



TEST REPORT

NUMBER: SHAH00254100S101

APPLICANT: EPCOS (ZHUHAI FTZ) CO., LTD.
LIANFENG LU, ZHUHAI FREE
TRAD ZONE, WANZAI, ZHUHAI,
GUANGDONG, CHINA.
ATTN: SUNNY PAN

DATE: MAY 16, 2011

THIS IS TO SUPERSEDE
REPORT NO. SHAH00254100
DATED MAY 06, 2011

SAMPLE DESCRIPTION:

SAMPLE NO.	MATERIAL DESCRIPTION	APPLICATION
1	METALLIZED POLYPROPYLENE FILM	C, F
2	METALLIZED POLYEESTER FILM	A, B, D, E
3	COVER FILM	A, D
4	SPRAYED METAL SnCu3	A, B, C, D, E, F, K, M
5	SPRAYED METAL Al	A, B, C, D, E, M
6	SPRAYED METAL Zn	B, C, E, F, K, L
7	CURED EPOXY (BLUE)	B, C, K
8	CURED POWDER (BLUE)	E, F, L
9	LEAD WIRE Cu	B, C, E, F, K, L
11	LEAD WIRE Fe	A, B, C, D, E, F, M
13	PBT PLASTIC BOX	B, C, J, K
14	PLASTIC TUBE (PET)	D
15	PRINT INK	A, B, C, D, E, F, G, H, I, J, K, L, M

TO BE CONTINUED

PREPARED AND CHECKED BY:
FOR INTERTEK TESTING SERVICES
LTD., SHANGHAI

AUTHORIZED BY:
FOR INTERTEK TESTING SERVICES
LTD., SHANGHAI

MYRA LV
CHEMICAL LAB SENIOR MANAGER

STEPHEN TSANG
GENERAL MANAGER

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16	LEAD WIRE Cu	G, I, K
17	TERMINAL	J, K
18	YELLOW TAPE	G, H, I
19	METAILIZED FILM	G, H, I, J, K, L, M
20	SPRAYED METAL	G, H, I, J, K, L, M
21	CURED EPOXY (YELLOW)	G, H, I, J, K, L
22	WIRE-METAL	H
23	WIRE-PLASTIC	H
24	PET TRANSPARENT TAPE	A
25	PLASTIC TUBE (POLIOLEFINA)	D
26	PP TRANSPARENT TAPE	A

TO BE CONTINUED

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ABOVE SUBSTANCE USED IN BELOW SERIES:

- A: MKT FILM CAPACITOR (UN-COATED): B3256*, B3257*
- B: MKT FILM CAPACITOR (BOXED): B3252*, B3293*
- C: MKP FILM CAPACITOR (BOXED): B3265*, B32656S*, B3267*, B3292*, B8112*, B8113*, B3202*, B3277*, B3291*, B3262*, B3279*
- D: MKT FILM CAPACITOR (MINIBLUE): B3255*
- E: MKT FILM CAPACITOR (DIPPED): B3251*, B3259*
- F: MKP FILM CAPACITOR (DIPPED): B3260*, B3261*, B8119*
- G: MKT AXIAL ROUND: B32231*, B32232*, B32227*, B32237*,
- H: MKP AXIAL CAPACITOR: B32665*
- I: MKP AXIAL SNUBBER: B32669*
- J: MKP BOXED SNUBBER: B32656*
- K: MFP FILM CAPACITOR (BOXED): B32686A*, B32686S*
- L: MFP FILM CAPACITOR (DIPPED): B3263*
- M: MKN FILM CAPACITOR (UN-COATED): B32861*

TESTS CONDUCTED:

AS REQUESTED BY THE APPLICANT, FOR DETAILS REFER TO ATTACHED PAGE(S)

TO BE CONTINUED

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FOR INTERTEK TESTING SERVICES
LTD., SHANGHAI

AUTHORIZED BY:
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CHEMICAL LAB SENIOR MANAGER

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GENERAL MANAGER



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TESTS CONDUCTED

(A) TEST RESULT SUMMARY:

