



东莞市合陵电子有限公司
Dongguan Heling Electronic Co., LTD

承認書

客戶 Customer: 深圳市矽递科技有限公司
料號 PN#: MJ6-B111-RVS1T073
版本 Rev.: A01
品名 Product Name: 沉板SMT千兆无灯帶壳
客戶料號 Customer PN# :
客戶版本 Customer Rev. :
產品描述 Description: 沉板SMT千兆无灯帶壳

日期Date: 2014-09-013

APPROVED BY 核准	CHECKED BY 審核	PREPARED BY 作成
DICK	WZ	XSY

客戶承認 Customer Approved

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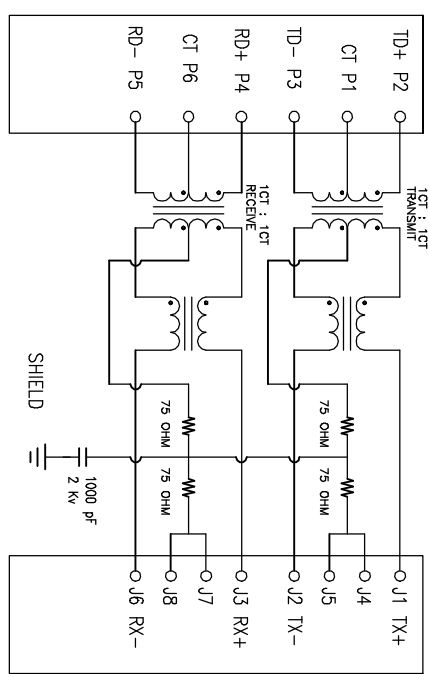
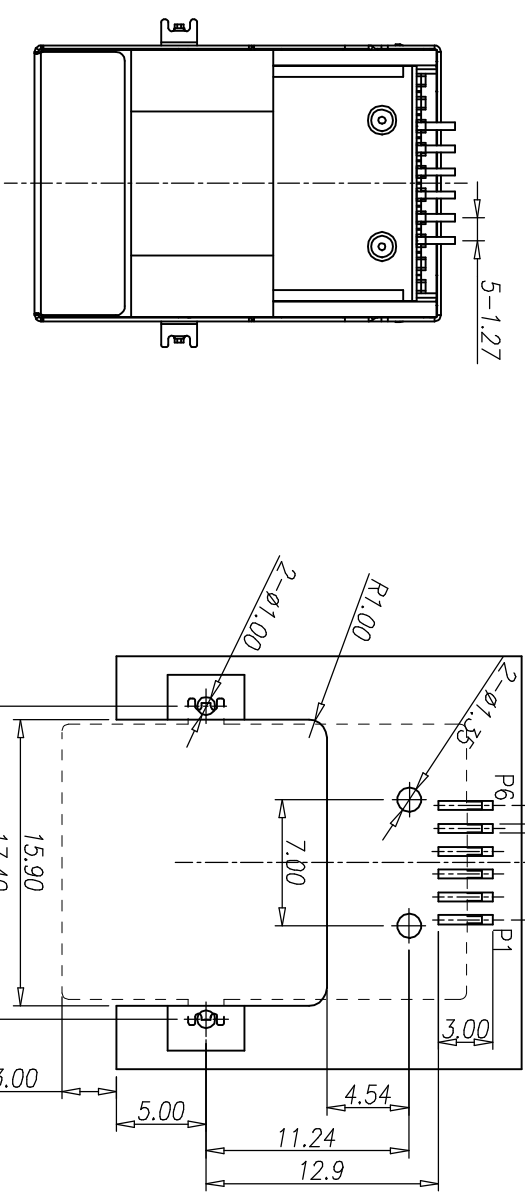
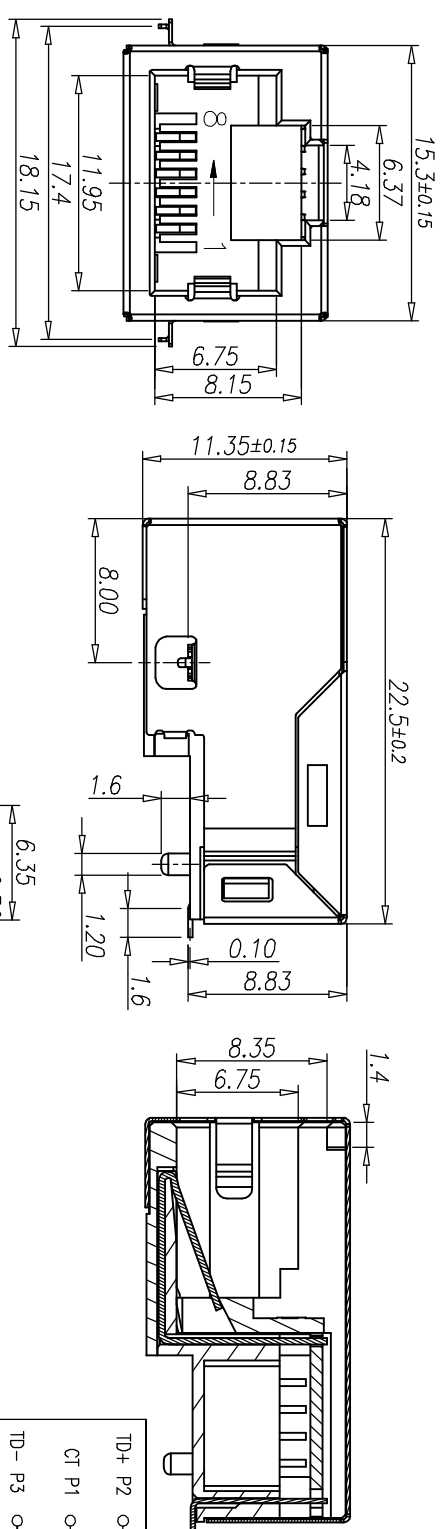
CATEGORY	DESCRIPTION	P/N #
CONNECTOR	R45+Transformer 变容器 10/100Mbps 1X1PORT	M6-BX11-RVS1T073

原料号为: M6-BX11-RVS1
变更后料号为: M6-BX11-RVS1T073

REV.	ECN NO	DESCRIPTION	REVISED	DATE
R01		New Release	Kelly	20010.09.28

ELECTRICAL SPECIFICATIONS @ 25°C +/- 5°C unless otherwise noted:

Insertion Loss: 1-100MHZ -1.0dB MAX
 Return Loss: 1-30MHZ -16.0dB MIN
 30-60MHZ -14.0dB MIN
 60-80MHZ -10.0dB MIN
 Cross Talk: 1-30MHZ -40.0dB MIN
 30-60MHZ -35.0dB MIN
 60-80MHZ -30.0dB MIN



Part No.: M6-BX11-RVS1T073

Table 1
Material & Plating

X	Terminal Plating
0	Au 1u" Plating
1	Au 3u" Plating
2	Au 6u" Plating
3	Au 15u" Plating
4	Au 30u" Plating
5	Au 50u" Plating

Recommend PCB Layout
Jack Top View

Product Drawing
DongGuan Heling Electronic Co.,LTD

UNLESS OTHERWISE SPECIFIED TOLERANCES	SCALE:1/1	UNIT: mm	DWG.NO:
UNIT: mm	SIZE: A3	PAGE: 1 OF 1	REV:A
.XX ±0.25	APPROVED BY	CHECKED BY	HL-TR-001
.XXX ±0.13	Tony	Bill	PREPARED BY
			Kelly

CUSTOMER COPY

CMR:1-100MHZ -35.0dB MIN
 Hi-Pot: 1500V AC 6S 1mA
 OCL:350uH MIN @ 100KHZ 100mV 8mA DC
 Turn Ratio: 1CT:1CT+/-3% Housing Material: LCP UL94V-0 Black
 Operating temperature range:0°C to +70°C
 Contacts: 0.35mm thick phos bronze plated with 6u' gold in contact area

DongGuan PengHui Electronics Co.,Ltd

SAMPLE TEST DATA REPORT

SHEET 1 OF 4

PART NO: RMT-296B-14F4-G2				REV: A	QTY: 10PCS				
TEST ITEM	HP	T/R	OCL P3-4	OCL P5-6	OCL P7-8	OCL P9-10	IL TD1	IL TD2	IL TD3
Conditions	2250VDC	50KHz 0.5V	100KHz 0.1V	100KHz 0.1V	100KHz 0.1V	100KHz 0.1V	1~100	1~100	1~100
	1.0mA/S	1CT:1±5%	DC 8mA	DC 8mA	DC 8mA	DC 8mA	MHz	MHz	MHz
SPEC			350 Min	350 Min	350 Min	350 Min	-1.00 Max	-1.00 Max	-1.00 Max
UNIT			uH	uH	uH	uH	dB	dB	dB
01	Pass	Pass	568	545	584	597	-0.70	-0.66	-0.78
02	Pass	Pass	556	592	611	614	-0.68	-0.64	-0.75
03	Pass	Pass	631	622	692	670	-0.68	-0.68	-0.84
04	Pass	Pass	547	560	613	588	-0.64	-0.69	-0.71
05	Pass	Pass	604	616	605	536	-0.69	-0.70	-0.75
06	Pass	Pass	574	582	601	614	-0.70	-0.68	-0.68
07	Pass	Pass	587	554	598	602	-0.72	-0.71	-0.69
08	Pass	Pass	622	637	645	691	-0.73	-0.65	-0.73
09	Pass	Pass	586	581	590	579	-0.69	-0.69	-0.62
10	Pass	Pass	589	548	550	591	-0.69	-0.66	-0.78
11									
12									
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15									
16									
17									
18									
19									
20									
21									
22									
23									
24									
25									
Mean	N/A	N/A	586.400	583.700	608.900	608.200	-0.692	-0.676	-0.733
R	N/A	N/A	84.000	92.000	142.000	155.000	0.090	0.070	0.220
PREPARED BY:					APPROVED BY:				
P.Zhang					X.J.Fang				

DongGuan PengHui Electronics Co.,Ltd

SAMPLE TEST DATA REPORT

SHEET 2 OF 4

PART NO: RMT-296B-14F4-G2				REV: A	QTY: 10PCS					
TEST ITEM	IL TD4	RL TD1	RL TD1	RL TD2	RL TD2	RL TD3	RL TD3	RL TD4	RL TD4	
Conditions	1~100 MHz	1-30 MHz	60-80 MHz	1-30 MHz	60-80 MHz	1-30 MHz	60-80 MHz	1-30 MHz	60-80 MHz	
SPEC	-1.00 Max	-20.0 Min	-12.0 Min	-20.0 Min	-12.0 Min	-20.0 Min	-12.0 Min	-20.0 Min	-12.0 Min	
UNIT	dB	dB	dB	dB	dB	dB	dB	dB	dB	
01	-0.74	-29.00	-15.50	-33.00	-17.50	-32.80	-16.90	-28.80	-16.80	
02	-0.76	-30.40	-16.30	-25.70	-15.60	-33.00	-17.20	-32.50	-15.80	
03	-0.69	-32.60	-16.40	-29.10	-16.80	-29.50	-17.30	-27.40	-17.00	
04	-0.72	-31.08	-17.10	-28.30	-15.80	-28.00	-16.80	-31.50	-17.70	
05	-0.68	-33.80	-15.70	-32.40	-17.40	-27.90	-16.70	-26.90	-15.70	
06	-0.65	-29.60	-17.50	-28.30	-18.40	-28.80	-16.50	-27.30	-15.90	
07	-0.71	-33.80	-17.30	-32.40	-16.70	-32.50	-17.50	-32.50	-14.40	
08	-0.69	-28.30	-16.10	-29.60	-17.20	-27.40	-15.70	-28.80	-15.10	
09	-0.74	-27.30	-16.30	-33.80	-17.00	-31.50	-15.90	-32.50	-14.00	
10	-0.68	-32.50	-17.50	-28.30	-17.30	-26.90	-16.20	-27.40	-14.80	
11										
12										
13										
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24										
25										
Mean	-0.706	-30.838	-16.570	-30.090	-16.970	-29.830	-16.670	-29.560	-15.720	
R	0.110	6.500	2.000	8.100	2.800	6.100	1.800	5.600	3.700	
PREPARED BY:					APPROVED BY:					
P.Zhang					X.J.Fang					

DongGuan PengHui Electronics Co.,Ltd

SAMPLE TEST DATA REPORT

SHEET 3 OF 4

PART NO: RMT-296B-14F4-G2				REV:A	QTY: 10PCS				
TEST ITEM	CTK TD1&TD2	CTK TD1&TD2	CTK TD2&TD3	CTK TD2&TD3	CTK TD3&TD4	CTK TD3&TD4	CMR TD1	CMR TD1	CMR TD2
Conditions	30~60 MHz	60~100 MHz	30~60 MHz	60~100 MHz	30~60 MHz	60~100 MHz	1-50 MHz	50~100 MHz	1-50 MHz
SPEC	-35.0 Min	-30.0 Min	-35.0 Min	-30.0 Min	-35.0 Min	-30.0 Min	-30.0 Min	-20.0 Min	-30.0 Min
UNIT	dB	dB	dB	dB	dB	dB	dB	dB	dB
01	-48.3	-38.0	-43.9	-36.80	-45.70	-36.8	-45.9	-32.8	-47.7
02	-56.3	-37.8	-48.2	-38.60	-46.50	-38.6	-46.3	-33.0	-47.9
03	-51.0	-39.4	-46.5	-36.70	-45.80	-36.7	-46.7	-29.5	-46.7
04	-46.3	-37.1	-49.2	-37.70	-48.30	-37.7	-47.5	-28.0	-48.2
05	-45.6	-37.5	-47.9	-38.10	-46.70	-38.1	-49.3	-27.9	-49.2
06	-43.1	-38.5	-46.5	-37.10	-48.3	-37.1	-46.3	-32.5	-47.7
07	-47.3	-37.4	-44.3	-38.20	-46.4	-38.2	-48.1	-27.4	-47.9
08	-46.5	-38.6	-47.6	-37.90	-45.1	-37.9	-47.1	-31.4	-46.7
09	-48.4	-37.4	-48.2	-37.50	-47.3	-37.5	-48.6	-26.9	-48.2
10	-47.5	-36.9	-49.1	-37.60	-46.3	-37.6	-47.8	-32.8	-49.2
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									
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22									
23									
24									
25									
Mean	-48.030	-37.860	-47.140	-37.620	-46.640	-37.620	-47.360	-30.220	-47.940
R	13.200	2.500	5.300	1.900	3.200	1.900	3.400	6.100	2.500
PREPARED BY:					APPROVED BY:				
P.Zhang					X.J.Fang				

DongGuan PengHui Electronics Co.,Ltd

SAMPLE TEST DATA REPORT

SHEET 4 OF 4

PART NO: RMT-296B-14F4-G2				REV:A	QTY: 10PCS				
TEST ITEM	CMR TD2	CMR TD3	CMR TD3	CMR TD4	CMR TD4	CAP J1-Shield			
Conditions	50~100 MHz	1-50 MHz	50~100 MHz	1-50 MHz	50~100 MHz	1KHZ 1.0V			
SPEC	-20.0 Min	-30.0 Min	-20.0 Min	-30.0 Min	-20.0 Min	800~ 1200			
UNIT	dB	dB	dB	dB	dB	PF			
01	-33.8	-49.2	-30.4	-47.9	-28.80	1006			
02	-28.3	-47.6	-32.6	-46.7	-32.50	1011			
03	-27.3	-46.9	-31.8	-41.2	-27.40	1045			
04	-32.5	-47.5	-33.8	-43.6	-31.50	1068			
05	-28.8	-48.5	-33.0	-42.1	-26.90	1059			
06	-30.7	-46.7	-32.80	-36.80	-29.60	1013			
07	-29.1	-48.2	-33.00	-38.60	-33.80	1068			
08	-28.3	-49.2	-29.50	-36.70	-28.30	1041			
09	-32.4	-47.1	-28.00	-37.70	-27.30	1008			
10	-29.6	-47.7	-27.90	-38.10	-32.50	1017			
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									
23									
24									
25									
Mean	-30.080	-47.860	-31.280	-40.940	-29.860	1033.600	N/A	N/A	N/A
R	6.500	2.500	5.900	11.200	6.900	62.000	N/A	N/A	N/A
PREPARED BY:					APPROVED BY:				
P.Zhang					X.J.Fang				

Test Report

No. CANML1402037905

Date: 05 Mar 2014

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SHENZHEN ANYAO RUBBER CO., LTD
 SHENZHEN BAOAN DISTRICT SONGGANG STREET SAND COMMUNITY OCEAN BAY INDUSTRIAL
 ZONE THREE ROAD NO.3 BUILDING A

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

SGS Job No. : GC140200723 - GZ
 Internal Reference No. : 6.5
 Date of Sample Received : 26 Feb 2014
 Testing Period : 26 Feb 2014 - 04 Mar 2014

Test Requested : A: As requested by client, SVHC screening is performed according to:
 (i) One hundred and fifty one (151) substances in the Candidate List of Substances of Very High Concern (SVHC) for authorization published by European Chemicals Agency (ECHA) on and before Dec 16, 2013 regarding Regulation (EC) No 1907/2006 concerning the REACH.

B~H: Selected test(s) as requested by client.

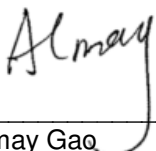
Test Result(s) : Please refer to next page(s).

Summary : A

According to the specified scope and analytical techniques, concentrations of tested SVHC are $\leq 0.1\%$ (w/w) in the submitted sample.	PASS
---	------

Conclusion: B: 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.



Almay Gao
 Approved Signatory



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Test Report

No. CANML1402037905

Date: 05 Mar 2014

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Test Sample :

Sample Description:

Specimen No.	SGS Sample ID	Description
SN1	CAN14-020379.005	Black plastic grains(5#)

A: SVHC

Remark :

- (1) The chemical analysis of specified SVHC is performed by means of currently available analytical techniques against the following SVHC related documents published by ECHA:
<http://echa.europa.eu/web/guest/candidate-list-table>
 These lists are under evaluation by ECHA and may subject to change in the future.

- (2) Concerning article(s):
 In accordance with Regulation (EC) No 1907/2006, any EU producer or importer of articles shall notify ECHA, in accordance with paragraph 4 of Article 7, if a substance meets the criteria in Article 57 and is identified in accordance with Article 59(1) of the Regulation, if (a) the substance in the Candidate List is present in those articles in quantities totaling over one tonne per producer or importer per year; and (b) the substance in the Candidate List is present in those articles above a concentration of 0.1% weight by weight (w/w).

Article 33 of Regulation (EC) No 1907/2006 requires supplier of an article containing a substance meeting the criteria in Article 57 and identified in accordance with Article 59(1) in a concentration above 0.1% weight by weight (w/w) shall provide the recipient of the article with sufficient information, available to the supplier, to allow safe use of the article including, as a minimum, the name of that substance in the Candidate List.

SGS adopts the interpretation of ECHA for SVHC in article unless indicated otherwise. Detail explanation is available at the following link:
http://webstage.contribute.sgs.net/corpreach/documents/SGS-CTS_SVHC-paper-EN-11.pdf

- (3) Concerning material(s):
 Test results in this report are based on the tested sample. This report refers to testing result of tested sample submitted as homogenous material(s). In case such material is being used to compose an article, the results indicated in this report may not represent SVHC concentration in such article. If this report refers to testing result of composite material group by equal weight proportion, the material in each composite test group may come from more than one article.

If the sample is a substance or mixture, and it directly exports to EU, client has the obligation to comply with the supply chain communication obligation under Article 31 of Regulation (EC) No. 1907/2006 and the conditions of Authorization of substance of very high concern included in the Annex XIV of the Regulation (EC) No. 1907/2006.



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- (4) Concerning substance and preparation:
 If a SVHC is found over 0.1% (w/w) and/or the specific concentration limit which is set in Regulation (EC) No 1272/2008 and No 790/2009, client is suggested to prepare a Safety Data Sheet (SDS) against the SVHC to comply with the supply chain communication obligation under Regulation (EC) No 1907/2006, in which:
- a substance that is classified as hazardous under the CLP Regulation (EC) No 1272/2008.
 - a mixture that is classified as dangerous according Dangerous Preparations Directive 1999/45/EC or classified as hazardous under the CLP Regulation (EC) No 1272/2008, when their concentrations are equal to, or greater than, those defined in the Article 3(3) of 1999/45/EC or the lower values given in Part 3 of Annex VI of Regulation (EC) No. 1272/2008; or
 - a mixture is not classified as dangerous under Directive 1999/45/EC, but contains either:
 - (a) a substance posing human health or environmental hazards in an individual concentration of $\geq 1\%$ by weight for mixtures that are solid or liquids (i.e., non-gaseous mixtures) or $\geq 0.2\%$ by volume for gaseous mixtures; or
 - (b) a substance that is PBT, or vPvB in an individual concentration of $\geq 0.1\%$ by weight for mixtures that are solid or liquids (i.e., non-gaseous mixtures); or
 - (c) a substance on the SVHC candidate list (for reasons other than those listed above), in an individual concentration of $\geq 0.1\%$ by weight for non-gaseous mixtures; or
 - (d) a substance for which there are Europe-wide workplace exposure limits.
- (5) If a SVHC is found over the reporting limit, client is suggested to identify the component which contains the SVHC and the exact concentration of the SVHC by requesting further quantitative analysis from the laboratory.

Test Method:

SGS In-House method- GZTC CHEM-TOP-092-01, GZTC CHEM-TOP-092-02, Analyzed by ICP-OES, UV-VIS, GC-MS, HPLC-DAD/MS and Colorimetric Method.



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Test Result: (Substances in the Candidate List of SVHC)

Batch	Substance Name	CAS No.	005 Concentration (%)	RL (%)
-	All tested SVHC in candidate list	-	ND	-

Notes:

1. The table above only shows detected SVHC, and SVHC that below RL are not reported. Please refer to Appendix for the full list of tested SVHC.
2. RL = Reporting Limit. All RL are based on homogenous material.
ND = Not detected (lower than RL), ND is denoted on the SVHC substance.
3. * The test result is based on the calculation of selected element(s) / marker(s) and to the worst-case scenario. For detail information, please refer to the SGS REACH website:
www.reach.sgs.com/substance-of-very-high-concern-analysis-information-page.htm
4. RL = 0.005% is evaluated for element (i.e. cobalt, arsenic, lead, chromium (VI), aluminum, zirconium, boron, strontium, zinc, antimony, titanium, barium and cadmium respectively), except molybdenum RL=0.0005%, boron RL=0.0025% (only for Lead bis(tetrafluoroborate)).
5. Calculated concentration of boric compounds are based on the water extractive boron by ICP-OES.
6. ^Δ CAS No. of diastereoisomers identified (α-HBCDD, β-HBCDD, γ-HBCDD): 134237-50-6, 134237-51-7, 134237-52-8.
7. ☆ CAS No. of Hexahydromethylphthalic anhydride, Hexahydro-4-methylphthalic anhydride, Hexahydro-1-methylphthalic anhydride, Hexahydro-3-methylphthalic anhydride: 25550-51-0, 19438-60-9, 48122-14-1, 57110-29-9; EC No. of those: 247-094-1, 243-072-0, 256-356-4, 260-566-1.
8. § The substance is proposed for the identification as SVHC only where it contains Michler's ketone (CAS Number: 90-94-8) or Michler's base (CAS Number: 101-61-1) ≥0.1% (w/w).



