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HSUAN MAO TECHNOLOGY CO., LTD. 8F. NO:111, HSING DE ROAD, SAN CHUNG CITY, TAIPEI HSIEN, TAIWAN, R. O. C.



The following test reports/information were submitted and identified by the client as:

Sample Description HOUSING, WAFER, TERMINAL

Style/Item No. H1025, H1026, H1252, H1253, H1257, H1500, H2003, H2006,

> H2008, H2410, H2430, H2440, H2481, H2510, H2560, H5080, H7000, H7500, T1025, T1026, T1253, T1500, T2008, W1600, W2103, W2109, W2400, W2491, W2600, W2660, W4508, W6750,

W7600

Testing Period 2008/02/19 TO 2008/02/19

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

> *This report is combined with 11 copies of test reports which hereby certified by SGS through the verification of each above certification provided by client.*

Chenyu Kung / Operation Manager Signed for and on behalf of SGS TAIWAN LTD.

Chemical Laboratory - Taipei



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HSUAN MAO TECHNOLOGY CO., LTD.

8F, NO:111, HSING DE ROAD, SAN CHUNG CITY, TAIPEI HSIEN,

TAIWAN, R. O. C.

Test Result(s)

PART NAME NO.1 WHITE PLASTIC (CE/2008/23092 NO.1)

PART NAME NO.2 SILVER COLORED METAL (INCLUDING THE PLATING LAYER)

(CE/2008/23092 NO.2)

SILVER COLORED METAL PIN (INCLUDING THE PLATING LAYER) PART NAME NO.3

(CE/2008/23092 NO.3)

LT. YELLOW PLASTIC (CE/2008/23104 NO.1) PART NAME NO.4

PART NAME NO.5 SILVER COLORED METAL (INCLUDING THE PLATING LAYER)

(CE/2008/23104 NO.2)

SILVER COLORED METAL PIN (INCLUDING THE PLATING LAYER NO.3) PART NAME NO.6

PART NAME NO.7 BEIGE PLASTIC (CE/2008/23106 NO.1)

SILVER COLORED METAL (INCLUDING THE PLATING LAYER) PART NAME NO.8

(CE/2008/23106 NO.2)

PART NAME NO.9 SILVER COLORED META PIN (INCLUDING THE PLATING LAYER)

(CE/2008/23106 NO.3)

WHITE PLASTIC (CE/2008/23115) PART NAME NO.10

PART NAME NO.11 WHITE PLASTIC (CE/2008/23116 NO.1)

SILVER COLORED METAL PIN (INCLUDING THE PLATING LAYER) PART NAME NO.12

(CE/2008/23116 NO.2)

PART NAME NO.13 COFFER PLASTIC (CE/2008/23124 NO.1)

SILVER COLORED METAL PIN (INCLUDING THE PLATING LAYER) PART NAME NO.14

(CE/2008/23124 NO.2)

PART NAME NO.15 WHITE PLASTIC (CE/2008/23126 NO.1)

PART NAME NO.16 SILVER COLORED METAL PIN (INCLUDING THE PLATING LAYER)

(CE/2008/23126 NO.2)

TRANSLUCENT-WHITE PLASTIC (CE/2008/23127 NO.1) PART NAME NO.17

SILVER COLORED METAL PIN (INCLUDING THE PLATING LAYER) PART NAME NO.18

(CE/2008/23127 NO.2)

SILVER COLORED METAL TERMINAL (INCLUDING THE PLATING LAYER) PART NAME NO.19

(CE/2008/23134)

SILVER COLORED/BRASS METAL TERMINAL (INCLUDING THE PLATING LAYER) PART NAME NO.20

(CE/2008/23144)

MIXED BLACK, DK. BLUE, DK. RED AND DK. YELLOWISH BROWN POWDER PART NAME NO.21

(CE/2008/23147)

Test Item(s):	Unit	Method	MDL	Result						
rest item(s).	Offic	Wethod	MIDE	NO.1	NO.2	NO.3	NO.4	NO.5		
Hexavalent Chromium Cr(VI) by Spot test / boiling water extraction	**	With reference to IEC 62321/2nd CDV (111/95/CDV). Determination of Hexavalent Chromium for metallic samples by Spot test / Colorimetric Method. (See Note 5)	0.02mg/kg with 50 cm ² surface area		Negative	Negative		Negative		
Hexavalent Chromium Cr(VI) by alkaline extraction	mg/kg	With reference to IEC 62321/2nd CDV (111/95/CDV). Determination of Hexavalent Chromium by UV/Vis Spectrometry.	2	n.d.			n.d.			



