 1 页 共 9 页
Page 1 of 9

申请单位 :浙江正导光电股份有限公司
Applicant :ZHEJIANG ZHENGDAO OPTOELECTRONICS CO.,LTD
地 址 :浙江省湖州市练市镇正导路 8 号
Address :NO.8 ZHENGDAO ROAD LIANSHI TOWN HUZHOU CITY ZHEJIANG PROVINCE

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 Sample Name :镀锡铜线 Tinned Copper Wire
材料名称 Material :铜、锡 Cu、Sn
样品接收日期 :2012.12.21
Sample Received Date :Dec. 21, 2012
样品检测日期 :2012.12.21—2012.12.25
Testing Period :Dec. 21, 2012 to Dec. 25, 2012

检测要求/检测依据/检测结果: 请参见下页。

Test Requested/Test Method/Test Result(s): Please refer to the following page(s).

主 检
Tested by

Sha Chen

批 准
Approved by

Chen Qian

Chen Qian
Approved Signatory

审 核
Reviewed by

Wei Miao

日 期
Date

2012.12.25

No. 13820413

宁波市华测检测技术有限公司

Centre Testing International(Ningbo)Co.,Ltd.

浙江省宁波市高新区创苑路750号A座7-8楼

7-8/F., Building A, No.750.Chuangyuan Road, Gaoxin District, Ningbo, Zhengjiang, China

检测报告 Test Report

报告编号 :RLNBE000117020001

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Report No.:RLNBE000117020001

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检测要求

:1.根据客户要求, 对所提交样品中的铅(Pb), 镉(Cd), 汞(Hg), 六价铬(Cr(VI)), 氟(F), 氯(Cl), 溴(Br), 碘(I), 全氟辛烷磺酸盐(PFOS), 全氟辛烷酸(PFOA)进行测试。

2.根据客户要求, 对所提交样品镀层中的铅(Pb), 镉(Cd), 汞(Hg), 六价铬(Cr(VI)), 多溴联苯(PBBs), 多溴二苯醚(PBDEs)进行测试。

Test Requested

:1.As specified by client, to test Lead(Pb), Cadmium(Cd), Mercury(Hg), Hexavalent Chromium(Cr(VI)), Fluorine(F), Chlorine(Cl), Bromine(Br), Iodine(I), Perfluorooctane Sulfonates(PFOS), Perfluorooctanoic Acid (PFOA) in the submitted sample(s).

2.As specified by client, to test Lead(Pb), Cadmium(Cd), Mercury(Hg), Hexavalent Chromium(Cr(VI)), Polybrominated Biphenyls(PBBs), Polybrominated Diphenyl Ethers(PBDEs) in the plating of submitted sample(s).

检测依据 Test Method:

测试项目 Tested Item(s)	测试方法 Test Method	测试仪器 Measured Equipment(s)	方法检测限 MDL
铅 Lead (Pb)	IEC 62321:2008 Ed.1 Sec.9	ICP-OES	2 mg/kg
	参考 IEC 62321:2008 Ed.1 * Refer to IEC 62321:2008 Ed.1 *		
镉 Cadmium (Cd)	IEC 62321:2008 Ed.1 Sec.9	ICP-OES	2 mg/kg
	参考 IEC 62321:2008 Ed.1 * Refer to IEC 62321:2008 Ed.1 *		
汞 Mercury (Hg)	IEC 62321:2008 Ed.1 Sec.7	ICP-OES	2 mg/kg
	参考 IEC 62321:2008 Ed.1 * Refer to IEC 62321:2008 Ed.1 *		
六价铬 Hexavalent Chromium (Cr(VI))	IEC 62321:2008 Ed.1 Annex B	UV-Vis	/
多溴联苯 Polybrominated Biphenyls (PBBs)	IEC 62321:2008 Ed.1 Annex A	GC-MS	5 mg/kg
多溴二苯醚 Polybrominated Diphenyl Ethers (PBDEs)	IEC 62321:2008 Ed.1 Annex A	GC-MS	5 mg/kg
氟 Fluorine (F)	参考 BS EN 14582:2007 Refer to BS EN 14582:2007	IC	10 mg/kg
氯 Chlorine (Cl)	参考 BS EN 14582:2007 Refer to BS EN 14582:2007	IC	10 mg/kg
溴 Bromine (Br)	参考 BS EN 14582:2007 Refer to BS EN 14582:2007	IC	10 mg/kg
碘 Iodine (I)	参考 BS EN 14582:2007 Refer to BS EN 14582:2007	IC	10 mg/kg
全氟辛烷酸 Perfluorooctanoic Acid(PFOA)	参考 US EPA 3550C:2007 Refer to US EPA 3550C:2007	LC-MS-MS	5 mg/kg
全氟辛烷磺酸盐 Perfluorooctane Sulfonates(PFOS)	参考 US EPA 3550C:2007 Refer to US EPA 3550C:2007	LC-MS-MS	5 mg/kg

*=镀层采用合适的酸液退镀, 退镀液经 ICP-OES 测试。

*=Appropriate acid is used for deplating, and the solution is analyzed by ICP-OES.

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检测结果 Test Result(s):

测试项目 Tested Item(s)	结果 Result	
	1	2
铅 Lead (Pb)	15 mg/kg	53 mg/kg
镉 Cadmium (Cd)	N.D.	N.D.
汞 Mercury (Hg)	N.D.	N.D.
六价铬 Hexavalent Chromium (Cr(VI))	Negative	Negative

测试项目 Tested Item(s)	结果 Result
	2
多溴联苯 Polybrominated Biphenyls(PBBs)	
一溴联苯 Monobromobiphenyl	N.D.
二溴联苯 Dibromobiphenyl	N.D.
三溴联苯 Tribromobiphenyl	N.D.
四溴联苯 Tetrabromobiphenyl	N.D.
五溴联苯 Pentabromobiphenyl	N.D.
六溴联苯 Hexabromobiphenyl	N.D.
七溴联苯 Heptabromobiphenyl	N.D.
八溴联苯 Octabromobiphenyl	N.D.
九溴联苯 Nonabromobiphenyl	N.D.
十溴联苯 Decabromobiphenyl	N.D.
多溴二苯醚 Polybrominated Diphenyl Ethers(PBDEs)	
一溴二苯醚 Monobromodiphenyl ether	N.D.
二溴二苯醚 Dibromodiphenyl ether	N.D.
三溴二苯醚 Tribromodiphenyl ether	N.D.
四溴二苯醚 Tetrabromodiphenyl ether	N.D.
五溴二苯醚 Pentabromodiphenyl ether	N.D.
六溴二苯醚 Hexabromodiphenyl ether	N.D.
七溴二苯醚 Heptabromodiphenyl ether	N.D.
八溴二苯醚 Octabromodiphenyl ether	N.D.
九溴二苯醚 Nonabromodiphenyl ether	N.D.
十溴二苯醚 Decabromodiphenyl ether	N.D.

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检测结果 Test Result(s):

测试项目 Tested Item(s)	结果 Result
	3
卤素 Halogens	
氟 Fluorine (F)	N.D.
氯 Chlorine (Cl)	N.D.
溴 Bromine (Br)	N.D.
碘 Iodine (I)	N.D.

测试项目 Tested Item(s)	结果 Result
	3
全氟辛酸 Perfluorooctanoic Acid(PFOA)	N.D.
全氟辛酸磺酸盐 Perfluorooctane Sulfonates(PFOS)	N.D.

