



Test Report

No.: GZ1011136135/CHEM

Date: DEC 10, 2010

Page 1 of 8

THE 771TH INSTITUTE'S IC PLASTIC PACKAGING PRODUCTION LINE
NO.189 TAI YI ROAD XIAN CITY

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

SGS Job No. : GZ12857248EC
SGS Internal Reference No. : 16.5
Tested sample information : SOP14L
Client Reference Information : SOP8L / 14L / 16L/ 20L / 24L / 28L
Material: Cu
Substance: Cu 塑封料 SiO₂ Ag Sn
Date of Sample Received : NOV 26, 2010
Testing Period : NOV 26, 2010 TO DEC 03, 2010
Test Requested : Selected test (s) as requested by client.
Test Method : Please refer to next page(s).
Test Result(s) : Please refer to next page(s).
Conclusion : A: Based on the performed tests on submitted sample(s), the results **comply with** the RoHS Directive 2002/95/EC and its subsequent amendments.

Signed for and on behalf of
SGS-CSTC Ltd.

Manson Yang
Approved Signatory

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Page 2 of 8

Test Results:

Description for specimen 1 : Black body w/ brown printing

A: RoHS Directive 2002/95/EC

Test Item(s)	Unit	Test Method (Reference)	Result	MDL	Limit
Cadmium (Cd)	mg/kg	IEC 62321: 2008, ICP-OES	N.D.	2	100
Lead (Pb)	mg/kg	IEC 62321: 2008, ICP-OES	5	2	1000
Mercury (Hg)	mg/kg	IEC 62321: 2008, ICP-OES	N.D.	2	1000
Hexavalent Chromium (CrVI) by alkaline extraction	mg/kg	IEC 62321: 2008, UV-Vis	N.D.	2	1000
Sum of PBBs	mg/kg	-	N.D.	-	1000
Monobromobiphenyl	mg/kg	IEC 62321: 2008, GC-MS	N.D.	5	
Dibromobiphenyl	mg/kg	IEC 62321: 2008, GC-MS	N.D.	5	
Tribromobiphenyl	mg/kg	IEC 62321: 2008, GC-MS	N.D.	5	
Tetrabromobiphenyl	mg/kg	IEC 62321: 2008, GC-MS	N.D.	5	
Pentabromobiphenyl	mg/kg	IEC 62321: 2008, GC-MS	N.D.	5	
Hexabromobiphenyl	mg/kg	IEC 62321: 2008, GC-MS	N.D.	5	
Heptabromobiphenyl	mg/kg	IEC 62321: 2008, GC-MS	N.D.	5	
Octabromobiphenyl	mg/kg	IEC 62321: 2008, GC-MS	N.D.	5	
Nonabromobiphenyl	mg/kg	IEC 62321: 2008, GC-MS	N.D.	5	
Decabromobiphenyl	mg/kg	IEC 62321: 2008, GC-MS	N.D.	5	
Sum of PBDEs	mg/kg	-	N.D.	-	1000
Monobromodiphenyl ether	mg/kg	IEC 62321: 2008, GC-MS	N.D.	5	
Dibromodiphenyl ether	mg/kg	IEC 62321: 2008, GC-MS	N.D.	5	
Tribromodiphenyl ether	mg/kg	IEC 62321: 2008, GC-MS	N.D.	5	
Tetrabromodiphenyl ether	mg/kg	IEC 62321: 2008, GC-MS	N.D.	5	
Pentabromodiphenyl ether	mg/kg	IEC 62321: 2008, GC-MS	N.D.	5	
Hexabromodiphenyl ether	mg/kg	IEC 62321: 2008, GC-MS	N.D.	5	
Heptabromodiphenyl ether	mg/kg	IEC 62321: 2008, GC-MS	N.D.	5	
Octabromodiphenyl ether	mg/kg	IEC 62321: 2008, GC-MS	N.D.	5	
Nonabromodiphenyl ether	mg/kg	IEC 62321: 2008, GC-MS	N.D.	5	
Decabromodiphenyl ether	mg/kg	IEC 62321: 2008, GC-MS	N.D.	5	

Note:

1. mg/kg = ppm
2. N.D. = Not Detected (< MDL)
3. MDL = Method Detection Limit
4. "-" = Not regulated

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SGS-CTC Standards Technical Services Co., Ltd.
Guangzhou Testing Service Chemical Laboratory

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B: PAHs (Polynuclear Aromatic Hydrocarbons)

