

12 Date: Sept. 02, 2024

Report No.: DH2024080012



中国认可 国际互认 检测 TESTING CNAS L16762

TEST REPORT

Applicant:	Shenzhen Techtion Smart Electronics Co., Ltd
Address:	Room 902, 8th Floor, Unit 1, Building No. 2, Xintianxia Chengyun Factory District, Vanke City Community, Bantian Street, Longgang District, Shenzhen

The following sample(s) and information was/were provided by the client. Dinghua does not assume any responsibility for verifying the accuracy, appropriateness, and/or completeness of the information provided.

Manufacturer:	Shenzhen Techtion Smart Electronics Co., Ltd
Address:	Room 902, 8th Floor, Unit 1, Building No. 2, Xintianxia Chengyun Factory District, Vanke City Community, Bantian Street, Longgang District, Shenzhen
Production plant:	Shenzhen Techtion Smart Electronics Co., Ltd
Address:	Room 902, 8th Floor, Unit 1, Building No. 2, Xintianxia Chengyun Factory District, Vanke City Community, Bantian Street, Longgang District, Shenzhen
Client Contact Number:	1
Sample name:	Industrial Monitor
Sample Condition:	Intact
Trademark:	/
Model /Type:	TS-121MCBJ
Sample Receiving Date:	Aug. 09, 2024
Testing Period:	Aug. 09, 2024 ~ Aug. 16, 2024
Test Method(s):	Please refer to next page(s).
Test Result(s):	Please refer to next page(s).



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Test Requirement		Conclusion
EU RoHS Directive(EU) 2015/863 amen - Lead, Mercury, Cadmium, Hexavalent o (PBB), Polybrominated diphenyl ethers ((DEHP), Butyl benzyl phthalate (BBP), D phthalate (DIBP)	Pass	
Note: The judgment rule complies with th	e simple binary judgment rule	

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Signature of Authorized Representative



WJ Authorized signatory



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1.Tested components

No.	Sample Description	REMARK
1	Black coating	SEE THE PHOTO
2	Metal cover base material	SEE THE PHOTO
3	Silver metal mother pillar	SEE THE PHOTO
4	Metal mother column base material with black coating	SEE THE PHOTO
5	Silver metal shell	SEE THE PHOTO
6	White plastic	SEE THE PHOTO
7	Black plastic shell	SEE THE PHOTO
8	Silver metal socket	SEE THE PHOTO
9	Silver metal cover	SEE THE PHOTO
10	Blue plastic	SEE THE PHOTO
11	Silver metal screw	SEE THE PHOTO
12	White plastic	SEE THE PHOTO
13	Silver metal nut	SEE THE PHOTO
14	Silver metal pin	SEE THE PHOTO
15	Silver metal shell	SEE THE PHOTO
16	Black plastic	SEE THE PHOTO
17	Silver metal shell	SEE THE PHOTO
18	Silver metal pin	SEE THE PHOTO
19	Black plastic shell	SEE THE PHOTO
20	Off white plastic base	SEE THE PHOTO
21	Black IC	SEE THE PHOTO
22	Black inductor	SEE THE PHOTO
23	Black plastic base	SEE THE PHOTO
24	Metal heat dissipation block base material	SEE THE PHOTO
25	White dry glue	SEE THE PHOTO
26	Black IC	SEE THE PHOTO
27	Black coating	SEE THE PHOTO
28	Black inductor	SEE THE PHOTO
29	Black printed silver metal shell	SEE THE PHOTO

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409-1, building F, Guanghong Meiju, No. 163 North Pingxin Road, Pinghu