测试样品/部位描述

Tested Sample/Part Description

- 1 金属基材 Metal substrate
- 2 银白色镀层 Silver-white plating
- 3 有银白色镀层的金属 Metal with silver-white plating

注释: 对于检测铅, 镉, 汞之样品已完全溶解。

对于检测铅, 镉, 汞之被剥离下来的电镀层已完全溶解。

-N.D. = 未检出 (小于方法检测限)

-mg/kg = ppm = 百万分之几

-Negative 表示阴性

阴性=不含有六价铬, 由表面积为 50cm^2 的样品所萃取出来的溶液中的六价铬的浓度小于 0.02mg/kg

Note: The sample had been dissolved totally tested for Lead, Cadmium, Mercury.

The washed plating had been dissolved totally tested for Lead, Cadmium, Mercury.

-MDL = Method Detection Limit

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

-mg/kg = ppm = parts per million

-Negative = Absence of Cr(VI), the detected Cr(VI) concentration in the boiling water extraction solution is less than 0.02 mg/kg with 50cm^2 sample surface area used.

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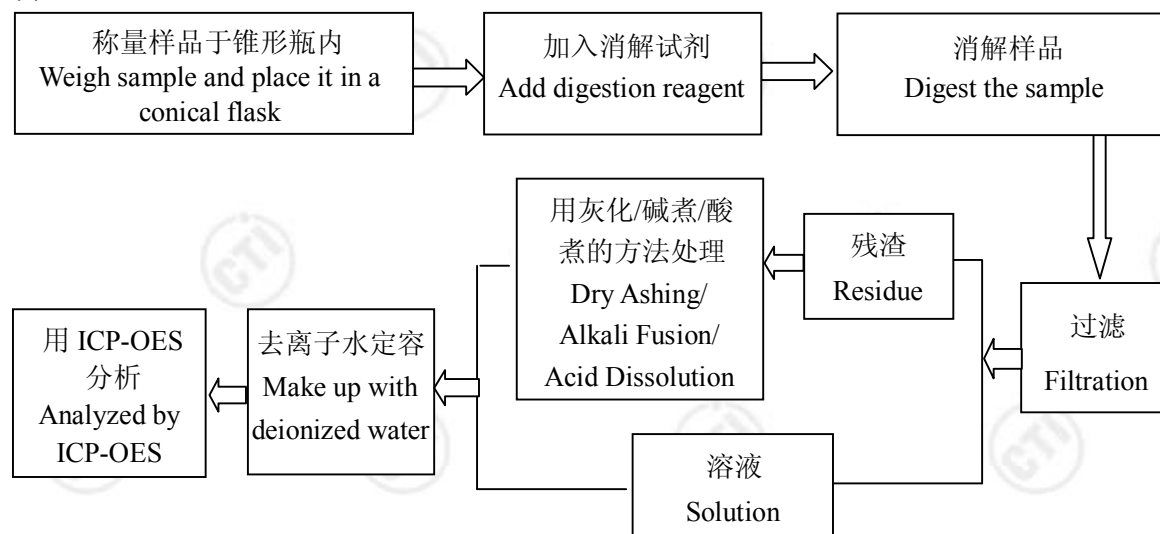
检测流程 Test Process:

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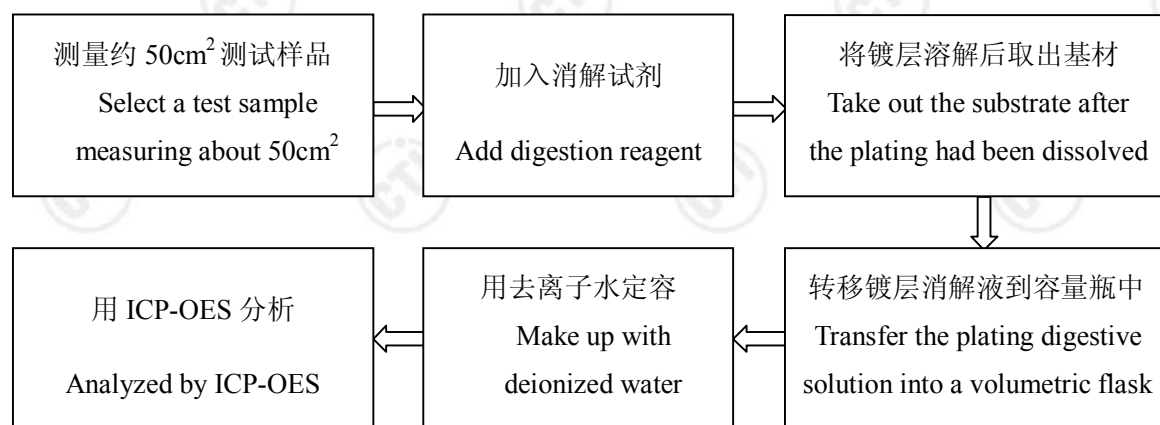
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1. 铅/镉 Pb/Cd

(1) IEC 62321:2008 Ed.1 Sec.9



(2) 参考 IEC 62321:2008 Ed.1 * Refer to IEC 62321:2008 Ed.1 *



检测报告 Test Report

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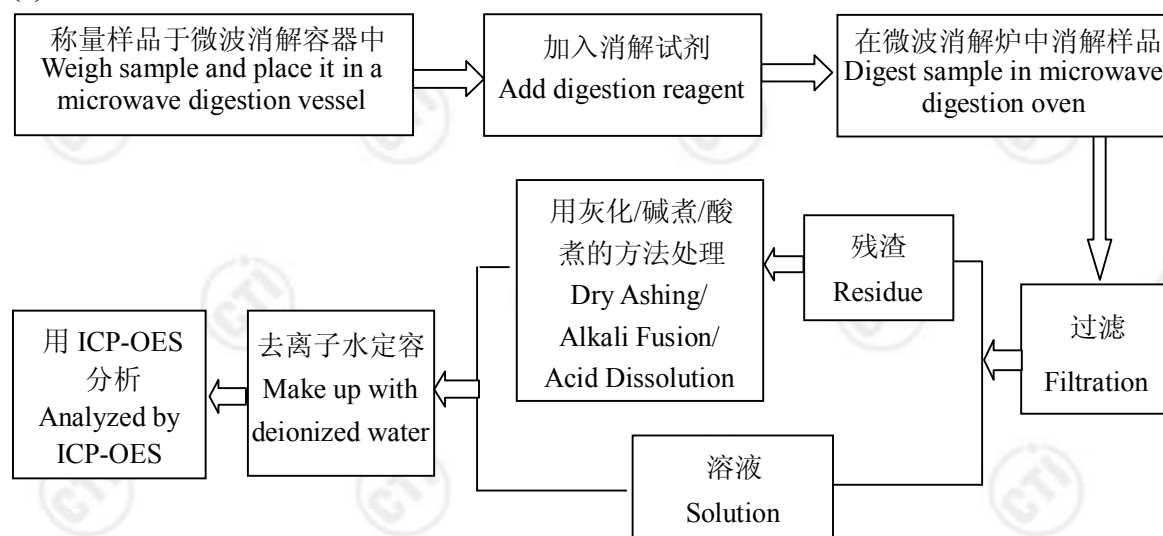
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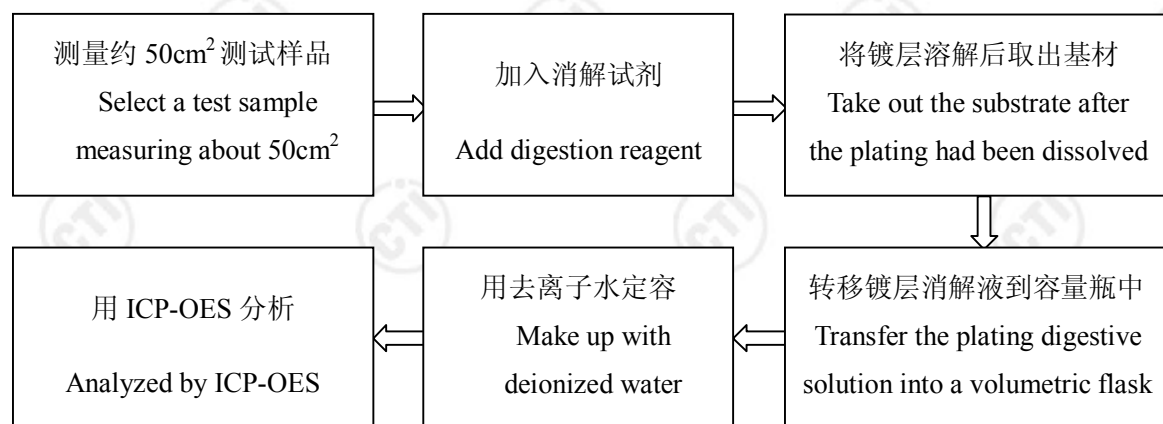
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2. 汞 Hg

