Test Report Number: SHAH00901166

Applicant: CHANGZHOU HUAWEI ELECTRONIC CO., LTD Date: 08 Jan, 2018
ZOUQU TOWN,ZHONGLOU DISTRICT,
CHANGZHOU CITY,JIANGSU.CHINA
Attn: LV ER XIAO

Sample Description:

One (1) group of submitted sample said to be : **Aluminum Electrolytic Capacitor (PET)**

Item Name : Aluminum Electrolytic Capacitor (PET)

Country Of Origin : China

****

Tests Conducted:

As requested by the applicant, for details refer to attached page(s).

****

To be continued

Authorized By:
For Intertek Testing Services Ltd., Shanghai

Leo Shi
General Manager

INTERTEK TESTING SERVICES LTD., SHANGHAI 上海天祥质量技术服务有限公司 检验检测专用章

Intertek Testing Services Ltd., Shanghai
上海天祥质量技术服务有限公司

Block B, Jinling Business Square, No.801 YiShan Road, Shanghai, China. 200233
上海市宜山路 801 号金陵商务广场 B 座 200233

Tel: +86 21 6120 6060
Fax: +86 21 6127 9708
www.intertek.com
www.intertek.com.cn

Test Report Number: SHAH00901166

Conclusion:

Tested Component	Standard	Result
Tested Components	Azocolourants Content Requirement In Annex XVII Item 43 Of The REACH Regulation (EC) NO. 1907/2006 & Amendment No. 552/2009 and 126/2013 (Formerly Known As Directive 2002/61/EC)	Pass
	Total Antimony Content	See test conducted
Tested Components Of Submitted Sample	Restriction of the use of certain hazardous substance in electrical and electronic equipment (RoHS Directive 2011/65/EU)	Pass
Other tested Components of Submitted Sample	Client's requirement on AfPS GS 2014:01 PAK for Polycyclic Aromatic Hydrocarbons (PAHs) content	Pass
	Halogen (F, Cl, Br, I) content	See Test Conducted
	Organotin content	See Test Conducted
	PFOS and PFOA content	See Test Conducted
Tested Components of Submitted Sample	Phthalate content	See Test Conducted
	Formaldehyde Content	See Test Conducted
Tested components (1)~(5), (10) of submitted sample	Asbestos qualitative test	See Test Conducted

****

To be continued

Authorized By:
For Intertek Testing Services Ltd., Shanghai

Leo Shi
General Manager

INTERTEK TESTING SERVICES LTD., SHANGHAI 上海天祥质量技术服务有限公司 检验检测专用章

Intertek Testing Services Ltd., Shanghai
上海天祥质量技术服务有限公司
Block B, Jinling Business Square, No.801 YiShan Road, Shanghai, China. 200233
上海市宜山路 801 号金陵商务广场 B 座 200233
Tel: +86 21 6120 6060
Fax: +86 21 6127 9708
www.intertek.com
www.intertek.com.cn

Test Report Number： SHAH00901166

Tests Conducted

1 Detection Of Amines Derived From Azocolourants and Azodyes：

By Gas Chromatographic - Mass Spectrometric (GC-MS) And High Performance Liquid Chromatographic (HPLC) Analysis.

Test Method： EN 14362-1： 2012 for Textile Material
EN ISO 17234-1： 2010 for Leather Material
EN 14362-3： 2012 & EN ISO 17234-2: 2011 for p-Aminoazobenzene

	Forbidden	Cas No.	Result					
			(1)	(2)	(3)	(4)	(5)	(10)
1.	4-Aminodiphenyl	92-67-1	N	N	N	N	N	N
2.	Benzidine	92-87-5	N	N	N	N	N	N
3.	4-Chloro-o-Toluidine	95-69-2	N	N	N	N	N	N
4.	2-Naphthylamine	91-59-8	N	N	N	N	N	N
5.	o-Aminoazotoluene	97-56-3	N	N	N	N	N	N
6.	2-Amino-4-Nitrotoluene	99-55-8	N	N	N	N	N	N
7.	p-Chloroaniline	106-47-8	N	N	N	N	N	N
8.	2,4-Diaminoanisole	615-05-4	N	N	N	N	N	N
9.	4,4'-Diaminodiphenylmethane	101-77-9	N	N	N	N	N	N
10.	3,3'-Dichlorobenzidine	91-94-1	N	N	N	N	N	N
11.	3,3'-Dimethoxybenzidine	119-90-4	N	N	N	N	N	N
12.	3,3'-Dimethylbenzidine	119-93-7	N	N	N	N	N	N
13.	3,3'-Dimethyl-4,4'diaminodiphenylmethane	838-88-0	N	N	N	N	N	N
14.	p-Cresidine	120-71-8	N	N	N	N	N	N
15.	4,4'-Methylene-Bis(2-Chloroaniline)	101-14-4	N	N	N	N	N	N
16.	4,4'-Oxydianiline	101-80-4	N	N	N	N	N	N
17.	4,4'-Thiodianiline	139-65-1	N	N	N	N	N	N
18.	o-Toluidine	95-53-4	N	N	N	N	N	N
19.	2,4-Toluylenediamine	95-80-7	N	N	N	N	N	N
20.	2,4,5-Trimethylaniline	137-17-7	N	N	N	N	N	N
21.	o-Anisidine	90-04-0	N	N	N	N	N	N
22.	p-Aminoazobenzene	60-09-3	N	N	N	N	N	N

Remark： N = Not Detected
Detection Limit = 5 ppm
Requirement = 30 ppm (Max.)
ppm = Parts per million = mg/kg

Tested Components： See component list in the last section of this report.

Date Sample Received： Dec.25, 2017
Testing Period： Dec.25, 2017 To Dec.28, 2017

****

To be continued

Intertek Testing Services Ltd., Shanghai
上海天祥质量技术服务有限公司
Block B, Jinling Business Square, No.801 YiShan Road, Shanghai, China. 200233
上海市宜山路 801 号金陵商务广场 B 座 200233
Tel: +86 21 6120 6060
Fax: +86 21 6127 9708
www.intertek.com
www.intertek.com.cn

Tests Conducted

2 Total (Antimony) Content

As per client's request, acid digestion method was used and total (Antimony) content was determined by Inductively Coupled Argon Plasma Spectrometry.