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30	Red plastic base	SEE THE PHOTO
31	Blue PCB	SEE THE PHOTO
32	Silver metal solder	SEE THE PHOTO
33	Silver metal conductive sheet	SEE THE PHOTO
34	Black plastic heat shrink sleeve	SEE THE PHOTO
35	Black plastic wire skin	SEE THE PHOTO
36	Silver metal solder	SEE THE PHOTO
37	Metal mother column base material with black coating	SEE THE PHOTO
38	Metal screw substrate with black coating	SEE THE PHOTO
39	Silver metal screw	SEE THE PHOTO
40	Black plastic wire skin	SEE THE PHOTO
41	crystal oscillator	SEE THE PHOTO
42	Yellow transparent tape	SEE THE PHOTO
43	Black printed white sticker	SEE THE PHOTO
44	Black plastic cover	SEE THE PHOTO
45	Off white plastic base	SEE THE PHOTO
46	Black IC	SEE THE PHOTO
47	Silver metal solder	SEE THE PHOTO
48	White double-sided tape	SEE THE PHOTO
49	Green PCB	SEE THE PHOTO
50	White plastic shell	SEE THE PHOTO
51	Black plastic shell	SEE THE PHOTO
52	Black plastic sheath	SEE THE PHOTO
53	Black plastic heat shrink sleeve	SEE THE PHOTO
54	Black plastic wire skin	SEE THE PHOTO
55	White plastic wire skin	SEE THE PHOTO
56	Green plastic wire skin	SEE THE PHOTO
57	Red plastic wire skin	SEE THE PHOTO
58	White plastic zip tie	SEE THE PHOTO
59	Black plastic film	SEE THE PHOTO
60	Black printed white plastic sticker	SEE THE PHOTO



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61		
01	Black adhesive tape	SEE THE PHOTO
62	Black printed white plastic sticker	SEE THE PHOTO
63	Black tape	SEE THE PHOTO
64	FPC	SEE THE PHOTO
65	Black adhesive tape	SEE THE PHOTO
66	Golden adhesive tape	SEE THE PHOTO
67	Off white plastic base	SEE THE PHOTO
68	Silver metal shell	SEE THE PHOTO
69	Black plastic shell	SEE THE PHOTO
70	Green PCB	SEE THE PHOTO
71	Grey inductor	SEE THE PHOTO
72	Black plastic	SEE THE PHOTO
73	White plastic wire skin	SEE THE PHOTO
74	Yellow plastic wire skin	SEE THE PHOTO
75	Black plastic wire skin	SEE THE PHOTO
76	Red plastic wire skin	SEE THE PHOTO
77	Grey plastic shell	SEE THE PHOTO
78	Green plastic wire skin	SEE THE PHOTO
79	Red plastic wire skin	SEE THE PHOTO
80	White plastic wire skin	SEE THE PHOTO
81	Blue plastic wire skin	SEE THE PHOTO
82	Yellow plastic wire skin	SEE THE PHOTO
83	Black plastic wire skin	SEE THE PHOTO
84	White plastic shell	SEE THE PHOTO
85	Grey plastic cushion strip	SEE THE PHOTO
86	Black plastic frame	SEE THE PHOTO
87	Translucent plastic film	SEE THE PHOTO
88	Reflective plastic film	SEE THE PHOTO
89	White plastic film	SEE THE PHOTO
90	Transparent plastic board	SEE THE PHOTO
91	FPC	SEE THE PHOTO



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		11
92	LED	SEE THE PHOTO
93	Silver metal cover	SEE THE PHOTO
94	White plastic pad	SEE THE PHOTO
95	Silver metal nut	SEE THE PHOTO
96	Grey tape	SEE THE PHOTO
97	Black coating	SEE THE PHOTO
98	Metal frame base material	SEE THE PHOTO
99	Grey dry adhesive	SEE THE PHOTO
100	Metal screw base material with black coating	SEE THE PHOTO
101	Display screen glass	SEE THE PHOTO
102	Black plastic strip with adhesive	SEE THE PHOTO
103	Silver metal frame	SEE THE PHOTO
104	Touch screen glass	SEE THE PHOTO



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2.Tested results

Part No	Test Item	Results of EDXRF	Screening Result of PHTH	Result of Wet Chemical Testing (mg/kg)	Conclusion
	Cd	BL			
-	Pb	BL			
-	Hg	BL			
	Cr(VI)	BL			
1	PBBs	BL			
1	PBDEs	BL			PASS
	DBP		BL		
	BBP		BL		
	DEHP		BL		
	DIBP		BL		
	Cd	BL			
-	Pb	BL			
	Hg	BL			
	Cr(VI)	BL			
2	PBBs				
2	PBDEs				– PASS
-	DBP				
-	BBP				
-	DEHP				
-	DIBP				
	Cd	BL			
-	Pb	BL			
-	Hg	BL			
_	Cr(VI)	BL			
0	PBBs				
3	PBDEs				PASS
	DBP				
	BBP				
	DEHP				
	DIBP				