(1) IEC 62321:2008 Ed.1 Sec.7



(2) 参考 IEC 62321:2008 Ed.1 * Refer to IEC 62321:2008 Ed.1 *



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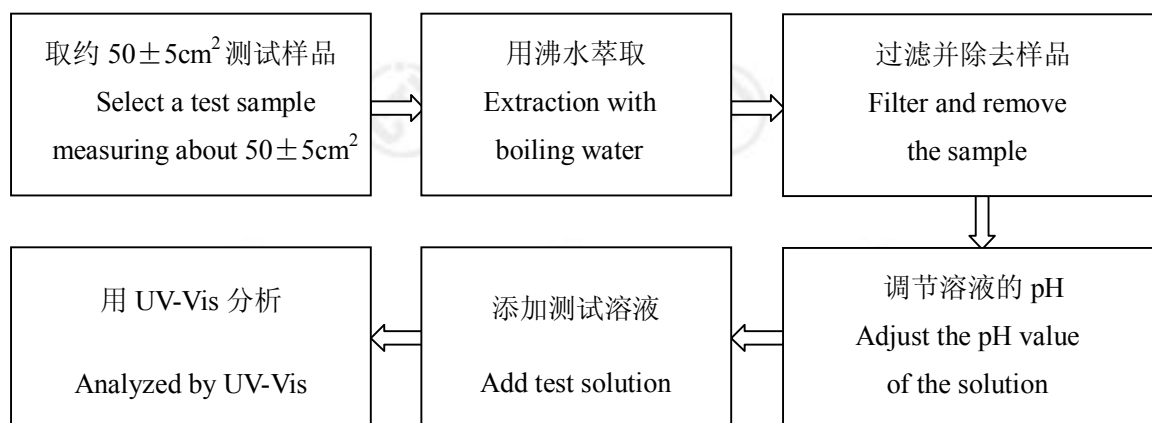
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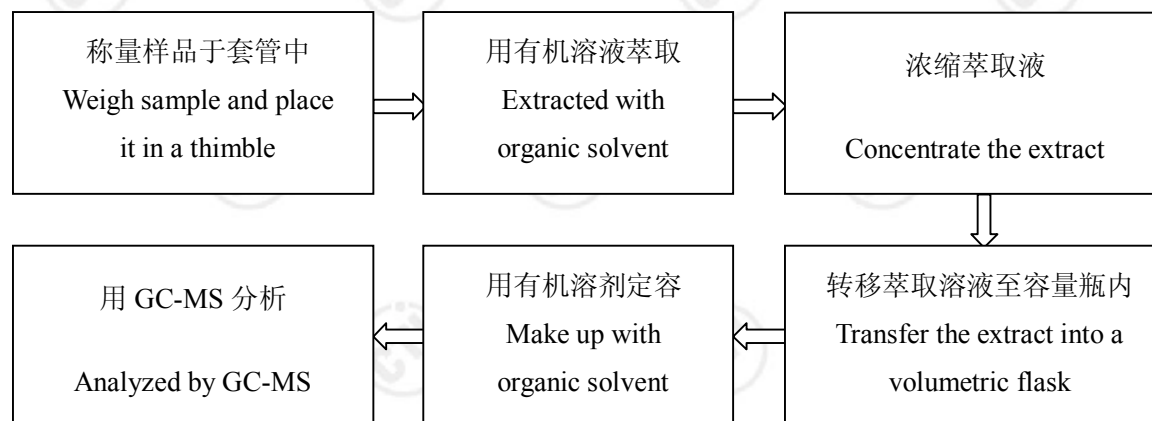
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3. 六价铬 Chromium(VI)

IEC 62321:2008 Ed. 1 Annex B



4. 多溴联苯/多溴二苯醚 PBBs/PBDEs



5. 氟/氯/溴/碘 F/Cl/Br/I



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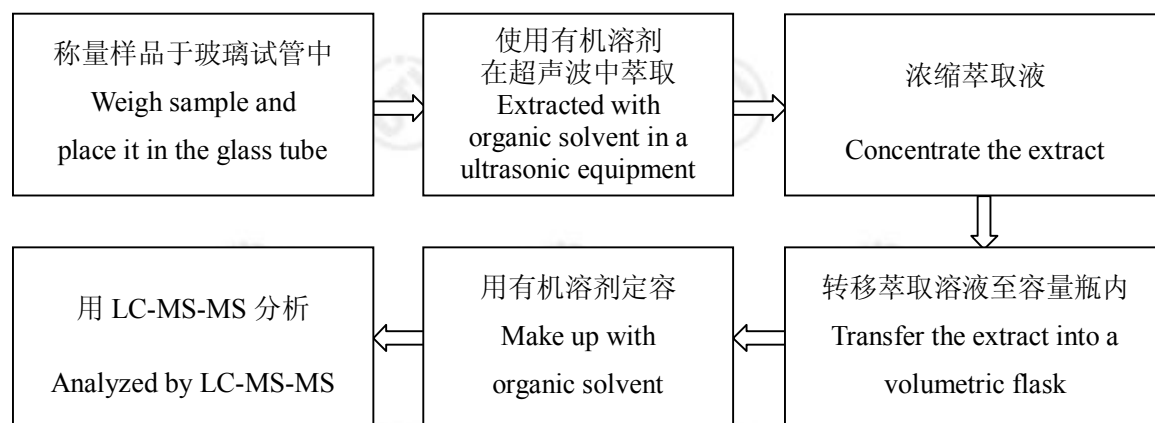
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6. 全氟辛酸(PFOA)和全氟辛酸磺酸盐(PFOS)

Perfluorooctanoic Acid(PFOA) and Perfluorooctane Sulfonates(PFOS)



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样品图片 Photo(s) of the sample(s)



*** 报告结束 ***

***End of report ***

检测报告无批准人签字及“报告专用章”无效，本报告检测结果仅对受测样品负责。未经CTI书面同意，不得部分复制本报告。

The test report is effective only with both signature and specialized stamp. The result(s) shown in this report refer only to the sample(s) tested. Without written approval of CTI, this report can't be reproduced except in full.