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Appendix
Full list of tested SVHC:

Batch	No.	Substance Name	CAS No.	RL (%)
I	1	4,4'-Diaminodiphenylmethane(MDA)	101-77-9	0.050
I	2	5-tert-butyl-2,4,6-trinitro-m-xylene (musk xylene)	81-15-2	0.050
I	3	Alkanes, C10-13, chloro (Short Chain Chlorinated Paraffins)	85535-84-8	0.050
I	4	Anthracene	120-12-7	0.050
I	5	Benzyl butyl phthalate (BBP)	85-68-7	0.050
I	6	Bis(2-ethylhexyl)phthalate (DEHP)	117-81-7	0.050
I	7	Bis(tributyltin)oxide (TBTO)	56-35-9	0.050
I	8	Cobalt dichloride*	7646-79-9	0.005
I	9	Diarsenic pentaoxide*	1303-28-2	0.005
I	10	Diarsenic trioxide*	1327-53-3	0.005
I	11	Dibutyl phthalate (DBP)	84-74-2	0.050
I	12	Hexabromocyclododecane (HBCDD) and all major diastereoisomers identified (α -HBCDD, β -HBCDD, γ -HBCDD) Δ	25637-99-4, 3194-55-6	0.050
I	13	Lead hydrogen arsenate*	7784-40-9	0.005
I	14	Sodium dichromate*	7789-12-0, 10588-01-9	0.005
I	15	Triethyl arsenate*	15606-95-8	0.005
II	16	2,4-Dinitrotoluene	121-14-2	0.050
II	17	Acrylamide	79-06-1	0.050



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II	18	Anthracene oil*	90640-80-5	0.050
II	19	Anthracene oil, anthracene paste*	90640-81-6	0.050
II	20	Anthracene oil, anthracene paste, anthracene fraction*	91995-15-2	0.050
II	21	Anthracene oil, anthracene paste, distn. Lights*	91995-17-4	0.050
II	22	Anthracene oil, anthracene-low*	90640-82-7	0.050
II	23	Diisobutyl phthalate	84-69-5	0.050
II	24	Lead chromate molybdate sulphate red (C.I. Pigment Red 104)*	12656-85-8	0.005
II	25	Lead chromate*	7758-97-6	0.005
II	26	Lead sulfochromate yellow (C.I. Pigment Yellow 34)*	1344-37-2	0.005
II	27	Pitch, coal tar, high temp.*	65996-93-2	0.050
II	28	Tris(2-chloroethyl)phosphate	115-96-8	0.050
III	29	Ammonium dichromate*	7789-09-5	0.005
III	30	Boric acid*	10043-35-3, 11113-50-1	0.005
III	31	Disodium tetraborate, anhydrous*	1303-96-4, 1330-43-4, 12179-04-3	0.005
III	32	Potassium chromate*	7789-00-6	0.005
III	33	Potassium dichromate*	7778-50-9	0.005
III	34	Sodium chromate*	7775-11-3	0.005
III	35	Tetraboron disodium heptaoxide, hydrate*	12267-73-1	0.005
III	36	Trichloroethylene	79-01-6	0.050



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IV	37	2-Ethoxyethanol	110-80-5	0.050
IV	38	2-Methoxyethanol	109-86-4	0.050
IV	39	Chromic acid, Oligomers of chromic acid and dichromic acid, Dichromic acid*	7738-94-5,- 13530-68-2	0.005
IV	40	Chromium trioxide*	1333-82-0	0.005
IV	41	Cobalt(II) carbonate*	513-79-1	0.005
IV	42	Cobalt(II) diacetate*	71-48-7	0.005
IV	43	Cobalt(II) dinitrate*	10141-05-6	0.005
IV	44	Cobalt(II) sulphate*	10124-43-3	0.005
V	45	1,2,3-trichloropropane	96-18-4	0.050
V	46	1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich	71888-89-6	0.050
V	47	1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters	68515-42-4	0.050
V	48	1-methyl-2-pyrrolidone	872-50-4	0.050
V	49	2-ethoxyethyl acetate	111-15-9	0.050
V	50	Hydrazine	7803-57-8, 302-01-2	0.050
V	51	strontium chromate*	7789-06-2	0.005
VI	52	1,2-Dichloroethane	107-06-2	0.050
VI	53	2,2'-dichloro-4,4'-methylenedianiline	101-14-4	0.050
VI	54	2-Methoxyaniline; o-Anisidine	90-04-0	0.050
VI	55	4-(1,1,3,3-tetramethylbutyl)phenol	140-66-9	0.050



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VI	56	Aluminosilicate Refractory Ceramic Fibres*	650-017-00-8 (Index no.)	0.005
VI	57	Arsenic acid*	7778-39-4	0.005
VI	58	Bis(2-methoxyethyl) ether	111-96-6	0.050
VI	59	Bis(2-methoxyethyl) phthalate	117-82-8	0.050
VI	60	Calcium arsenate*	7778-44-1	0.005
VI	61	Dichromium tris(chromate)*	24613-89-6	0.005
VI	62	Formaldehyde, oligomeric reaction products with aniline	25214-70-4	0.050
VI	63	Lead diazide, Lead azide*	13424-46-9	0.005
VI	64	Lead dipicrate*	6477-64-1	0.005
VI	65	Lead styphnate*	15245-44-0	0.005
VI	66	N,N-dimethylacetamide	127-19-5	0.050
VI	67	Pentazinc chromate octahydroxide*	49663-84-5	0.005
VI	68	Phenolphthalein	77-09-8	0.050
VI	69	Potassium hydroxyoctaoxodizincatedichromate*	11103-86-9	0.005
VI	70	Trilead diarsenate*	3687-31-8	0.005
VI	71	Zirconia Aluminosilicate Refractory Ceramic Fibres*	650-017-00-8 (Index no.)	0.005
VII	72	[4-[[4-anilino-1-naphthyl][4-(dimethylamino)phenyl]methylene]cyclohexa-2,5-dien-1-ylidene] dimethylammonium chloride (C.I. Basic Blue 26) [§]	2580-56-5	0.050
VII	73	[4-[4,4'-bis(dimethylamino)benzhydrylidene]cyclohexa-2,5-dien-1-ylidene]dimethylammonium chloride (C.I. Basic Violet 3) [§]	548-62-9	0.050



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VII	74	1,2-bis(2-methoxyethoxy)ethane (TEGDME; triglyme)	112-49-2	0.050
VII	75	1,2-dimethoxyethane; ethylene glycol dimethyl ether (EGDME)	110-71-4	0.050
VII	76	4,4'-bis(dimethylamino) benzophenone (Michler's Ketone)	90-94-8	0.050
VII	77	4,4'-bis(dimethylamino)-4'-(methylamino)trityl alcohol [§]	561-41-1	0.050
VII	78	Diboron trioxide*	1303-86-2	0.005
VII	79	Formamide	75-12-7	0.050
VII	80	Lead(II) bis(methanesulfonate)*	17570-76-2	0.005
VII	81	N,N,N',N'-tetramethyl-4,4'-methylenedianiline (Michler's base)	101-61-1	0.050
VII	82	TGIC (1,3,5-tris(oxiranylmethyl)-1,3,5-triazine-2,4,6(1H,3H,5H)-trione)	2451-62-9	0.050
VII	83	α,α -Bis[4-(dimethylamino)phenyl]-4(phenylamino)naphthalene-1-methanol (C.I. Solvent Blue 4) [§]	6786-83-0	0.050
VII	84	β -TGIC (1,3,5-tris[(2S and 2R)-2,3-epoxypropyl]-1,3,5-triazine-2,4,6-(1H,3H,5H)-trione)	59653-74-6	0.050
VIII	85	[Phthalato(2-)]dioxotrilead*	69011-06-9	0.005
VIII	86	1,2-Benzenedicarboxylic acid, dipentylester, branched and linear	84777-06-0	0.050
VIII	87	1,2-Diethoxyethane	629-14-1	0.050
VIII	88	1-Bromopropane	106-94-5	0.050
VIII	89	3-Ethyl-2-methyl-2-(3-methylbutyl)-1,3-oxazolidine	143860-04-2	0.050
VIII	90	4-(1,1,3,3-tetramethylbutyl)phenol, ethoxylated	-	0.050
VIII	91	4,4'-Methylenedi-o-toluidine	838-88-0	0.050



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VIII	92	4,4'-Oxydianiline and its salts	101-80-4	0.050
VIII	93	4-Aminoazobenzene	60-09-3	0.050
VIII	94	4-Methyl- <i>m</i> -phenylenediamine	95-80-7	0.050
VIII	95	4-Nonylphenol, branched and linear	-	0.050
VIII	96	6-Methoxy- <i>m</i> -toluidine	120-71-8	0.050
VIII	97	Acetic acid, lead salt, basic*	51404-69-4	0.005
VIII	98	Biphenyl-4-ylamine	92-67-1	0.050
VIII	99	Bis(pentabromophenyl) ether (DecaBDE)	1163-19-5	0.050
VIII	100	Cyclohexane-1,2-dicarboxylic anhydride, cis-cyclohexane-1,2-dicarboxylic anhydride, trans-cyclohexane-1,2-dicarboxylic anhydride	85-42-7, 13149-00-3, 14166-21-3	0.050
VIII	101	Diazene-1,2-dicarboxamide (C,C'-azodi(formamide))	123-77-3	0.050
VIII	102	Dibutyltin dichloride (DBTC)	683-18-1	0.050
VIII	103	Diethyl sulphate	64-67-5	0.050
VIII	104	Diisopentylphthalate	605-50-5	0.050
VIII	105	Dimethyl sulphate	77-78-1	0.050
VIII	106	Dinoseb	88-85-7	0.050
VIII	107	Dioxobis(stearato)trilead*	12578-12-0	0.005
VIII	108	Fatty acids, C16-18, lead salts*	91031-62-8	0.005
VIII	109	Furan	110-00-9	0.050
VIII	110	Henicosafuoroundecanoic acid	2058-94-8	0.050



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VIII	131	Silicic acid, barium salt, lead-doped*	68784-75-8	0.005
VIII	132	Silicic acid, lead salt*	11120-22-2	0.005
VIII	133	Sulfurous acid, lead salt, dibasic*	62229-08-7	0.005
VIII	134	Tetraethyllead*	78-00-2	0.005
VIII	135	Tetralead trioxide sulphate*	12202-17-4	0.005
VIII	136	Tricosafuorododecanoic acid	307-55-1	0.050
VIII	137	Trilead bis(carbonate)dihydroxide (basic lead carbonate)*	1319-46-6	0.005
VIII	138	Trilead dioxide phosphonate*	12141-20-7	0.005
IX	139	4-Nonylphenol, branched and linear, ethoxylated	-	0.050
IX	140	Ammonium pentadecafluorooctanoate (APFO)	3825-26-1	0.050
IX	141	Cadmium oxide*	1306-19-0	0.005
IX	142	Cadmium*	7440-43-9	0.005
IX	143	Dipentyl phthalate (DPP)	131-18-0	0.050
IX	144	Pentadecafluorooctanoic acid (PFOA)	335-67-1	0.050
X	145	Cadmium sulphide*	1306-23-6	0.005
X	146	Dihexyl phthalate	84-75-3	0.050
X	147	Disodium 3,3'-[[1,1'-biphenyl]-4,4'-diylbis(azo)]bis(4-aminonaphthalene-1-sulphonate) (C.I. Direct Red 28)	573-58-0	0.050
X	148	Disodium 4-amino-3-[[4'-[(2,4-diaminophenyl)azo][1,1'-biphenyl]-4-yl]azo]-5-hydroxy-6-(phenylazo)naphthalene-2,7-disulphonate (C.I. Direct Black 38)	1937-37-7	0.050
X	149	Imidazolidine-2-thione; (2-imidazoline-2-thiol)	96-45-7	0.050



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X	150	Lead di(acetate)*	301-04-2	0.005
X	151	Trixylyl phosphate	25155-23-1	0.050



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Remarks:

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

B: 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 Colorimetric Method using UV-Vis.
- (5) With reference to IEC 62321:2008, determination of PBBs and PBDEs by GC-MS.

<u>Test Item(s):</u>	<u>Limit</u>	<u>Unit</u>	<u>MDL</u>	<u>005</u>
Cadmium(Cd)	100	mg/kg	2	ND
Lead (Pb)	1000	mg/kg	2	3
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
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



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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 the directive 2011/65/EU, Annex II.

C: Hexabromocyclododecane (HBCDD)

Test method: Determination of HBCDD by GC-MS based on IEC 62321:2008.

<u>Test Item(s):</u>	<u>Unit</u>	<u>MDL</u>	<u>005</u>
Hexabromocyclododecane (HBCDD)	mg/kg	10	ND

Note:

- (1) Reference Information: Directive 2011/65/EU recasting RoHS directive 2002/95/EC:
Hexabromocyclododecane (HBCDD) is considered as a priority for risk evaluation and substance restriction.

D: Phthalates

Test Method: Determination of phthalates by GC-MS based on EN 14372:2004.

<u>Test Item(s):</u>	<u>CAS No.</u>	<u>Unit</u>	<u>MDL</u>	<u>005</u>
Dibutyl phthalate (DBP)	84-74-2	%(w/w)	0.003	ND
Butyl benzyl phthalate (BBP)	85-68-7	%(w/w)	0.003	ND
Bis (2-ethylhexyl) phthalate (DEHP)	117-81-7	%(w/w)	0.003	ND

Note:

- (1) Reference Information: Directive 2011/65/EU recasting RoHS directive 2002/95/EC:
Bis (2-ethylhexyl) phthalate (DEHP), Butyl benzyl phthalate (BBP) and Dibutyl phthalate (DBP) are considered as a priority for risk evaluation and substance restriction.

E: Phthalate(s)

Test Method: With reference to EN 14372:2004, analysis was performed by GC-MS.

<u>Test Item(s)</u>	<u>CAS No.</u>	<u>Unit</u>	<u>MDL</u>	<u>005</u>
Dibutyl Phthalate (DBP)	84-74-2	%(w/w)	0.003	ND



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Benzylbutyl Phthalate (BBP)	85-68-7	%(w/w)	0.003	ND
Bis(2-ethylhexyl) Phthalate (DEHP)	117-81-7	%(w/w)	0.003	ND
Diisononyl Phthalate (DINP)	28553-12-0/ 68515-48-0	%(w/w)	0.010	ND
Di-n-octyl Phthalate (DNOP)	117-84-0	%(w/w)	0.003	ND
Diisodecyl Phthalate (DIDP)	26761-40-0/ 68515-49-1	%(w/w)	0.010	ND

Notes:

- (1) DBP, BBP, DEHP Reference information: Entry 51 of Regulation (EC) No 552/2009 amending Annex XVII of REACH Regulation (EC) No 1907/2006 (previously restricted under Directive 2005/84/EC):
 - i) Shall not be used as substances or in mixtures, in concentrations greater than 0.1 % by weight of the plasticised material, in toys and childcare articles.
 - ii) Toys and childcare articles containing these phthalates in a concentration greater than 0.1 % by weight of the plasticised material shall not be placed on the market.
 Please refer to Regulation (EC) No 552/2009 to get more detail information
- (2) DINP, DNOP, DIDP Reference information: Entry 52 of Regulation (EC) No 552/2009 amending Annex XVII of REACH Regulation (EC) No 1907/2006 (previously restricted under Directive 2005/84/EC).
 - i) Shall not be used as substances or in mixtures, in concentrations greater than 0.1 % by weight of the plasticised material, in toys and childcare articles which can be placed in the mouth by children.
 - ii) Such toys and childcare articles containing these phthalates in a concentration greater than 0.1 % by weight of the plasticised material shall not be placed on the market.
 Please refer to Regulation (EC) No 552/2009 to get more detail information

F: Halogen

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

Test Item(s):	Unit	MDL	005
Fluorine (F)	mg/kg	50	96
Chlorine (Cl)	mg/kg	50	ND
Bromine (Br)	mg/kg	50	ND
Iodine (I)	mg/kg	50	ND

G: PFOS (Perfluorooctane Sulfonates) and PFOA (Perfluorooctanoic Acid)

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



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<u>Test Item(s)</u>	<u>Unit</u>	<u>MDL</u>	<u>005</u>
Perfluorooctane Sulfonates (PFOS) and related Acid, Metal Salt and Amide	mg/kg	10	ND
Perfluorooctanoic Acid (PFOA)	mg/kg	10	ND

Notes :

For reference: commission regulation (EU) No 757/2010 amending regulation (EC) No 850/2004:

- (1) For the purposes of this entry, Article 4(1) (b) shall apply to concentrations of PFOS equal to or below 10 mg/kg (0,001 % by weight) when it occurs in substances or in preparations.
- (2) For the purposes of this entry, Article 4(1) (b) shall apply to concentrations of PFOS in semi-finished products or articles, or parts thereof, if the concentration of PFOS is lower than 0,1 % by weight calculated with reference to the mass of structurally or micro-structurally distinct parts that contain PFOS or, for textiles or other coated materials, if the amount of PFOS is lower than 1 µg /m² of the coated material.

H: Polynuclear Aromatic Hydrocarbons (PAHs)

Test Method: With reference to ZEK 01.4-08 of German ZLS and its amendments, analysis was performed by GC-MS.

<u>Test Item(s)</u>	<u>Unit</u>	<u>MDL</u>	<u>005</u>
Naphthalene (NAP)	mg/kg	0.2	ND
Acenaphthylene (ANY)	mg/kg	0.2	ND
Acenaphthene (ANA)	mg/kg	0.2	ND
Fluorene (FLU)	mg/kg	0.2	ND
Phenanthrene (PHE)	mg/kg	0.2	ND
Anthracene (ANT)	mg/kg	0.2	ND
Fluoranthene (FLT)	mg/kg	0.2	ND
Pyrene (PYR)	mg/kg	0.2	ND
Benzo(a)anthracene (BaA)	mg/kg	0.2	ND
Chrysene (CHR)	mg/kg	0.2	ND
Benzo(b)fluoranthene (BbF) + Benzo(j)fluoranthene (BjF)	mg/kg	0.2	ND
Benzo(k)fluoranthene (BkF)	mg/kg	0.2	ND
Benzo(a)pyrene (BaP)	mg/kg	0.2	ND
Benzo(e)pyrene (BeP)	mg/kg	0.2	ND
Indeno(1,2,3-c,d)pyrene (IPY)	mg/kg	0.2	ND
Dibenzo(a,h)anthracene (DBA)	mg/kg	0.2	ND
Benzo(g,h,i)perylene (BPE)	mg/kg	0.2	ND
Sum of 18 PAH	mg/kg	-	ND

Note 1: ZEK 01.4-08: Restraining maximum values for products



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Parameter	Category 1	Category 2	Category 3
	Material indented to be put in the mouth or material for toys with normal skin contact for children aged < 36 months	Materials those are not included in Category 1, with predictable contact with the skin longer than 30 s. (long-term skin contact)	Materials those are not included in Category 1 or 2, with predictable skin contact up to 30 s (short-term skin contact).
Benzo[a]pyrene (mg/kg)	<MDL (<0.2)***	1	20
Sum of 18 PAH(US EPA) (mg/kg)**	<MDL (<0.2)***	10	200

- * * = Only PAH substances >0.2 mg/kg are taken into account while calculating the sum of PAHs
- *** = In case that the maximum values exceed the limits of category 1, but are within the limits of category 2, one may confirm the suitability of the tested material which is indented to be put in the mouth by additional specific migration tests of PAH components based on DIN EN 1186ff and §64 LFGB 80.30-1. The conclusion of the migration test results must be made based on food law criteria.

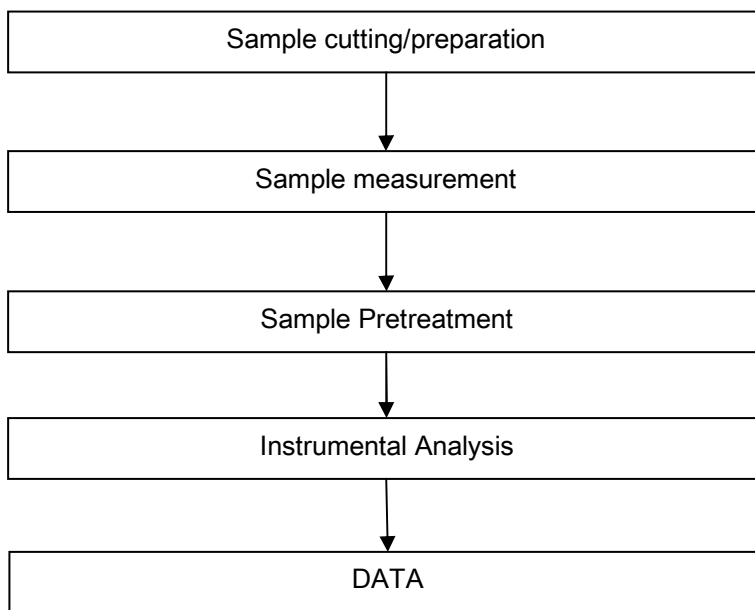


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ATTACHMENTS

SVHC Testing Flow Chart

- 1) Name of the person who made testing: Martin He / Alison Zhang
- 2) Name of the person in charge of testing: Cutey Yu

