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COMCHIP TECHNOLOGY CO., LTD.

NO. 31, YONGXIN LN., YINGTAO RD., YINGGE DIST., NEW TAIPEI CITY 239, TAIWAN (R. O. C.)

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

Sample Description : SURFACE MOUNT PLASTIC MOLDED PRODUCTS

Style/Item No. : SOD-523 / SOD-323 / SOD-323S / MINI-SMA(SOD-123) / SOD-123T / SOD-123ST /

SOD-123H / SOD-123S / SOD-123HT / MINI-MELF (DO-213AA) / SMA(DO-214AC) /

SMA-S / SMA-L / SMA-FL / SMA-HST / SMA-F / MELF (DO-213AB) / SMB(DO-214AA) / SMB-S / SMB-F / SMC (DO-214AB) / SMC-T1 / SMC-F /

TO-252 (D-PAK) / ASM-10A / ASM-10C / TO-263 (D2-PAK)

Sample Receiving Date : 2012/03/09

Testing Period : 2012/03/09 TO 2012/03/19

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

Chenyu Kung Signed for and on SGS TAIWAN LTD. Chemical Laboratory - Taipei



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Test Result(s)

PART NAME No.1 PLATING LAYER OF SILVER COLORED METAL (SMC (DO-214AB)) PART NAME No.2 BASE MATERIAL OF COPPER COLORED METAL (SMC (DO-214AB))

PART NAME No.3 MIXED ALL PARTS (SMC (DO-214AB))

Test Item(s)	11:4	B# o4lo o al	MDL	Result		
	Unit	Method		No.1	No.2	No.3
Cadmium (Cd)	mg/kg	IEC 62321: 2008 application of modified digestion by surface etching and performed by ICP-AES.	2	n.d.		
	mg/kg	With reference to IEC 62321: 2008 and performed by ICP-AES.	2		n.d.	n.d.
Lead (Pb)	mg/kg	IEC 62321: 2008 application of modified digestion by surface etching and performed by ICP-AES.	2	192		
	mg/kg	With reference to IEC 62321: 2008 and performed by ICP-AES.	2		n.d.	10200
Mercury (Hg)	mg/kg	IEC 62321: 2008 application of modified digestion by surface etching and performed by ICP-AES.	2	n.d.		
	mg/kg	With reference to IEC 62321: 2008 and performed by ICP-AES.	2		n.d.	n.d.
Hexavalent Chromium Cr(VI)	**	With reference to IEC 62321: 2008 and performed by Boiling water extraction Method.#	#	Negative	Negative	
	mg/kg	With reference to IEC 62321: 2008 and performed by UV-VIS.	2			n.d.
Nickel (Ni)	mg/kg	With reference to US EPA Method 3050B for Nickel Content. Analysis was performed by ICP-AES.	2	n.d.		



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Toot Itom(a)	Toot Hom/o) Hoit	Method	MDL	Result		
Test Item(s)	Unit	Metriod		No.1	No.2	No.3
Perfluorooctane sulfonates (PFOS-Acid, Metal Salt, Amide)	μg/m²	With reference to US EPA 3540C: 1996 method for PFOS Content. Analysis was performed by LC/MS.	1	n.d.		
PFOA (CAS No.: 335-67-1)	μg/m²	With reference to US EPA 3540C: 1996 method for PFOA Content. Analysis was performed by LC/MS.	1	n.d.		
Sum of PBBs			-			n.d.
Monobromobiphenyl		!	5			n.d.
Dibromobiphenyl	mg/kg		5			n.d.
Tribromobiphenyl			5			n.d.
Tetrabromobiphenyl		With reference to IEC 62321:	5			n.d.
Pentabromobiphenyl			5			n.d.
Hexabromobiphenyl			5			n.d.
Heptabromobiphenyl			5			n.d.
Octabromobiphenyl			5			n.d.
Nonabromobiphenyl			5			n.d.
Decabromobiphenyl			5			n.d.
Sum of PBDEs		2008 and performed by GC/MS.	_			n.d.
Monobromodiphenyl ether			5 5			n.d.
Dibromodiphenyl ether						n.d.
Tribromodiphenyl ether			5			n.d.
Tetrabromodiphenyl ether			5			n.d.
Pentabromodiphenyl ether			5			n.d.
Hexabromodiphenyl ether			5			n.d.
Heptabromodiphenyl ether			5			n.d.
Octabromodiphenyl ether			5			n.d.
Nonabromodiphenyl ether			5			n.d.
Decabromodiphenyl ether			5			n.d.