Test Report

No. SHAEC1301214305

Date: 01 Feb 2013

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DAIKIN FLUOROCHEMICALS (CHINA) CO., LTD.

CHANGSHU INTERNATIONAL CHEMICAL INDUSTRIAL PARK, HAIYU TOWN, CHANGSHU CITY, JIANGSU

The following sample(s) was/were submitted and identified on behalf of the clients as : NEOFロン FEP

SGS Job No. : SP13-001741 - SH

Model No. : NP-1105

Date of Sample Received : 21 Jan 2013

Testing Period : 21 Jan 2013 - 01 Feb 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, Polybrominated biphenyls (PBB), Polybrominated diphenyl ethers (PBDE) 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.



JJ Fan

Approved Signatory

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Test Results :

Test Part Description :

Specimen No.	SGS Sample ID	Description
1	SHA13-012143.002	Translucent solid pellet

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 : With reference to IEC 62321:2008

- (1) Determination of Cadmium by ICP-OES.
- (2) Determination of Lead by ICP-OES.
- (3) Determination of Mercury by ICP-OES.
- (4) Determination of Hexavalent Chromium by Colorimetric Method using UV-Vis.
- (5) Determination of PBBs / PBDEs content by GC-MS.

Test Item(s)	Limit	Unit	MDL	002
Cadmium (Cd)	100	mg/kg	2	ND
Lead (Pb)	1000	mg/kg	2	ND
Mercury (Hg)	1000	mg/kg	2	ND
Hexavalent Chromium (Cr(VI))	1000	mg/kg	2	ND
Sum of PBBs	1000	mg/kg	-	ND
Monobromobiphenyl	-	mg/kg	5	ND
Dibromobiphenyl	-	mg/kg	5	ND
Tribromobiphenyl	-	mg/kg	5	ND
Tetrabromobiphenyl	-	mg/kg	5	ND
Pentabromobiphenyl	-	mg/kg	5	ND
Hexabromobiphenyl	-	mg/kg	5	ND
Heptabromobiphenyl	-	mg/kg	5	ND
Octabromobiphenyl	-	mg/kg	5	ND
Nonabromobiphenyl	-	mg/kg	5	ND
Decabromobiphenyl	-	mg/kg	5	ND
Sum of PBDEs	1000	mg/kg	-	ND
Monobromodiphenyl ether	-	mg/kg	5	ND

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<u>Test Item(s)</u>	<u>Limit</u>	<u>Unit</u>	<u>MDL</u>	<u>002</u>
Dibromodiphenyl ether	-	mg/kg	5	ND
Tribromodiphenyl ether	-	mg/kg	5	ND
Tetrabromodiphenyl ether	-	mg/kg	5	ND
Pentabromodiphenyl ether	-	mg/kg	5	ND
Hexabromodiphenyl ether	-	mg/kg	5	ND
Heptabromodiphenyl ether	-	mg/kg	5	ND
Octabromodiphenyl ether	-	mg/kg	5	ND
Nonabromodiphenyl ether	-	mg/kg	5	ND
Decabromodiphenyl ether	-	mg/kg	5	ND

Notes :

(1) The maximum permissible limit is quoted from directive 2011/65/EU, Annex II

Halogen

Test Method : With reference to EN 14582: 2007, analysis was performed by Ion Chromatograph (IC).

<u>Test Item(s)</u>	<u>Unit</u>	<u>MDL</u>	<u>002</u>
Fluorine (F)	mg/kg	50	>100000
Chlorine (Cl)	mg/kg	50	ND
Bromine (Br)	mg/kg	50	ND
Iodine (I)	mg/kg	50	ND

PFOS (Perfluorooctane Sulfonates) and PFOA (Perfluorooctanoic Acid)

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

<u>Test Item(s)</u>	<u>Limit</u>	<u>Unit</u>	<u>MDL</u>	<u>002</u>
Perfluorooctane Sulfonates (PFOS) and related Acid, Metal Salt and Amide	1000	mg/kg	10	ND
Perfluorooctanoic Acid (PFOA)	-	mg/kg	10	ND

Notes :

Max. limit specified by commission regulation (EU) No. 757/2010 amending regulation (EC) No 850/2004.

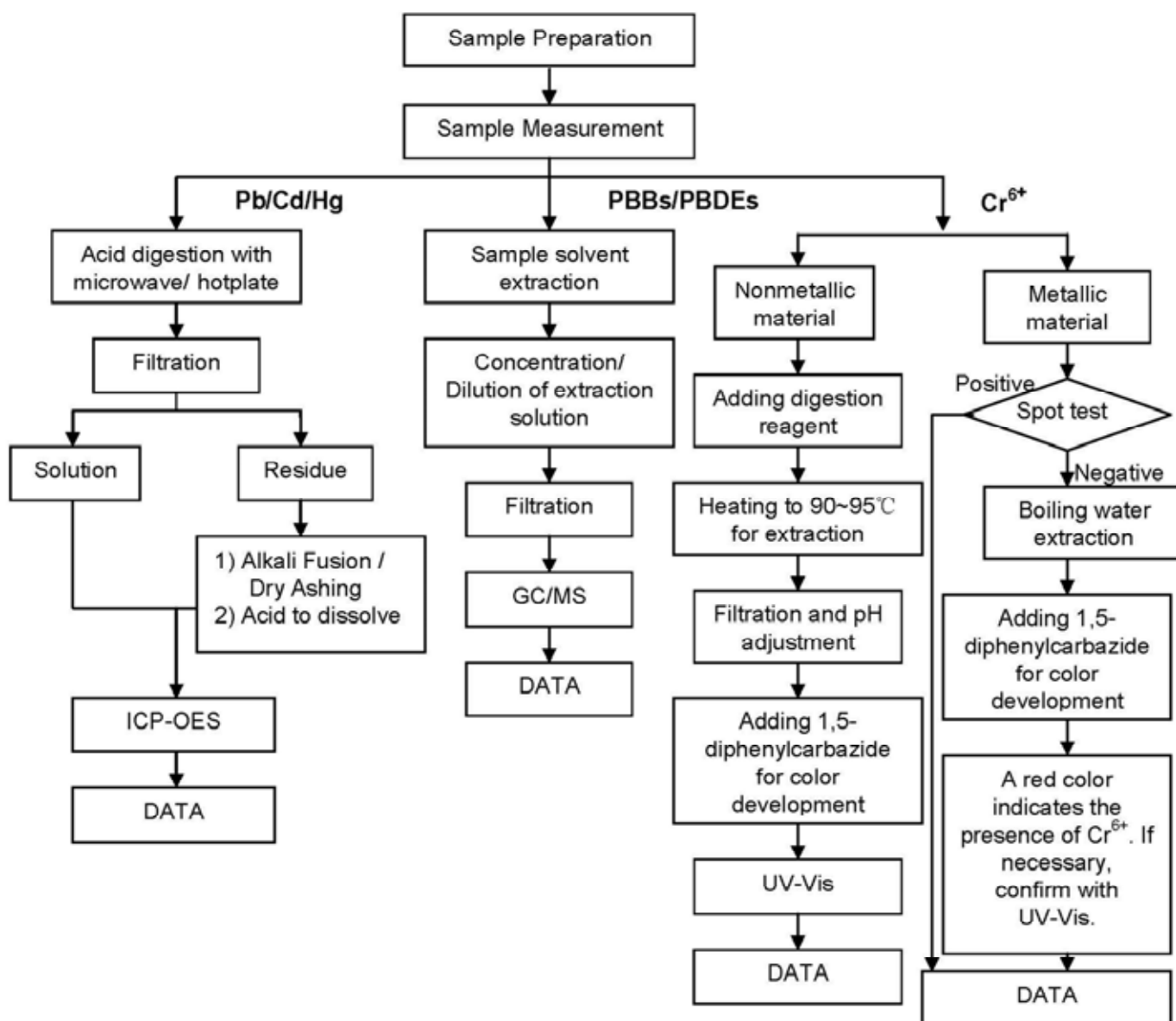
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ATTACHMENTS