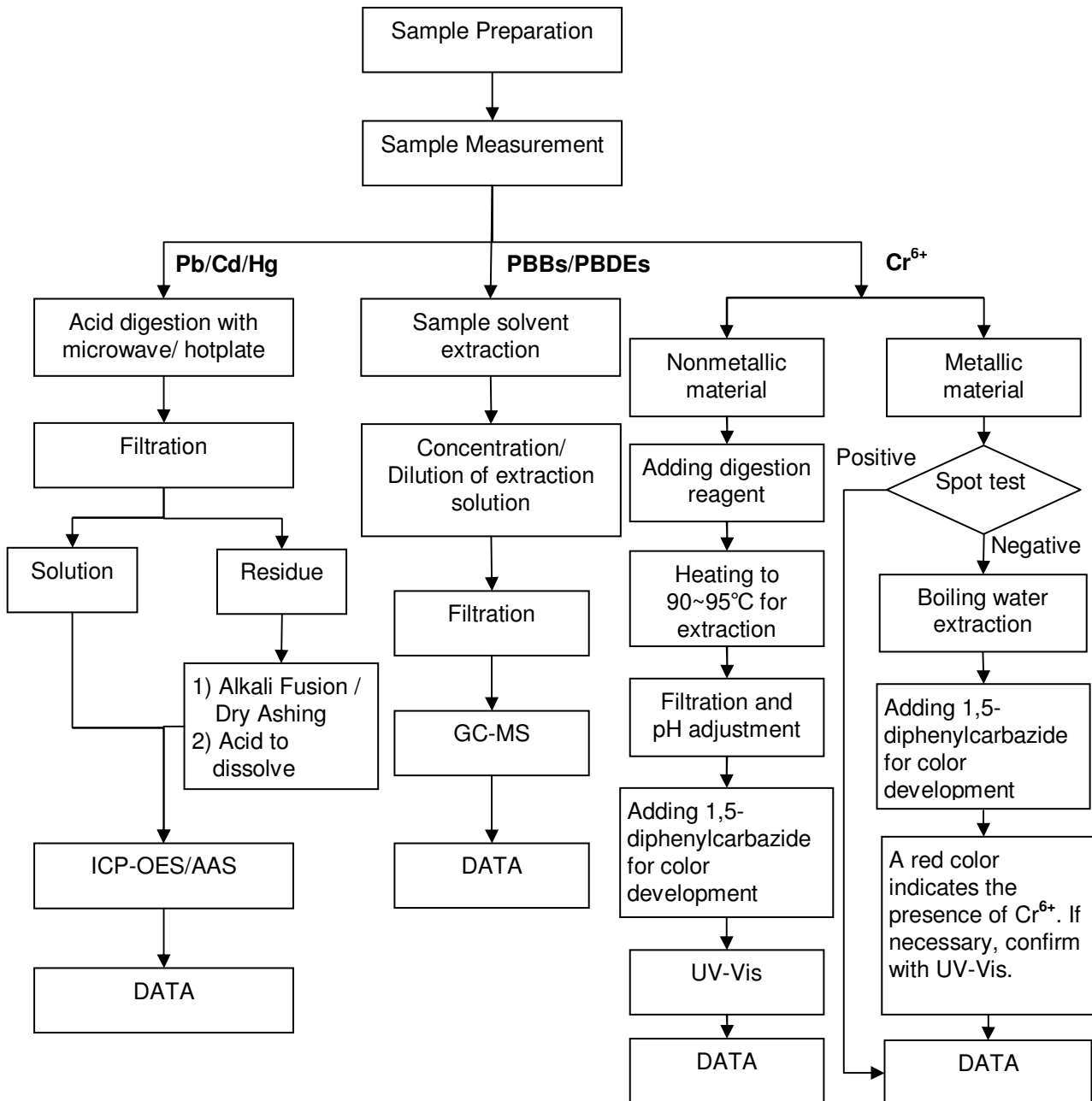


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ATTACHMENTS

RoHS Testing Flow Chart

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

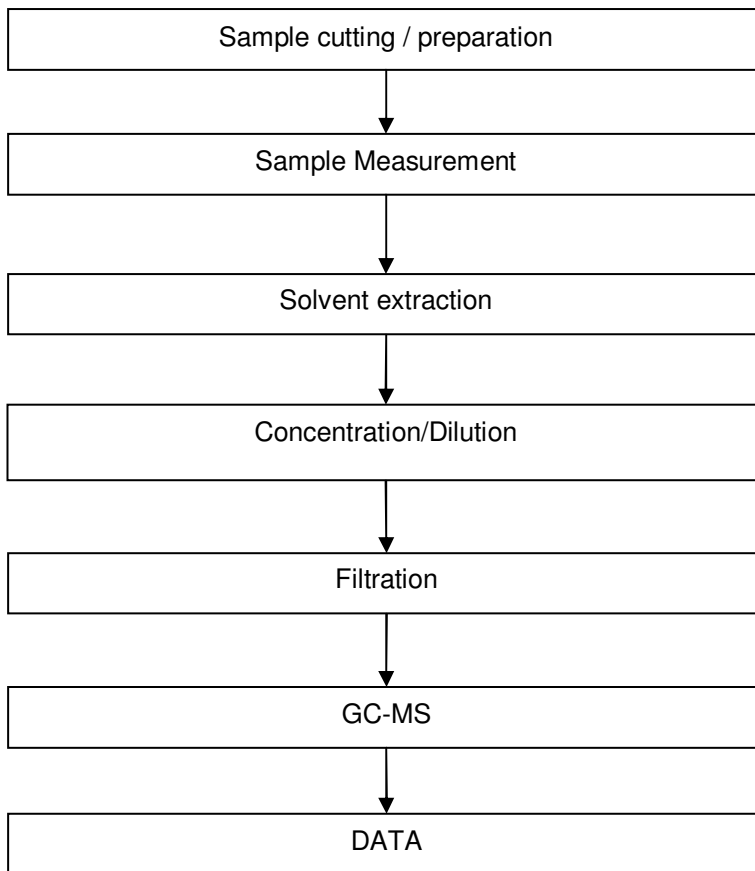


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ATTACHMENTS

HBCDD Testing Flow Chart

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

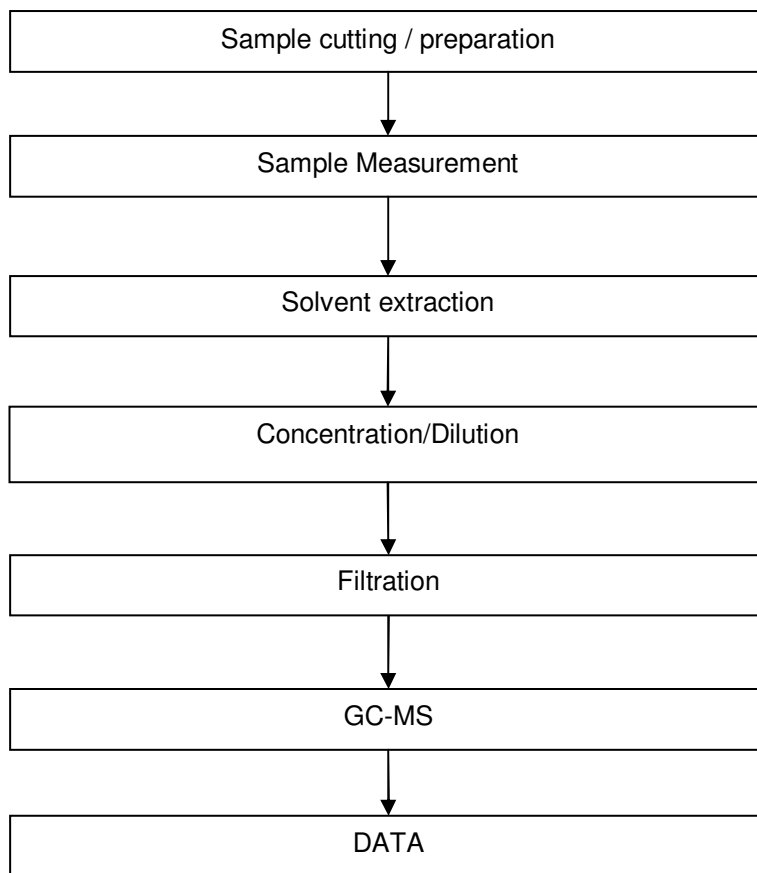


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ATTACHMENTS

Phthalates Testing Flow Chart

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

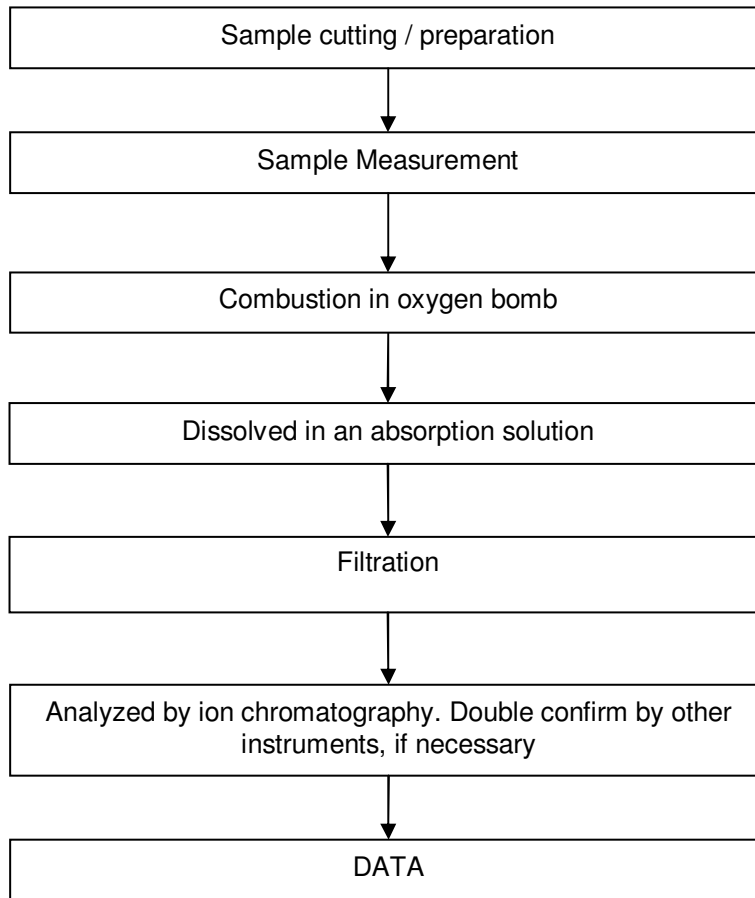


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Halogen Testing Flow Chart

- 1) Name of the person who made testing: Bella Wang
- 2) Name of the person in charge of testing: Adams Yu

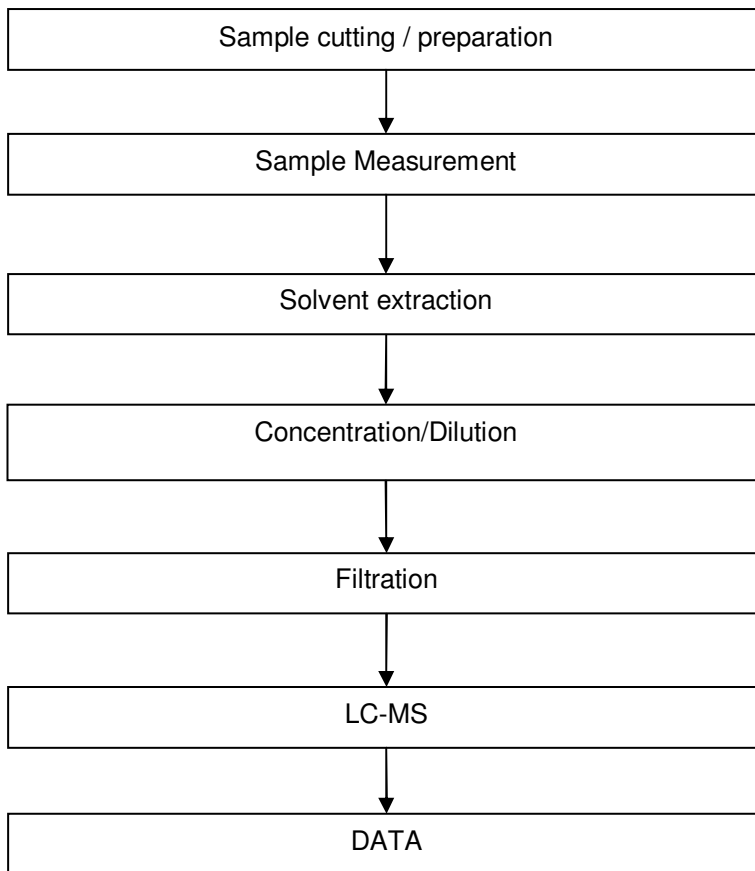


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PFOA / PFOS Testing Flow Chart

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

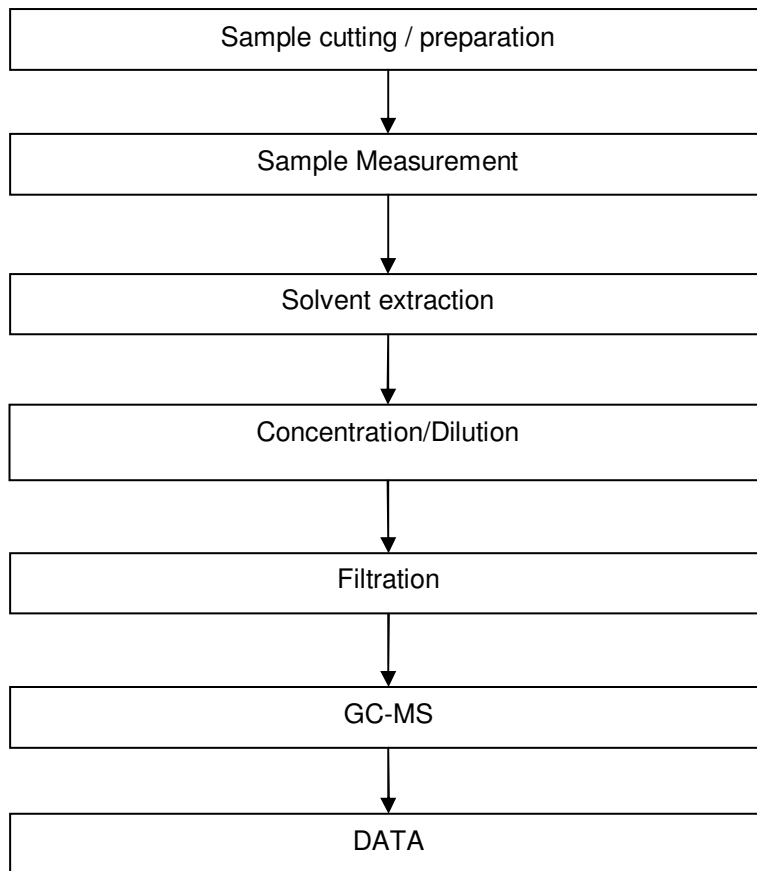


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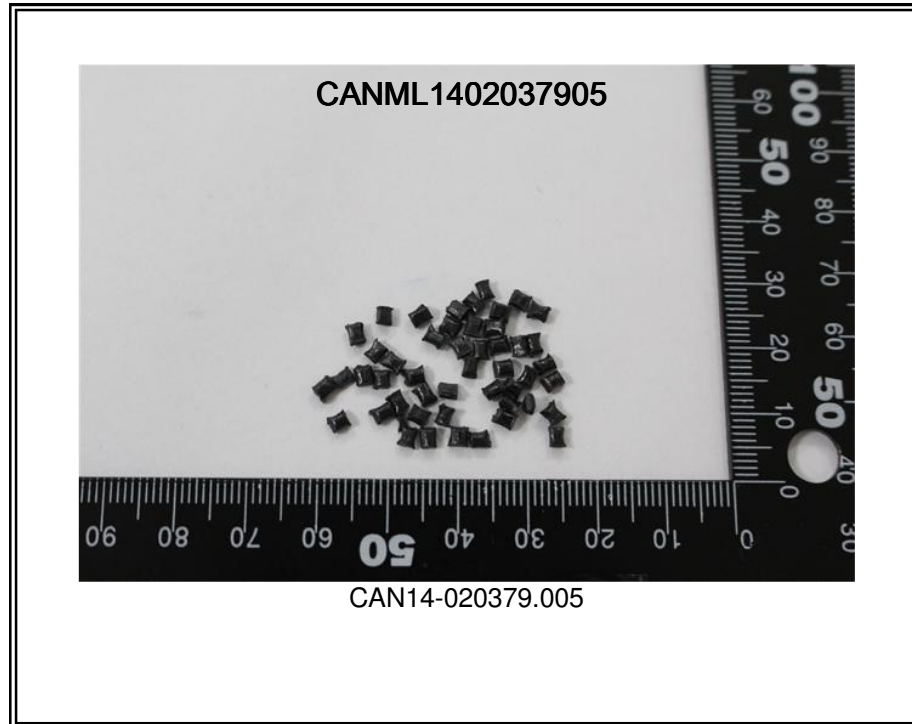
PAHs Testing Flow Chart

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



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Sample photo:



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*** End of Report ***

Test Report

No. CANML1402093501

Date: 04 Mar 2014

Page 1 of 5

DONGGUAN CITY EECHEONG METAL MATERIALS CO.,LTD

GUANGDONG PROVINCE DONGGUAN CHANGAN HAKONG FUXING ROAD NO.33 JINMING
INTERNATIONAL INDUSTRY MOULD CITY

The following sample(s) was/were submitted and identified on behalf of the clients as : C2680

SGS Job No. : GC140200733 - GZ
Internal Reference No. : 2.1
Date of Sample Received : 27 Feb 2014
Testing Period : 27 Feb 2014 - 04 Mar 2014
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.

Echo

Echo Yeung
Approved Signatory



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Test Results :

Test Part Description :

Specimen No.	SGS Sample ID	Description
SN1	CAN14-020935.001	Brassy 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.
 - (5)With reference to IEC 62321:2008, determination of PBBs and PBDEs by GC-MS.

<u>Test Item(s)</u>	<u>Limit</u>	<u>Unit</u>	<u>MDL</u>	<u>001</u>
Cadmium (Cd)	100	mg/kg	2	ND
Lead (Pb)	1,000	mg/kg	2	8
Mercury (Hg)	1,000	mg/kg	2	ND
Hexavalent Chromium (CrVI)	-	-	◇	Negative
Sum of PBBs	1,000	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	1,000	mg/kg	-	ND
Monobromodiphenyl ether	-	mg/kg	5	ND



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Test Report

No. CANML1402093501

Date: 04 Mar 2014

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<u>Test Item(s)</u>	<u>Limit</u>	<u>Unit</u>	<u>MDL</u>	<u>001</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 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 results of Cr(VI) represent status of the sample at the time of testing.

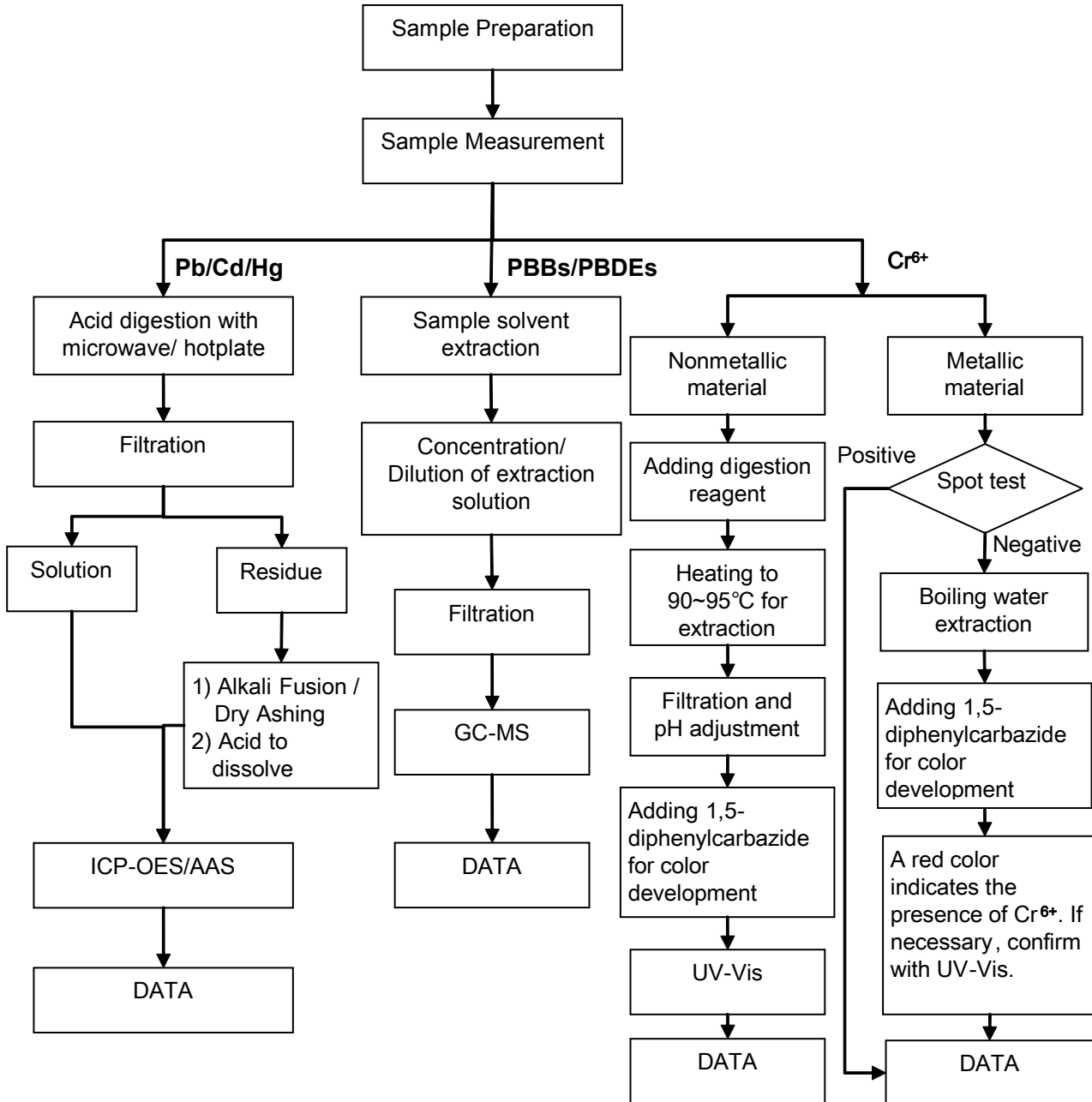


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ATTACHMENTS

RoHS Testing Flow Chart

- 1) Name of the person who made testing: Michael Tso / Cutey Yu
- 2) Name of the person in charge of testing: Adams Yu / Yolanda Wei
- 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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Sample photo:



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*** End of Report ***



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Test Report

No. CANML1402093502

Date: 04 Mar 2014

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DONGGUAN CITY EECHEONG METAL MATERIALS CO.,LTD

GUANGDONG PROVINCE DONGGUAN CHANGAN HAKONG FUXING ROAD NO.33 JINMING
INTERNATIONAL INDUSTRY MOULD CITY

The following sample(s) was/were submitted and identified on behalf of the clients as : C5191

SGS Job No. : GC140200733 - GZ
Internal Reference No. : 2.2
Date of Sample Received : 27 Feb 2014
Testing Period : 27 Feb 2014 - 04 Mar 2014
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.

Echo

Echo Yeung
Approved Signatory



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Test Results :

Test Part Description :

Specimen No.	SGS Sample ID	Description
SN1	CAN14-020935.002	Copper-colored 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.
 - (5)With reference to IEC 62321:2008, determination of PBBs and PBDEs by GC-MS.