Test Item(s)	Unit	Test Method	Results	MDL
Naphthalene (NAP)	mg/kg	ZEK 01.2-08, GC-MS	N.D.	0.2
Acenaphthylene (ANY)	mg/kg	ZEK 01.2-08, GC-MS	N.D.	0.2
Acenaphthene (ANA)	mg/kg	ZEK 01.2-08, GC-MS	N.D.	0.2
Fluorene (FLU)	mg/kg	ZEK 01.2-08, GC-MS	N.D.	0.2
Phenanthrene (PHE)	mg/kg	ZEK 01.2-08, GC-MS	N.D.	0.2
Anthracene (ANT)	mg/kg	ZEK 01.2-08, GC-MS	N.D.	0.2
Fluoranthene (FLT)	mg/kg	ZEK 01.2-08, GC-MS	N.D.	0.2
Pyrene (PYR)	mg/kg	ZEK 01.2-08, GC-MS	0.3	0.2
Benzo(a)anthracene (BaA)	mg/kg	ZEK 01.2-08, GC-MS	N.D.	0.2
Chrysene (CHR)	mg/kg	ZEK 01.2-08, GC-MS	N.D.	0.2
Benzo(b)fluoranthene (BbF)	mg/kg	ZEK 01.2-08, GC-MS	N.D.	0.2
Benzo(k)fluoranthene (BkF)	mg/kg	ZEK 01.2-08, GC-MS	N.D.	0.2
Benzo(a)pyrene (BaP)	mg/kg	ZEK 01.2-08, GC-MS	N.D.	0.2
Indeno(1-,2,3-c,d)pyrene (IPY)	mg/kg	ZEK 01.2-08, GC-MS	N.D.	0.2
Dibenzo(a,h)anthracene (DBA)	mg/kg	ZEK 01.2-08, GC-MS	N.D.	0.2
Benzo(g,h,i)perylene (BPE)	mg/kg	ZEK 01.2-08, GC-MS	N.D.	0.2
Sum of 16 PAHs acc. US EPA	mg/kg	-	0.3	-

Note:

1. mg/kg = ppm
2. N.D. = Not Detected (< MDL)
3. MDL = Method Detection Limit

ZEK 01.2-08 : Restraining maximum values for products

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 16 PAH (US EPA) (mg/kg)**	<MDL (<0.2)***	10	200

Remark:

**= 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 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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Test Report

No.: GZ1011136135/CHEM

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Page 4 of 8

C: PFOA & PFOS (Perfluorooctanoic acid & Perfluorooctane sulfonates)

Test Item(s)	Unit	Test Method (Reference)	Result	MDL
Perfluorooctanoic acid (PFOA)	mg/kg	EPA 3550C: 2007, LC-MS	N.D.	10
Perfluorooctane sulfonates (PFOS)				
PFOS – Acid				
PFOS – Metal Salt	mg/kg	EPA 3550C: 2007, LC-MS	N.D.	10
PFOS – Amide				

Note:

1. mg/kg = ppm
2. N.D. = Not Detected (< MDL)
3. MDL = Method Detection Limit

For reference: Entry 53 of Regulation (EC) No 552/2009 amending Annex XVII of REACH Regulation (EC) No 1907/2006 (previously restricted under Directive 2006/122/EC):

- (1) May not be placed on the market or used as a substance or constituent of preparations in a concentration equal to or higher than 0,005 % by mass.
- (2) May not be placed on the market in semi-finished products or articles, or parts thereof, if the concentration of PFOS is equal to or higher than 0,1% by mass calculated with reference to the mass of structurally or microstructurally distinct parts that contain PFOS or, for textiles or other coated materials, if the amount of PFOS is equal to or higher than 1µg /m² of the coated material.

Remark : As requested by client, the testing was conducted as whole / part sample, for the sample can't be disjointed.