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Toot Hom/o).	Unit	Method	MDL	Result					
Test Item(s):	Unit	wethod	MDL	NO.1	NO.2	NO.3	NO.4	NO.5	
Cadmium (Cd)	mg/kg	With reference to IEC 62321/2nd CDV (111/95/CDV). Determination of Cadmium by ICP-AES.	2	n.d.	n.d.	n.d.	n.d.	n.d.	
Mercury (Hg)	mg/kg	With reference to IEC 62321/2nd CDV (111/95/CDV). Determination of Lead by ICP-AES.	2	n.d.	n.d.	n.d.	n.d.	n.d.	
Lead (Pb)	mg/kg	With reference to IEC 62321/2nd CDV (111/95/CDV). Determination of Mercury by ICP-AES.	2	9	7	15	n.d.	74	

Toot Itom(s).	Unit	Method	MDL			Result		
Test Item(s):	o iii	Wethod	MIDL	NO.1	NO.2	NO.3	NO.4	NO.5
Monobromobiphenyl	mg/kg		5	n.d.			n.d.	
Dibromobiphenyl	mg/kg		5	n.d.		1	n.d.	
Tribromobiphenyl	mg/kg	With reference to IEC 62321/2nd	5	n.d.		1	n.d.	
Tetrabromobiphenyl	mg/kg		5	n.d.		1	n.d.	
Pentabromobiphenyl	mg/kg	CDV (111/95/CDV).	5	n.d.		1	n.d.	
Hexabromobiphenyl	mg/kg	Determination of PBB and PBDE	5	n.d.		1	n.d.	
Heptabromobiphenyl	mg/kg	by GC/MS.	5	n.d.		1	n.d.	
Octabromobiphenyl	mg/kg	by GC/MS.	5	n.d.		1	n.d.	
Nonabromobiphenyl	mg/kg		5	n.d.		1	n.d.	
Decabromobiphenyl	mg/kg		5	n.d.		1	n.d.	
Sum of PBBs	mg/kg		•	n.d.		1	n.d.	
Monobromobiphenyl ether	mg/kg		5	n.d.		1	n.d.	
Dibromobiphenyl ether	mg/kg		5	n.d.			n.d.	
Tribromobiphenyl ether	mg/kg		5	n.d.		1	n.d.	
Tetrabromobiphenyl ether	mg/kg		5	n.d.			n.d.	
Pentabromobiphenyl ether	mg/kg	With reference to IEC 62321/2nd	5	n.d.			n.d.	
Hexabromobiphenyl ether		CDV (111/95/CDV).	5	n.d.			n.d.	
Heptabromobiphenyl ether		Determination of PBB and PBDE	5	n.d.			n.d.	
Octabromobiphenyl ether	mg/kg	by GC/MS.	5	n.d.			n.d.	
Nonabromobiphenyl ether	mg/kg	by GC/IVI3.	5	n.d.			n.d.	
Decabromobiphenyl ether	mg/kg		5	n.d.			n.d.	
Sum of PBDEs (Mono to Deca)	mg/kg		ı	n.d.			n.d.	
Sum of PBDEs (Mono to Nona)	mg/kg		-	n.d.			n.d.	
(Note 4)								

Test Item(s):	Unit Method		MDL	Result					
rest item(s).	Offic Metriod	Metriod	INIDE	NO.6	NO.7	NO.8	NO.9	NO.10	
Hexavalent Chromium Cr(VI)	**	With reference to IEC 62321/2nd	0.02mg/kg	Negative		Negative	Negative		
by Spot test / boiling water		CDV (111/95/CDV). Determination of	with 50						
extraction		Hexavalent Chromium for metallic	cm ²						
		samples by Spot test / Colorimetric	surface						
		Method. (See Note 5)	area						

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Tost Itom(s):	Test Item(s): Unit Method			Result					
rest item(s).	Offic	IVIETIO	MDL	NO.6	NO.7	NO.8	NO.9	NO.10	
Hexavalent Chromium Cr(VI) by alkaline extraction	mg/kg	With reference to IEC 62321/2nd CDV (111/95/CDV). Determination of Hexavalent Chromium by UV/Vis Spectrometry.	2		n.d.			n.d.	
Cadmium (Cd)	mg/kg	With reference to IEC 62321/2nd CDV (111/95/CDV). Determination of Cadmium by ICP-AES.	2	n.d.	n.d.	n.d.	n.d.	n.d.	
Mercury (Hg)	mg/kg	With reference to IEC 62321/2nd CDV (111/95/CDV). Determination of Lead by ICP-AES.	2	n.d.	n.d.	n.d.	n.d.	n.d.	
Lead (Pb)	mg/kg	With reference to IEC 62321/2nd CDV (111/95/CDV). Determination of Mercury by ICP-AES.	2	15	n.d.	26	18	12	