Test Item(s)	Limit	Unit	MDL	002
Cadmium (Cd)	100	mg/kg	2	ND
Lead (Pb)	1,000	mg/kg	2	19
Mercury (Hg)	1,000	mg/kg	2	ND
Hexavalent Chromium (CrVI)	-	-	◇	Negative
Sum of PBBs	1,000	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	1,000	mg/kg	-	ND
Monobromodiphenyl ether	-	mg/kg	5	ND



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Test Report

No. CANML1402093502

Date: 04 Mar 2014

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

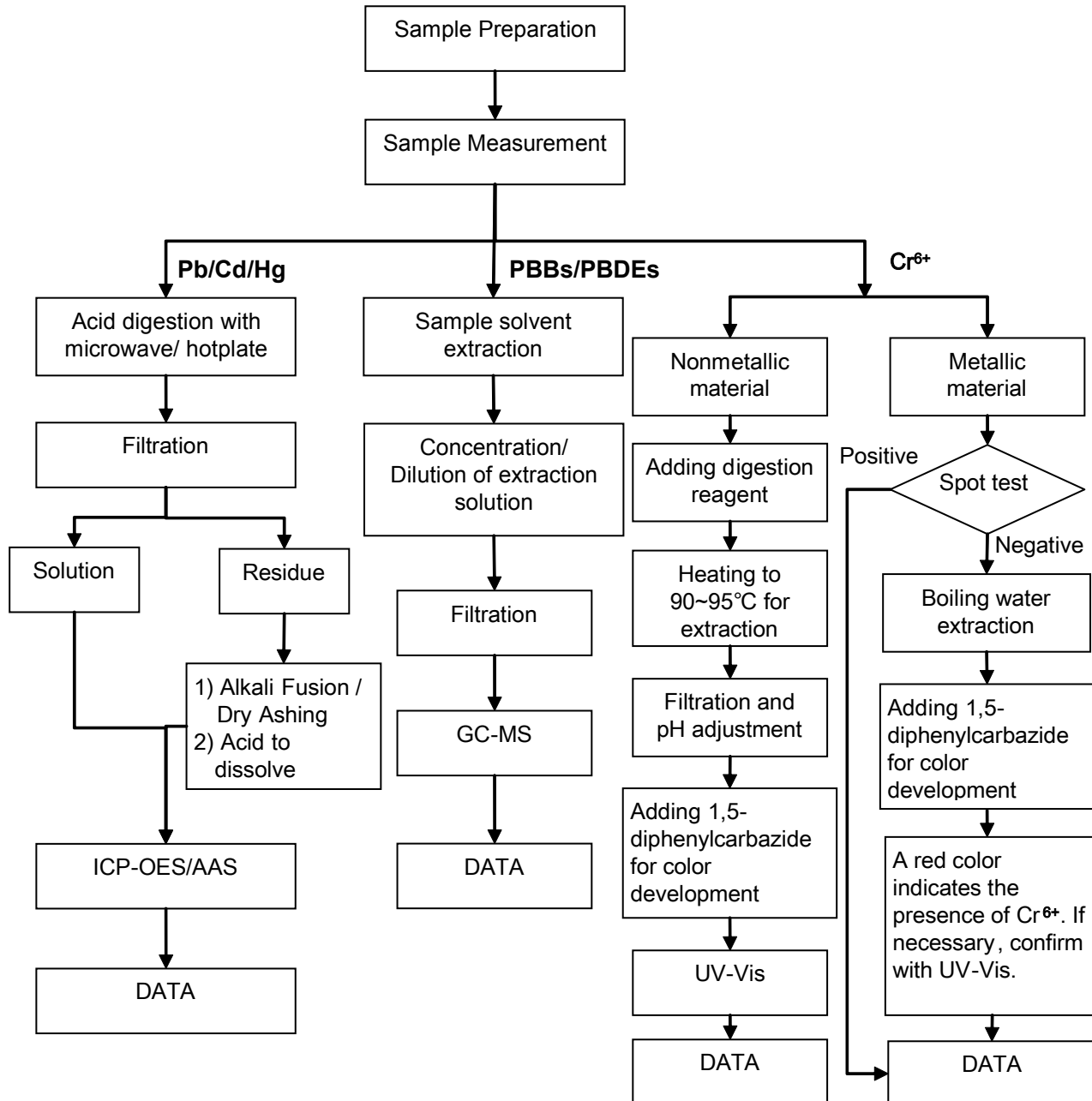


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ATTACHMENTS

RoHS Testing Flow Chart

- 1) Name of the person who made testing: Michael Tso / Cutey Yu
- 2) Name of the person in charge of testing: Adams Yu / Yolanda Wei
- 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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Sample photo:



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*** End of Report ***

Test Report

No. CANEC1401850807

Date: 04 Mar 2014

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SHENZHEN SANJING MACHINERY EQUIPMENT CO.,LTD
(BAO'AN ROAD SIDE)AVIATION ROAD MEASUREMENTS XIXIANG STREET BAO'AN DISTRICT
SHENZHEN
CHINA

The following sample(s) was/were submitted and identified on behalf of the clients as : AU plated layer

SGS Job No. : CP14-005735 - SZ
Date of Sample Received : 24 Feb 2014
Testing Period : 24 Feb 2014 - 28 Feb 2014
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.



Almay Gao
Approved Signatory



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Test Results :

Test Part Description :

Specimen No.	SGS Sample ID	Description
SN1	CAN14-018508.004	Gold 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>	<u>MDL</u>	<u>004</u>
Cadmium (Cd)	100	mg/kg	2	ND
Lead (Pb)	1,000	mg/kg	2	12
Mercury (Hg)	1,000	mg/kg	2	ND
Hexavalent Chromium (CrVI)	-	-	◇	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 results of Cr(VI) represent status of the sample at the time of testing.

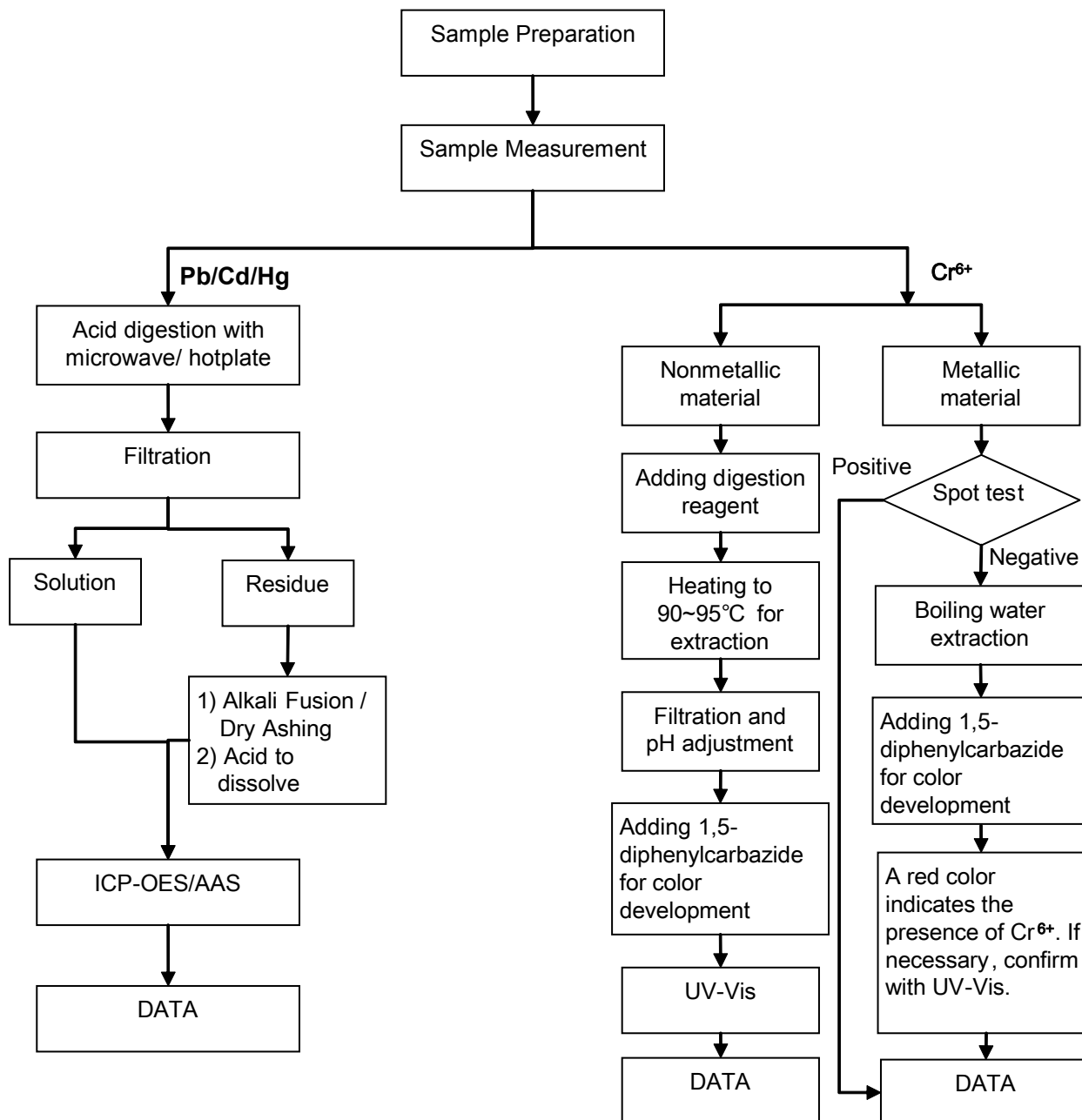


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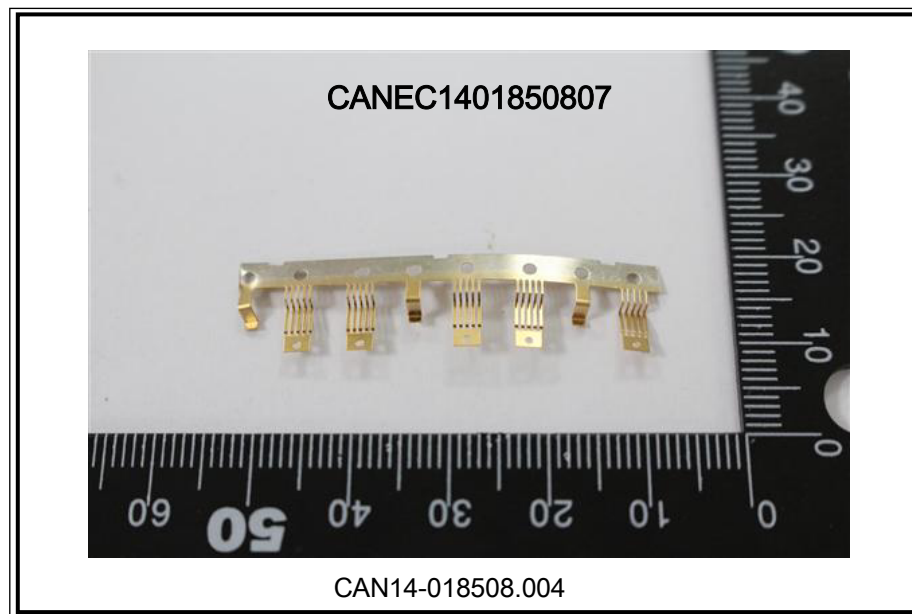
RoHS Testing Flow Chart

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



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Sample photo:



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Test Report

No. CANEC1401850801

Date: 04 Mar 2014

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SHENZHEN SANJING MACHINERY EQUIPMENT CO.,LTD

(BAO'AN ROAD SIDE)AVIATION ROAD MEASUREMENTS XIXIANG STREET BAO'AN DISTRICT
SHENZHEN
CHINA

The following sample(s) was/were submitted and identified on behalf of the clients as : Bright plated layer

SGS Job No. : CP14-005735 - SZ
Date of Sample Received : 24 Feb 2014
Testing Period : 24 Feb 2014 - 28 Feb 2014
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.



Almay Gao
Approved Signatory



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Test Results :

Test Part Description :

Specimen No.	SGS Sample ID	Description
SN1	CAN14-018508.001	Silver-white 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.

Test Item(s)	Limit	Unit	MDL	001
Cadmium (Cd)	100	mg/kg	2	ND
Lead (Pb)	1,000	mg/kg	2	11
Mercury (Hg)	1,000	mg/kg	2	ND
Hexavalent Chromium (CrVI)	-	-	◇	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 results of Cr(VI) represent status of the sample at the time of testing.

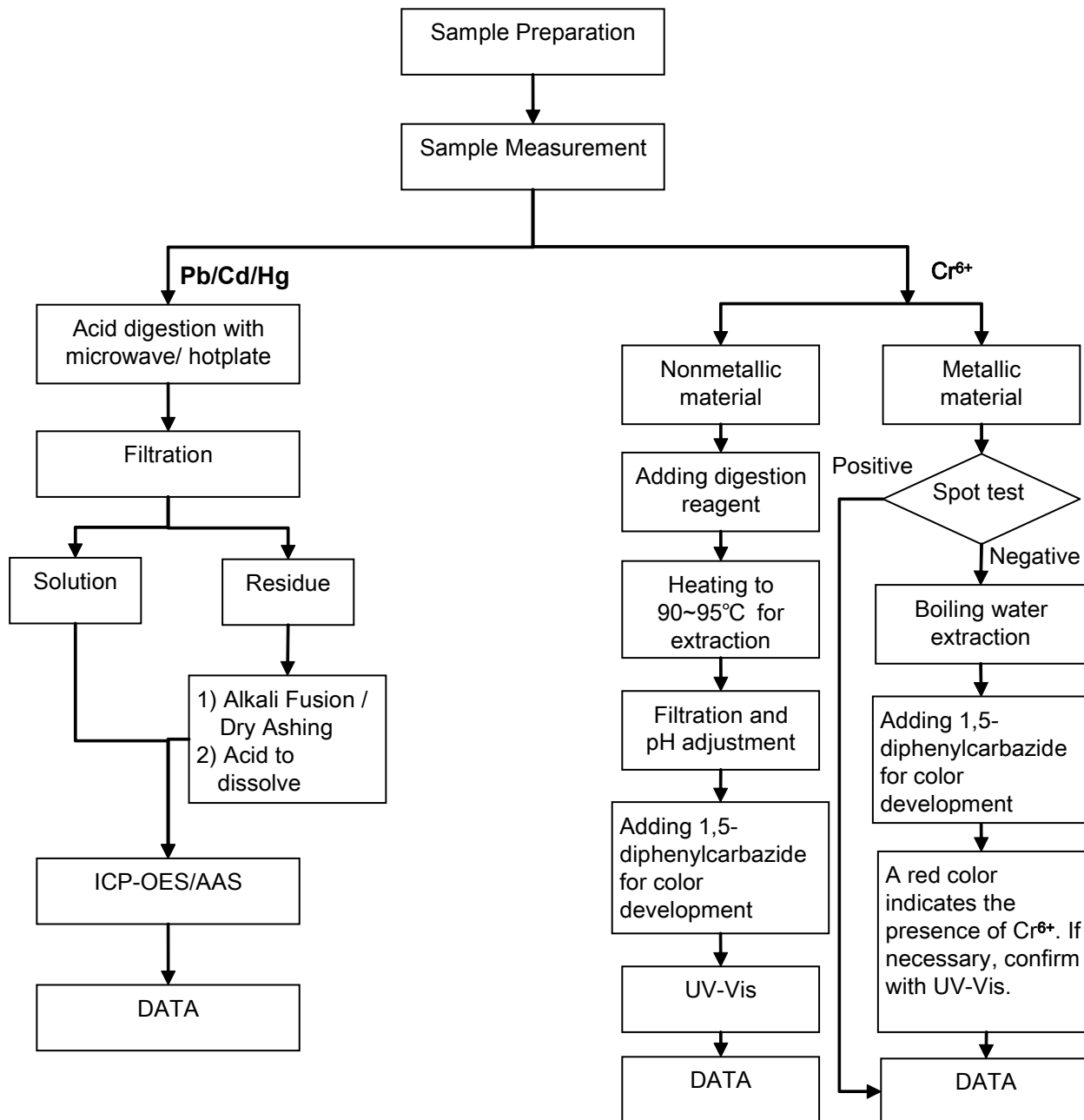


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ATTACHMENTS

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
- 3) These samples were dissolved totally by pre-conditioning method according to below flow chart (Cr6+ test method excluded).



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Sample photo:



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Test Report

No. CANEC1401850805

Date: 04 Mar 2014

Page 1 of 4

SHENZHEN SANJING MACHINERY EQUIPMENT CO.,LTD

(BAO'AN ROAD SIDE)AVIATION ROAD MEASUREMENTS XIXIANG STREET BAO'AN DISTRICT
SHENZHEN
CHINA

The following sample(s) was/were submitted and identified on behalf of the clients as : NI plated layer

SGS Job No. : CP14-005735 - SZ
Date of Sample Received : 24 Feb 2014
Testing Period : 24 Feb 2014 - 28 Feb 2014
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.



Almay Gao
Approved Signatory



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Test Results :

Test Part Description :

Specimen No.	SGS Sample ID	Description
SN1	CAN14-018508.003	Silvery 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.

Test Item(s)	Limit	Unit	MDL	003
Cadmium (Cd)	100	mg/kg	2	ND
Lead (Pb)	1,000	mg/kg	2	17
Mercury (Hg)	1,000	mg/kg	2	ND
Hexavalent Chromium (CrVI)	-	-	◇	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 results of Cr(VI) represent status of the sample at the time of testing.

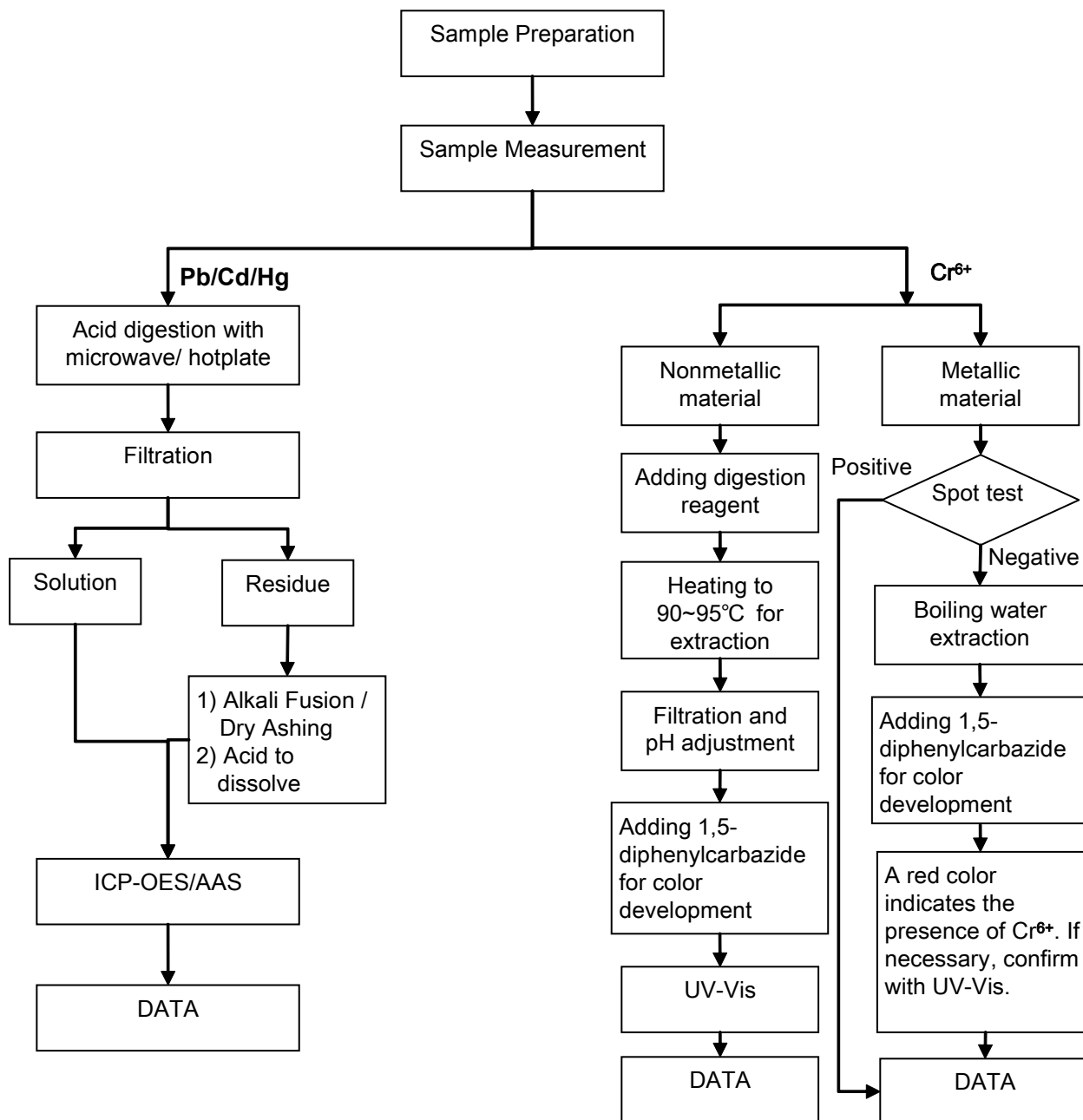


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ATTACHMENTS

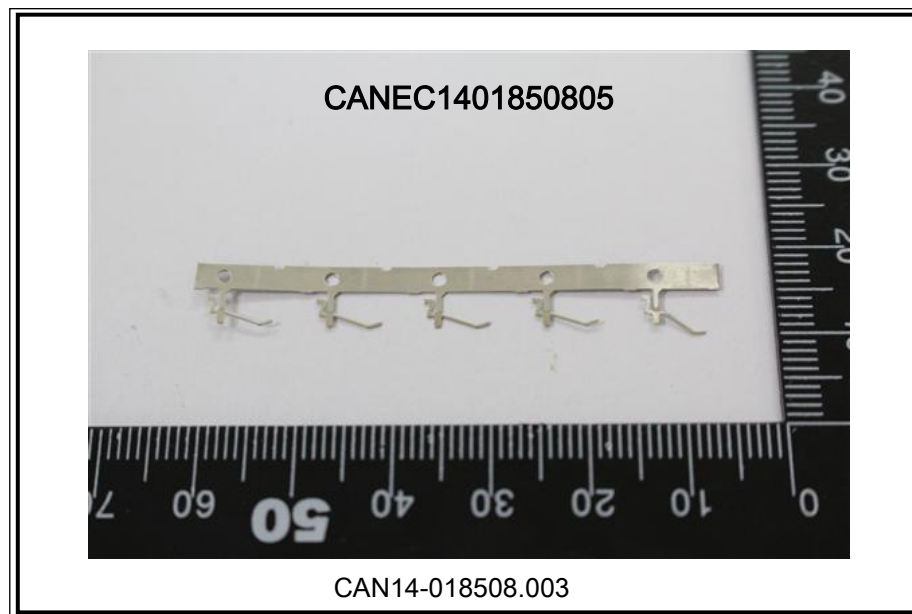
RoHS Testing Flow Chart

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



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Sample photo:



SGS authenticate the photo on original report only

*** End of Report ***



TEST REPORT

Applicant: SHENZHEN FUHONGXIN CIRCUIT CO.,LTD
Address: No.84, 1/F, East 7 Block, Yongnan Road, HouTingGangTou Industrial, Shajing Street
Bao'an District, Shenzhen

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

Product name: PCB
Model: FHX001

Sample Received Date: DEC. 21, 2013
Testing Period Dec. 21, 2013 – Dec. 27, 2013

Test Requirement:

- As specified by client, to determine the Lead(Pb), Cadmium(Cd), Mercury(Hg), Hexavalent Chromium(Cr6+), Polybrominated Biphenyls(PBBs) & Polybrominated ,Diphenyl Ethers(PBDEs) content in the submitted sample in accordance with Regulation 2011/65/EU.