RoHS Testing Flow Chart

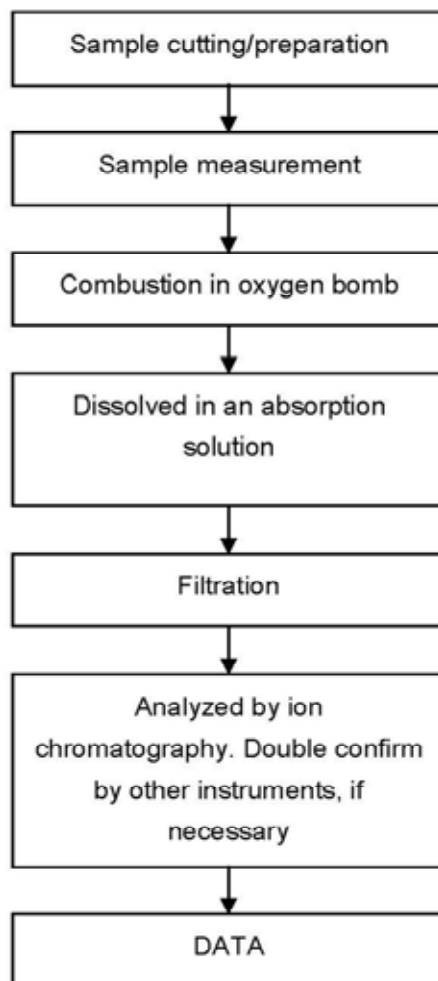
- 1) Name of the person who made testing: Jan Shi/Yoyo Wang/Allen Xiao/Gary Xu
- 2) Name of the person in charge of testing: Jeff Zhang/George Xu/ Linda Li
- 3) These samples were dissolved totally by pre-conditioning method according to below flow chart. (Cr⁶⁺ and PBBs/PBDEs test method excluded)



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Halogen Testing Flow Chart

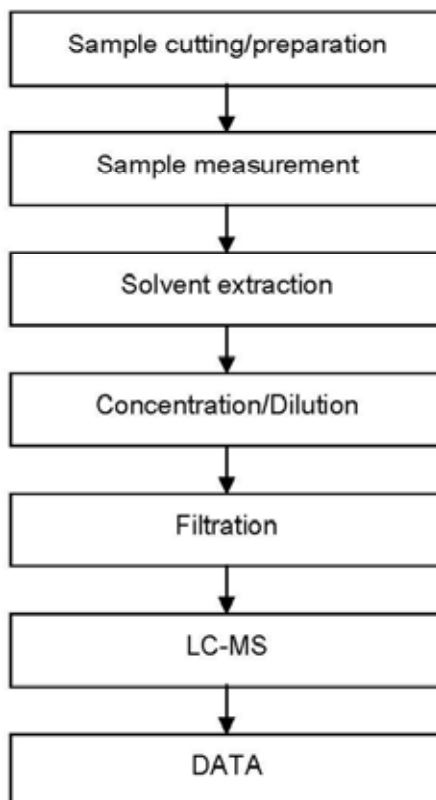
- 1) Name of the person who made testing: Sisily Yin
- 2) Name of the person in charge of testing: Linda Li



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PFOS/PFOA Testing Flow Chart

- 1) Name of the person who made testing: Judy Li
- 2) Name of the person in charge of testing: Myra Ma



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Sample photo:



SGS authenticate the photo on original report only

*** End of Report ***

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测试报告

No. SHAEC1207662608

日期: 2012年05月19日

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常州市恒丰铜材有限公司

常州市凤凰路26号

以下测试之样品是由申请者所提供及确认: 镀银圆铜线

SGS工作编号: SP12-013936 - SH

成分: 铜、银

样品接收日期: 2012年05月16日

测试周期: 2012年05月16日 - 2012年05月19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



Fan Jingjie, JJ 范晶捷

批准签署人

本报告是发布日期为2012年05月19日编号为SHAEC1207662607 英文检测报告的中文译本。如有异议, 以英文版本为准。

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3rd Building, No. 889 Yishan Road Xuhui District, Shanghai China 200233
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HL: (86-21) 61402594 HL: (86-21) 54500353 e sgs.china@sgs.com

测试报告

No. SHAEC1207662608

日期: 2012年05月19日

第2页,共8页

测试结果:

测试样品描述:

样品编号	SGS样品ID	描述
1	SHA12-076626.004	银色金属线

备注:

- (1) 1 mg/kg = 1 ppm = 0.0001%
- (2) MDL = 方法检测限
- (3) ND = 未检出 (< MDL)
- (4) "-" = 未规定

RoHS指令2011/65/EU

测试方法:

参考IEC 62321:2008:

- (1) 用ICP-OES测定镉的含量.
- (2) 用ICP-OES测定铅的含量.
- (3) 用ICP-OES测定汞的含量.
- (4) 用点测试法/紫外-可见分光光度计比色法测定六价铬的含量.
- (5) 用GC-MS测定PBBs(多溴联苯)和PBDEs(多溴二苯醚) 的含量.

测试项目	限值	单位	MDL	004
镉 (Cd)	100	mg/kg	2	ND
铅(Pb)	1000	mg/kg	2	ND
汞 (Hg)	1000	mg/kg	2	ND
六价铬(CrVI)	-	-	◇	阴性
多溴联苯之和(PBBs)	1000	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)	1000	mg/kg	-	ND
一溴二苯醚	-	mg/kg	5	ND

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测试项目	限值	单位	MDL	004
二溴二苯醚	-	mg/kg	5	ND
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.

(2) ◇点测试法:

阴性= 镀层中未检测到六价铬,阳性 = 镀层中检测到六价铬;

(当点测试结果为阴性或无法确定时,将采用沸水萃取法作进一步的结果验证.)

◇沸水萃取法:

阴性 = 镀层中未检测到六价铬

阳性 = 镀层中检测到六价铬; 表明50 cm²表面积的被测试样品的沸水萃取液中六价铬的浓度等于或大于0.02 mg/kg

针对金属表面的防腐涂层:由于未获知样品的存储条件和生产日期,样品的六价铬测试结果仅代表测试时样品的状态

六溴环十二烷(HBCDD)

测试方法: 参考IEC 62321:2008, 采用GC-MS分析六溴环十二烷含量.

测试项目	单位	MDL	004
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, 采用GC-MS分析邻苯二甲酸盐(或酯)含量.