Table Hamadaha	1114	Madhad	MDI			Result		
Test Item(s):	Unit	Method	MDL	NO.6	NO.7	NO.8	NO.9	NO.10
Monobromobiphenyl	mg/kg		5		n.d.			n.d.
Dibromobiphenyl	mg/kg		5		n.d.			n.d.
Tribromobiphenyl	mg/kg		5		n.d.			n.d.
Tetrabromobiphenyl	mg/kg	With reference to IEC 62321/2nd	5		n.d.			n.d.
Pentabromobiphenyl	mg/kg	CDV (111/95/CDV).	5		n.d.			n.d.
Hexabromobiphenyl	mg/kg	Determination of PBB and PBDE	5		n.d.			n.d.
Heptabromobiphenyl	mg/kg	by GC/MS.	5		n.d.			n.d.
Octabromobiphenyl	mg/kg	by GC/MS.	5		n.d.			n.d.
Nonabromobiphenyl	mg/kg		5		n.d.			n.d.
Decabromobiphenyl	mg/kg		5		n.d.			n.d.
Sum of PBBs	mg/kg	Ī	-		n.d.			n.d.
Monobromobiphenyl ether	mg/kg		5		n.d.			n.d.
Dibromobiphenyl ether	mg/kg		5		n.d.			n.d.
Tribromobiphenyl ether	mg/kg		5		n.d.			n.d.
Tetrabromobiphenyl ether	mg/kg		5		n.d.			n.d.
Pentabromobiphenyl ether	mg/kg	With reference to IEC 62321/2nd	5		n.d.			n.d.
Hexabromobiphenyl ether	mg/kg	CDV (111/95/CDV).	5		n.d.			n.d.
Heptabromobiphenyl ether	mg/kg	Determination of PBB and PBDE	5		n.d.			n.d.
Octabromobiphenyl ether	mg/kg	by GC/MS.	5		n.d.			n.d.
Nonabromobiphenyl ether	mg/kg		5		n.d.			n.d.
Decabromobiphenyl ether	mg/kg		5		n.d.			n.d.
Sum of PBDEs (Mono to Deca)	mg/kg		-		n.d.			n.d.
Sum of PBDEs (Mono to Nona)	mg/kg		-		n.d.			n.d.
(Note 4)								



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HSUAN MAO TECHNOLOGY CO., LTD. 8F, NO:111, HSING DE ROAD, SAN CHUNG CITY, TAIPEI HSIEN, TAIWAN, R. O. C.