TESTING ITEM	RESULT			
	(4)	(5)	(6)	(9)
CADMIUM (Cd) CONTENT (mg/kg)	ND	ND	ND	ND
LEAD (Pb) CONTENT (mg/kg)	241	70	ND	76
MERCURY (Hg) CONTENT (mg/kg)	ND	ND	ND	ND
CHROMIUM (VI) (Cr ⁶⁺) RESULT (BY BOILING WATER EXTRACTION ON METAL) (mg/kg WITH 50cm ²)	ND	ND	ND	ND

TESTING ITEM	RESULT				
	(11)	(16)	(17)	(20)	(22)
CADMIUM (Cd) CONTENT (mg/kg)	ND	ND	ND	ND	ND
LEAD (Pb) CONTENT (mg/kg)	ND	28	92	30	22
MERCURY (Hg) CONTENT (mg/kg)	ND	ND	ND	ND	ND
CHROMIUM (VI) (Cr ⁶⁺) RESULT (BY BOILING WATER EXTRACTION ON METAL) (mg/kg WITH 50cm ²)	ND	ND	ND	ND	ND

TO BE CONTINUED



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TESTS CONDUCTED

TESTING ITEM	RESULT		
	(1)	(2)	(3)
CADMIUM (Cd) CONTENT (mg/kg)	ND	ND	ND
LEAD (Pb) CONTENT (mg/kg)	ND	ND	ND
MERCURY (Hg) CONTENT (mg/kg)	ND	ND	ND
CHROMIUM (VI) (Cr ⁶⁺) CONTENT (mg/kg) (FOR NON-METAL)	ND	ND	ND
POLYBROMINATED BIPHENYLS (PBBs) (mg/kg)			
MONOBROMO BIPHENYLS (MonoBB)	ND	ND	ND
DIBROMO BIPHENYLS (DiBB)	ND	ND	ND
TRIBROMO BIPHENYLS (TriBB)	ND	ND	ND
TETRABROMO BIPHENYLS (TetraBB)	ND	ND	ND
PENTABROMO BIPHENYLS (PentaBB)	ND	ND	ND
HEXABROMO BIPHENYLS (HexaBB)	ND	ND	ND
HEPTABROMO BIPHENYLS (HeptaBB)	ND	ND	ND
OCTABROMO BIPHENYLS (OctaBB)	ND	ND	ND
NONABROMO BIPHENYLS (NonaBB)	ND	ND	ND
DECABROMO BIPHENYL (DecaBB)	ND	ND	ND
POLYBROMINATED DIPHENYL ETHERS (PBDEs) (mg/kg)			
MONOBROMO DIPHENYL ETHERS (MonoBDE)	ND	ND	ND
DIBROMO DIPHENYL ETHERS (DiBDE)	ND	ND	ND
TRIBROMO DIPHENYL ETHERS (TriBDE)	ND	ND	ND
TETRABROMO DIPHENYL ETHERS (TetraBDE)	ND	ND	ND
PENTABROMO DIPHENYL ETHERS (PentaBDE)	ND	ND	ND
HEXABROMO DIPHENYL ETHERS (HexaBDE)	ND	ND	ND
HEPTABROMO DIPHENYL ETHERS (HeptaBDE)	ND	ND	ND
OCTABROMO DIPHENYL ETHERS (OctaBDE)	ND	ND	ND
NONABROMO DIPHENYL ETHERS (NonaBDE)	ND	ND	ND
DECABROMO DIPHENYL ETHER (DecaBDE)	ND	ND	ND