Tested element	Result (ppm)									
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Sb	54	<10	<10	<10	<10	<10	<10	<10	<10	<10

Remark：ppm = Parts per million = mg/kg
Detection Limit = 10ppm

Tested Components：See component list in the last section of this report.

Date Sample Received：Dec.25, 2017
Testing Period：Dec.25, 2017 To Dec.28, 2017

****

To be continued

Intertek Testing Services Ltd., Shanghai
上海天祥质量技术服务有限公司
Block B, Jinling Business Square, No.801 YiShan Road, Shanghai, China. 200233
上海市宜山路 801 号金陵商务广场 B 座 200233
Tel: +86 21 6120 6060
Fax: +86 21 6127 9708
www.intertek.com
www.intertek.com.cn

Test Report Number: SHAH00901166

Tests Conducted

3 RoHS Chemical Test

(A) Test Result Summary:

Testing Item	Result			
	(6)	(7)	(8)	(9)
Cadmium (Cd) Content (mg/kg)	ND	ND	ND	ND
Lead (Pb) Content (mg/kg)	ND	ND	ND	ND
Mercury (Hg) Content (mg/kg)	ND	ND	ND	ND
Chromium (VI)(Cr^{6+}) Result (By Boiling Water Extraction on Metal) ($\mu g/cm^2$)	Negative	Negative	Negative	Negative

Testing Item	Result					
	(1)	(2)	(3)	(4)	(5)	(10)
Cadmium (Cd) Content (mg/kg)	ND	ND	ND	ND	ND	ND
Lead (Pb) Content (mg/kg)	ND	ND	ND	ND	ND	ND
Mercury (Hg) Content (mg/kg)	ND	ND	ND	ND	ND	ND
Chromium (VI)(Cr^{6+}) Content (mg/kg)	ND	ND	ND	ND	ND	ND
Polybrominated Biphenyls (PBBs) Content (mg/kg)						
Monobromobiphenyl (MonoBB)	ND	ND	ND	ND	ND	ND
Dibromobiphenyl (DiBB)	ND	ND	ND	ND	ND	ND
Tribromobiphenyl (TriBB)	ND	ND	ND	ND	ND	ND
Tetrabromobiphenyl (TetraBB)	ND	ND	ND	ND	ND	ND
Pentabromobiphenyl (PentaBB)	ND	ND	ND	ND	ND	ND
Hexabromobiphenyl (HexaBB)	ND	ND	ND	ND	ND	ND
Heptabromobiphenyl (HeptaBB)	ND	ND	ND	ND	ND	ND
Octabromobiphenyl (OctaBB)	ND	ND	ND	ND	ND	ND
Nonabromobiphenyl (NonaBB)	ND	ND	ND	ND	ND	ND
Decabromobiphenyl (DecaBB)	ND	ND	ND	ND	ND	ND
Polybrominated Diphenyl Ethers (PBDEs) Content (mg/kg)						
Monobromodiphenyl Ether (MonoBDE)	ND	ND	ND	ND	ND	ND
Dibromodiphenyl Ether (DiBDE)	ND	ND	ND	ND	ND	ND
Tribromodiphenyl Ether (TriBDE)	ND	ND	ND	ND	ND	ND
Tetrabromodiphenyl Ether (TetraBDE)	ND	ND	ND	ND	ND	ND
Pentabromodiphenyl Ether (PentaBDE)	ND	ND	ND	ND	ND	ND
Hexabromodiphenyl Ether (HexaBDE)	ND	ND	ND	ND	ND	ND
Heptabromodiphenyl Ether (HeptaBDE)	ND	ND	ND	ND	ND	ND
Octabromodiphenyl Ether (OctaBDE)	ND	ND	ND	ND	ND	ND
Nonabromodiphenyl Ether (NonaBDE)	ND	ND	ND	ND	ND	ND
Decabromodiphenyl Ether (DecaBDE)	ND	ND	ND	ND	ND	ND

****

To be continued

Intertek Testing Services Ltd., Shanghai
上海天祥质量技术服务有限公司
Block B, Jinling Business Square, No.801 YiShan Road, Shanghai, China. 200233
上海市宜山路 801 号金陵商务广场 B 座 200233
Tel: +86 21 6120 6060
Fax: +86 21 6127 9708
www.intertek.com
www.intertek.com.cn

Test Report Number： SHAH00901166

Tests Conducted

Remark：mg/kg with 50cm^2 = Milligram per kilogram with 50 square centimeter
ND = Not Detected

Negative = A negative test result indicated the absorbance value of testing sample solution for Cr(VI) testing is less than the absorbance value of the 0.10 μ g/cm^2 equivalent comparison standard solution, the Cr(VI) concentration is below the limit of quantification, then the sample is considered to be negative for Cr(VI).

(B) RoHS Requirement:

Restricted Substances	Limits
Cadmium (Cd)	0.01% (100 mg/kg)
Lead (Pb)	0.1% (1000 mg/kg)
Mercury (Hg)	0.1% (1000 mg/kg)
Chromium (VI) (Cr^{6+})	0.1% (1000 mg/kg)
Polybrominated Biphenyls (PBBs)	0.1% (1000 mg/kg)
Polybrominated Diphenyl Ethers (PBDEs)	0.1% (1000 mg/kg)

The above limits were quoted from 2011/65/EU for homogeneous material.

(C) Test Method:

Testing Item	Testing Method	Reporting Limit
Cadmium (Cd) Content	With reference to IEC 62321-5 Edition 1.0:2013, by acid digestion until the tested sample was totally dissolved, and determined by ICP - OES	2 mg/kg
Lead (Pb) Content	With reference to IEC 62321-5 Edition 1.0:2013, by acid digestion until the tested sample was totally dissolved, and determined by ICP - OES	2 mg/kg
Mercury (Hg) Content	With reference to IEC 62321-4 Edition 1.0:2013, by acid digestion until the tested sample was totally dissolved, and determined by ICP - OES	2 mg/kg
Chromium (VI)(Cr^{6+}) Content	With reference to IEC 62321 Edition 1.0:2008, by alkaline digestion and determined by UV-VIS Spectrophotometer	1 mg/kg
Chromium (VI) (Cr^{6+}) Content	With reference to IEC 62321-7-1 Edition 1.0:2015, by boiling water extraction and determined by UV-VIS Spectrophotometer.	Positive(>0.13 μg/cm^2) / Negative(<0.10 μg/cm^2) / Inconclusive(0.10μg/cm^2 --0.13 μg/cm^2)
Polybrominated Biphenyls (PBBs)& Polybrominated Diphenyl Ethers (PBDEs) Content	With reference to IEC 62321-6 Edition 1.0:2015, by solvent extraction and determined by GC/MS and further HPLC confirmation when necessary	5 mg/kg

Tested Components：See component list in the last section of this report.