Result

Test Item(s):	Unit	Method	MDL			Result				
rest item(s).	Oilit	Wethou	MIDE	NO.11	NO.12	NO.13	NO.14	NO.15		
Hexavalent Chromium Cr(VI)	**	With reference to IEC 62321/2nd	0.02mg/kg		Negative		Negative			
by Spot test / boiling water		CDV (111/95/CDV). Determination of	with 50							
extraction		Hexavalent Chromium for metallic	cm ²							
		samples by Spot test / Colorimetric	surface							
		Method. (See Note 5)	area							
Hexavalent Chromium Cr(VI)	mg/kg	With reference to IEC 62321/2nd	2	n.d.		n.d.		n.d.		
by alkaline extraction		CDV (111/95/CDV). Determination of								
		Hexavalent Chromium by UV/Vis								
		Spectrometry.								
Cadmium (Cd)	mg/kg	With reference to IEC 62321/2nd	2	n.d.	n.d.	n.d.	n.d.	n.d.		
		CDV (111/95/CDV). Determination of								
		Cadmium by ICP-AES.								
Mercury (Hg)	mg/kg	With reference to IEC 62321/2nd	2	n.d.	n.d.	n.d.	n.d.	n.d.		
		CDV (111/95/CDV). Determination of								
		Lead by ICP-AES.								
Lead (Pb)	mg/kg	With reference to IEC 62321/2nd	2	n.d.	6	n.d.	7	27		
		CDV (111/95/CDV). Determination of								
		Mercury by ICP-AES.								
	l	I		Resi			ult			
Test Item(s):	Unit	Method	MDL	NO.11	NO.12	NO.13	NO.14	NO.15		
Monobromobiphenyl	mg/kg		5	n.d.		n.d.		n.d.		
Dibromobiphenyl	mg/kg		5	n.d.		n.d.		n.d.		
Tribromobiphenyl	mg/kg		5	n.d.		n.d.		n.d.		
Tetrabromobiphenyl	mg/kg	With reference to IEC 62321/2nd	5	n.d.		n.d.		n.d.		
Pentabromobiphenyl	mg/kg	CDV (111/95/CDV).	5	n.d.		n.d.		n.d.		
Hexabromobiphenyl	mg/kg	Determination of PBB and PBDE	5	n.d.		n.d.		n.d.		
Heptabromobiphenyl	mg/kg		5	n.d.		n.d.		n.d.		
Octabromobiphenyl	mg/kg	by GC/MS.	5	n.d.		n.d.		n.d.		
Nonabromobiphenyl	mg/kg		5	n.d.		n.d.		n.d.		
Decabromobiphenyl	mg/kg		5	n.d.		n.d.		n.d.		
Sum of PBBs	mg/kg		-	n.d.		n.d.		n.d.		
Monobromobiphenyl ether	mg/kg		5	n.d.		n.d.		n.d.		
Dibromobiphenyl ether	mg/kg		5	n.d.		n.d.		n.d.		
Tribromobiphenyl ether	mg/kg		5	n.d.		n.d.		n.d.		
Tetrabromobiphenyl ether	mg/kg	ļ	5	n.d.		n.d.		n.d.		
Pentabromobiphenyl ether	mg/kg	With reference to IEC 62321/2nd	5	n.d.		n.d.		n.d.		
Hexabromobiphenyl ether	mg/kg	CDV (111/95/CDV).	5	n.d.		n.d.		n.d.		
Heptabromobiphenyl ether	mg/kg	Determination of PBB and PBDE	5	n.d.		n.d.		n.d.		
Octabromobiphenyl ether	mg/kg	by GC/MS.	5	n.d.		n.d.		n.d.		
Nonabromobiphenyl ether	mg/kg		5	n.d.		n.d.		n.d.		
Decabromobiphenyl ether	mg/kg	1	5	n.d.		n.d.		n.d.		
Sum of PBDEs (Mono to Deca)	mg/kg	1	-	n.d.		n.d.		n.d.		
	mg/kg		-	n.d.		n.d.		n.d.		
(Note 4)										



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Test Item(s):	Unit	nit Method				Result		
rest item(s).	Offic	Wethod	MDL	NO.16	NO.17	NO.18	NO.19	NO.20
Hexavalent Chromium Cr(VI) by Spot test / boiling water extraction	**	With reference to IEC 62321/2nd CDV (111/95/CDV). Determination of Hexavalent Chromium for metallic samples by Spot test / Colorimetric Method. (See Note 5)	0.02mg/kg with 50 cm ² surface area	Negative		Negative	Negative	Negative
Hexavalent Chromium Cr(VI) by alkaline extraction	mg/kg	With reference to IEC 62321/2nd CDV (111/95/CDV). Determination of Hexavalent Chromium by UV/Vis Spectrometry.	2		n.d.			
Cadmium (Cd)	mg/kg	With reference to IEC 62321/2nd CDV (111/95/CDV). Determination of Cadmium by ICP-AES.	2	n.d.	n.d.	n.d.	n.d.	n.d.
Mercury (Hg)	mg/kg	With reference to IEC 62321/2nd CDV (111/95/CDV). Determination of Lead by ICP-AES.	2	n.d.	n.d.	n.d.	n.d.	n.d.
Lead (Pb)	mg/kg	With reference to IEC 62321/2nd CDV (111/95/CDV). Determination of Mercury by ICP-AES.	2	29	n.d.	n.d.	17	53

Tabl Ham/a)	11	Mathad	MDI			Result		
Test Item(s):	Unit	Method	MDL	NO.16	NO.17	NO.18	NO.19	NO.20
Monobromobiphenyl	mg/kg		5		n.d.			
Dibromobiphenyl	mg/kg		5		n.d.			
Tribromobiphenyl	mg/kg		5		n.d.			
Tetrabromobiphenyl	mg/kg	With reference to IEC 62321/2nd	5		n.d.			
Pentabromobiphenyl		CDV (111/95/CDV).	5		n.d.			
Hexabromobiphenyl	mg/kg	Determination of PBB and PBDE	5		n.d.			
Heptabromobiphenyl	mg/kg	by GC/MS.	5		n.d.			
Octabromobiphenyl	mg/kg		5		n.d.			
Nonabromobiphenyl	mg/kg		5		n.d.			
Decabromobiphenyl	mg/kg		5		n.d.			
Sum of PBBs	mg/kg		-		n.d.			
Monobromobiphenyl ether	mg/kg		5		n.d.			
Dibromobiphenyl ether	mg/kg		5		n.d.			
Tribromobiphenyl ether	mg/kg		5		n.d.			
Tetrabromobiphenyl ether	mg/kg		5		n.d.			
Pentabromobiphenyl ether	mg/kg	With reference to IEC 62321/2nd	5		n.d.			
Hexabromobiphenyl ether	/1	CDV (111/95/CDV).	5		n.d.			
Heptabromobiphenyl ether	mg/kg	Determination of PBB and PBDE	5		n.d.			
Octabromobiphenyl ether	mg/kg	by GC/MS.	5		n.d.			
Nonabromobiphenyl ether	mg/kg	by GC/IVIS.	5		n.d.			
Decabromobiphenyl ether	mg/kg		5		n.d.			
Sum of PBDEs (Mono to Deca)	mg/kg		-		n.d.			
Sum of PBDEs (Mono to Nona)	mg/kg		-		n.d.			
(Note 4)								