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测试报告

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测试项目	单位	MDL	004
邻苯二甲酸二丁酯(DBP)	%	0.003	ND
邻苯二甲酸丁苄酯(BBP)	%	0.003	ND
邻苯二甲酸二(2-乙基己基)酯(DEHP)	%	0.003	ND

备注:

(1) 参考信息: RoHS指令2002/95/EC的重订指令2011/65/EU:

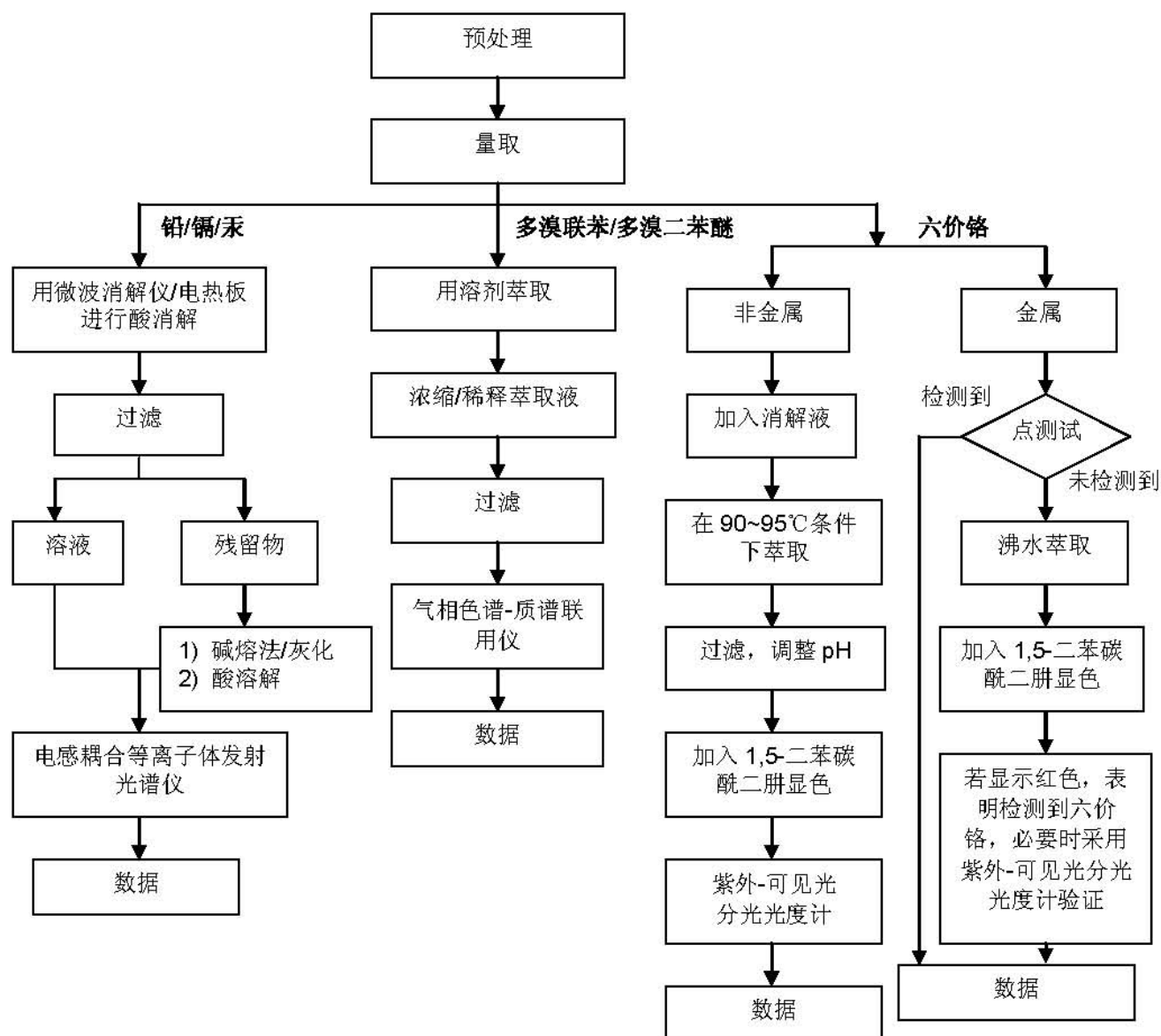
邻苯二甲酸二(2-乙基己基)酯(DEHP), 邻苯二甲酸丁苄酯(BBP)和邻苯二甲酸二丁酯(DBP) 被列为需优先进行风险评估和考虑进行限制的物质。

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附件

RoHS 测试流程图

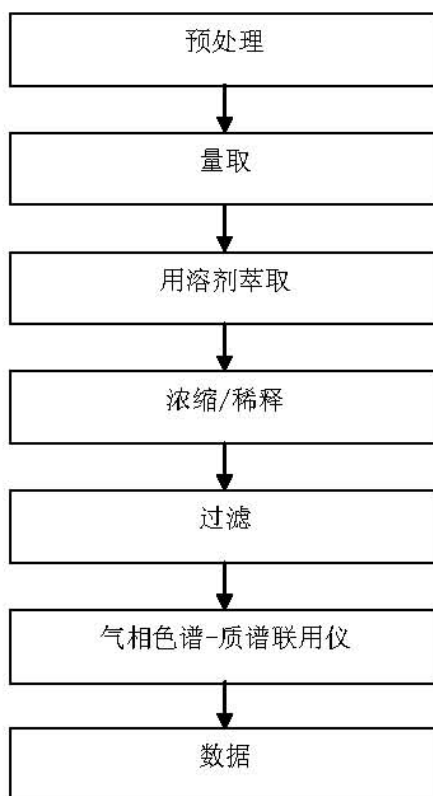
- 1) 分析人员: 施青/王彦青/肖飞/徐刚
- 2) 项目负责人: 张春华/徐亮/李丹
- 3) 样品按照下述流程被完全消解(六价铬和多溴联苯/多溴二苯醚测试除外)。



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Phthalates 测试流程图

- 1) 分析人员: 姚霞飞
- 2) 项目负责人: 张玉

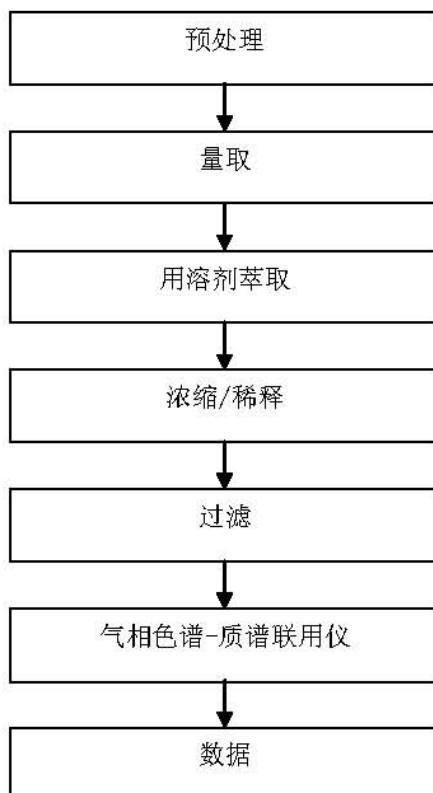


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HBCDD 测试流程图

- 1) 分析人员: 徐刚
- 2) 项目负责人: 李丹



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测试报告

No. SHAEC1207662608

日期: 2012年05月19日

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样品照片:



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*** 报告完 ***

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測試報告 Test Report

號碼(No.) : CE/2012/44809

日期(Date) : 2012/04/27

頁數(Page): 1 of 6

長春人造樹脂廠股份有限公司

CHANG CHUN PLASTICS CO., LTD.