Date Sample Received：Dec.25, 2017
Testing Period：Dec.25, 2017 To Jan.5, 2018

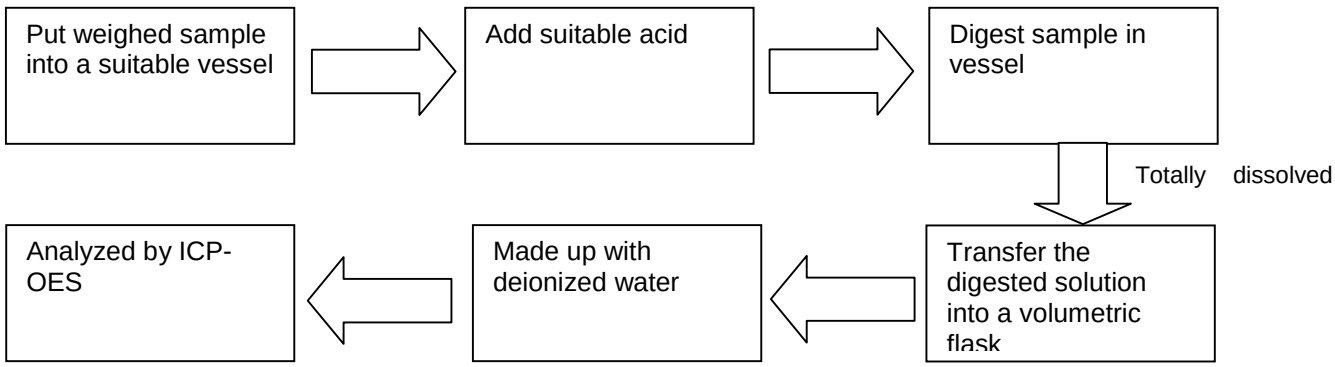
****

To be continued

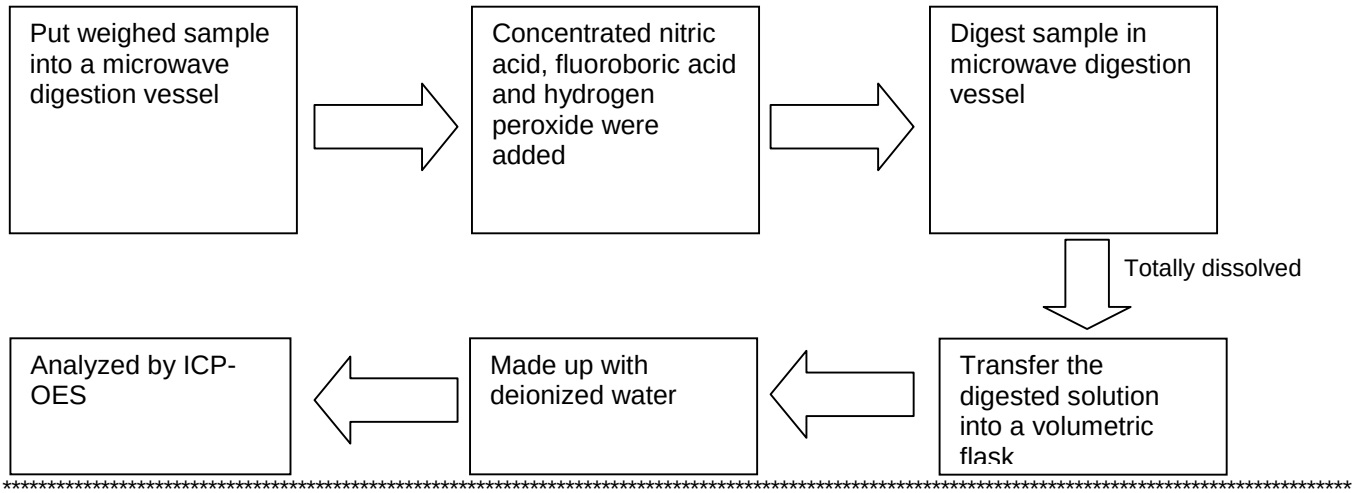
Intertek Testing Services Ltd., Shanghai
上海天祥质量技术服务有限公司
Block B, Jinling Business Square, No.801 YiShan Road, Shanghai, China. 200233
上海市宜山路 801 号金陵商务广场 B 座 200233
Tel: +86 21 6120 6060
Fax: +86 21 6127 9708
www.intertek.com
www.intertek.com.cn

(D) Measurement Flowchart:

1. Test for Cd/Pb Contents



2. Test for Hg Content

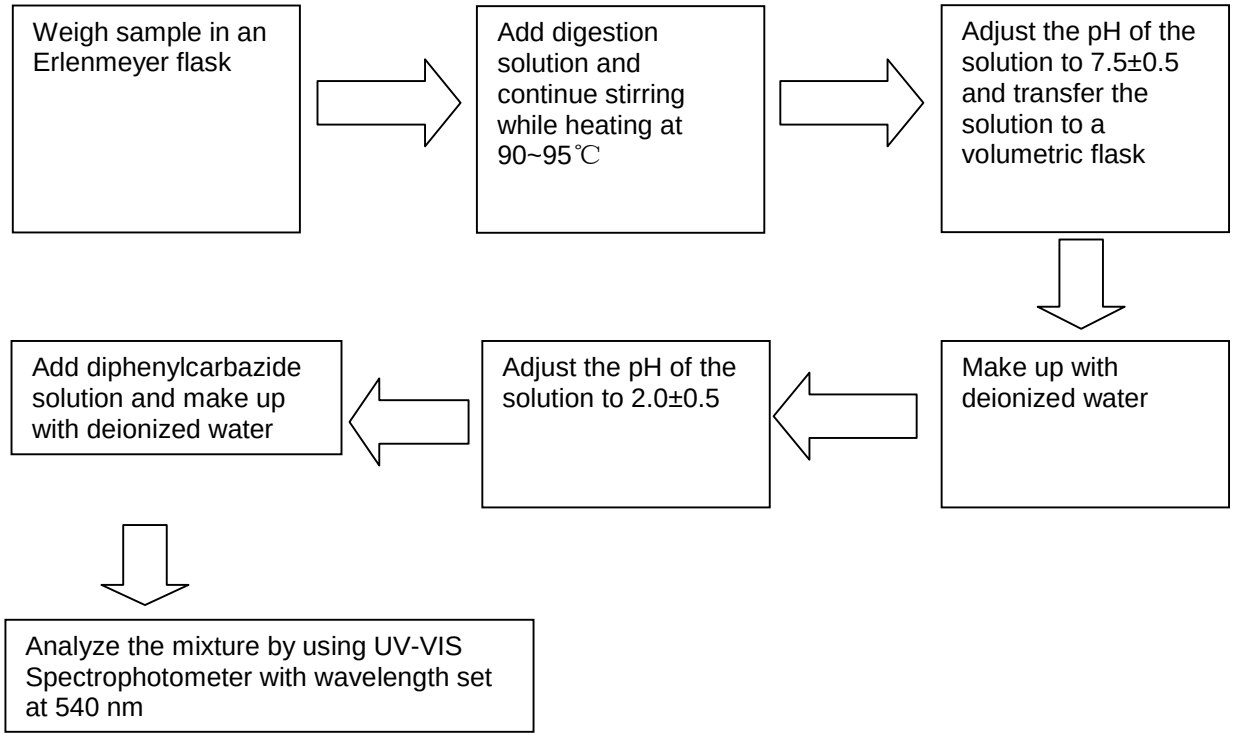


To be continued

Intertek Testing Services Ltd., Shanghai
上海天祥质量技术服务有限公司
Block B, Jinling Business Square, No.801 YiShan Road, Shanghai, China. 200233
上海市宜山路 801 号金陵商务广场 B 座 200233
Tel: +86 21 6120 6060
Fax: +86 21 6127 9708
www.intertek.com
www.intertek.com.cn

Tests Conducted

3. Test for Chromium (VI) (Cr^{6+}) Content (Alkaline Digestion)



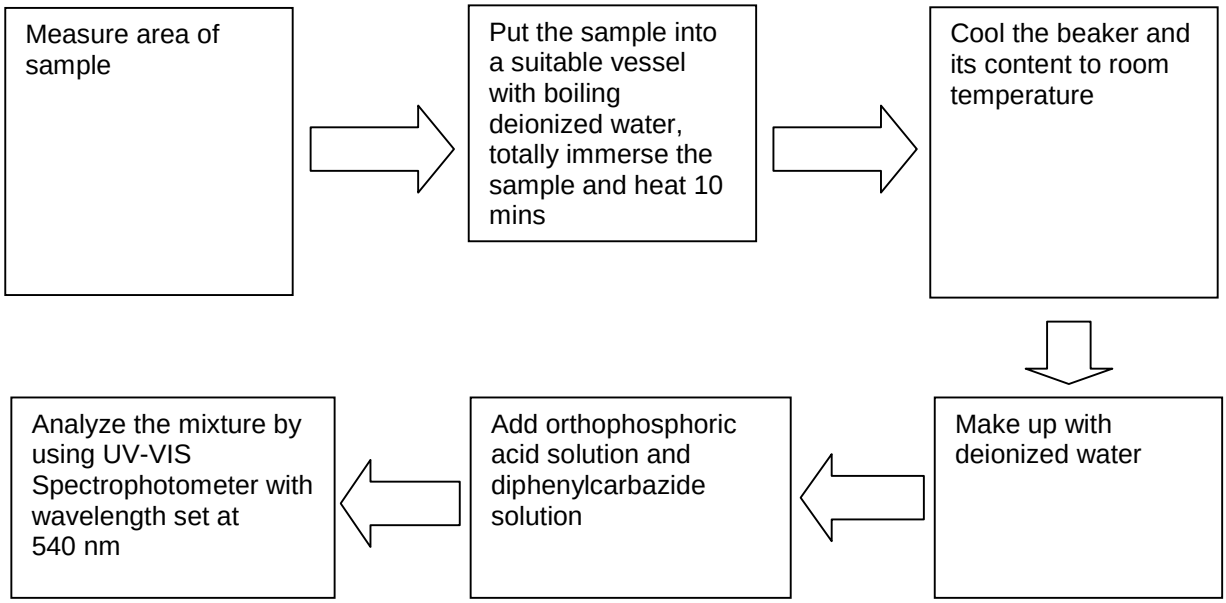
****

To be continued

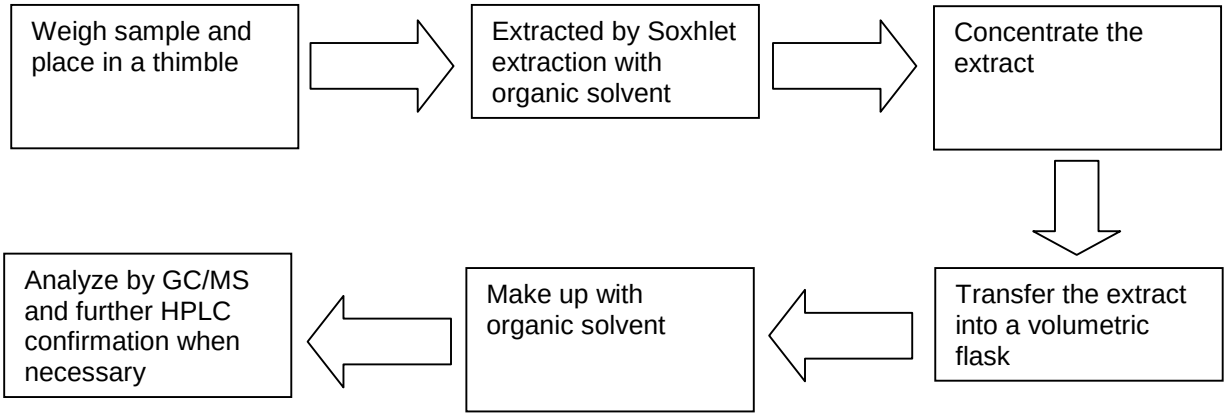
Intertek Testing Services Ltd., Shanghai
上海天祥质量技术服务有限公司
Block B, Jinling Business Square, No.801 YiShan Road, Shanghai, China. 200233
上海市宜山路 801 号金陵商务广场 B 座 200233
Tel: +86 21 6120 6060
Fax: +86 21 6127 9708
www.intertek.com
www.intertek.com.cn