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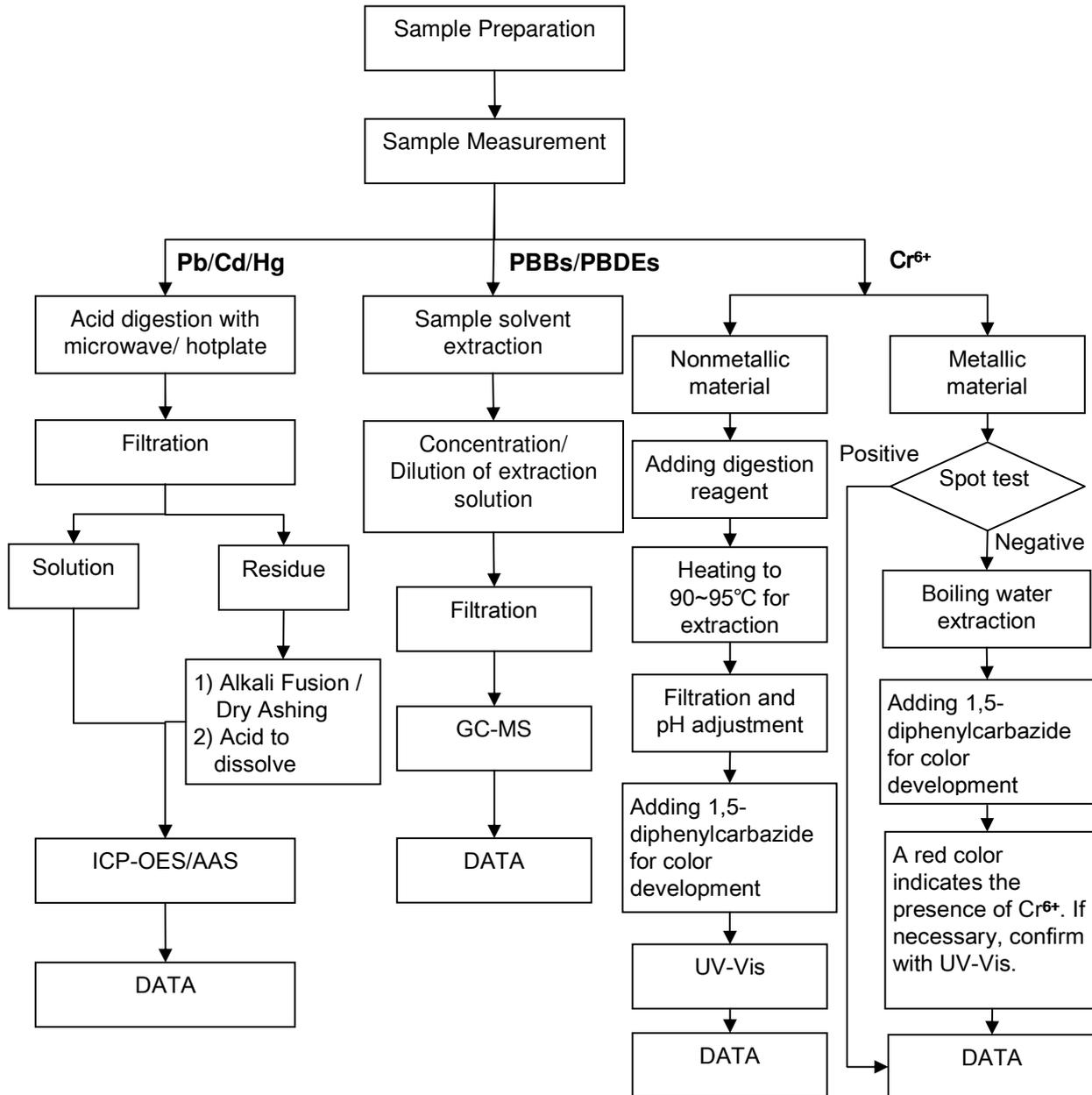
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ATTACHMENTS

RoHS Testing Flow Chart

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



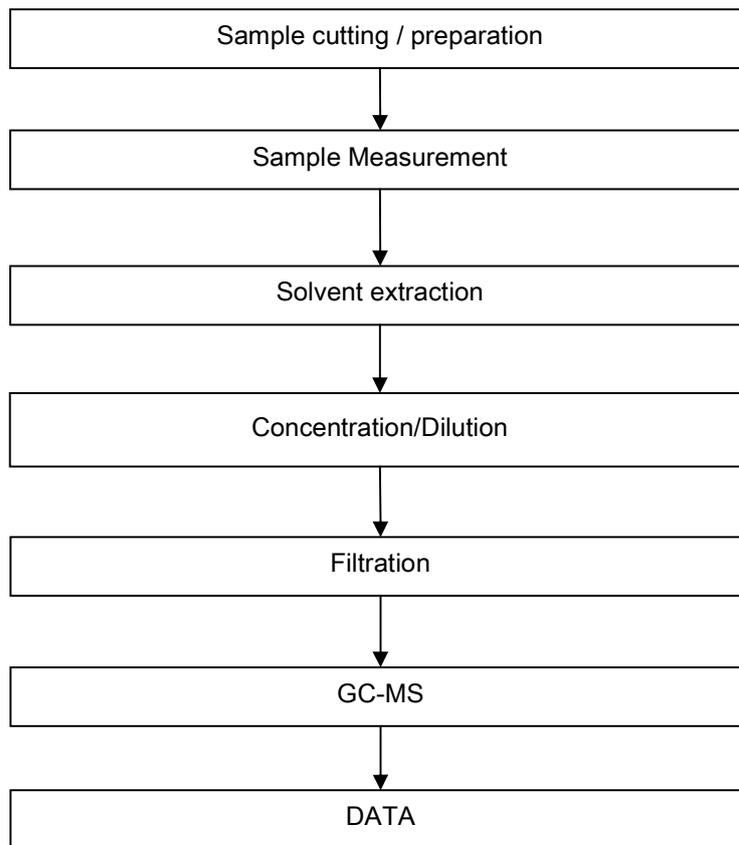
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PAHs Testing Flow Chart