台北市中山區松江路301號7樓

7TH FL., NO. 301, SONG KIANG ROAD, TAIPEI, TAIWAN



以下測試樣品係由客戶送樣，且由客戶聲稱並經客戶確認如下 (The following samples was/were submitted and identified by/on behalf of the client as):

樣品名稱(Sample Description) : THERMOPLASTIC POLYESTER ELASTOMER, TPEE

樣品型號(Style/Item No.) : TPEE(1130, 1140, 1143, 1148, 1152, 1155, 1163, 1168, 1172)

收件日期(Sample Receiving Date) : 2012/4/23

測試期間(Testing Period) : 2012/4/23 TO 2012/04/27

測試需求(Test Requested) : 依據客戶要求，參考RoHS 2011/65/EU Annex II 指令進行鎘，鉛，汞，六價鉻，多溴聯苯，多溴聯苯醚測試。(As specified by client, with reference to RoHS Directive 2011/65/EU Annex II to determine Cadmium, Lead, Mercury, Cr(VI), PBBs, PBDEs contents in the submitted sample.)

測試結果(Test Results) : 請見下一頁 (Please refer to next pages).


Chenyu Kung / Operation Manager
Signed for and on behalf of
SGS TAIWAN LTD.
Chemical Laboratory – Taipei

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Test Report

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7TH FL., NO. 301, SONG KIANG ROAD, TAIPEI, TAIWAN



測試結果(Test Results)

測試部位(PART NAME)No.1 : 白色塑膠粒 (WHITE PLASTIC PELLETS)

測試項目 (Test Items)	單位 (Unit)	測試方法 (Method)	方法偵測 極限值 (MDL)	結果 (Result) No.1
鎘 / Cadmium (Cd)	mg/kg	參考IEC 62321: 2008方法, 以感應耦合電漿原子發射光譜儀檢測. / With reference to IEC 62321: 2008 and performed by ICP-AES.	2	n.d.
鉛 / Lead (Pb)	mg/kg		2	n.d.
汞 / Mercury (Hg)	mg/kg		2	n.d.
六價鉻 / Hexavalent Chromium Cr(VI)	mg/kg	參考IEC 62321: 2008方法, 以UV-VIS檢測. / With reference to IEC 62321: 2008 and performed by UV-VIS.	2	n.d.
多溴聯苯總和 / Sum of PBBs	mg/kg	參考IEC 62321: 2008方法, 以氣相層析/質譜儀檢測. / With reference to IEC 62321: 2008 and performed by GC/MS.	-	n.d.
一溴聯苯 / Monobromobiphenyl	mg/kg		5	n.d.
二溴聯苯 / Dibromobiphenyl	mg/kg		5	n.d.
三溴聯苯 / Tribromobiphenyl	mg/kg		5	n.d.
四溴聯苯 / Tetrabromobiphenyl	mg/kg		5	n.d.
五溴聯苯 / Pentabromobiphenyl	mg/kg		5	n.d.
六溴聯苯 / Hexabromobiphenyl	mg/kg		5	n.d.
七溴聯苯 / Heptabromobiphenyl	mg/kg		5	n.d.
八溴聯苯 / Octabromobiphenyl	mg/kg		5	n.d.
九溴聯苯 / Nonabromobiphenyl	mg/kg		5	n.d.
十溴聯苯 / Decabromobiphenyl	mg/kg		5	n.d.

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Test Report

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7TH FL., NO. 301, SONG KIANG ROAD, TAIPEI, TAIWAN



測試項目 (Test Items)	單位 (Unit)	測試方法 (Method)	方法偵測 極限值 (MDL)	結果 (Result)
				No.1
多溴聯苯醚總和 / Sum of PBDEs	mg/kg	參考IEC 62321: 2008方法, 以氣相層析/質譜儀檢測. / With reference to IEC 62321: 2008 and performed by GC/MS.	-	n.d.
一溴聯苯醚 / Monobromodiphenyl ether	mg/kg		5	n.d.
二溴聯苯醚 / Dibromodiphenyl ether	mg/kg		5	n.d.
三溴聯苯醚 / Tribromodiphenyl ether	mg/kg		5	n.d.
四溴聯苯醚 / Tetrabromodiphenyl ether	mg/kg		5	n.d.
五溴聯苯醚 / Pentabromodiphenyl ether	mg/kg		5	n.d.
六溴聯苯醚 / Hexabromodiphenyl ether	mg/kg		5	n.d.
七溴聯苯醚 / Heptabromodiphenyl ether	mg/kg		5	n.d.
八溴聯苯醚 / Octabromodiphenyl ether	mg/kg		5	n.d.
九溴聯苯醚 / Nonabromodiphenyl ether	mg/kg		5	n.d.
十溴聯苯醚 / Decabromodiphenyl ether	mg/kg	5	n.d.	

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. "-" = Not Regulated (無規格值)

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測試報告 Test Report

號碼(No.) : CE/2012/44809

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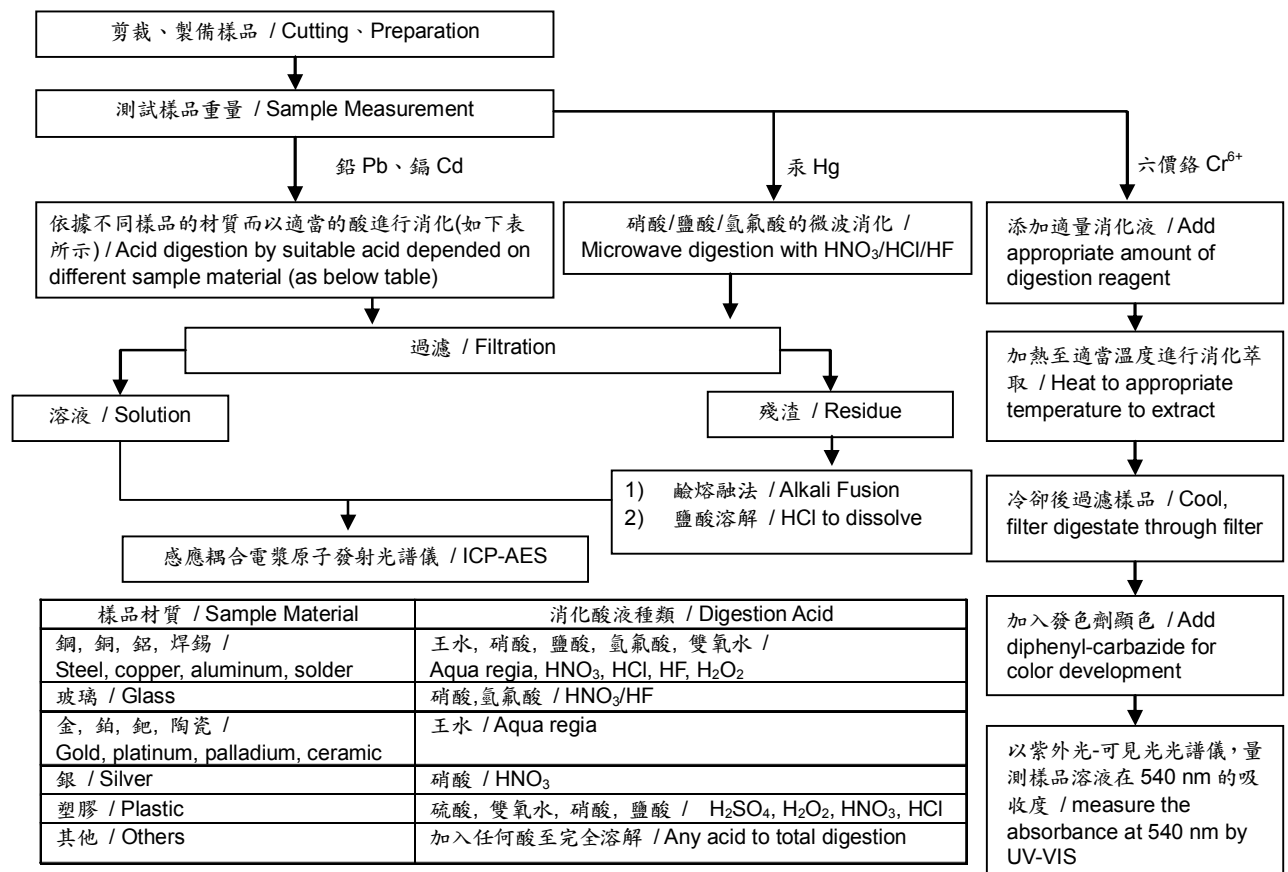
CHANG CHUN PLASTICS CO., LTD.