Tests Conducted

4. Test for Chromium (VI) (Cr^{6+}) Content (Boiling Water Extraction)



5. Test for PBBs/PBDEs Contents



****

To be continued

Intertek Testing Services Ltd., Shanghai
上海天祥质量技术服务有限公司
Block B, Jinling Business Square, No.801 YiShan Road, Shanghai, China. 200233
上海市宜山路 801 号金陵商务广场 B 座 200233
Tel: +86 21 6120 6060
Fax: +86 21 6127 9708
www.intertek.com
www.intertek.com.cn

Test Report Number： SHAH00901166

Tests Conducted

Remarks：

*1：list of appropriate acid：

Material	Acid added for digestion
Polymers	HNO_3,HCl,HF,H_2O_2,H_3BO_3
Metals	HNO_3,HCl,HF
Electronics	HNO_3,HCl,H_2O_2,HBF_4

*2：If the result of spot test is positive, Chromium VI would be determined as detected.

4 Polycyclic Aromatic Hydrocarbons (PAHs) Content

With reference to AfPS GS 2014:01 PAK, by solvent extraction and determined by Gas Chromatography – Mass Spectrometer (GC/MS).

(Ⅰ) Test Results

Testing Item	Result (in mg/kg)				
	(1)	(3)	(4)	(5)	(10)
1. Benzo[a]anthracene	ND	ND	ND	ND	ND
2. Chrysene	ND	ND	ND	ND	ND
3. Benzo[b]fluoranthene	ND	ND	ND	ND	ND
4. Benzo[j]fluoranthene	ND	ND	ND	ND	ND
5. Benzo[k]fluoranthene	ND	ND	ND	ND	ND
6. Benzo[e]pyrene	ND	ND	ND	ND	ND
7. Benzo[a]pyrene	ND	ND	ND	ND	ND
8. Indeno[1,2,3-c,d]pyrene	ND	ND	ND	ND	ND
9. Dibenzo[a,h]anthrancene	ND	ND	ND	ND	ND
10. Benzo[g,h,i]perylene	ND	ND	ND	ND	0.4
11. Acenaphthylene	ND	ND	ND	ND	ND
12. Acenaphthene	ND	ND	ND	ND	ND
13. Fluorene	ND	ND	ND	ND	ND
14. Phenanthrene	ND	ND	ND	ND	ND
15. Anthracene	ND	ND	ND	ND	ND
16. Fluoranthene	ND	ND	ND	ND	ND
17. Pyrene	ND	ND	ND	ND	3.7
Sum of 11-17 PAHs	ND	ND	ND	ND	3.7
18. Naphthalene	0.5	ND	ND	ND	0.6
Sum of 1-18 PAHs	0.5	ND	ND	ND	4.7
Classification of Samples (other products): Category	3	3	3	3	3

****

To be continued

Intertek Testing Services Ltd., Shanghai
上海天祥质量技术服务有限公司
Block B, Jinling Business Square, No.801 YiShan Road, Shanghai, China. 200233
上海市宜山路 801 号金陵商务广场 B 座 200233
Tel: +86 21 6120 6060
Fax: +86 21 6127 9708
www.intertek.com
www.intertek.com.cn

Test Report Number： SHAH00901166

Tests Conducted

ND= Not detected
Detection limit = 0.2 mg/kg

(Ⅱ) Limits for PAH in Products

Parameter	Category 1	Category 2		Category 3	
/	To be taken material, which are intended in the mouth,or materials in toys intended and with long-term skin contact (longer than 30 s)	Materials that do not fall into category 1, with foreseeable contact to skin longer than 30 s (long-term skin contact) or short-term repeated skin contact [a)]		Materials that do not fall into category 1 or 2, with foreseeable contact to skin up to 30 s (short-term skin contact)	
/	/	Toys by RL 2009/48/EC	other products by ProdSG	Toys by RL 2009/48/EC	other products by ProdSG
Benzo[a]pyrene	< 0.2	< 0.2	< 0.5	< 0.5	< 1
Benzo[e]pyrene	< 0.2	< 0.2	< 0.5	< 0.5	< 1
Benzo[a]anthracene	< 0.2	< 0.2	< 0.5	< 0.5	< 1
Benzo[b]fluoranthene	< 0.2	< 0.2	< 0.5	< 0.5	< 1
Benzo[j]fluoranthene	< 0.2	< 0.2	< 0.5	< 0.5	< 1
Benzo[k]fluoranthene	< 0.2	< 0.2	< 0.5	< 0.5	< 1
Chrysene	< 0.2	< 0.2	< 0.5	< 0.5	< 1
Dibenzo[a,h]anthrancene	< 0.2	< 0.2	< 0.5	< 0.5	< 1
Benzo[g,h,i]perylene	< 0.2	< 0.2	< 0.5	< 0.5	< 1
Indeno[1,2,3-c,d]pyrene	< 0.2	< 0.2	< 0.5	< 0.5	< 1
Acenaphthylen, Acenaphthen, Fluoren, Phenanthren, Pyren, Anthracen, Fluoranthen	< 1 (Sum)	< 5 (Sum)	< 10 (Sum)	<20 (Sum)	< 50 (Sum)
Naphthalene	< 1	< 2		< 10	
Sum 18 PAHs	< 1	< 5	< 10	< 20	< 50

[a)] Formulation "of repeated short-term skin contact" REACH Annex XVII No. 50 supplement (REGULATION (EU) No 1272/2013)