TO BE CONTINUED



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TESTS CONDUCTED

TESTING ITEM	RESULT		
	(7)	(8)	(13)
CADMIUM (Cd) CONTENT (mg/kg)	ND	ND	ND
LEAD (Pb) CONTENT (mg/kg)	ND	ND	ND
MERCURY (Hg) CONTENT (mg/kg)	ND	ND	ND
CHROMIUM (VI) (Cr ⁶⁺) CONTENT (mg/kg) (FOR NON-METAL)	ND	ND	ND
POLYBROMINATED BIPHENYLS (PBBs) (mg/kg)			
MONOBROMO BIPHENYLS (MonoBB)	ND	ND	ND
DIBROMO BIPHENYLS (DiBB)	ND	ND	ND
TRIBROMO BIPHENYLS (TriBB)	ND	ND	ND
TETRABROMO BIPHENYLS (TetraBB)	ND	ND	ND
PENTABROMO BIPHENYLS (PentaBB)	ND	ND	ND
HEXABROMO BIPHENYLS (HexaBB)	ND	ND	ND
HEPTABROMO BIPHENYLS (HeptaBB)	ND	ND	ND
OCTABROMO BIPHENYLS (OctaBB)	ND	ND	ND
NONABROMO BIPHENYLS (NonaBB)	ND	ND	ND
DECABROMO BIPHENYL (DecaBB)	ND	ND	ND
POLYBROMINATED DIPHENYL ETHERS (PBDEs) (mg/kg)			
MONOBROMO DIPHENYL ETHERS (MonoBDE)	ND	ND	ND
DIBROMO DIPHENYL ETHERS (DiBDE)	ND	ND	ND
TRIBROMO DIPHENYL ETHERS (TriBDE)	ND	ND	ND
TETRABROMO DIPHENYL ETHERS (TetraBDE)	ND	ND	ND
PENTABROMO DIPHENYL ETHERS (PentaBDE)	ND	ND	ND
HEXABROMO DIPHENYL ETHERS (HexaBDE)	ND	ND	ND
HEPTABROMO DIPHENYL ETHERS (HeptaBDE)	ND	ND	ND
OCTABROMO DIPHENYL ETHERS (OctaBDE)	ND	ND	ND
NONABROMO DIPHENYL ETHERS (NonaBDE)	ND	ND	ND
DECABROMO DIPHENYL ETHER (DecaBDE)	ND	ND	ND

TO BE CONTINUED



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TESTS CONDUCTED

TESTING ITEM	RESULT		
	(14)	(15)	(18)
CADMIUM (Cd) CONTENT (mg/kg)	ND	ND	ND
LEAD (Pb) CONTENT (mg/kg)	ND	ND	ND
MERCURY (Hg) CONTENT (mg/kg)	ND	ND	ND
CHROMIUM (VI) (Cr ⁶⁺) CONTENT (mg/kg) (FOR NON-METAL)	ND	ND	ND
POLYBROMINATED BIPHENYLS (PBBs) (mg/kg)			
MONOBROMO BIPHENYLS (MonoBB)	ND	ND	ND
DIBROMO BIPHENYLS (DiBB)	ND	ND	ND
TRIBROMO BIPHENYLS (TriBB)	ND	ND	ND
TETRABROMO BIPHENYLS (TetraBB)	ND	ND	ND
PENTABROMO BIPHENYLS (PentaBB)	ND	ND	ND
HEXABROMO BIPHENYLS (HexaBB)	ND	ND	ND
HEPTABROMO BIPHENYLS (HeptaBB)	ND	ND	ND
OCTABROMO BIPHENYLS (OctaBB)	ND	ND	ND
NONABROMO BIPHENYLS (NonaBB)	ND	ND	ND
DECABROMO BIPHENYL (DecaBB)	ND	ND	ND
POLYBROMINATED DIPHENYL ETHERS (PBDEs) (mg/kg)			
MONOBROMO DIPHENYL ETHERS (MonoBDE)	ND	ND	ND
DIBROMO DIPHENYL ETHERS (DiBDE)	ND	ND	ND
TRIBROMO DIPHENYL ETHERS (TriBDE)	ND	ND	ND
TETRABROMO DIPHENYL ETHERS (TetraBDE)	ND	ND	ND
PENTABROMO DIPHENYL ETHERS (PentaBDE)	ND	ND	ND
HEXABROMO DIPHENYL ETHERS (HexaBDE)	ND	ND	ND
HEPTABROMO DIPHENYL ETHERS (HeptaBDE)	ND	ND	ND
OCTABROMO DIPHENYL ETHERS (OctaBDE)	ND	ND	ND
NONABROMO DIPHENYL ETHERS (NonaBDE)	ND	ND	ND
DECABROMO DIPHENYL ETHER (DecaBDE)	ND	ND	ND