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Part No	Test Item	Results of EDXRF	Screening Result of PHTH	Result of Wet Chemical Testing (mg/kg)	Conclusion
	Cd	BL			
	Pb	BL			
	Hg	BL			
	Cr(VI)	BL			
	PBBs				5.00
4	PBDEs				PASS
	DBP				
	BBP				
	DEHP				
	DIBP				
	Cd	Cd BL			
	Pb	BL			
	Hg	BL			
	Cr(VI)	BL			
-	PBBs				
5	PBDEs				PASS
	DBP				
	BBP				
	DEHP				
	DIBP				
	Cd	BL			
	Pb	BL			
	Hg	BL			
	Cr(VI)	BL			
6	PBBs	BL			DAGG
6	PBDEs	BL			PASS
	DBP		BL		
	BBP		BL		
	DEHP		BL		
	DIBP		BL		

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Part No	Test Item	Results of EDXRF	Screening Result of PHTH	Result of Wet Chemical Testing (mg/kg)	Conclusion
	Cd	BL			
	Pb	BL			
	Hg	BL			
	Cr(VI)	BL			
_	PBBs	IN		ND	
7	PBDEs	IN		ND	PASS
	DBP		BL		
	BBP		BL		
	DEHP		BL		_
	DIBP		BL		1
	Cd	OL		22	PASS
	Pb	OL		34741##	
	Hg	BL			
	Cr(VI)	BL			
	PBBs				
8	PBDEs				
	DBP				
	BBP				
	DEHP				_
	DIBP				-
	Cd	BL			
	Pb	BL			
	Hg	BL			
	Cr(VI)	BL			1
9	PBBs				
	PBDEs				PASS
	DBP				
	BBP				
	DEHP				1
	DIBP				1



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Part No	Test Item	Results of EDXRF	Screening Result of PHTH	Result of Wet Chemical Testing (mg/kg)	Conclusion
_	Cd	BL			
	Pb	BL			
	Hg	BL			
	Cr(VI)	BL			
	PBBs	IN		ND	1
10	PBDEs	IN		ND	PASS
	DBP		BL		
-	BBP		BL		
-	DEHP		BL		
-	DIBP		BL		-
	Cd	BL			-
-	Pb	BL			
-	Hg	BL			
-	Cr(VI)	BL			
-	PBBs				
11	PBDEs				PASS
-	DBP				_
-	BBP				-
-	DEHP				1
-	DIBP				-
	Cd	BL			
	Pb	BL			1
-	Hg	BL			1
	Cr(VI)	BL			1
-	PBBs	IN		ND	PASS
12	PBDEs	IN		ND	
-	DBP		BL		
-	BBP		BL		-
-	DEHP		BL		1
-	DIBP		BL		1

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Part No	Test Item	Results of EDXRF	Screening Result of PHTH	Result of Wet Chemical Testing (mg/kg)	Conclusion
	Cd	BL			
	Pb	BL			
	Hg	BL			
	Cr(VI)	BL			
	PBBs				
13	PBDEs				PASS
-	DBP				
	BBP				
	DEHP				-
	DIBP				
	Cd	BL			PASS
	Pb	BL			
-	Hg	BL			
-	Cr(VI)	BL			
	PBBs				
14	PBDEs				
-	DBP				
-	BBP				_
-	DEHP				_
-	DIBP				_
	Cd	BL			
	Pb	BL			
	Hg	BL			-
	Cr(VI)	BL			1
	PBBs				PASS
15	PBDEs				
-	DBP				
F	BBP				
F	DEHP				
ŀ	DIBP				1



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Part No	Test Item	Results of EDXRF	Screening Result of PHTH	Result of Wet Chemical Testing (mg/kg)	Conclusion
	Cd	BL			
	Pb	BL			
	Hg	BL			
	Cr(VI)	BL			
	PBBs	BL			
16	PBDEs	BL			PASS
	DBP		BL		
	BBP		BL		
Ī	DEHP		BL		1
_	DIBP		BL		-
	Cd	BL			-
	Pb	BL			
-	Hg	BL			
-	Cr(VI)	BL			
-	PBBs				
17	PBDEs				PASS
-	DBP				-
-	BBP				-
-	DEHP				-
-	DIBP				-
	Cd	BL			
	Pb	BL			
-	Hg	BL			-
-	Cr(VI)	BL			-
	PBBs				-
18	PBDEs				PASS
-	DBP				-
	BBP				-
-	DEHP				1
-	DIBP				1