台北市中山區松江路301號7樓

7TH FL., NO. 301, SONG KIANG ROAD, TAIPEI, TAIWAN



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



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測試報告 Test Report

號碼(No.) : CE/2012/44809

日期(Date) : 2012/04/27

頁數(Page): 5 of 6

長春人造樹脂廠股份有限公司

CHANG CHUN PLASTICS CO., LTD.

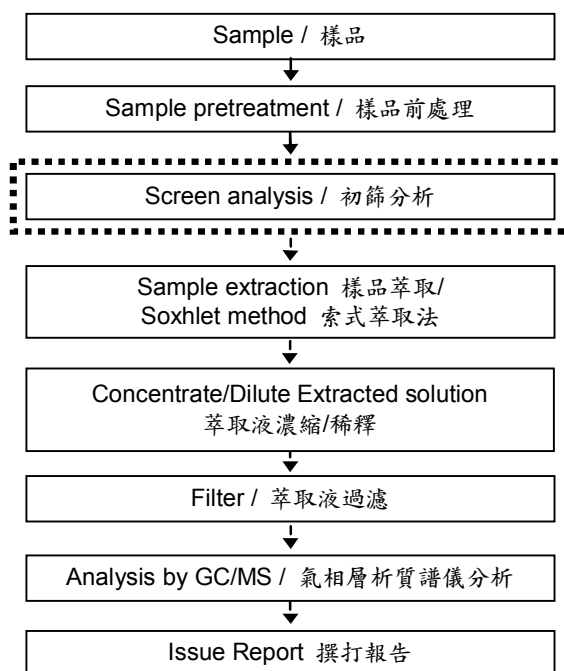
台北市中山區松江路301號7樓

7TH FL., NO. 301, SONG KIANG ROAD, TAIPEI, TAIWAN



多溴聯苯/多溴聯苯醚分析流程圖 / PBB/PBDE analytical FLOW CHART

- 測試人員：翁賜彬 / Name of the person who made measurement: Roman Wong
- 測試負責人：張啓興 / Name of the person in charge of measurement: Troy Chang
- 初次測試程序 / First testing process —————>
- 選擇性篩檢程序 / Optional screen process>
- 確認程序 / Confirmation process - - ->



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台北市中山區松江路301號7樓

7TH FL., NO. 301, SONG KIANG ROAD, TAIPEI, TAIWAN



* 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/2012/44809



** 報告結尾 (End of Report) **

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Test Report No. F690101/LF-CTSAYAA12-25742

Issued Date: 2012. 07. 10 Page 1 of 5

To: **LG CHEM. LTD.**
LG twin tower 23
Yeouuido-dong
Yeongdeungpo-gu
SEOUL
Korea

The following merchandise was submitted and identified by the client as :

SGS File No. : AYAA12-25742
Product Name : LUPOY GN5001RFG-K0265
Item No./Part No. : N/A
Received Date : 2012. 07. 05
Test Period : 2012. 07. 06 to 2012. 07. 10
Test Results : For further details, please refer to following page(s)
Test Performed : SGS Korea tested the sample(s) selected by applicant with following results.

SGS Korea Co. Ltd.

Jeff Jang / Chemical Lab Mgr

Timothy Jeon
Jinhee Kim
Cindy Park
Jerry Jung/ Testing Person



Test Report No. F690101/LF-CTSAYAA12-25742

Issued Date: 2012. 07. 10 Page 2 of 5

Sample No. : AYAA12-25742.001
Sample Description : LUPOY GN5001RFG-K0265
Item No./Part No. : N/A
Materials : N/A

Heavy Metals

Test Items	Unit	Test Method	MDL	Results
Cadmium (Cd)	mg/kg	With reference to IEC 62321:2008, ICP	0.5	N.D.
Lead (Pb)	mg/kg	With reference to IEC 62321:2008, ICP	5	N.D.
Mercury (Hg)	mg/kg	With reference to IEC 62321:2008, ICP	2	N.D.
Hexavalent Chromium (Cr VI)	mg/kg	With reference to IEC 62321:2008, UV-VIS	1	N.D.

Flame Retardants-PBBs/PBDEs

Test Items	Unit	Test Method	MDL	Results
Monobromobiphenyl	mg/kg	With reference to IEC 62321:2008, GC-MS	5	N.D.
Dibromobiphenyl	mg/kg	With reference to IEC 62321:2008, GC-MS	5	N.D.
Tribromobiphenyl	mg/kg	With reference to IEC 62321:2008, GC-MS	5	N.D.
Tetrabromobiphenyl	mg/kg	With reference to IEC 62321:2008, GC-MS	5	N.D.
Pentabromobiphenyl	mg/kg	With reference to IEC 62321:2008, GC-MS	5	N.D.
Hexabromobiphenyl	mg/kg	With reference to IEC 62321:2008, GC-MS	5	N.D.
Heptabromobiphenyl	mg/kg	With reference to IEC 62321:2008, GC-MS	5	N.D.
Octabromobiphenyl	mg/kg	With reference to IEC 62321:2008, GC-MS	5	N.D.
Nonabromobiphenyl	mg/kg	With reference to IEC 62321:2008, GC-MS	5	N.D.
Decabromobiphenyl	mg/kg	With reference to IEC 62321:2008, GC-MS	5	N.D.
Monobromodiphenyl ether	mg/kg	With reference to IEC 62321:2008, GC-MS	5	N.D.
Dibromodiphenyl ether	mg/kg	With reference to IEC 62321:2008, GC-MS	5	N.D.
Tribromodiphenyl ether	mg/kg	With reference to IEC 62321:2008, GC-MS	5	N.D.
Tetrabromodiphenyl ether	mg/kg	With reference to IEC 62321:2008, GC-MS	5	N.D.
Pentabromodiphenyl ether	mg/kg	With reference to IEC 62321:2008, GC-MS	5	N.D.
Hexabromodiphenyl ether	mg/kg	With reference to IEC 62321:2008, GC-MS	5	N.D.
Heptabromodiphenyl ether	mg/kg	With reference to IEC 62321:2008, GC-MS	5	N.D.
Octabromodiphenyl ether	mg/kg	With reference to IEC 62321:2008, GC-MS	5	N.D.
Nonabromodiphenyl ether	mg/kg	With reference to IEC 62321:2008, GC-MS	5	N.D.
Decabromodiphenyl ether	mg/kg	With reference to IEC 62321:2008, GC-MS	5	N.D.

NOTE: (1) N.D. = Not detected.(<MDL)
 (2) mg/kg = ppm
 (3) MDL = Method Detection Limit
 (4) - = No regulation
 (5) Negative = Undetectable / Positive = Detectable
 (6) ** = Qualitative analysis (No Unit)
 (7) * = 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.

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