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Test Item(s):	Unit	Method	MDL	Result
rest item(s).	Oilit	Metriod		NO.21
Monobromobiphenyl	mg/kg		5	n.d.
Dibromobiphenyl	mg/kg		5	n.d.
Tribromobiphenyl	mg/kg	With reference to IEC 62321/2nd CDV (111/95/CDV). Determination of PBB and PBDE by GC/MS.	5	n.d.
Tetrabromobiphenyl	mg/kg		5	n.d.
Pentabromobiphenyl	mg/kg		5	n.d.
Hexabromobiphenyl	mg/kg		5	n.d.
Heptabromobiphenyl	mg/kg		5	n.d.
Octabromobiphenyl	mg/kg		5	n.d.
Nonabromobiphenyl	mg/kg		5	n.d.
Decabromobiphenyl	mg/kg		5	n.d.
Sum of PBBs	mg/kg		-	n.d.
Monobromobiphenyl ether	mg/kg		5	n.d.
Dibromobiphenyl ether	mg/kg		5	n.d.
Tribromobiphenyl ether	mg/kg		5	n.d.
Tetrabromobiphenyl ether	mg/kg		5	n.d.
Pentabromobiphenyl ether	mg/kg		5	n.d.
Hexabromobiphenyl ether	mg/kg	With reference to IEC 62321/2nd	5	n.d.
Heptabromobiphenyl ether	mg/kg	CDV (111/95/CDV). Determination of PBB and PBDE	5	n.d.
Octabromobiphenyl ether	mg/kg	by GC/MS.	5	n.d.
Nonabromobiphenyl ether	mg/kg	by come.	5	n.d.
Decabromobiphenyl ether	mg/kg		5	n.d.
Sum of PBDEs (Mono to Deca)	mg/kg		-	n.d.
Sum of PBDEs (Mono to Nona) (Note 4)	mg/kg		-	n.d.

Test Item(s):	Unit	Method	MDL	Result NO.21
Hexavalent Chromium Cr(VI) by alkaline extraction	mg/kg	With reference to IEC 62321/2nd CDV (111/95/CDV). Determination of Hexavalent Chromium by UV/Vis Spectrometry.	2	n.d.
Cadmium (Cd)	mg/kg	With reference to IEC 62321/2nd CDV (111/95/CDV). Determination of Cadmium by	2	n.d.
Mercury (Hg)	mg/kg	With reference to IEC 62321/2nd CDV (111/95/CDV). Determination of Lead by ICP-	2	n.d.



HSUAN MAO TECHNOLOGY CO., LTD. 8F, NO:111, HSING DE ROAD, SAN CHUNG CITY, TAIPEI HSIEN, TAIWAN, R. O. C.



Test Item(s):	Unit	Method	MDL	Result NO.21
Lead (Pb)		With reference to IEC 62321/2nd CDV (111/95/CDV).	2	n.d.
		Determination of Mercury by ICP-		

Note: 1. mg/kg = ppm

- 2. n.d. = Not Detected
- 3. MDL = Method Detection Limit
- 4. According to 2005/717/EC DecaBDE is exempt.
- 5. Spot-test:

Negative = Absence of Cr(VI) coating / surface layer,

Positive = Presence of Cr(VI) coating / surface layer;

(The tested sample should be further verified by boiling-water-extraction method if the spot test result cannot be confirmed.)

Boiling-water-extraction:

Negative = Absence of Cr(VI) coating / surface layer.

Positive = Presence of Cr(VI) coating / surface layer;

the detected concentration in boiling-water-extraction solution is equal or greater than 0.02 mg/kg with 50 cm² sample surface area.

6. "---" = Not Conducted

- 7. " " = Not Regulated
- 8. ** = Qualitative analysis (No Unit)

** End of Report **