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TESTS CONDUCTED

TESTING ITEM	RESULT		
	(19)	(21)	(23)
CADMIUM (Cd) CONTENT (mg/kg)	ND	ND	ND
LEAD (Pb) CONTENT (mg/kg)	ND	ND	ND
MERCURY (Hg) CONTENT (mg/kg)	ND	ND	ND
CHROMIUM (VI) (Cr ⁶⁺) CONTENT (mg/kg) (FOR NON-METAL)	ND	ND	ND
POLYBROMINATED BIPHENYLS (PBBs) (mg/kg)			
MONOBROMO BIPHENYLS (MonoBB)	ND	ND	ND
DIBROMO BIPHENYLS (DiBB)	ND	ND	ND
TRIBROMO BIPHENYLS (TriBB)	ND	ND	ND
TETRABROMO BIPHENYLS (TetraBB)	ND	ND	ND
PENTABROMO BIPHENYLS (PentaBB)	ND	ND	ND
HEXABROMO BIPHENYLS (HexaBB)	ND	ND	ND
HEPTABROMO BIPHENYLS (HeptaBB)	ND	ND	ND
OCTABROMO BIPHENYLS (OctaBB)	ND	ND	ND
NONABROMO BIPHENYLS (NonaBB)	ND	ND	ND
DECABROMO BIPHENYL (DecaBB)	ND	ND	ND
POLYBROMINATED DIPHENYL ETHERS (PBDEs) (mg/kg)			
MONOBROMO DIPHENYL ETHERS (MonoBDE)	ND	ND	ND
DIBROMO DIPHENYL ETHERS (DiBDE)	ND	ND	ND
TRIBROMO DIPHENYL ETHERS (TriBDE)	ND	ND	ND
TETRABROMO DIPHENYL ETHERS (TetraBDE)	ND	ND	ND
PENTABROMO DIPHENYL ETHERS (PentaBDE)	ND	ND	ND
HEXABROMO DIPHENYL ETHERS (HexaBDE)	ND	ND	ND
HEPTABROMO DIPHENYL ETHERS (HeptaBDE)	ND	ND	ND
OCTABROMO DIPHENYL ETHERS (OctaBDE)	ND	ND	ND
NONABROMO DIPHENYL ETHERS (NonaBDE)	ND	ND	ND
DECABROMO DIPHENYL ETHER (DecaBDE)	ND	ND	ND

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TESTS CONDUCTED

TESTING ITEM	RESULT		
	(24)	(25)	(26)
CADMIUM (Cd) CONTENT (mg/kg)	ND	ND	ND
LEAD (Pb) CONTENT (mg/kg)	ND	ND	ND
MERCURY (Hg) CONTENT (mg/kg)	ND	ND	ND
CHROMIUM (VI) (Cr ⁶⁺) CONTENT (mg/kg) (FOR NON-METAL)	ND	ND	ND
POLYBROMINATED BIPHENYLS (PBBs) (mg/kg)			
MONOBROMO BIPHENYLS (MonoBB)	ND	ND	ND
DIBROMO BIPHENYLS (DiBB)	ND	ND	ND
TRIBROMO BIPHENYLS (TriBB)	ND	ND	ND
TETRABROMO BIPHENYLS (TetraBB)	ND	ND	ND
PENTABROMO BIPHENYLS (PentaBB)	ND	ND	ND
HEXABROMO BIPHENYLS (HexaBB)	ND	ND	ND
HEPTABROMO BIPHENYLS (HeptaBB)	ND	ND	ND
OCTABROMO BIPHENYLS (OctaBB)	ND	ND	ND
NONABROMO BIPHENYLS (NonaBB)	ND	ND	ND
DECABROMO BIPHENYL (DecaBB)	ND	ND	ND
POLYBROMINATED DIPHENYL ETHERS (PBDEs) (mg/kg)			
MONOBROMO DIPHENYL ETHERS (MonoBDE)	ND	ND	ND
DIBROMO DIPHENYL ETHERS (DiBDE)	ND	ND	ND
TRIBROMO DIPHENYL ETHERS (TriBDE)	ND	ND	ND
TETRABROMO DIPHENYL ETHERS (TetraBDE)	ND	ND	ND
PENTABROMO DIPHENYL ETHERS (PentaBDE)	ND	ND	ND
HEXABROMO DIPHENYL ETHERS (HexaBDE)	ND	ND	ND
HEPTABROMO DIPHENYL ETHERS (HeptaBDE)	ND	ND	ND
OCTABROMO DIPHENYL ETHERS (OctaBDE)	ND	ND	ND
NONABROMO DIPHENYL ETHERS (NonaBDE)	ND	ND	ND
DECABROMO DIPHENYL ETHER (DecaBDE)	ND	ND	ND