Conclusion:

Pass

Test Result(s): Please refer to the following page(s);

Test Method: Please refer to the following page(s);

Wrote by: Sally Reviewed by: Hulk
Approved by: Jack Date: 2013-12-27

Test Result(s):

Test item(s)	Unit	Limit	Result(s)
			1
Lead(Pb)	mg/kg	1000	N.D.
Cadmium(Cd)	mg/kg	100	N.D.
Mercury(Hg)	mg/kg	1000	N.D.
Chromium(Cr VI)	mg/kg	1000	N.D.
Sum of PBBs	mg/kg	1000	N.D.
Monobromobiphenyl	mg/kg	/	N.D.
Dibromobiphenyl	mg/kg	/	N.D.
Tribromobiphenyl	mg/kg	/	N.D.
Tetrabromobiphenyl	mg/kg	/	N.D.
Pentabromobiphenyl	mg/kg	/	N.D.
Hexabromobiphenyl	mg/kg	/	N.D.
Heptabromobiphenyl	mg/kg	/	N.D.
Octabromobiphenyl	mg/kg	/	N.D.
Nonabromobiphenyl	mg/kg	/	N.D.
Decabromobiphenyl	mg/kg	/	N.D.
Sum of PBDEs	mg/kg	1000	N.D.
Monobromodiphenyl ether	mg/kg	/	N.D.
Dibromodiphenyl ether	mg/kg	/	N.D.
Tribromodiphenyl ether	mg/kg	/	N.D.
Tetrabromodiphenyl ether	mg/kg	/	N.D.
Pentabromodiphenyl ether	mg/kg	/	N.D.
Hexabromodiphenyl ether	mg/kg	/	N.D.
Heptabromodiphenyl ether	mg/kg	/	N.D.
Octabromodiphenyl ether	mg/kg	/	N.D.
Nonabromodiphenyl ether	mg/kg	/	N.D.
Decabromodiphenyl ether	mg/kg	/	N.D.

Sample Description:

1:Green PCB

Notes:

1mg/kg=1ppm = 0.0001%

N.D. = Not Detected (<MDL)

MDL = Method Detection Limit

/=Not Regulated

---=Not Applicable

Shenzhen NTEK Testing Technology Co., Ltd.

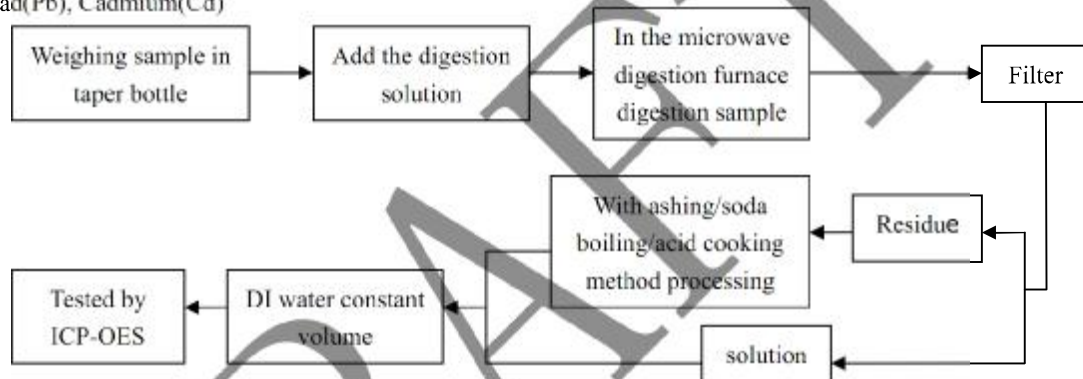
 Address: 1/F, Building E, Fenda Science Park, Sanwei Community, Xixiang Street, Bao'an District, Shenzhen P.R. China.
 Tel: (86)-0755-61156588 Fax: (86)-0755-61156599 Http: www.ntek.org.cn

Test Method:

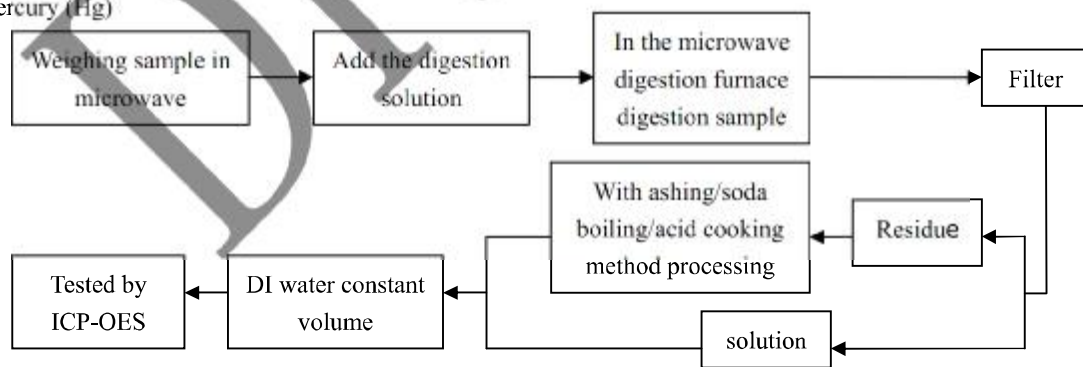
Test item(s)	Test method	Measure instrument	MDL
Lead(Pb)	IEC 62321:2008	ICP-OES	2 mg/kg
Cadmium(Cd)	IEC 62321:2008	ICP-OES	2 mg/kg
Mercury(Hg)	IEC 62321:2008	ICP-OES	2 mg/kg
Chromium(Cr VI)	IEC 62321:2008	UV-Vis	2 mg/kg
PBBs/ PBDEs	IEC 62321:2008	GC-MS	5 mg/kg

Test Flow:

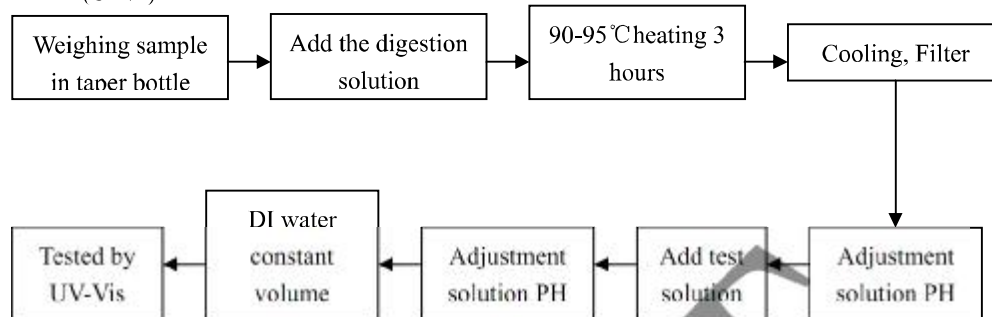
1. Lead(Pb), Cadmium(Cd)



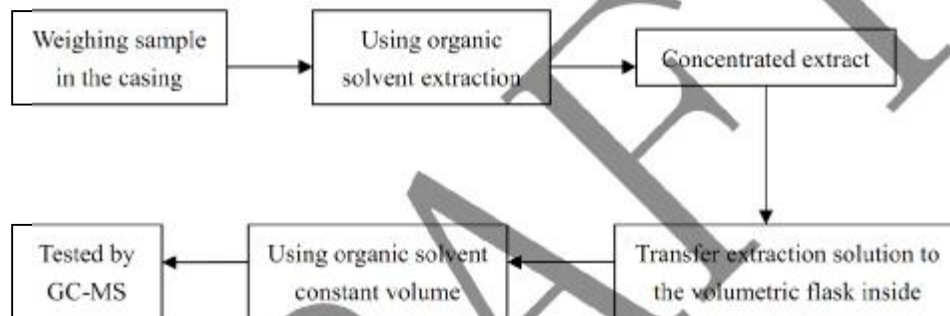
2. Mercury (Hg)



3. Chromium(Cr VI)



4. PBBs/ PBDEs



Sample photo:

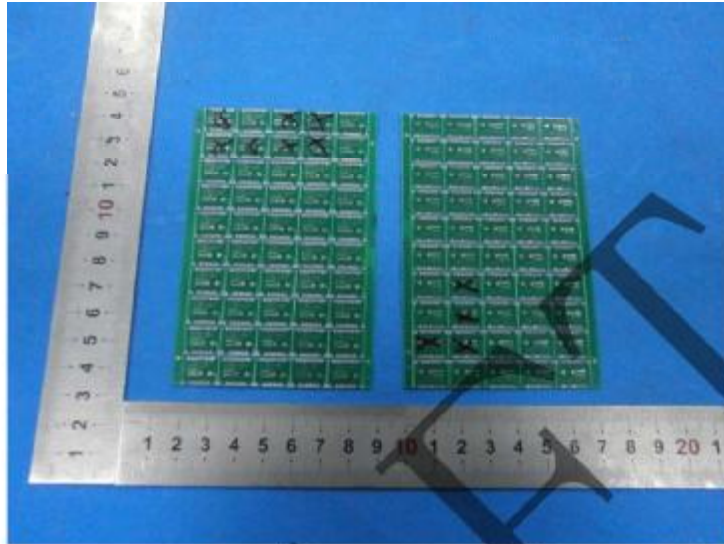


Fig.1

****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 NTEK, this report can't be reproduced except in full.

Shenzhen NTEK Testing Technology Co., Ltd.

Address: 1/F, Building E, Fenda Science Park, Sanwei Community, Xixiang Street, Bao'an District, Shenzhen P.R. China.
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測試報告 Test Report

號碼(No.) : KA/2014/10573 日期(Date) : 2014/01/21 頁數(Page): 1 of 6

國巨股份有限公司楠梓分公司(國巨/飛元/華亞)
YAGEO CORPORATION NANTZE BRANCH (YAGEO/PHYCOMP/COMPOSTAR)
高雄市楠梓加工出口區西三街16號
16, WEST 3RD STREET N. E. P. Z. KAOHSIUNG, TAIWAN, R. O. C.

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

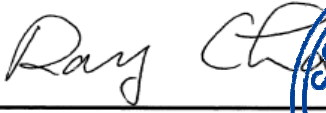

(The following samples was/were submitted and identified by/on behalf of the client as):

樣品名稱(Sample Description) : MULTI-LAYER CERAMIC CAPACITOR
樣品型號(Style/Item No.) : X7R 1206 SERIES
收件日期(Sample Receiving Date) : 2014/01/13
測試期間(Testing Period) : 2014/01/13 TO 2014/01/21
送樣廠商(Sample Submitted By) : 國巨股份有限公司楠梓分公司 (YAGEO CORPORATION NANTZE BRANCH)

=====
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.)

測試方法(Test Method) : 請見下一頁 (Please refer to next pages).

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



Ray Chang / Asst. Manager
Signed for and on behalf of
SGS Taiwan Limited
Chemical Laboratory-Kaohsiung

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測試報告

Test Report

號碼(No.) : KA/2014/10573 日期(Date) : 2014/01/21 頁數(Page): 2 of 6

國巨股份有限公司楠梓分公司(國巨/飛元/華亞)
 YAGEO CORPORATION NANTZE BRANCH (YAGEO/PHYCOMP/COMPOSTAR)
 高雄市楠梓加工出口區西三街16號
 16, WEST 3RD STREET N. E. P. Z. KAOHSIUNG, TAIWAN, R. O. C.

測試結果(Test Results)

測試部位(PART NAME)No.1 : 棕色/銀色 MULTI-LAYER CERAMIC CAPACITOR
 (BROWN/SILVER MULTI-LAYER CERAMIC CAPACITOR)

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 62321-5: 2013 方法, 以感應耦合電漿原子發射光譜儀檢測. / With reference to IEC 62321-5: 2013 and performed by ICP-AES.	2	n.d.
鉛 / Lead (Pb)	mg/kg	參考 IEC 62321-5: 2013 方法, 以感應耦合電漿原子發射光譜儀檢測. / With reference to IEC 62321-5: 2013 and performed by ICP-AES.	2	n.d.
汞 / Mercury (Hg)	mg/kg	參考 IEC 62321-4: 2013 方法, 以感應耦合電漿原子發射光譜儀檢測. / With reference to IEC 62321-4: 2013 and performed by ICP-AES.	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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測試報告

Test Report

號碼(No.) : KA/2014/10573

日期(Date) : 2014/01/21

頁數(Page): 3 of 6

國巨股份有限公司楠梓分公司(國巨/飛元/華亞)

YAGEO CORPORATION NANTZE BRANCH (YAGEO/PHYCOMP/COMPOSTAR)

高雄市楠梓加工出口區西三街16號

16, WEST 3RD STREET N. E. P. Z. KAOHSIUNG, TAIWAN, R. O. C.

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)

測試報告 Test Report

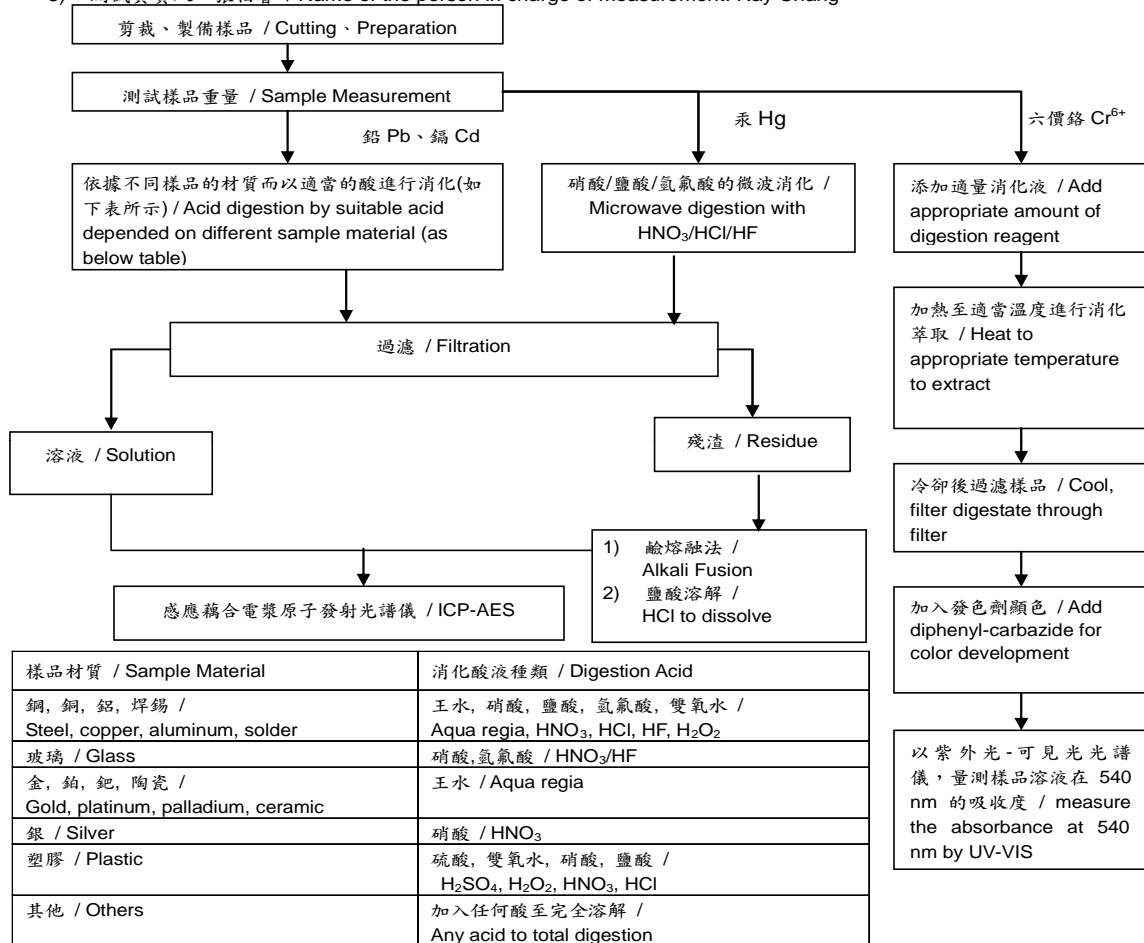
號碼(No.) : KA/2014/10573

日期(Date) : 2014/01/21

頁數(Page): 4 of 6

國巨股份有限公司楠梓分公司(國巨/飛元/華亞)
YAGEO CORPORATION NANTZE BRANCH (YAGEO/PHYCOMP/COMPOSTAR)
高雄市楠梓加工出口區西三街16號
16, WEST 3RD STREET N. E. P. Z. KAOHSIUNG, TAIWAN, R. O. C.

- 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：劉俊宏 / Name of the person who made measurement: Jony Liu
- 3) 測試負責人：張伯睿 / Name of the person in charge of measurement: Ray Chang



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

測試報告 Test Report

號碼(No.) : KA/2014/10573

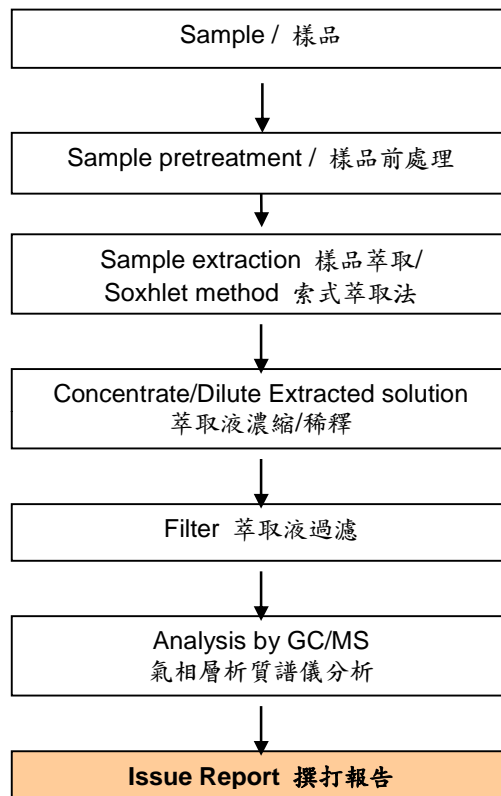
日期(Date) : 2014/01/21

頁數(Page): 5 of 6

國巨股份有限公司楠梓分公司(國巨/飛元/華亞)
YAGEO CORPORATION NANTZE BRANCH (YAGEO/PHYCOMP/COMPOSTAR)
高雄市楠梓加工出口區西三街16號
16, WEST 3RD STREET N. E. P. Z. KAOHSIUNG, TAIWAN, R. O. C.

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

- 1) 測試人員：陳威錚 / Name of the person who made measurement: Dorothy Chen
- 2) 測試負責人：張伯睿 / Name of the person in charge of measurement: Ray Chang



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測試報告 Test Report

號碼(No.) : KA/2014/10573

日期(Date) : 2014/01/21

頁數(Page): 6 of 6

國巨股份有限公司楠梓分公司(國巨/飛元/華亞)

YAGEO CORPORATION NANTZE BRANCH (YAGEO/PHYCOMP/COMPOSTAR)

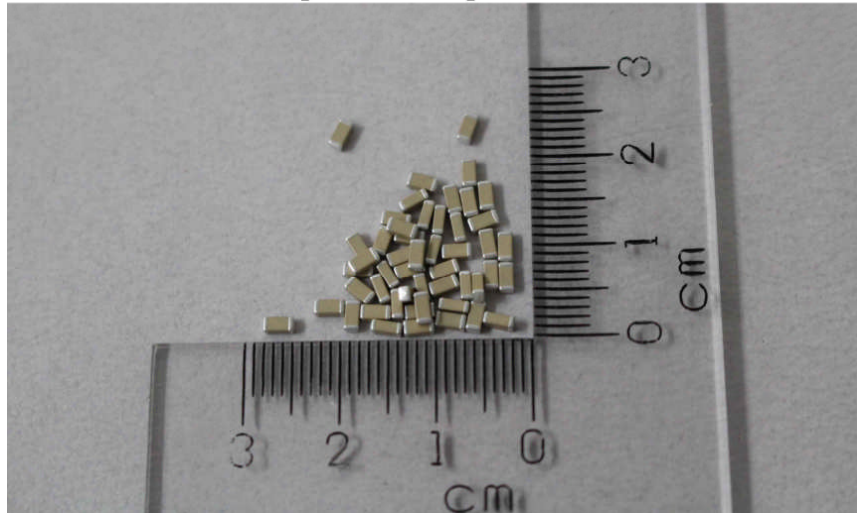
高雄市楠梓加工出口區西三街16號

16, WEST 3RD STREET N. E. P. Z. KAOHSIUNG, 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.)

KA/2014/10573



** 報告結尾 (End of Report) **

Test Report

No. SHAEC1324970811

Date: 03 Jan 2014

Page 1 of 5

YAGEO CORPORATION(YAGEO/PHYCOMP/COMPOSTAR BRAND)
3F,NO.233-1,BAOQIAO RD.,XINDIAN DIST.,NEW TAIPEI CITY 23145,TAIWAN

The following sample(s) was/were submitted and identified on behalf of the clients as : ARRAY CHIP RESISTORS

SGS Job No. : SP13-036808 - SUZ
Model No. : YC164 SERIES
Date of Sample Received : 20 Dec 2013
Testing Period : 20 Dec 2013 - 26 Dec 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).

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
SN1	SHA13-249708.006	Black/white/silver ARRAY CHIP RESISTORS

Remarks :

- (1) 1 mg/kg = 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 Colorimetric Method using UV-Vis.
 - (5) With reference to IEC 62321:2008, determination of PBBs and PBDEs by GC-MS.