Tested Component(s)：See component list in the last section of this report

Date Sample Received：Dec.25, 2017
Testing Period：Dec.25, 2017 To Dec.29, 2017

****

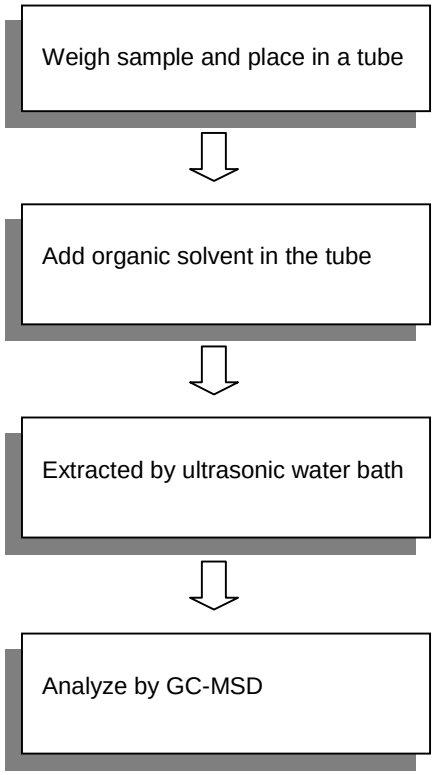
To be continued

Intertek Testing Services Ltd., Shanghai
上海天祥质量技术服务有限公司
Block B, Jinling Business Square, No.801 YiShan Road, Shanghai, China. 200233
上海市宜山路 801 号金陵商务广场 B 座 200233
Tel: +86 21 6120 6060
Fax: +86 21 6127 9708
www.intertek.com
www.intertek.com.cn

Tests Conducted

Measurement flowchart：

Test for PAHs content



****

To be continued

Intertek Testing Services Ltd., Shanghai
上海天祥质量技术服务有限公司
Block B, Jinling Business Square, No.801 YiShan Road, Shanghai, China. 200233
上海市宜山路 801 号金陵商务广场 B 座 200233
Tel: +86 21 6120 6060
Fax: +86 21 6127 9708
www.intertek.com
www.intertek.com.cn

Test Report Number： SHAH00901166

Tests Conducted

5 Tested Components：See component list in the last section of this report.

Halogen Test

Ⅰ. Test result summary

Halogen content：

Testing Item	Result (ppm)					
	(1)	(2)	(3)	(4)	(5)	(10)
Fluorine (F) content	ND	ND	ND	ND	ND	251
Chlorine (Cl) content	ND	ND	ND	255	ND	ND
Bromine (Br) content	ND	ND	ND	ND	ND	ND
Iodine (I) content	ND	ND	ND	ND	ND	ND

Remark：ppm = Parts per million = mg/kg
ND = Not Detected

Ⅱ. Test method

Testing Item	Testing Method	Reporting Limit
Halogen (F, Cl, Br, I) content	With reference to EN 14582:2007 by combustion in a calorimetric bomb and determined by ion chromatography	50 ppm

Remarks：Reporting limit = Quantitation limit of analyte in sample

Date Sample Received：Dec.25, 2017 & Jan.12, 2018
Testing Period：Dec.25, 2017 To Jan.17, 2018

****

To be continued

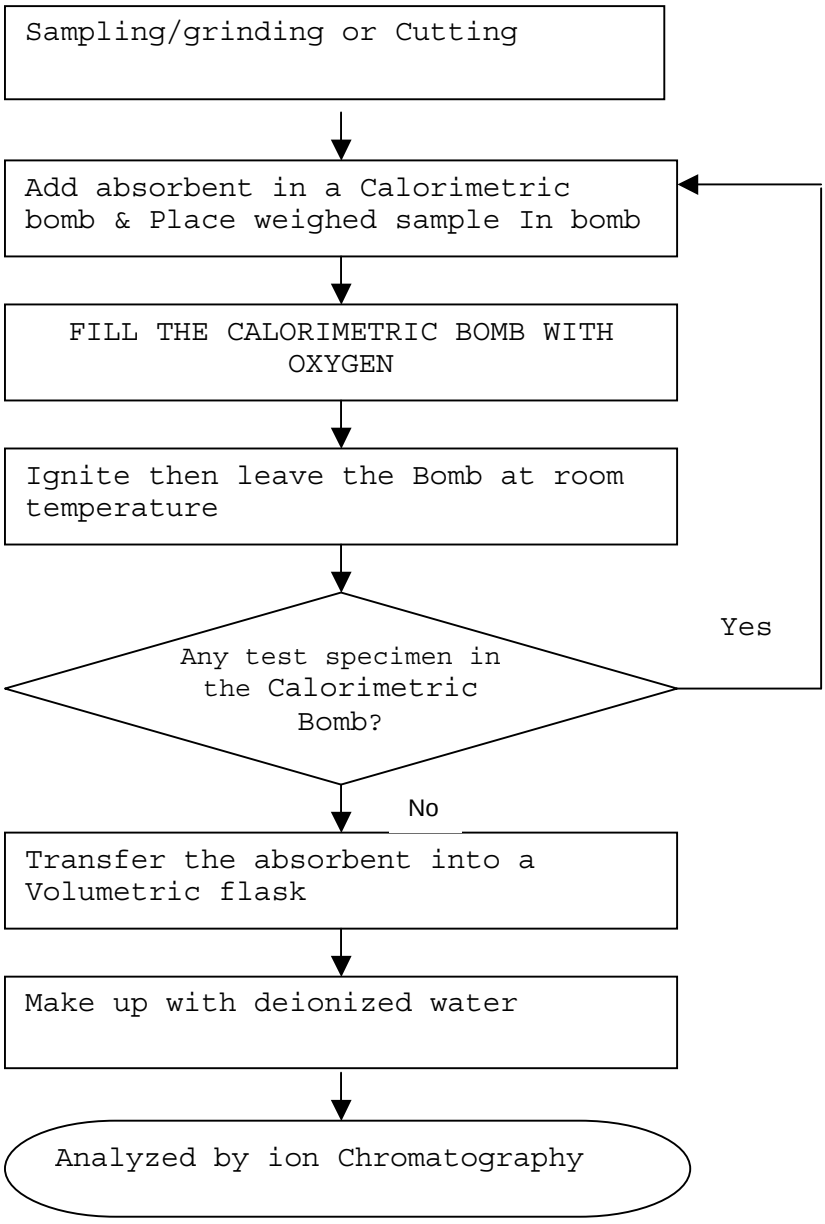
Intertek Testing Services Ltd., Shanghai
上海天祥质量技术服务有限公司
Block B, Jinling Business Square, No.801 YiShan Road, Shanghai, China. 200233
上海市宜山路 801 号金陵商务广场 B 座 200233
Tel: +86 21 6120 6060
Fax: +86 21 6127 9708
www.intertek.com
www.intertek.com.cn