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REMARK:

mg/kg = MILLIGRAM PER KILOGRAM = ppm

mg/kg WITH 50cm² = MILLIGRAM PER KILOGRAM WITH 50 SQUARE CENTIMETER

ND = NOT DETECTED

(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 2002/95/EC AND AMENDMENT
2005/618/EC FOR HOMOGENEOUS MATERIAL.

TO BE CONTINUED



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TESTS CONDUCTED

(C) TEST METHOD:

<u>TESTING ITEM</u>	<u>TESTING METHOD</u>	<u>REPORTING LIMIT</u>
CADMIUM (Cd) CONTENT	WITH REFERENCE TO IEC 62321 EDITION 1.0: 2008, BY ACID DIGESTION AND DETERMINED BY ICP-OES	2 mg/kg
LEAD (Pb) CONTENT	WITH REFERENCE TO IEC 62321 EDITION 1.0: 2008, BY ACID DIGESTION AND DETERMINED BY ICP-OES	2 mg/kg
MERCURY (Hg) CONTENT	WITH REFERENCE TO IEC 62321 EDITION 1.0: 2008, BY ACID DIGESTION AND DETERMINED BY ICP-OES	2 mg/kg
CHROMIUM (VI) (Cr ⁶⁺) CONTENT (FOR NON-METAL)	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 (FOR METAL)	WITH REFERENCE TO IEC 62321 EDITION 1.0: 2008, BY BOILING WATER EXTRACTION AND DETERMINED BY UV-VIS SPECTROPHOTOMETER	0.02mg/kg WITH 50cm ² (IN TESTING SOLUTION)
POLYBROMINATED BIPHENYLS (PBBs) & POLYBROMINATED DIPHENYL ETHERS (PBDEs)	WITH REFERENCE TO IEC IEC 62321 EDITION 1.0: 2008, BY SOLVENT EXTRACTION AND DETERMINED BY GC/MS AND FURTHER HPLC CONFIRMATION WHEN NECESSARY.	5 mg/kg