Test Item(s)	Limit	Unit	MDL	006
Cadmium (Cd)	100	mg/kg	2	ND
Lead (Pb)	1000	mg/kg	2	422
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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Test Report

No. SHAEC1324970811

Date: 03 Jan 2014

Page 3 of 5

<u>Test Item(s)</u>	<u>Limit</u>	<u>Unit</u>	<u>MDL</u>	<u>006</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 :

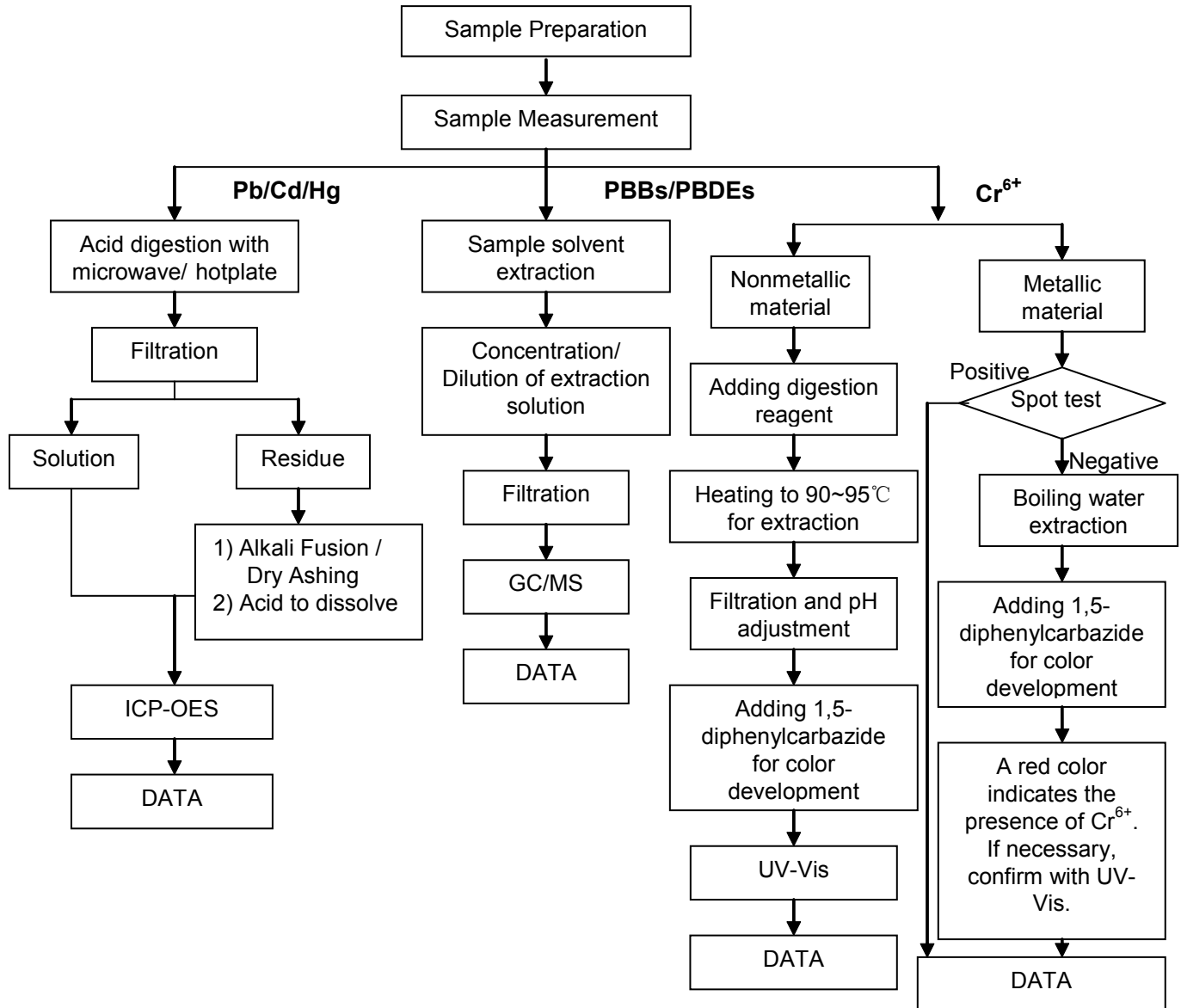
- (1) The maximum permissible limit is quoted from directive 2011/65/EU, Annex II

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ATTACHMENTS

RoHS Testing Flow Chart

- 1) Name of the person who made testing: Jan Shi/Star Wang/Shara Wang/Gary Xu
- 2) Name of the person in charge of testing: Jeff Zhang/George Xu/ Jessy Huang
- 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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Sample photo:



SGS authenticate the photo on original report only

*** End of Report ***

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测试报告

No. CANEC1309326406 A01 日期: 2013年07月02日 第1页,共6页

中山市坦洲镇创日磁电子厂
中国中山市坦洲镇新前进村申堂二路B4幢

本报告取代测试报告CANEC1309326404

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SGS工作编号: CP13-030888 - GZ
样品接收日期: 2013年06月20日
测试周期: 2013年06月20日 - 2013年06月28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



Alkene_Liang梁康宁
批准签署人

备注: 本报告是编号为CANEC1309326405 A01报告的中文版本。

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测试结果:

测试样品描述:

样品编号	SGS样品ID	描述
1	CAN13-093264.001	深灰色磁芯

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	001
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

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测试报告

No. CANEC1309326406 A01

日期: 2013年07月02日

第3页,共6页

测试项目	限值	单位	MDL	001
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.

卤素

测试方法: 参照EN 14582:2007方法测定, 采用IC进行分析.

测试项目	单位	MDL	001
氟 (F)	mg/kg	50	ND
氯 (Cl)	mg/kg	50	ND
溴 (Br)	mg/kg	50	ND
碘 (I)	mg/kg	50	ND

多环芳香烃(PAHs)

测试方法: 参照ZEK 01.4-08及其后续指令, 采用 GC-MS进行分析.

测试项目	单位	MDL	001
萘 (NAP)	mg/kg	0.2	ND
芴烯(ANY)	mg/kg	0.2	ND
芴(萘嵌戊烷) (ANA)	mg/kg	0.2	ND
芴 (FLU)	mg/kg	0.2	ND
菲 (PHE)	mg/kg	0.2	ND

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测试报告

No. CANEC1309326406 A01 日期: 2013年07月02日 第4页,共6页

测试项目	单位	MDL	001
蒽 (ANT)	mg/kg	0.2	ND
荧蒽 (FLT)	mg/kg	0.2	ND
芘 (PYR)	mg/kg	0.2	ND
苯并(a)蒽 (BaA)	mg/kg	0.2	ND
屈 (CHR)	mg/kg	0.2	ND
苯并(b)荧蒽 (BbF)和苯并(j)荧蒽 (BjF)	mg/kg	0.4	ND
苯并(k)荧蒽 (BkF)	mg/kg	0.2	ND
苯并(e)芘 (BeP)	mg/kg	0.2	ND
苯并(a)芘 (BaP)	mg/kg	0.2	ND
茚苯(1,2,3-c,d)芘 (IPY)	mg/kg	0.2	ND
二苯并(a,h)蒽(DBA)	mg/kg	0.2	ND
苯并(g,h,i)芘(二苯并(a,h)芘) (BPE)	mg/kg	0.2	ND
18项多环芳香烃总和	mg/kg	-	ND

ZEK 01.4-08:产品最大控制值

参数	1类	2类	3类
	设计意图为放入口中的材料,以及 36 个月以下幼儿的玩具上与皮肤接触的材料	未在 1 类规定中涵盖的材料,且可能与皮肤长期接触的材料(接触时间大于 30 秒)	未在 1 和 2 类规定中涵盖的材料,且可能与皮肤短期接触的材料(接触时间小于等于 30 秒)
BaP 含量 (mg/kg)	< 0.2**	1	20
18 种 PAH 总量 (mg/kg)*	< 0.2**	10	200

备注:

* =仅物质浓度大于 0.2ppm 时才用于计算 18 项 PAHs 总量

**=若设计意图为放入口中的材料的测试结果大于 1 类限值但不超过 2 类限值,需再依据 DIN EN 1186ff 及 §64 LFGB 80.30-1 进行 PAH 的迁移性测试并根据相关食品法规进行判定。

六溴环十二烷(HBCDD)

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测试报告

No. CANEC1309326406 A01 日期: 2013年07月02日 第5页,共6页

测试方法: 参考IEC 62321:2008, 用GC-MS分析。

测试项目	单位	MDL	001
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。

测试项目	CAS NO.	单位	MDL	001
邻苯二甲酸二丁酯 (DBP)	84-74-2	%(w/w)	0.003	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)	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。

全氟辛烷磺酰基化合物(PFOS)和全氟辛酸(PFOA)

测试方法: 参照US EPA 3550C: 2007方法测定, 采用HPLC-MS进行分析。

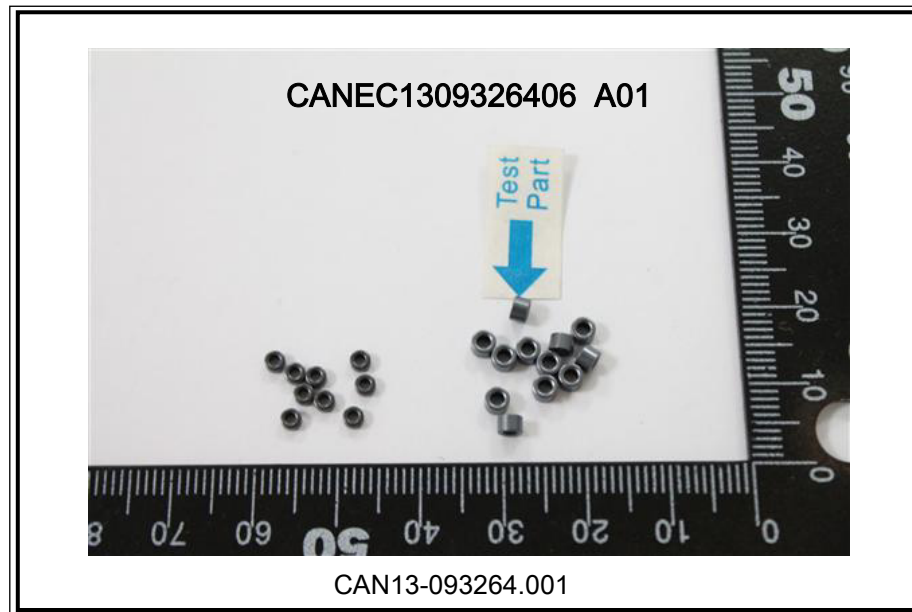
测试项目	单位	MDL	001
全氟辛烷磺酰基化合物 (PFOS)- 酸,金属盐和酰胺	mg/kg	10	ND
全氟辛酸 (PFOA)	mg/kg	10	ND

备注:

- 参考: (EC) No 850/2004 补充指令 (EU) No 757/2010的要求:
(1) 第4章 (1) (b) 款适用于PFOS浓度等于或低于10mg/kg (0.001%重量比) 的物质或配制品。
(2) 第4章 (1) (b) 款适用于PFOS浓度低于0.1% (重量比) 的半成品, 成品或者它们的部件, 以含有PFOS的结构或特殊部件的局部结构计算, 对于纺织品和其它涂层的材料, PFOS的量低于1µg/m²。

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样品照片:



此照片仅限于随SGS正本报告使用

*** 报告完 ***

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Test Report

No. CANEC1403115202

Date: 17 Mar 2014

Page 1 of 5

GUANGDONG TTIN METAL INDUSTRY CO., LTD.

FENGHUANG ROAD 40.TTIN INDUSTRIAL PARK,BEIZHA DONGFANG INDUSTRIAL AREA,HUMEN TOWN,DONGGUAN CITY, GUANGDONG PROVINCE

The following sample(s) was/were submitted and identified on behalf of the clients as : Lead-free solder wire

SGS Job No. : CP14-010849 - SZ

Date of Sample Received : 06 Mar 2014

Testing Period : 06 Mar 2014 - 11 Mar 2014

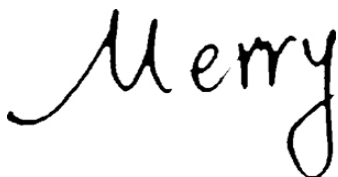
Test Requested : Selected test(s) as requested by client.

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.



Merry Lv
Approved Signatory



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Test Results :

Test Part Description :

Specimen No.	SGS Sample ID	Description
SN1	CAN14-031152.002	Silvery metal wire w/ white material

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 Colorimetric Method using UV-Vis.
 - (5)With reference to IEC 62321:2008, determination of PBBs and PBDEs by GC-MS.

<u>Test Item(s)</u>	<u>Limit</u>	<u>Unit</u>	<u>MDL</u>	<u>002</u>
Cadmium (Cd)	100	mg/kg	2	ND
Lead (Pb)	1,000	mg/kg	2	35
Mercury (Hg)	1,000	mg/kg	2	ND
Hexavalent Chromium (CrVI)	1,000	mg/kg	2	ND
Sum of PBBs	1,000	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	1,000	mg/kg	-	ND
Monobromodiphenyl ether	-	mg/kg	5	ND



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Test Report

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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 the directive 2011/65/EU, Annex II

Remark: Results & photo(s) of this report refer to test report CANEC1402502103.

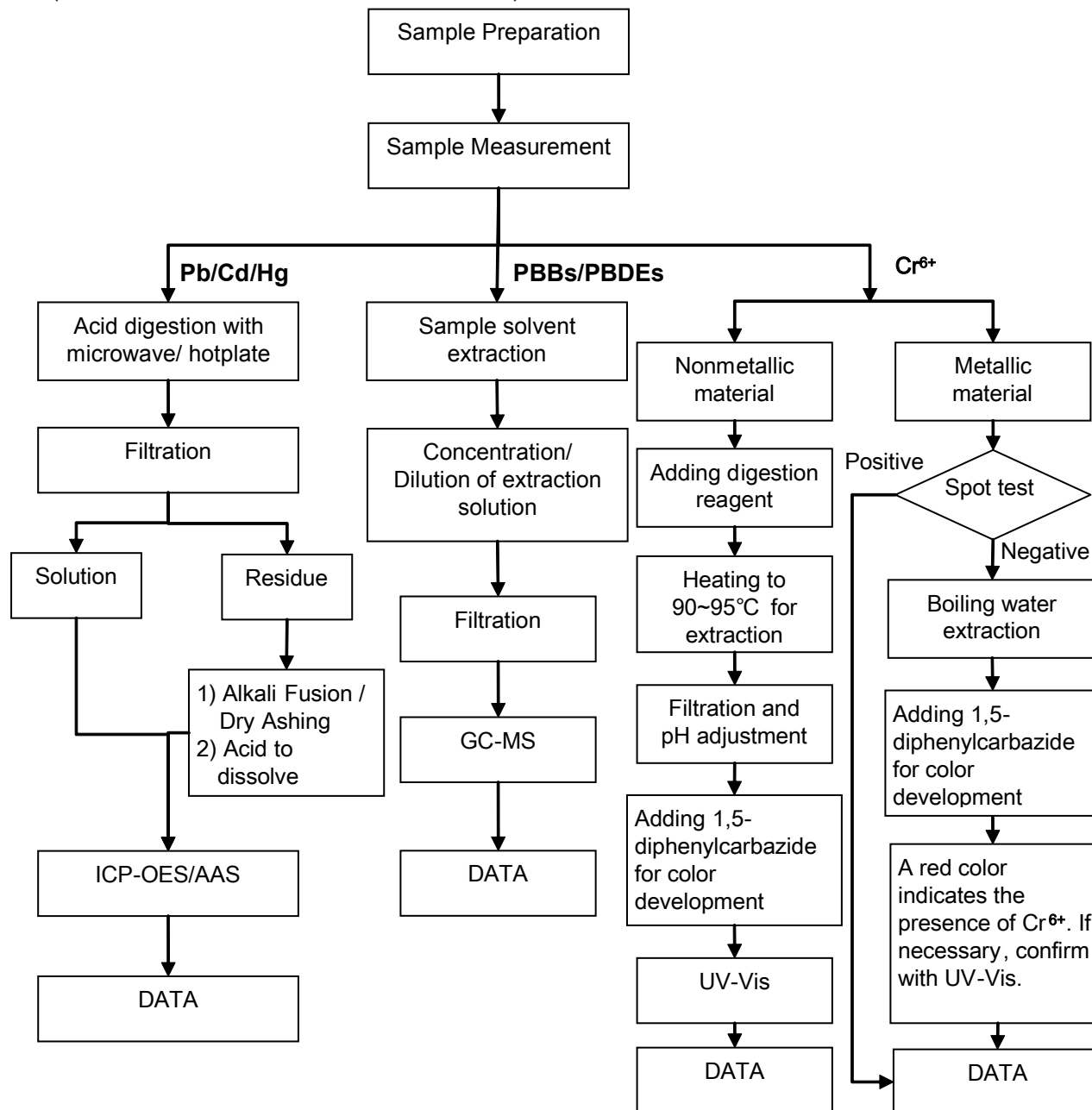


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ATTACHMENTS

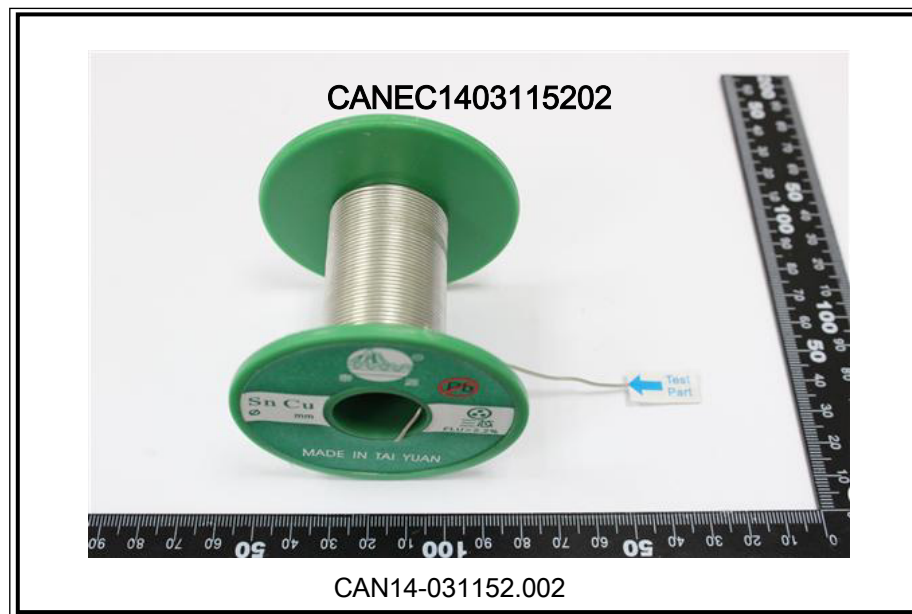
RoHS Testing Flow Chart

- 1) Name of the person who made testing: Michael Tso / Cutey Yu
- 2) Name of the person in charge of testing: Adams Yu / Yolanda Wei
- 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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Sample photo:



SGS authenticate the photo on original report only

*** End of Report ***



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检测报告 Test Report

报告编号 SCL01G000973001E
Report No. SCL01G000973001E

第 1 页 共 8 页
Page 1 of 8

申请单位 松田电工有限公司
Applicant ZHUHAI SUNTEK WIRE CO.,LTD
地 址 珠海市金湾区平沙汉青路62号
Address NO.62,HANQINGROAD,PINGSHATOWN,JINWAN
DISTRICT,ZHUHAI519055,GUANGDONG,CHINA

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 漆包线红色
Sample Name enamelled wire (Red)
样品接收日期 2014.04.10
Sample Received Date Apr. 10, 2014
样品检测日期 2014.04.10-2014.04.14
Testing Period Apr. 10, 2014 to Apr. 14, 2014

检测要求 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)), 多溴联苯 (PBBs), 多溴二苯醚 (PBDEs) 进行测试。
Test Requested As specified by client, to test Lead (Pb), Cadmium (Cd), Mercury (Hg), Hexavalent Chromium(Cr(VI)), Polybrominated Biphenyl(PBBs), Polybrominated Diphenyl Ethers(PBDEs) in the submitted sample(s).

检测依据/检测结果 请参见下页。
Test Method/Test Result(s) Please refer to the following page(s).

主 检
Tested by Rick Lin
批 准
Approved by Danny Liu

审 核
Reviewed by Vargas He
日 期
Date 2014.04.14



Danny Liu
Technical Manager

No. R1012233184

深圳市华测检测技术股份有限公司 广东省深圳市宝安区 70 区鸿威工业园
Centre Testing International (Shenzhen) Co., Ltd. Hongwei Industrial Zone, Bao'an 70 District, Shenzhen, Guangdong, China

检测报告 Test Report

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结论 Conclusion

测试样品 Tested Sample	依据指令 According to directive	结果 Result
提交样品 Submitted Sample	2011/65/EU*	合格 Pass

*2011/65/EU为欧盟RoHS指令(2002/95/EC)的重订指令。该指令对电子电器产品中的特定有毒有害物质(铅(Pb), 镉(Cd), 汞(Hg), 六价铬(Cr(VI)), 多溴联苯(PBBs), 多溴二苯醚(PBDEs))限制使用。

合格表示检测结果不超过欧盟RoHS指令2011/65/EU要求的限值。

*2011/65/EU is a new version of RoHS Directive (2002/95/EC), which focuses on restriction of the use of certain hazardous substances (Lead(Pb), Cadmium(Cd), Mercury(Hg), Hexavalent Chromium(Cr(VI)), Polybrominated Biphenyls(PBBs), Polybrominated Diphenyl Ethers(PBDEs)) in electrical and electronic equipment.

Pass means that the results shown on the report do not exceed the limits set by RoHS Directive 2011/65/EU.

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检测依据 Test Method

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 62321-5:2013 Ed.1.0	ICP-OES
镉(Cd) Cadmium (Cd)	IEC 62321-5:2013 Ed.1.0	ICP-OES
汞(Hg) Mercury (Hg)	IEC 62321-4:2013 Ed.1.0	ICP-OES
六价铬(Cr(VI)) Hexavalent Chromium(Cr(VI))	IEC 62321:2008 Ed.1 Annex C	UV-Vis
多溴联苯(PBBs) Polybrominated Biphenyl(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

检测结果 Test Result(s)

测试项目 Test Item(s)	结果 Result	方法检测限 MDL	2011/65/EU指令限值 Limit of Directive 2011/65/EU
铅(Pb) Lead (Pb)	N.D.	2 mg/kg	1000 mg/kg
镉(Cd) Cadmium (Cd)	N.D.	2 mg/kg	100 mg/kg
汞(Hg) Mercury (Hg)	N.D.	2 mg/kg	1000 mg/kg
六价铬(Cr(VI)) Hexavalent Chromium (Cr(VI))	N.D.	2 mg/kg	1000 mg/kg

检测报告

Test Report

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测试项目 Test Item(s)	结果 Result	方法检测限 MDL	2011/65/EU指令限值 Limit of Directive 2011/65/EU
多溴联苯 (PBBs) Polybrominated biphenyl(PBBs)			
一溴联苯 Monobromobiphenyl	N.D.	5 mg/kg	1000 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	
九溴联苯 Nonabromobiphenyl	N.D.	5 mg/kg	
十溴联苯 Decabromobiphenyl	N.D.	5 mg/kg	

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测试项目 Test Item(s)	结果 Result	方法检测限 MDL	2011/65/EU指令限值 Limit of Directive 2011/65/EU
多溴二苯醚 (PBDEs) Polybrominated Diphenyl Ethers(PBDEs)			
一溴二苯醚 Monobromodiphenyl ether	N.D.	5 mg/kg	1000 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	

测试样品/部位描述 红色漆包线
Tested Sample/Part Description Red enamelled wire

注释: 对于检测铅, 镉, 汞之样品已完全溶解。
-N.D. = 未检出 (小于方法检测限)
-mg/kg= ppm = 百万分之几

Note: **The sample(s) had been dissolved totally tested for Lead, Cadmium, Mercury.**
-MDL = Method Detection Limit
-N.D. = Not Detected (<MDL)
-mg/kg = ppm = parts per million

备注: 报告编号中“E”表示此报告为中英文对照版本。

Remark: **The end sign of report number E represents the bilingual version.**

检测报告 Test Report

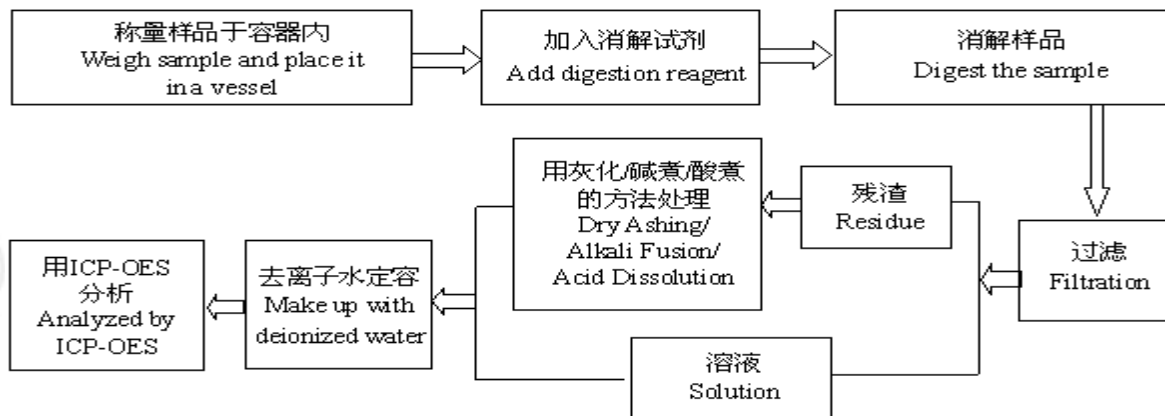
报告编号 SCL01G000973001E
Report No. SCL01G000973001E