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Part No	Test Item	Results of EDXRF	Screening Result of PHTH	Result of Wet Chemical Testing (mg/kg)	Conclusion
	Cd	BL			
	Pb	BL			
	Hg	BL			
	Cr(VI)	BL			
	PBBs	BL			1
19	PBDEs	BL			PASS
	DBP		BL		
	BBP		BL		-
	DEHP		BL		-
-	DIBP		BL		-
	Cd	BL			-
-	Pb	BL			
-	Hg	BL			
-	Cr(VI)	BL			
-	PBBs	BL			
20	PBDEs	BL			PASS
-	DBP		BL		-
-	BBP		BL		_
-	DEHP		BL		-
-	DIBP		BL		-
	Cd	BL			
	Pb	BL			1
F	Hg	BL			1
ŀ	Cr(VI)	BL			1
-	PBBs	BL			
21	PBDEs	BL			PASS
-	DBP		BL		
-	BBP		BL		
-	DEHP		BL		
-	DIBP		BL		1

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Part No	Test Item	Results of EDXRF	Screening Result of PHTH	Result of Wet Chemical Testing (mg/kg)	Conclusion
_	Cd	BL			
	Pb	BL			
	Hg	BL			
	Cr(VI)	BL			
	PBBs	BL			1
22	PBDEs	BL			PASS
-	DBP		BL		-
-	BBP		BL		-
-	DEHP		BL		-
-	DIBP		BL		-
	Cd	BL			-
-	Pb	BL			
-	Hg	BL			
-	Cr(VI)	BL			
-	PBBs	IN		ND	
23	PBDEs	IN		ND	PASS
-	DBP		BL		-
-	BBP		BL		-
-	DEHP		BL		-
-	DIBP		BL		-
	Cd	BL			
-	Pb	BL			
-	Hg	BL			
-	Cr(VI)	BL			
	PBBs				1
24	PBDEs				PASS
	DBP				1
-	BBP				
-	DEHP				
-	DIBP				1



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Part No	Test Item	Results of EDXRF	Screening Result of PHTH	Result of Wet Chemical Testing (mg/kg)	Conclusion
_	Cd	BL			
	Pb	BL			
	Hg	BL			
	Cr(VI)	BL			
	PBBs	BL]
25	PBDEs	BL			PASS
	DBP		BL		
	BBP		BL		
-	DEHP		BL		
-	DIBP		BL		-
	Cd	BL			-
-	Pb	BL			
-	Hg	BL			
-	Cr(VI)	BL			
	PBBs	BL			
26	PBDEs	BL			PASS
-	DBP		BL		
-	BBP		BL		-
-	DEHP		BL		-
-	DIBP		BL		-
	Cd	BL			
	Pb	BL]
-	Hg	BL			1
	Cr(VI)	BL			1
	PBBs	BL			1
27	PBDEs	BL			PASS
	DBP		BL		1
	BBP		BL		-
	DEHP		BL		1
-	DIBP		BL		

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Part No	Test Item	Results of EDXRF	Screening Result of PHTH	Result of Wet Chemical Testing (mg/kg)	Conclusion
	Cd	BL			
	Pb	BL			
	Hg	BL			
	Cr(VI)	BL			
-	PBBs	BL			
28	PBDEs	BL			PASS
-	DBP		BL		-
-	BBP		BL		-
-	DEHP		BL		
-	DIBP		BL		-
	Cd	BL			-
-	Pb	BL			
-	Hg	BL			
-	Cr(VI)	BL			
-	PBBs				
29	PBDEs				PASS
-	DBP				-
-	BBP				-
-	DEHP				-
-	DIBP				-
	Cd	BL			
-	Pb	BL			
-	Hg	BL			
-	Cr(VI)	BL			
-	PBBs	BL			
30	PBDEs	BL			PASS
-	DBP		BL		1
-	BBP		BL		1
-	DEHP		BL		-
-	DIBP		BL		