DATE SAMPLE RECEIVED: APR.28, 2011

TESTING PERIOD: APR.28, 2011 TO MAY 04, 2011

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TEST REPORT

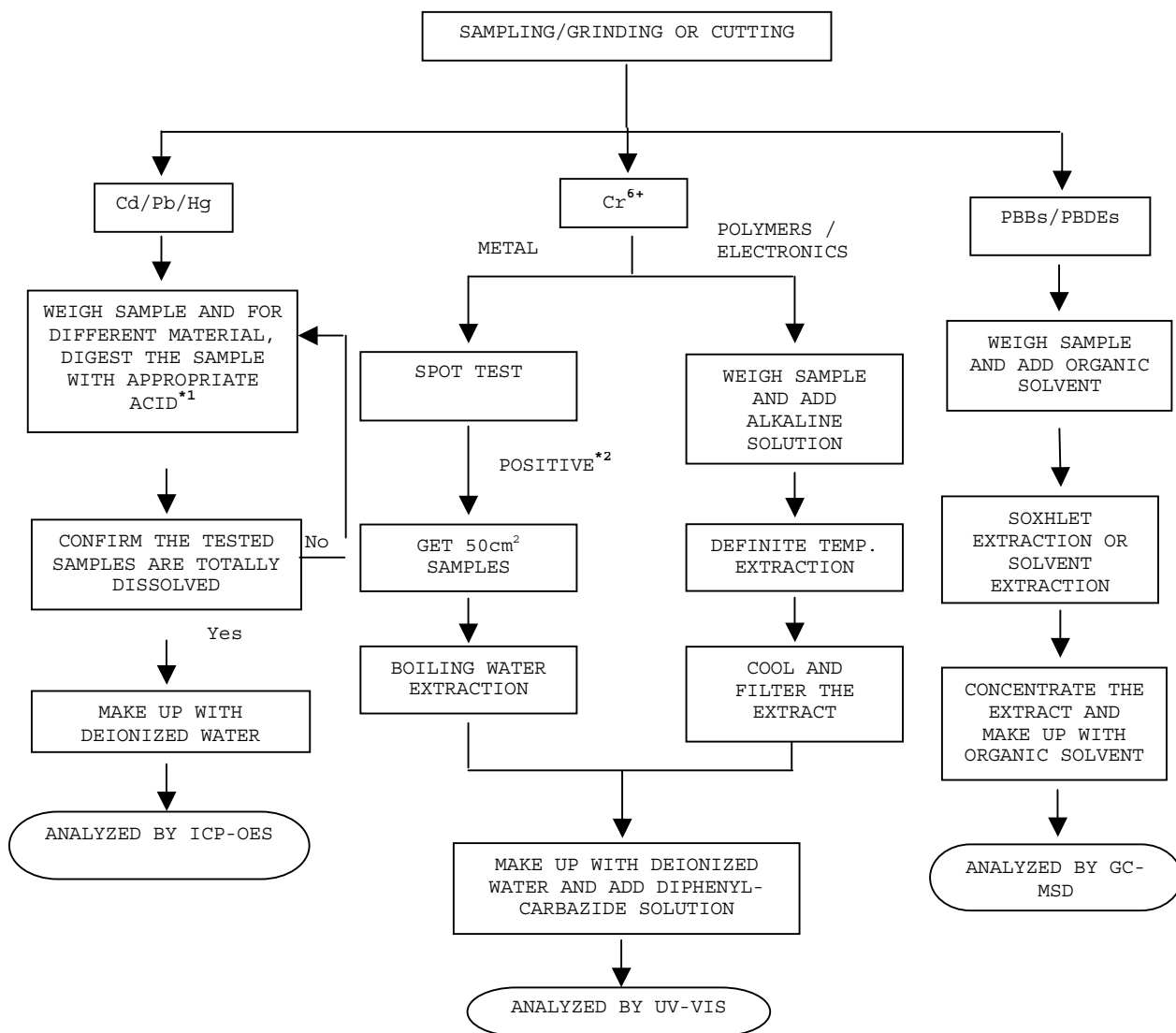
NUMBER: SHAH00254100S101

TESTS CONDUCTED

(D) MEASUREMENT FLOWCHART:

TEST FOR Cd/Pb/Hg/Cr (VI)/PBBs/PBDEs CONTENTS

REFERENCE STANDARD: IEC 62321 EDITION 1.0: 2008



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TESTS CONDUCTED

REMARKS:

*1: LIST OF APPROPRIATE ACID:

<u>MATERIAL</u>	<u>ACID ADDED FOR DIGESTION</u>
POLYMERS	HNO ₃ , HCl, HF, H ₂ O ₂ , H ₃ BO ₃
METALS	HNO ₃ , HCl, HF
ELECTRONICS	HNO ₃ , HCl, H ₂ O ₂ , HBF ₄

*2: IF THE RESULT OF SPOT TEST IS POSITIVE, CHROMIUM VI WOULD BE DETERMINED AS DETECTED.