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Test Item(s)	Unit	Method	MDL	Result		
				No.1	No.2	No.3
Halogen						
Halogen-Fluorine (F) (CAS No.: 14762-94-8)	mg/kg	With reference to BS EN 14582:2007. Analysis was performed by IC.	50			n.d.
Halogen-Chlorine (CI) (CAS No.: 22537-15-1)	mg/kg	With reference to BS EN 14582:2007. Analysis was performed by IC.	50			n.d.
Halogen-Bromine (Br) (CAS No.: 10097-32-2)	mg/kg	With reference to BS EN 14582:2007. Analysis was performed by IC.	50			n.d.
Halogen-Iodine (I) (CAS No.: 14362-44-8)	mg/kg	With reference to BS EN 14582:2007. Analysis was performed by IC.	50			n.d.

Note:

- 1. mg/kg = ppm; 0.1wt% = 1000ppm
- 2. n.d. = Not Detected
- 3. MDL = Method Detection Limit
- 4. " " = Not Regulated
- 5. "---" = Not Conducted
- 6. ** = Qualitative analysis (No Unit)
- 7. # = a. Positive means the presence of CrVI on the tested areas
 - b. Negative means the absence of CrVI on the tested areas

The detected concentration in boiling-water-extraction solution is equal or greater than 0.02 mg/kg with 50 cm ² tested areas.

8. The sample(s) was/were analyzed on behalf of the applicant as mixing sample in one testing. The above result(s) was/were only given as the informality value.

PFOS Reference Information: POPs - (EU) 757/2010

Outlawing PFOS as substances or preparations in concentrations above 0.001% (10ppm), in semi-finished products or articles or parts at a level above 0.1%(1000ppm), in textiles or other coated materials above 1µ g/m².



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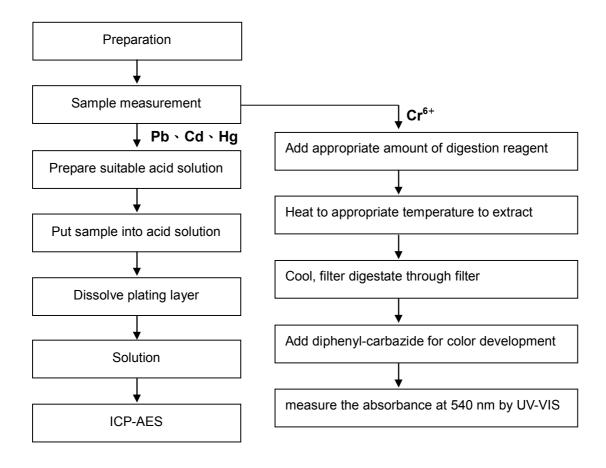
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No₁

- 1) The plating layer of samples were dissolved totally by pre-conditioning method according to below flow chart. (Cr⁶⁺ test method excluded)
- 2) Name of the person who made measurement: Climbgreat Yang
- 3) Name of the person in charge of measurement: Troy Chang

Flow Chart of Stripping method for metal analysis





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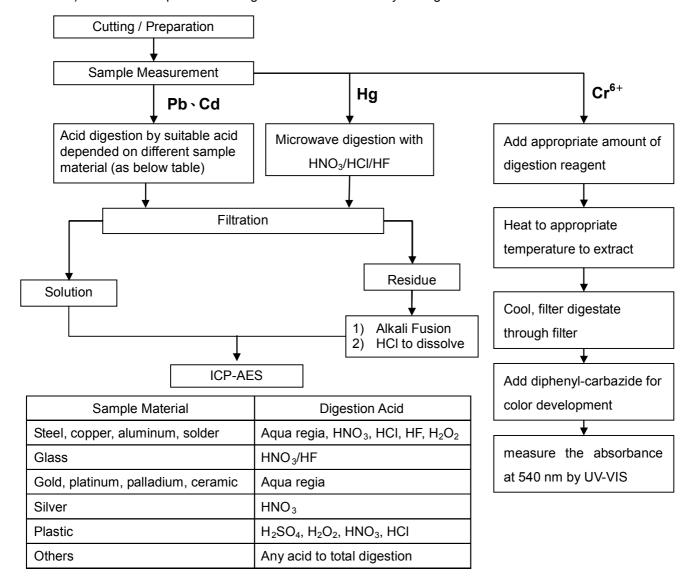
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No2 and No.3