Tests Conducted

(III) Measurement flowchart：

Test for Halogen content

Reference method： EN 14582：2007



****

To be continued

Intertek Testing Services Ltd., Shanghai
上海天祥质量技术服务有限公司
Block B, Jinling Business Square, No.801 YiShan Road, Shanghai, China. 200233
上海市宜山路 801 号金陵商务广场 B 座 200233
Tel: +86 21 6120 6060
Fax: +86 21 6127 9708
www.intertek.com
www.intertek.com.cn

Test Report Number： SHAH00901166

Tests Conducted

6 Organotin Content Test

With reference to ISO 17353, by solvent extraction and followed by Gas Chromatographic-Mass Spectrometric (GC-MS) Analysis.

Tested Compound	Result (mg/kg)					
	(1)	(2)	(3)	(4)	(5)	(10)
Dibutyl Tin (DBT)	ND	ND	ND	ND	ND	ND
Dioctyl Tin (DOT)	ND	ND	ND	ND	ND	ND
Tributyl Tin (TBT)	ND	ND	ND	ND	ND	ND
Triphenyl Tin (TPhT)	ND	ND	ND	ND	ND	ND

Remark： Detection Limit = 0.05 mg/kg
ND = Not Detected

Tested Component：See component list in the last section of this report.

Date Sample Received：Dec.25, 2017
Testing Period：Dec.25, 2017 To Dec.29, 2017

7 Perfluorooctane Sulfonates (PFOS) And Perfluorooctanoic Acid (PFOA) Content

By solvent extraction and followed by Liquid Chromatography-Mass Spectrometry (LC-MS) analysis.

Compound	Result (ppm)					
	(1)	(2)	(3)	(4)	(5)	(10)
Perfluorooctane sulfonates(PFOS)#	ND	ND	ND	ND	ND	ND
Perfluorooctanoic acid(PFOA)	ND	ND	ND	ND	ND	ND

Remark：Detection Limit = 0.1ppm
ppm = Parts per million = mg/kg
ND = Not Detected

Tested Components：See component list in the last section of this report.

Date Sample Received：Dec.25, 2017
Testing Period：Dec.25, 2017 To Dec.29, 2017

****

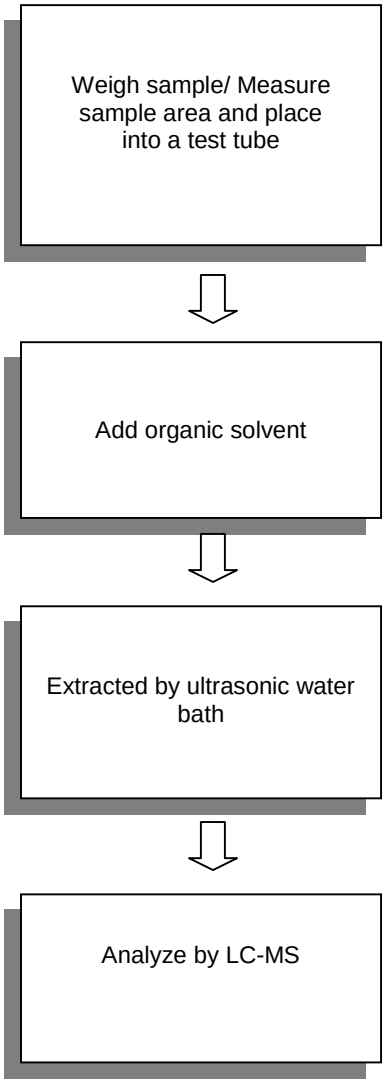
To be continued

Intertek Testing Services Ltd., Shanghai
上海天祥质量技术服务有限公司
Block B, Jinling Business Square, No.801 YiShan Road, Shanghai, China. 200233
上海市宜山路 801 号金陵商务广场 B 座 200233
Tel: +86 21 6120 6060
Fax: +86 21 6127 9708
www.intertek.com
www.intertek.com.cn

Tests Conducted

Measurement flowchart：

Test for **Perfluorooctane Sulfonates(PFOS)and Perfluorooctanoic Acid (PFOA)** content：



****

To be continued

Intertek Testing Services Ltd., Shanghai
上海天祥质量技术服务有限公司
Block B, Jinling Business Square, No.801 YiShan Road, Shanghai, China. 200233
上海市宜山路 801 号金陵商务广场 B 座 200233
Tel: +86 21 6120 6060
Fax: +86 21 6127 9708
www.intertek.com
www.intertek.com.cn

Test Report Number： SHAH00901166

Tests Conducted

8 Phthalate Content Test

With reference to EN 14372, by Gas Chromatography-Mass Spectrometry (GC-MS) and High Performance Liquid Chromatography (HPLC) analysis.

Tested Compound	Cas No.	Result (mg/kg)					
		(1)	(2)	(3)	(4)	(5)	(10)
Di-butyl phthalate (DBP)	84-74-2	ND	ND	ND	ND	ND	ND
Di(2-ethyl hexyl) phthalate(DEHP)	117-81-7	ND	ND	ND	ND	ND	ND
Benzyl butyl phthalate (BBP)	85-68-7	ND	ND	ND	ND	ND	ND
Di-iso-nonyl phthalate (DINP)	28553-12-0	ND	ND	ND	ND	ND	ND
Di-n-octyl phthalate (DNOP)	117-84-0	ND	ND	ND	ND	ND	ND
Di-iso-decyl phthalate (DIDP)	26761-40-0	ND	ND	ND	ND	ND	ND
Di-n-hexyl phthalate (DnHP/DHEXP)	84-75-3	ND	ND	ND	ND	ND	ND
Di-iso-butyl phthalate (DIBP)	84-69-5	ND	ND	ND	ND	ND	ND
Bis(2-methoxyethyl) phthalate (DMEP)	117-82-8	ND	ND	ND	ND	ND	ND
Di-iso-pentyl phthalate (DIPP)	605-50-5	ND	ND	ND	ND	ND	ND
Di-n-pentyl phthalate (DnPP/DPENP)	131-18-0	ND	ND	ND	ND	ND	ND
n-Pentyl-iso-pentyl phthalate	776297-69-9	ND	ND	ND	ND	ND	ND
1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters (DHNUP)	68515-42-4	ND	ND	ND	ND	ND	ND
1,2-Benzenedicarboxylic acid,di-C6-8-branched alkyl esters,C7-rich (DIHP)	71888-89-6	ND	ND	ND	ND	ND	ND
1,2-Benzenedicarboxylic acid, dipentylester, branched and linear	84777-06-0	ND	ND	ND	ND	ND	ND
1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear	68515-50-4	ND	ND	ND	ND	ND	ND