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Part No	Test Item	Results of EDXRF	Screening Result of PHTH	Result of Wet Chemical Testing (mg/kg)	Conclusion
	Cd	BL			_
_	Pb	BL			
	Hg	BL			
	Cr(VI)	BL			
	PBBs	IN		ND	
31	PBDEs	IN		ND	PASS
	DBP		BL		1
-	BBP		BL		-
-	DEHP		BL		-
-	DIBP		BL		-
	Cd	BL			PASS
-	Pb	BL			
-	Hg	BL			
-	Cr(VI)	BL			
-	PBBs				
32	PBDEs				
-	DBP				-
-	BBP				-
-	DEHP				-
	DIBP				-
	Cd	BL			
	Pb	BL			1
-	Hg	BL			
-	Cr(VI)	BL			
-	PBBs				1
33	PBDEs				PASS
-	DBP				-
-	BBP				-
-	DEHP				1
-	DIBP				-



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Part No	Test Item	Results of EDXRF	Screening Result of PHTH	Result of Wet Chemical Testing (mg/kg)	Conclusion
_	Cd	BL			
_	Pb	BL			
	Hg	BL			
	Cr(VI)	BL			
0.4	PBBs	BL			
34	PBDEs	BL			PASS
F	DBP		BL]
F	BBP		BL]
	DEHP		BL]
-	DIBP		BL		-
	Cd	BL			DAGO
-	Pb	BL			
-	Hg	BL			
-	Cr(VI)	BL			
05	PBBs	BL			
35	PBDEs	BL			PASS
-	DBP		BL]
-	BBP		BL		
-	DEHP		BL		
F	DIBP		BL		1
	Cd	BL			
F	Pb	BL]
F	Hg	BL]
	Cr(VI)	BL]
	PBBs				
36	PBDEs				PASS
	DBP]
F	BBP				1
F	DEHP				1
	DIBP				1

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Part No	Test Item	Results of EDXRF	Screening Result of PHTH	Result of Wet Chemical Testing (mg/kg)	Conclusion
-	Cd	BL			
_	Pb	BL			
	Hg	BL			
	Cr(VI)	BL			
	PBBs				
37	PBDEs				PASS
-	DBP				
-	BBP				-
-	DEHP				
-	DIBP				-
	Cd	BL			
-	Pb	BL			
-	Hg	BL			
-	Cr(VI)	BL			
	PBBs				
38	PBDEs				PASS
-	DBP				
-	BBP				
-	DEHP				
-	DIBP				
	Cd	BL			
	Pb	BL			
-	Hg	BL			
-	Cr(VI)	BL			
	PBBs				1
39	PBDEs				PASS
	DBP				
Ē	BBP				1
	DEHP				
-	DIBP				



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Part No	Test Item	Results of EDXRF	Screening Result of PHTH	Result of Wet Chemical Testing (mg/kg)	Conclusion
_	Cd	BL			
	Pb	BL			
	Hg	BL			
	Cr(VI)	BL			
	PBBs	BL			1
40	PBDEs	BL			PASS
-	DBP		BL		-
-	BBP		BL		-
-	DEHP		BL		
-	DIBP		BL		-
	Cd	BL			PASS
-	Pb	BL			
-	Hg	BL			
-	Cr(VI)	IN		Negative	
-	PBBs				
41	PBDEs				
-	DBP				-
-	BBP				
-	DEHP				
-	DIBP				-
	Cd	BL			
-	Pb	BL			
-	Hg	BL			
-	Cr(VI)	BL			1
-	PBBs	BL			1
42	PBDEs	BL			PASS
-	DBP		BL		-
-	BBP		BL		1
-	DEHP		BL		-
-	DIBP		BL		-