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检测流程 Test Process

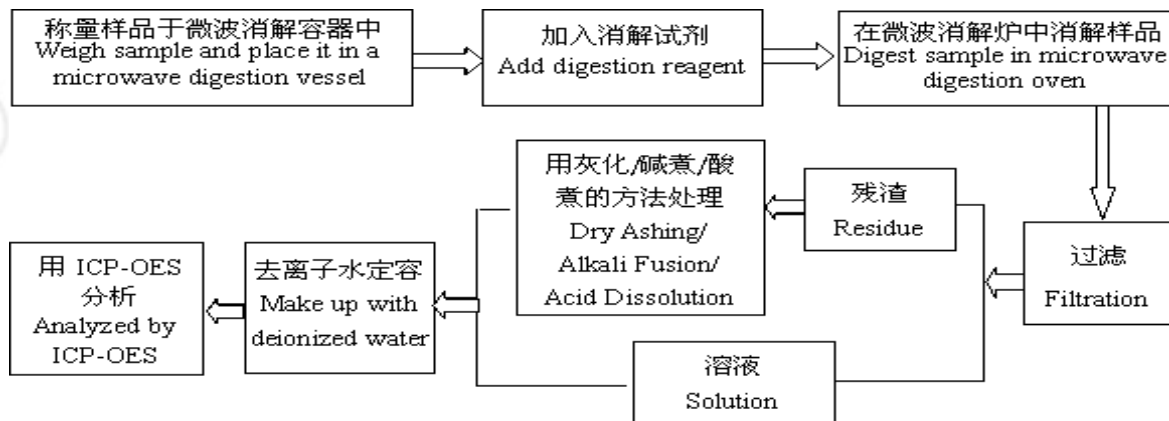
1. 铅(Pb), 镉(Cd)

Lead (Pb), Cadmium (Cd)



2. 汞(Hg)

Mercury (Hg)

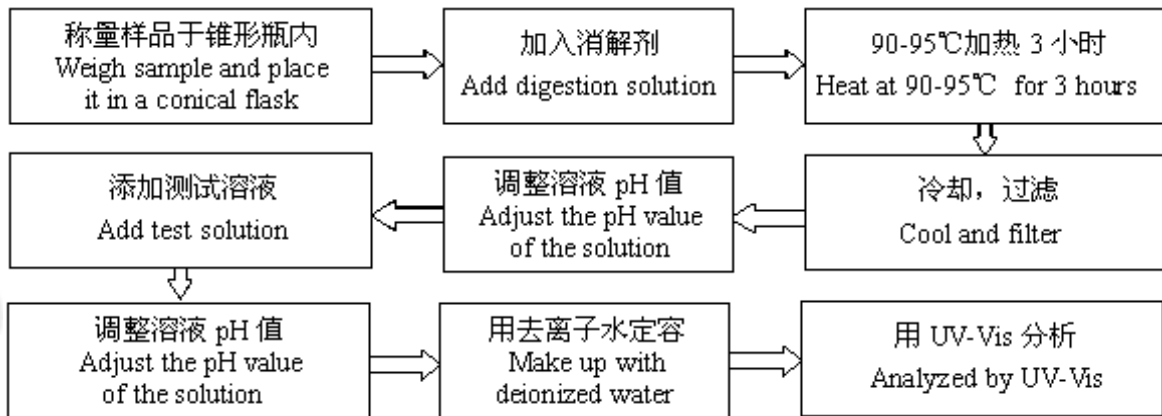


检测报告 Test Report

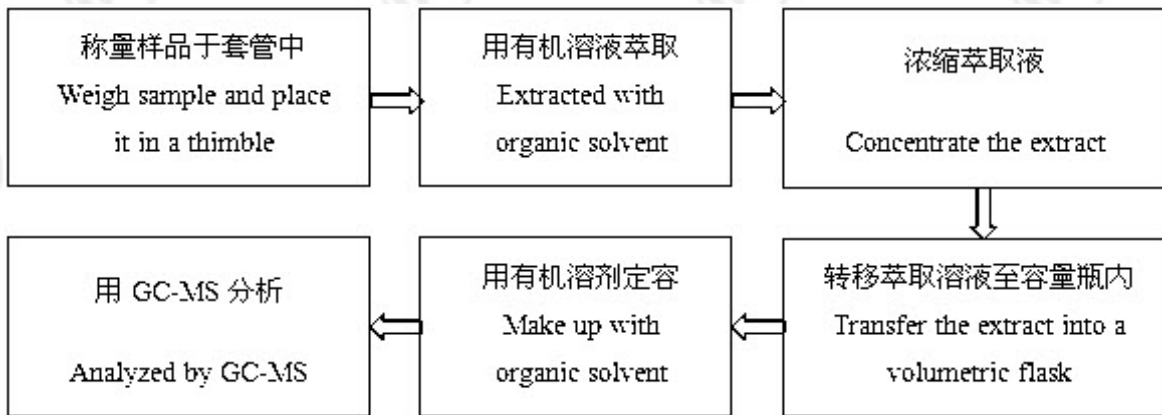
报告编号 SCL01G000973001E
Report No. SCL01G000973001E

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3. 六价铬 (Cr (VI)) Hexavalent Chromium (Cr(VI))



4. 多溴联苯 (PBBs), 多溴二苯醚 (PBDEs) Polybrominated Biphenyl (PBBs), Polybrominated Diphenyl Ethers (PBDEs)



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Report No. SCL01G000973001E

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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.

检测报告 Test Report

报告编号 SCL01G000973004E
Report No. SCL01G000973004E

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Page 1 of 8

申请单位 松田电工有限公司
Applicant ZHUHAI SUNTEK WIRE CO.,LTD
地 址 珠海市金湾区平沙汉青路62号
Address NO.62,HANQINGROAD,PINGSHATOWN,JINWAN
DISTRICT,ZHUHAI519055,GUANGDONG,CHINA

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 漆包线 (本色)
Sample Name enamelled wire
样品接收日期 2014.04.10
Sample Received Date Apr. 10, 2014
样品检测日期 2014.04.10-2014.04.14
Testing Period Apr. 10, 2014 to Apr. 14, 2014

检测要求 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)), 多溴联苯 (PBBs), 多溴二苯醚 (PBDEs) 进行测试。
Test Requested As specified by client, to test Lead (Pb), Cadmium (Cd), Mercury (Hg), Hexavalent Chromium(Cr(VI)), Polybrominated Biphenyl(PBBs), Polybrominated Diphenyl Ethers(PBDEs) in the submitted sample(s).

检测依据/检测结果 请参见下页。
Test Method/Test Result(s) Please refer to the following page(s).

主 检
Tested by Rick Lin
批 准
Approved by Danny Liu

审 核
Reviewed by Vargas He
日 期
Date 2014.04.14



Danny Liu
Technical Manager

No. R1012233184

深圳市华测检测技术股份有限公司 广东省深圳市宝安区 70 区鸿威工业园
Centre Testing International (Shenzhen) Co., Ltd. Hongwei Industrial Zone, Bao'an 70 District, Shenzhen, Guangdong, China

检测报告 Test Report

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结论 Conclusion

测试样品 Tested Sample	依据指令 According to directive	结果 Result
提交样品 Submitted Sample	2011/65/EU*	合格 Pass

*2011/65/EU为欧盟RoHS指令(2002/95/EC)的重订指令。该指令对电子电器产品中的特定有毒有害物质(铅(Pb), 镉(Cd), 汞(Hg), 六价铬(Cr(VI)), 多溴联苯(PBBs), 多溴二苯醚(PBDEs))限制使用。

合格表示检测结果不超过欧盟RoHS指令2011/65/EU要求的限值。

*2011/65/EU is a new version of RoHS Directive (2002/95/EC), which focuses on restriction of the use of certain hazardous substances (Lead(Pb), Cadmium(Cd), Mercury(Hg), Hexavalent Chromium(Cr(VI)), Polybrominated Biphenyls(PBBs), Polybrominated Diphenyl Ethers(PBDEs)) in electrical and electronic equipment.

Pass means that the results shown on the report do not exceed the limits set by RoHS Directive 2011/65/EU.

检测报告

Test Report

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检测依据 Test Method

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 62321-5:2013 Ed.1.0	ICP-OES
镉(Cd) Cadmium (Cd)	IEC 62321-5:2013 Ed.1.0	ICP-OES
汞(Hg) Mercury (Hg)	IEC 62321-4:2013 Ed.1.0	ICP-OES
六价铬(Cr(VI)) Hexavalent Chromium(Cr(VI))	IEC 62321:2008 Ed.1 Annex C	UV-Vis
多溴联苯(PBBs) Polybrominated Biphenyl(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

检测结果 Test Result(s)

测试项目 Test Item(s)	结果 Result	方法检测限 MDL	2011/65/EU指令限值 Limit of Directive 2011/65/EU
铅(Pb) Lead (Pb)	N.D.	2 mg/kg	1000 mg/kg
镉(Cd) Cadmium (Cd)	N.D.	2 mg/kg	100 mg/kg
汞(Hg) Mercury (Hg)	N.D.	2 mg/kg	1000 mg/kg
六价铬(Cr(VI)) Hexavalent Chromium (Cr(VI))	N.D.	2 mg/kg	1000 mg/kg

检测报告

Test Report

报告编号 SCL01G000973004E
Report No. SCL01G000973004E

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测试项目 Test Item(s)	结果 Result	方法检测限 MDL	2011/65/EU指令限值 Limit of Directive 2011/65/EU
多溴联苯 (PBBs) Polybrominated biphenyl(PBBs)			
一溴联苯 Monobromobiphenyl	N.D.	5 mg/kg	1000 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	
九溴联苯 Nonabromobiphenyl	N.D.	5 mg/kg	
十溴联苯 Decabromobiphenyl	N.D.	5 mg/kg	

检测报告

Test Report

报告编号 SCL01G000973004E
Report No. SCL01G000973004E

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测试项目 Test Item(s)	结果 Result	方法检测限 MDL	2011/65/EU指令限值 Limit of Directive 2011/65/EU
多溴二苯醚 (PBDEs) Polybrominated Diphenyl Ethers(PBDEs)			
一溴二苯醚 Monobromodiphenyl ether	N.D.	5 mg/kg	1000 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	

测试样品/部位描述 铜色漆包线
Tested Sample/Part Description Cupreous enamelled wire

注释: 对于检测铅, 镉, 汞之样品已完全溶解。
-N.D. = 未检出 (小于方法检测限)
-mg/kg= ppm = 百万分之几

Note: **The sample(s) had been dissolved totally tested for Lead, Cadmium, Mercury.**
-MDL = Method Detection Limit
-N.D. = Not Detected (<MDL)
-mg/kg = ppm = parts per million

备注: 报告编号中“E”表示此报告为中英文对照版本。

Remark: **The end sign of report number E represents the bilingual version.**

检测报告

Test Report

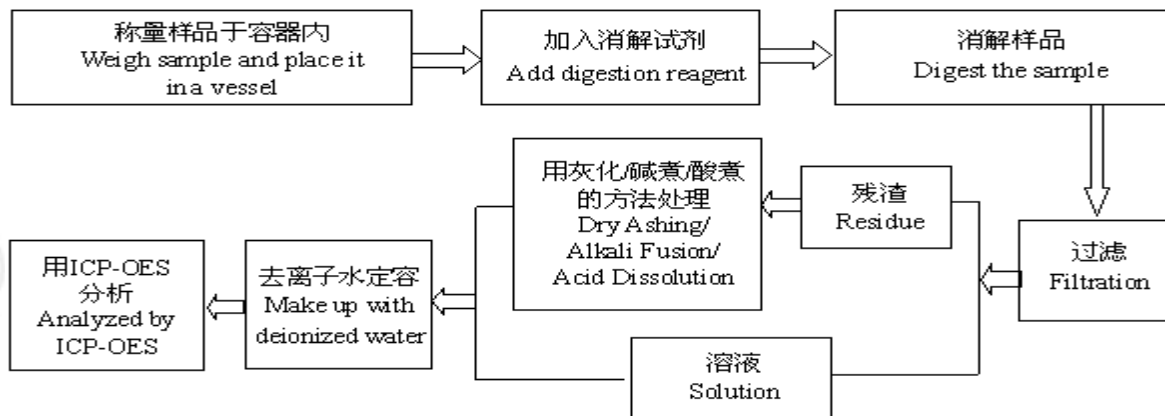
报告编号 SCL01G000973004E
Report No. SCL01G000973004E

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检测流程 Test Process

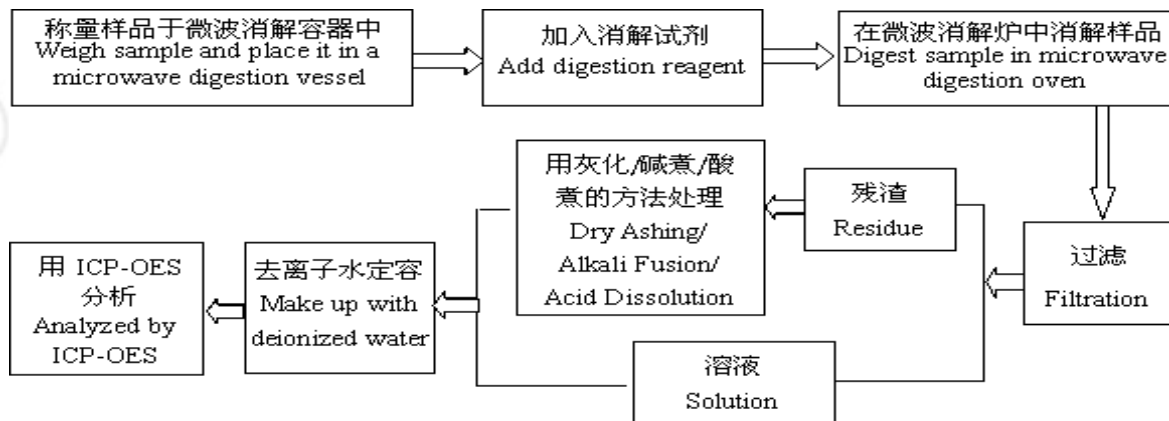
1. 铅(Pb), 镉(Cd)

Lead (Pb), Cadmium (Cd)



2. 汞(Hg)

Mercury (Hg)

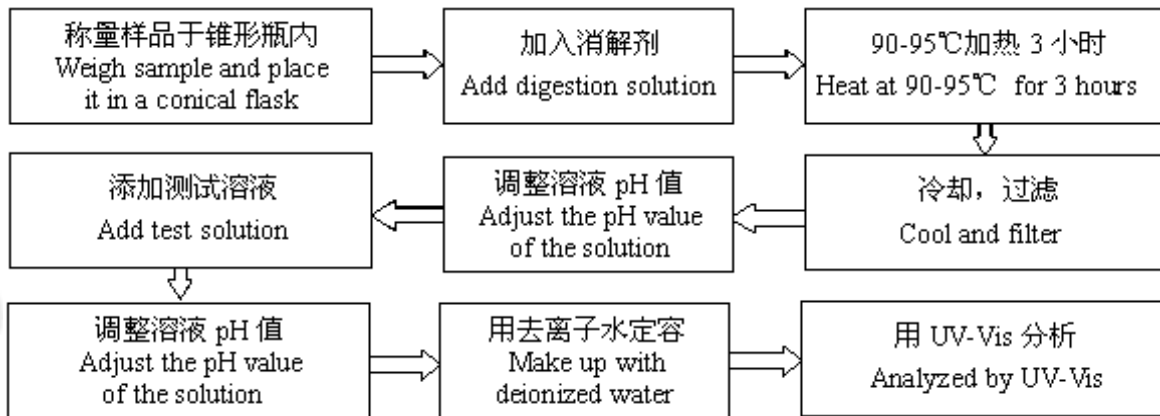


检测报告 Test Report

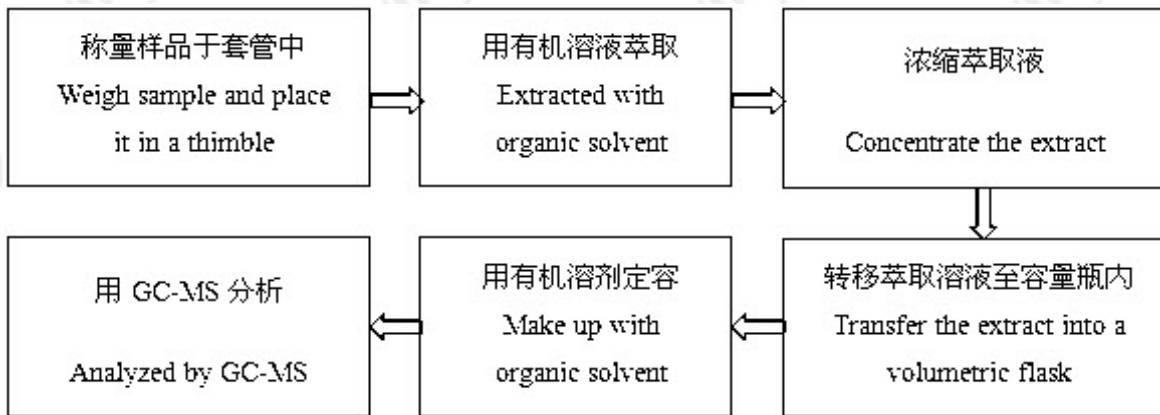
报告编号 SCL01G000973004E
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3. 六价铬 (Cr(VI)) Hexavalent Chromium(Cr(VI))



4. 多溴联苯 (PBBs), 多溴二苯醚 (PBDEs) Polybrominated Biphenyl(PBBs) , Polybrominated Diphenyl Ethers(PBDEs)



检测报告 Test Report

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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.

检测报告 Test Report

报告编号 SCL01G000973003E
Report No. SCL01G000973003E

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Page 1 of 8

申请单位 松田电工有限公司
Applicant ZHUHAI SUNTEK WIRE CO.,LTD
地 址 珠海市金湾区平沙汉青路62号
Address NO.62,HANQINGROAD,PINGSHATOWN,JINWAN
DISTRICT,ZHUHAI519055,GUANGDONG,CHINA

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 漆包线蓝色
Sample Name enamelled wire(Blue)
样品接收日期 2014.04.10
Sample Received Date Apr. 10, 2014
样品检测日期 2014.04.10-2014.04.14
Testing Period Apr. 10, 2014 to Apr. 14, 2014

检测要求 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)), 多溴联苯 (PBBs), 多溴二苯醚 (PBDEs) 进行测试。
Test Requested As specified by client, to test Lead (Pb), Cadmium (Cd), Mercury (Hg), Hexavalent Chromium(Cr(VI)), Polybrominated Biphenyl(PBBs), Polybrominated Diphenyl Ethers(PBDEs) in the submitted sample(s).

检测依据/检测结果 请参见下页。
Test Method/Test Result(s) Please refer to the following page(s).

主 检
Tested by Rick Lin
批 准
Approved by Danny Liu

审 核
Reviewed by Vargas He
日 期
Date 2014.04.14



Danny Liu
Technical Manager

No. R1012233184

深圳市华测检测技术股份有限公司 广东省深圳市宝安区 70 区鸿威工业园
Centre Testing International (Shenzhen) Co., Ltd. Hongwei Industrial Zone, Bao'an 70 District, Shenzhen, Guangdong, China

检测报告 Test Report

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结论 Conclusion

测试样品 Tested Sample	依据指令 According to directive	结果 Result
提交样品 Submitted Sample	2011/65/EU*	合格 Pass

*2011/65/EU为欧盟RoHS指令(2002/95/EC)的重订指令。该指令对电子电器产品中的特定有毒有害物质(铅(Pb), 镉(Cd), 汞(Hg), 六价铬(Cr(VI)), 多溴联苯(PBBs), 多溴二苯醚(PBDEs))限制使用。
合格表示检测结果不超过欧盟RoHS指令2011/65/EU要求的限值。

*2011/65/EU is a new version of RoHS Directive (2002/95/EC), which focuses on restriction of the use of certain hazardous substances (Lead(Pb), Cadmium(Cd), Mercury(Hg), Hexavalent Chromium(Cr(VI)), Polybrominated Biphenyls(PBBs), Polybrominated Diphenyl Ethers(PBDEs)) in electrical and electronic equipment.

Pass means that the results shown on the report do not exceed the limits set by RoHS Directive 2011/65/EU.