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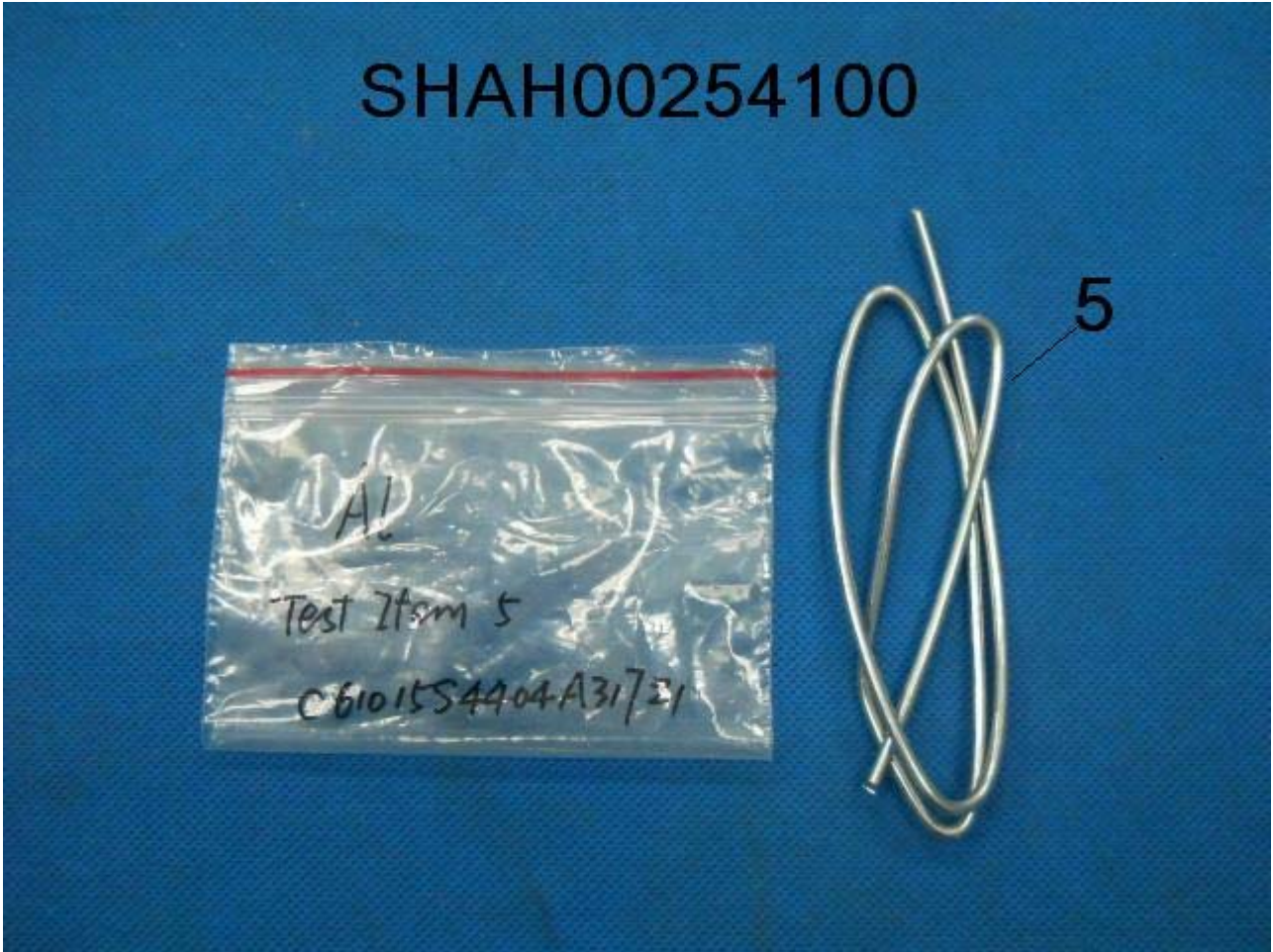


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END OF REPORT

To: Epcos (Zhuhai Ftz) Co., Ltd.

Attention: Sunny Pan

Date: May 16, 2011

Re: Report Revision Notification

Intertek Testing Services Report Number SHAH00254100 Dated May 06, 2011.

Please be informed that all the content recorded in the above captioned report will be void. This captioned report is now superseded by a revised Intertek Testing Services Report Number SHAH00254100S101.

Please return the original captioned report to us immediately.

Thank you for your attention.

PREPARED AND CHECKED BY:
FOR INTERTEK TESTING SERVICES
LTD., SHANGHAI



MYRA LV
CHEMICAL LAB SENIOR MANAGER

AUTHORIZED BY:
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