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Part No	Test Item	Results of EDXRF	Screening Result of PHTH	Result of Wet Chemical Testing (mg/kg)	Conclusion
	Cd	BL			
	Pb	BL			
	Hg	BL			
	Cr(VI)	BL			
-	PBBs	BL			
43	PBDEs	BL			PASS
-	DBP		BL		
-	BBP		BL		-
-	DEHP		BL		-
-	DIBP		BL		-
	Cd	BL			-
-	Pb	BL			
-	Hg	BL			
-	Cr(VI)	BL			
-	PBBs	BL			
44	PBDEs	BL			PASS
-	DBP		BL		
-	BBP		BL		
-	DEHP		BL		_
-	DIBP		BL		_
	Cd	BL			
-	Pb	BL			-
-	Hg	BL			-
-	Cr(VI)	BL			-
-	PBBs	BL			-
45	PBDEs	BL			PASS
-	DBP		BL		-
-	BBP		BL		-
-	DEHP		BL		-
-	DIBP		BL		-

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Part No	Test Item	Results of EDXRF	Screening Result of PHTH	Result of Wet Chemical Testing (mg/kg)	Conclusion
	Cd	BL			_
	Pb	BL			
	Hg	BL			
	Cr(VI)	BL			
	PBBs	BL			1
46	PBDEs	BL			PASS
	DBP		BL		
-	BBP		BL		
-	DEHP		BL		-
-	DIBP		BL		
	Cd	BL			PASS
-	Pb	BL			
-	Hg	BL			
-	Cr(VI)	BL			
-	PBBs				
47	PBDEs				
-	DBP				-
-	BBP				-
-	DEHP				-
-	DIBP				-
	Cd	BL			
	Pb	BL			1
-	Hg	BL			1
-	Cr(VI)	BL			1
	PBBs	BL			1
48	PBDEs	BL			PASS
ŀ	DBP		BL		1
F	BBP		BL		1
Ē	DEHP		BL		1
ŀ	DIBP		BL		

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Part No	Test Item	Results of EDXRF	Screening Result of PHTH	Result of Wet Chemical Testing (mg/kg)	Conclusion
	Cd	BL			
	Pb	BL			
	Hg	BL			
	Cr(VI)	BL			
	PBBs	IN		ND	1
49	PBDEs	IN		ND	PASS
	DBP		BL		-
	BBP		BL		-
	DEHP		BL		-
	DIBP		BL		-
	Cd	BL			-
	Pb	BL			
	Hg	BL			
	Cr(VI)	BL			
	PBBs	BL			
50	PBDEs	BL			PASS
	DBP		BL		-
	BBP		BL		-
	DEHP		BL		-
	DIBP		BL		-
	Cd	BL			
	Pb	BL			-
	Hg	BL			-
	Cr(VI)	BL			1
	PBBs	BL			1
51	PBDEs	BL			PASS
	DBP		BL		
	BBP		BL		1
	DEHP		BL		1
	DIBP		BL		1

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Part No	Test Item	Results of EDXRF	Screening Result of PHTH	Result of Wet Chemical Testing (mg/kg)	Conclusion
	Cd	BL			
	Pb	BL			
	Hg	BL			
	Cr(VI)	BL			
	PBBs	BL			
52	PBDEs	BL			PASS
	DBP		BL		
	BBP		BL		
F	DEHP		BL		
	DIBP		BL		
	Cd	BL			-
-	Pb	BL			
-	Hg	BL			
-	Cr(VI)	BL			
	PBBs	BL			
53	PBDEs	BL			- PASS
-	DBP		BL		_
-	BBP		BL		_
-	DEHP		BL		_
-	DIBP		BL		-
	Cd	BL			
	Pb	BL			
	Hg	BL			
	Cr(VI)	BL			
[PBBs	BL			
54	PBDEs	BL			PASS
ŀ	DBP		BL		1
-	BBP		BL		1
Ē	DEHP		BL		1
-	DIBP		BL		

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Part No	Test Item	Results of EDXRF	Screening Result of PHTH	Result of Wet Chemical Testing (mg/kg)	Conclusion
_	Cd	BL			
	Pb	BL			_
	Hg	BL			_
	Cr(VI)	BL			
	PBBs	BL			
55	PBDEs	BL			PASS
-	DBP		BL		
	BBP		BL		
-	DEHP		BL		
-	DIBP		BL		-
	Cd	BL			-
-	Pb	BL			
-	Hg	BL			
-	Cr(VI)	BL			
-	PBBs	BL			
56	PBDEs	BL			PASS
-	DBP		BL		-
-	BBP		BL		-
-	DEHP		BL		-
-	DIBP		BL		-
	Cd	BL			
-	Pb	BL			1
	Hg	BL			1
-	Cr(VI)	BL			
-	PBBs	BL			
57	PBDEs	BL			PASS
-	DBP		BL		
-	BBP		BL		
-	DEHP		BL		
-	DIBP		BL		1