检测报告

Test Report

报告编号 SCL01G000973003E
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检测依据 Test Method

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 62321-5:2013 Ed.1.0	ICP-OES
镉(Cd) Cadmium (Cd)	IEC 62321-5:2013 Ed.1.0	ICP-OES
汞(Hg) Mercury (Hg)	IEC 62321-4:2013 Ed.1.0	ICP-OES
六价铬(Cr(VI)) Hexavalent Chromium(Cr(VI))	IEC 62321:2008 Ed.1 Annex C	UV-Vis
多溴联苯(PBBs) Polybrominated Biphenyl(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

检测结果 Test Result(s)

测试项目 Test Item(s)	结果 Result	方法检测限 MDL	2011/65/EU指令限值 Limit of Directive 2011/65/EU
铅(Pb) Lead (Pb)	N.D.	2 mg/kg	1000 mg/kg
镉(Cd) Cadmium (Cd)	N.D.	2 mg/kg	100 mg/kg
汞(Hg) Mercury (Hg)	N.D.	2 mg/kg	1000 mg/kg
六价铬(Cr(VI)) Hexavalent Chromium (Cr(VI))	N.D.	2 mg/kg	1000 mg/kg

检测报告

Test Report

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测试项目 Test Item(s)	结果 Result	方法检测限 MDL	2011/65/EU指令限值 Limit of Directive 2011/65/EU
多溴联苯 (PBBs) Polybrominated biphenyl(PBBs)			
一溴联苯 Monobromobiphenyl	N.D.	5 mg/kg	1000 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	
九溴联苯 Nonabromobiphenyl	N.D.	5 mg/kg	
十溴联苯 Decabromobiphenyl	N.D.	5 mg/kg	

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测试项目 Test Item(s)	结果 Result	方法检测限 MDL	2011/65/EU指令限值 Limit of Directive 2011/65/EU
多溴二苯醚 (PBDEs) Polybrominated Diphenyl Ethers(PBDEs)			
一溴二苯醚 Monobromodiphenyl ether	N.D.	5 mg/kg	1000 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	

测试样品/部位描述 蓝色漆包线
Tested Sample/Part Description Blue enamelled wire

注释: 对于检测铅, 镉, 汞之样品已完全溶解。
-N.D. = 未检出 (小于方法检测限)
-mg/kg= ppm = 百万分之几

Note: **The sample(s) had been dissolved totally tested for Lead, Cadmium, Mercury.**
-MDL = Method Detection Limit
-N.D. = Not Detected (<MDL)
-mg/kg = ppm = parts per million

备注: 报告编号中“E”表示此报告为中英文对照版本。

Remark: **The end sign of report number E represents the bilingual version.**

检测报告

Test Report

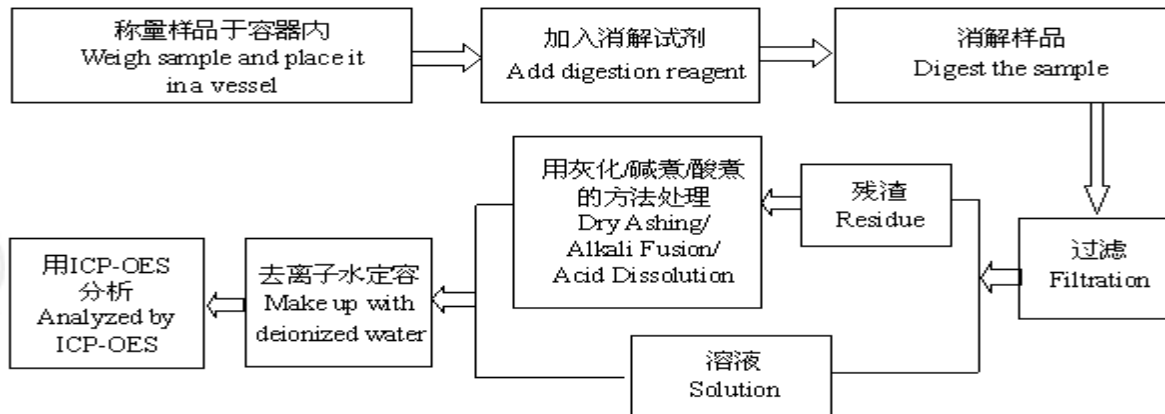
报告编号 SCL01G000973003E
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检测流程 Test Process

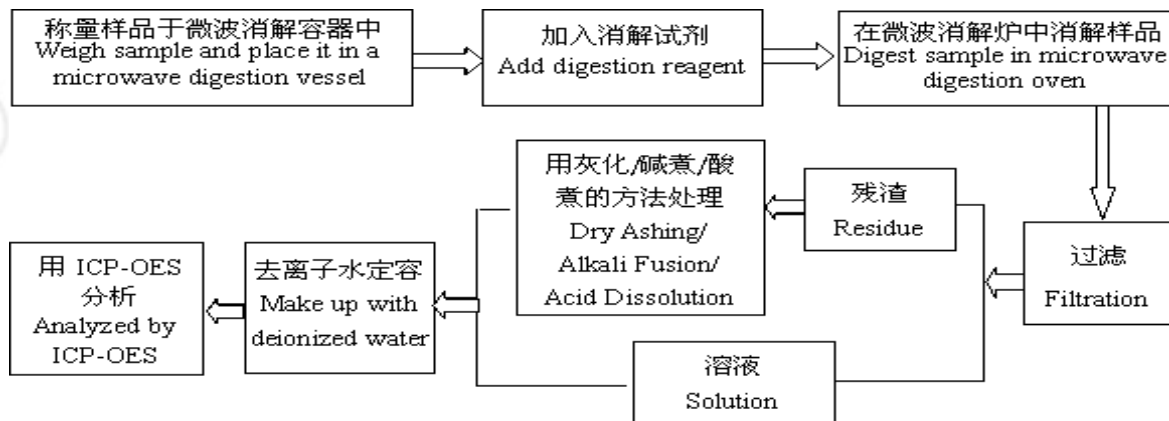
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Lead (Pb), Cadmium (Cd)



2. 汞(Hg)

Mercury (Hg)

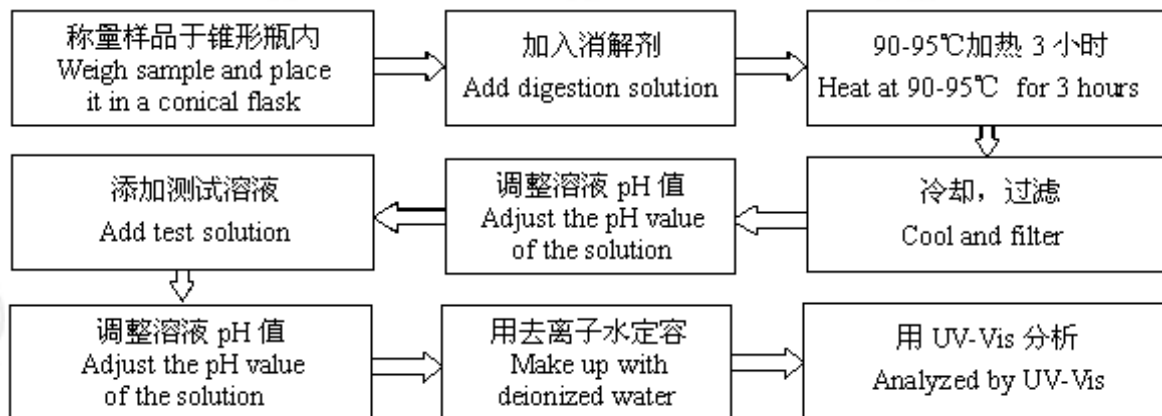


检测报告 Test Report

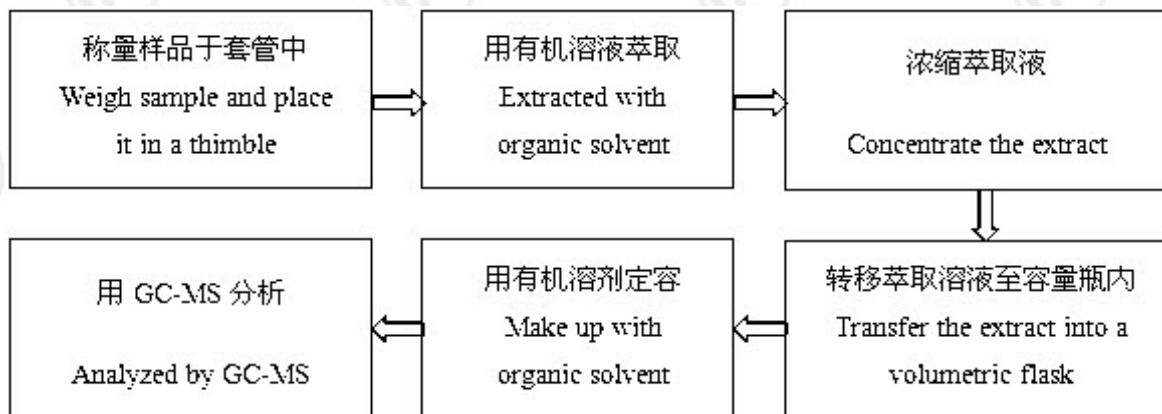
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3. 六价铬(Cr(VI)) Hexavalent Chromium(Cr(VI))



4. 多溴联苯(PBBs), 多溴二苯醚(PBDEs) Polybrominated Biphenyl(PBBs), Polybrominated Diphenyl Ethers(PBDEs)



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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.

检测报告 Test Report

报告编号 SCL01G000973002E
Report No. SCL01G000973002E

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申请单位 松田电工有限公司
Applicant ZHUHAI SUNTEK WIRE CO.,LTD
地 址 珠海市金湾区平沙汉青路62号
Address NO.62,HANQINGROAD,PINGSHATOWN,JINWAN
DISTRICT,ZHUHAI519055,GUANGDONG,CHINA

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 漆包线绿色
Sample Name enamelled wire(Green)
样品接收日期 2014.04.10
Sample Received Date Apr. 10, 2014
样品检测日期 2014.04.10-2014.04.14
Testing Period Apr. 10, 2014 to Apr. 14, 2014

检测要求 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)), 多溴联苯 (PBBs), 多溴二苯醚 (PBDEs) 进行测试。
Test Requested As specified by client, to test Lead (Pb), Cadmium (Cd), Mercury (Hg), Hexavalent Chromium(Cr(VI)), Polybrominated Biphenyl(PBBs), Polybrominated Diphenyl Ethers(PBDEs) in the submitted sample(s).

检测依据/检测结果 请参见下页。
Test Method/Test Result(s) Please refer to the following page(s).

主 检
Tested by Rick Lin
批 准
Approved by Danny Liu

审 核
Reviewed by Vargas He
日 期
Date 2014.04.14



Danny Liu
Technical Manager

No. R1012233184

深圳市华测检测技术股份有限公司 广东省深圳市宝安区 70 区鸿威工业园
Centre Testing International (Shenzhen) Co., Ltd. Hongwei Industrial Zone, Bao'an 70 District, Shenzhen, Guangdong, China

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结论 Conclusion

测试样品 Tested Sample	依据指令 According to directive	结果 Result
提交样品 Submitted Sample	2011/65/EU*	合格 Pass

*2011/65/EU为欧盟RoHS指令(2002/95/EC)的重订指令。该指令对电子电器产品中的特定有毒有害物质(铅(Pb), 镉(Cd), 汞(Hg), 六价铬(Cr(VI)), 多溴联苯(PBBs), 多溴二苯醚(PBDEs))限制使用。

合格表示检测结果不超过欧盟RoHS指令2011/65/EU要求的限值。

*2011/65/EU is a new version of RoHS Directive (2002/95/EC), which focuses on restriction of the use of certain hazardous substances (Lead(Pb), Cadmium(Cd), Mercury(Hg), Hexavalent Chromium(Cr(VI)), Polybrominated Biphenyls(PBBs), Polybrominated Diphenyl Ethers(PBDEs)) in electrical and electronic equipment.

Pass means that the results shown on the report do not exceed the limits set by RoHS Directive 2011/65/EU.

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检测依据 Test Method

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 62321-5:2013 Ed.1.0	ICP-OES
镉(Cd) Cadmium (Cd)	IEC 62321-5:2013 Ed.1.0	ICP-OES
汞(Hg) Mercury (Hg)	IEC 62321-4:2013 Ed.1.0	ICP-OES
六价铬(Cr(VI)) Hexavalent Chromium(Cr(VI))	IEC 62321:2008 Ed.1 Annex C	UV-Vis
多溴联苯(PBBs) Polybrominated Biphenyl(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

检测结果 Test Result(s)

测试项目 Test Item(s)	结果 Result	方法检测限 MDL	2011/65/EU指令限值 Limit of Directive 2011/65/EU
铅(Pb) Lead (Pb)	N.D.	2 mg/kg	1000 mg/kg
镉(Cd) Cadmium (Cd)	N.D.	2 mg/kg	100 mg/kg
汞(Hg) Mercury (Hg)	N.D.	2 mg/kg	1000 mg/kg
六价铬(Cr(VI)) Hexavalent Chromium (Cr(VI))	N.D.	2 mg/kg	1000 mg/kg

检测报告

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测试项目 Test Item(s)	结果 Result	方法检测限 MDL	2011/65/EU指令限值 Limit of Directive 2011/65/EU
多溴联苯 (PBBs) Polybrominated biphenyl(PBBs)			
一溴联苯 Monobromobiphenyl	N.D.	5 mg/kg	1000 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	
九溴联苯 Nonabromobiphenyl	N.D.	5 mg/kg	
十溴联苯 Decabromobiphenyl	N.D.	5 mg/kg	

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测试项目 Test Item(s)	结果 Result	方法检测限 MDL	2011/65/EU指令限值 Limit of Directive 2011/65/EU
多溴二苯醚 (PBDEs) Polybrominated Diphenyl Ethers(PBDEs)			
一溴二苯醚 Monobromodiphenyl ether	N.D.	5 mg/kg	1000 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	

测试样品/部位描述 绿色漆包线
Tested Sample/Part Description Green enamelled wire

注释: 对于检测铅, 镉, 汞之样品已完全溶解。
-N.D. = 未检出 (小于方法检测限)
-mg/kg= ppm = 百万分之几

Note: **The sample(s) had been dissolved totally tested for Lead, Cadmium, Mercury.**
-MDL = Method Detection Limit
-N.D. = Not Detected (<MDL)
-mg/kg = ppm = parts per million

备注: 报告编号中“E”表示此报告为中英文对照版本。

Remark: **The end sign of report number E represents the bilingual version.**

检测报告 Test Report

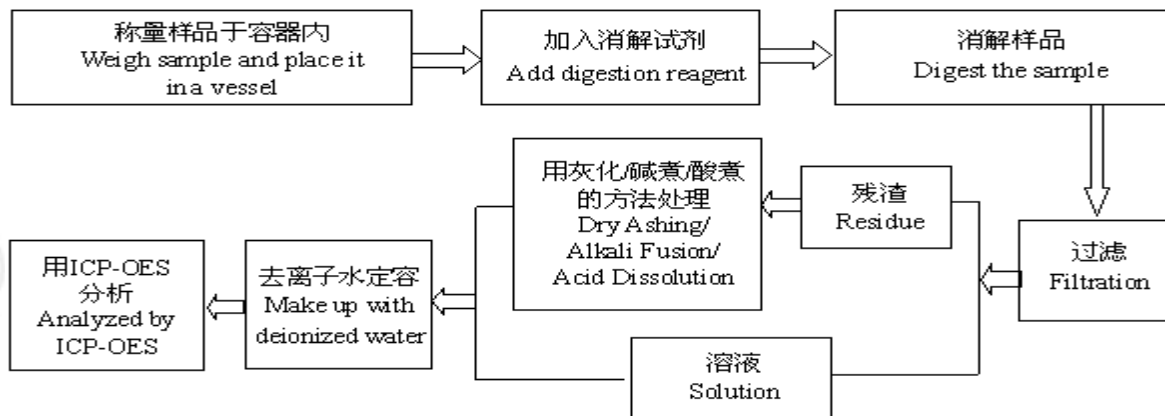
报告编号 SCL01G000973002E
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检测流程 Test Process

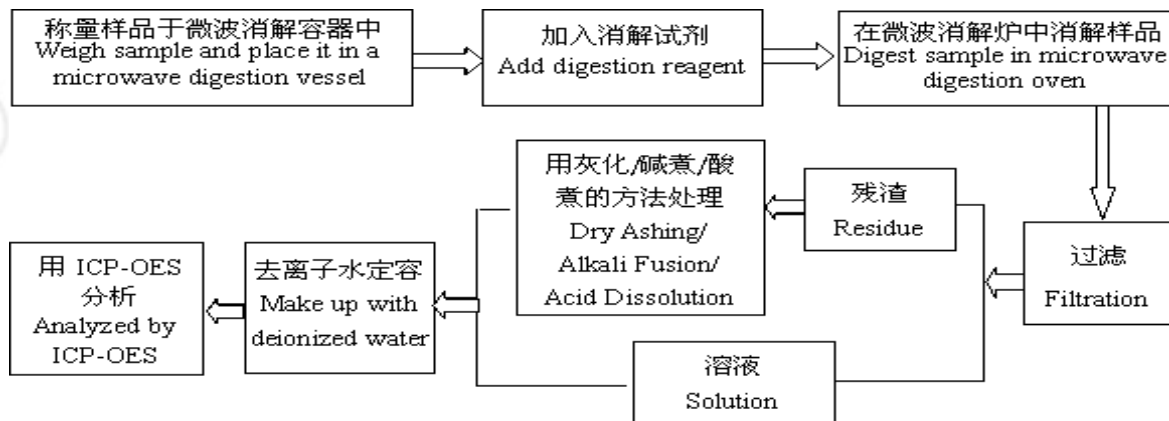
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Lead (Pb), Cadmium (Cd)



2. 汞(Hg)

Mercury (Hg)

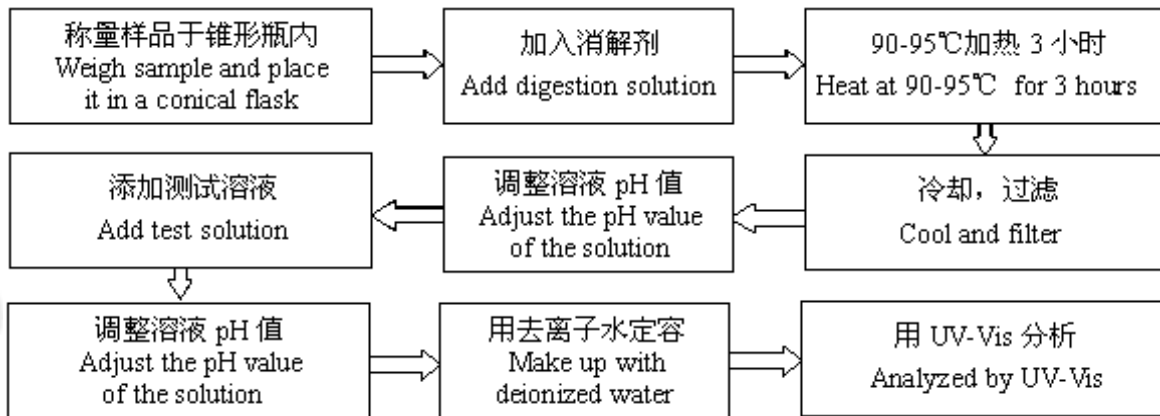


检测报告 Test Report

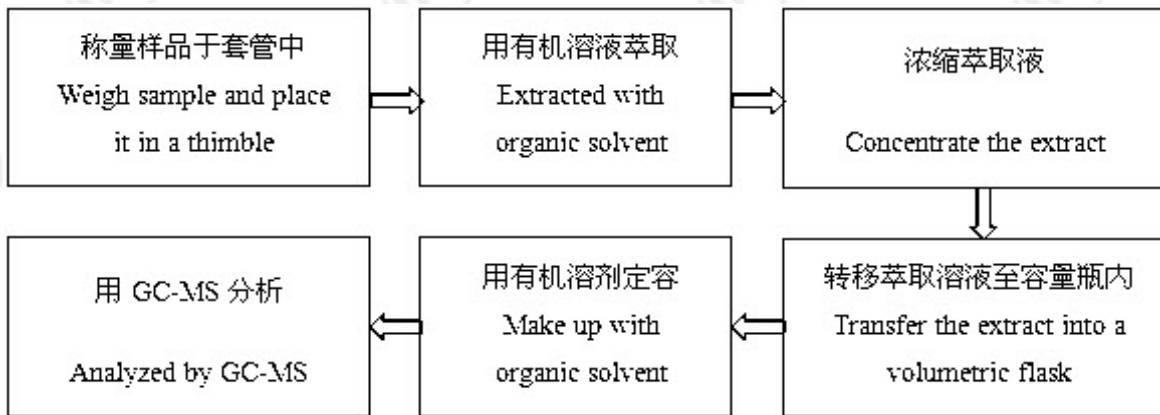
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3. 六价铬 (Cr(VI)) Hexavalent Chromium(Cr(VI))



4. 多溴联苯 (PBBs), 多溴二苯醚 (PBDEs) Polybrominated Biphenyl(PBBs), Polybrominated Diphenyl Ethers(PBDEs)



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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。

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**OBMW2.E234867
Magnet Wire - Component**

Page Bottom

Magnet Wire - Component

See General Information for Magnet Wire - Component

ZHUHAI SUNTEK WIRE CO LTD
62 HANQING RD PINGSHA TOWN
JINWAN DISTRICT
ZHUHAI, GUANGDONG 519055 CHINA

E234867

Mtl Dsg	Mark Dsg	Coat Type			ANSI Type	Temp Class
		BC	OC	BOND		
xUEW 180*	(1)	Polyurethane	—	—	MW82	180
xUEW 155*					MW79#	155
xUEW 130*					MW75#	130
xUEW/NY or QAN/180*	(1)	Polyurethane	Polyamide	—	MW83	180
xUEW/NY or QAN/155*					MW80#	155
xUEW/NY or QAN/130*					MW28#	130
xSEIW or QZY -x/180*	(1)	Polyesterimide	—	—	MW77#	180
xSEIW or xPEW/155*	(1)	Polyesterimide	—	—	MW26#	155
xPEW/130*	(1)	Polyesterimide	—	—	-#	130
X SBUEW 180 or X HBUEW 180	(1)	Polyurethane	—	Polyamide-imide	--	180
X SBUEW/155 or X HBUEW/155	(1)	Polyurethane	—	Polyamide-imide	MW131	155
X SBUEW/130 or X HBUEW/130	(1)	Polyurethane	—	Polyamide-imide	MW130	130
X SBUEW/120 or X HBUEW/120	(1)	Polyurethane	—	Polyamide-imide	--	120

* May be suffixed by LZ, EL or LZL.

LZ - Signifies magnet wires twisted together; EL - signifies base coated magnet wire laid parallel with top coat applied overall; LZL - signifies base coated magnet wire twisted together and covered with top coat overall.

This magnet wire may perform better than rating reflects and hence may not be suitable for an insulation system thermal aging program.

x May be prefixed by 0, 1, 2, 3 to indicate coating thickness.

- None ANSI Type.

Marking: Company name and material designation or marked designation on package or reel.

Last Updated on 2009-07-16

The appearance of a company's name or product in this database does not in itself assure that products so identified have been manufactured under UL's Follow-Up Service. Only those products bearing the UL Mark should be considered to be Listed and covered under UL's Follow-Up Service. Always look for the Mark on the product.

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POLYPLASTICS CO LTD

VECTRA DIV, 18-1 KONAN 2-CHOME, MINATO-KU, TOKYO 108-8280 JP

E130i(d)(e)(h)

Liquid Crystal Polymer (LCP), thermotropic aromatic polyester, "Vectra", furnished as pellets

Color	Min Thk (mm)	Flame Class	HWI		RTI Elec	RTI Imp	RTI Str
			HWI	HA1			
BK	0.4	V-0	-	-	130	130	130
ALL	0.75	V-0	2	4	240	220	240
	1.5	V-0	1	4	240	220	240
	3.0	V-0	0	4	240	220	240

Comparative Tracking Index (CTI): 4

Dimensional Stability (%): 0

High-Voltage Arc Tracking Rate
(HVTR): 0

High Volt, Low Current Arc Resis (D495): 5

Dielectric Strength (kV/mm): 39

Volume Resistivity (10xohm-cm): 16

(d) - Virgin and regrind up to 50% by weight incl. have the same basic material characteristics for colors NC and BK in the 0.75, 1.5 and 3.0 thickness.

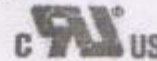
(e) - In addition, regrind at 25 to 50% have the same basic characteristics at a minimum of 1.5mm except RTI's for the Mechanical w/Impact property is 180C.

(h) - Recognition of virgin only at 0.4 mm in BK.

UL94 small-scale test data does not pertain to building materials, furnishings and related contents. UL94 small-scale test data is intended solely for determining the flammability of plastic materials used in the components and parts of end-product devices and appliances, where the acceptability of the combination is determined by UL.

Report Date: 1992-08-19
Last Revised: 2006-09-05

Underwriters Laboratories Inc®

**IEC and ISO Test Methods**

Test Name	Test Method	Units	Thickness	
			Tested (mm)	Value
IEC Flammability	IEC 60695-11-10	Class (color)	0.4	V-0 (BK)
			0.75	V-0 (ALL)
			1.5	V-0 (ALL)
			3.0	V-0 (ALL)
Glow-Wire Flammability (GWFI)	IEC 60695-2-12	C	-	-
Glow-Wire Ignition (GWIT)	IEC 60695-2-13	C	-	-
IEC Comparative Tracking Index	IEC 60112	Volts (Max)	-	-
IEC Ball Pressure	IEC 60695-10-2	C	-	-
ISO Heat Deflection (1.80 MPa)	ISO 75-2	C	-	-
ISO Tensile Strength	ISO 527-2	MPa	-	-
ISO Flexural Strength	ISO 178	MPa	-	-
ISO Tensile Impact	ISO 8256	kJ/m2	-	-
ISO Izod Impact	ISO 180	kJ/m2	-	-
ISO Charpy Impact	ISO 179-2	kJ/m2	-	-

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