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

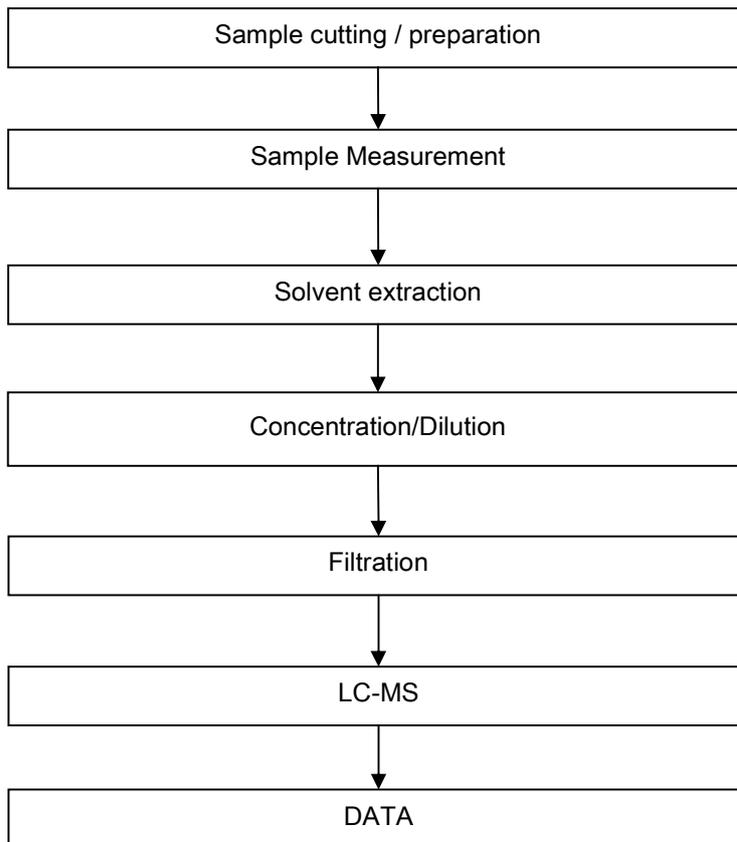


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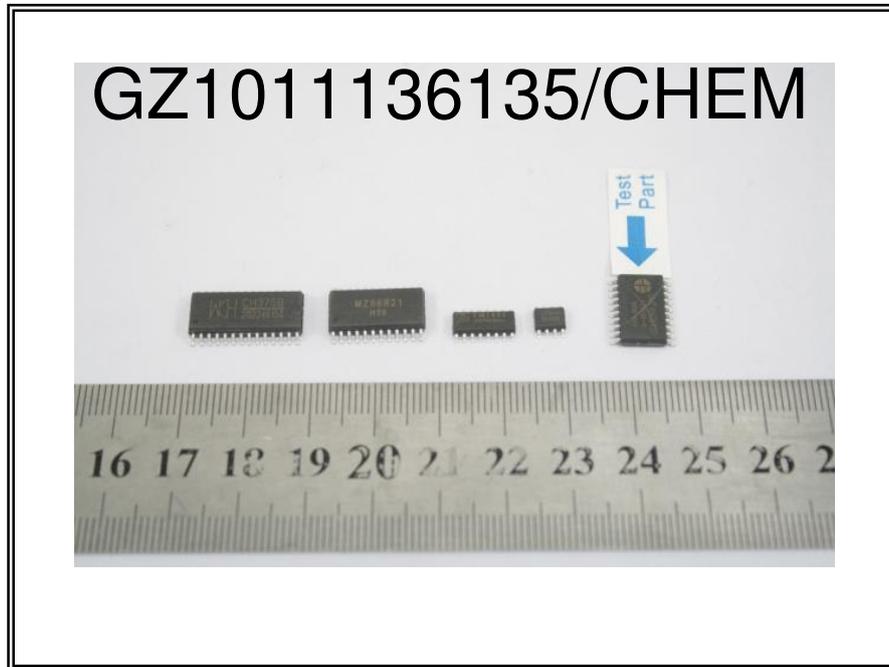
PFOA / PFOS Testing Flow Chart

- 1) Name of the person who made testing: Cindy Huang
- 2) Name of the person in charge of testing: Ryan Yang



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Sample photo :



SGS authenticate the photo on original report only

*** End of Report ***

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