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





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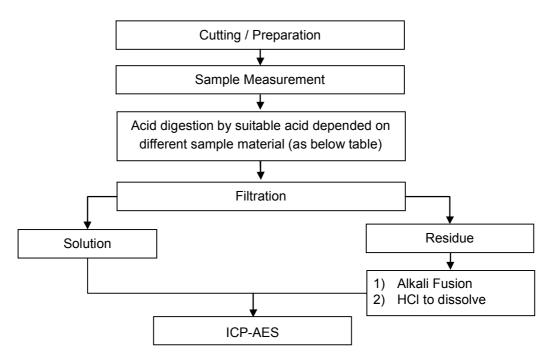
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- 1) These samples were dissolved totally by pre-conditioning method according to below flow
- 2) Name of the person who made measurement: Climbgreat Yang
- 3) Name of the person in charge of measurement: Troy Chang

Flow Chart of digestion for the elements analysis performed by ICP-AES



Steel, copper, aluminum, solder	Aqua regia, HNO ₃ , HCl, HF, H ₂ O ₂		
Glass	HNO ₃ /HF		
Gold, platinum, palladium, ceramic	Aqua regia		
Silver	HNO ₃		
Plastic	H ₂ SO ₄ , H ₂ O ₂ , HNO ₃ , HCI		
Others	Any acid to total digestion		



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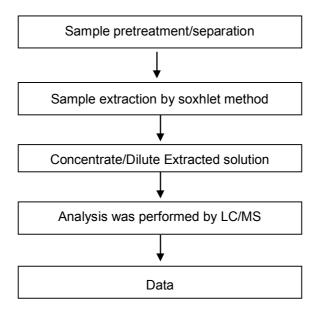
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Analytical flow chart of Soxhlet extraction (LC/MS) procedure

- Name of the person who made measurement: Roman Wong
- Name of the person in charge of measurement: Troy Chang

[Test Items: PFOS/PFOA · Benzotriazole]





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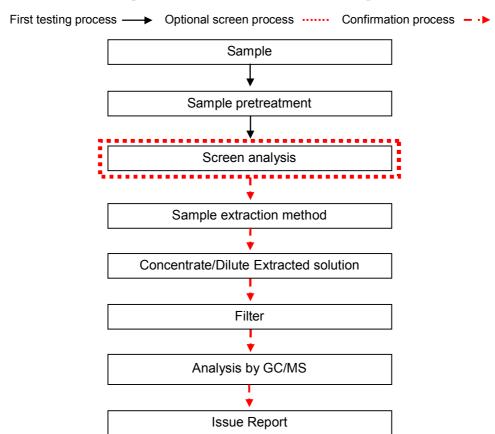


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Analytical flow chart

- Name of the person who made measurement: Roman Wong
- Name of the person in charge of measurement: Troy Chang

[Test Items: PBB/PBDE, TBBP-A-bis]





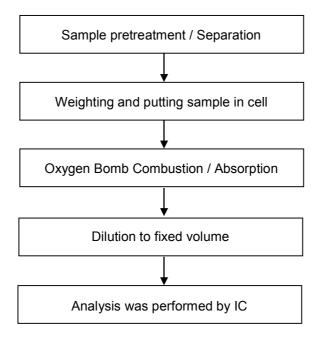
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Analytical flow chart of halogen content

- 1) Name of the person who made measurement: Rita Chen
- 2) Name of the person in charge of measurement: Troy Chang





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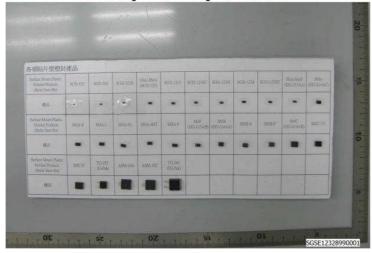
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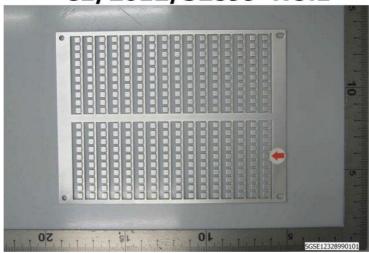
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* The tested sample / part is marked by an arrow if it's shown on the photo. *

CE/2012/32899



CE/2012/32899 NO.1



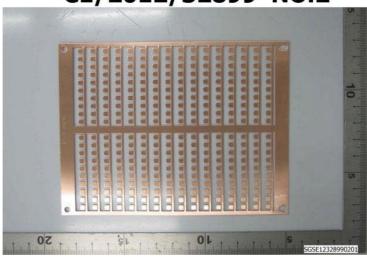


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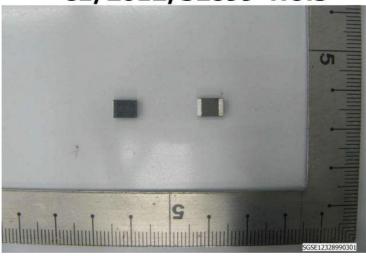
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CE/2012/32899 NO.2



CE/2012/32899 **NO.3**



** End of Report **