Remark：Detection Limit = 100mg/kg
ND = Not Detected

Tested Components：See component list in the last section of this report.

Date Sample Received：Dec.25, 2017
Testing Period：Dec.25, 2017 To Dec.28, 2017

****

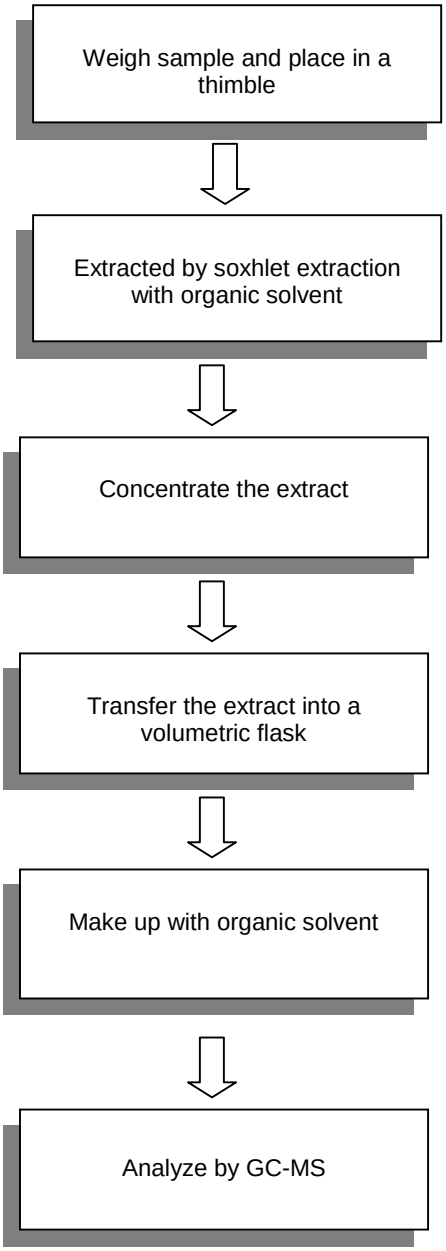
To be continued

Intertek Testing Services Ltd., Shanghai
上海天祥质量技术服务有限公司
Block B, Jinling Business Square, No.801 YiShan Road, Shanghai, China. 200233
上海市宜山路 801 号金陵商务广场 B 座 200233
Tel: +86 21 6120 6060
Fax: +86 21 6127 9708
www.intertek.com
www.intertek.com.cn

Tests Conducted

Measurement flowchart：

Test for phthalate content



****

To be continued

Intertek Testing Services Ltd., Shanghai
上海天祥质量技术服务有限公司
Block B, Jinling Business Square, No.801 YiShan Road, Shanghai, China. 200233
上海市宜山路 801 号金陵商务广场 B 座 200233
Tel: +86 21 6120 6060
Fax: +86 21 6127 9708
www.intertek.com
www.intertek.com.cn

Test Report Number： SHAH00901166

Tests Conducted

9 Formaldehyde Content

By water extraction and followed by High Performance Liquid Chromatographic(HPLC) analysis.

Tested Component	Result(mg/kg)
(1)	ND
(2)	ND
(3)	ND
(4)	ND
(5)	ND
(10)	ND

Remark: ND = Not Detected
Detection Limit = 5.0 mg/kg

Tested Components: See component list in the last section of this report.

Date Sample Received：Dec.25, 2017
Testing Period：Dec.25, 2017 To Dec.29, 2017

10 Asbestos

As per test method NIOSH 9002:1994, Asbestos qualitative test was determined by microscopic examination method.

Tested Component	Result
(1)	Negative
(2)	Negative
(3)	Negative
(4)	Negative
(5)	Negative
(10)	Negative

Analyte：Actinolite, Amosite, Crocidolite, Tremolite, Anthophyllite, Chrysotile

Estimated LOD：< 1% asbestos
The estimated LOD is quoted hereby, because of the detection limit for visual estimation is a function of the quantity of sample analyzed, the nature of matrix interference, sample preparation, and the fiber size and distribution.

Tested Components：See component list in the last section of this report.

****

To be continued

Intertek Testing Services Ltd., Shanghai
上海天祥质量技术服务有限公司
Block B, Jinling Business Square, No.801 YiShan Road, Shanghai, China. 200233
上海市宜山路 801 号金陵商务广场 B 座 200233
Tel: +86 21 6120 6060
Fax: +86 21 6127 9708
www.intertek.com
www.intertek.com.cn

Test Report Number： SHAH00901166

Tests Conducted

Picture 1

Picture 2

Date Sample Received：Dec.25, 2017
Testing Period：Dec.25, 2017 To Dec.29, 2017

****

Components List：

(1) PET plastic tube
(2) Ink
(3) Pressure-sensitive adhesive tape
(4) Separator paper
(5) Electrolyte
(6) Anode foil
(7) Cathode foil
(8) Al case
(9) Lead wire
(10) Rubber

****

End of report

Intertek Testing Services Ltd., Shanghai
上海天祥质量技术服务有限公司
Block B, Jinling Business Square, No.801 YiShan Road, Shanghai, China. 200233
上海市宜山路 801 号金陵商务广场 B 座 200233
Tel: +86 21 6120 6060
Fax: +86 21 6127 9708
www.intertek.com
www.intertek.com.cn