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Part No	Test Item	Results of EDXRF	Screening Result of PHTH	Result of Wet Chemical Testing (mg/kg)	Conclusion
_	Cd	BL			
	Pb	BL			
	Hg	BL			
	Cr(VI)	BL			
	PBBs	BL			1
58	PBDEs	BL			PASS
	DBP		BL		
	BBP		BL		
-	DEHP		BL		
-	DIBP		BL		-
	Cd	BL			-
-	Pb	BL			
-	Hg	BL			
-	Cr(VI)	BL			
-	PBBs	BL			
59	PBDEs	BL			PASS
-	DBP		BL		-
-	BBP		BL		-
-	DEHP		BL		-
-	DIBP		BL		-
	Cd	BL			
-	Pb	BL			1
	Hg	BL			1
	Cr(VI)	BL			1
	PBBs	BL			1
60	PBDEs	BL			PASS
-	DBP		BL		
-	BBP		BL		1
-	DEHP		BL		1
-	DIBP		BL		1

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Part No	Test Item	Results of EDXRF	Screening Result of PHTH	Result of Wet Chemical Testing (mg/kg)	Conclusion
	Cd	BL			
	Pb	BL			
	Hg	BL			
	Cr(VI)	BL			
	PBBs	BL			1
61	PBDEs	BL			PASS
-	DBP		BL		-
-	BBP		BL		-
-	DEHP		BL		-
-	DIBP		BL		-
	Cd	BL			PASS
-	Pb	BL			
-	Hg	BL			
-	Cr(VI)	BL			
-	PBBs	BL			
62	PBDEs	BL			
-	DBP		BL		-
-	BBP		BL		-
-	DEHP		BL		-
-	DIBP		BL		-
	Cd	BL			
	Pb	BL			
-	Hg	BL			
-	Cr(VI)	BL			-
-	PBBs	BL			-
63	PBDEs	BL			PASS
-	DBP		BL		-
-	BBP		BL		-
-	DEHP		BL		-
-	DIBP		BL		1

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Part No	Test Item	Results of EDXRF	Screening Result of PHTH	Result of Wet Chemical Testing (mg/kg)	Conclusion
	Cd	BL			_
_	Pb	BL			_
	Hg	BL			
	Cr(VI)	BL			
	PBBs	BL			
64	PBDEs	BL			PASS
-	DBP		BL		
-	BBP		BL		
-	DEHP		BL		
-	DIBP		BL		
	Cd	BL			-
-	Pb	BL			
-	Hg	BL			
-	Cr(VI)	BL			
	PBBs	BL			
65	PBDEs	BL			PASS
-	DBP		BL		
-	BBP		BL		
-	DEHP		BL		
-	DIBP		BL		
	Cd	BL			
	Pb	BL			
-	Hg	BL			
-	Cr(VI)	BL			
	PBBs	BL			
66	PBDEs	BL			PASS
	DBP		BL		
	BBP		BL		-
	DEHP		BL		
-	DIBP		BL		



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Part No	Test Item	Results of EDXRF	Screening Result of PHTH	Result of Wet Chemical Testing (mg/kg)	Conclusion
	Cd	BL			
	Pb	BL			
	Hg	BL			
	Cr(VI)	BL			
	PBBs	BL			
67	PBDEs	BL			PASS
-	DBP		BL		-
-	BBP		BL		
-	DEHP		BL		-
-	DIBP		BL		_
	Cd	BL			-
-	Pb	BL			
-	Hg	BL			
-	Cr(VI)	IN		Negative	
-	PBBs				
68	PBDEs				PASS
-	DBP				
-	BBP				
-	DEHP				-
-	DIBP				-
	Cd	BL			
-	Pb	BL			-
-	Hg	BL			-
-	Cr(VI)	BL			-
-	PBBs	BL			
69	PBDEs	BL			PASS
-	DBP		BL		
-	BBP		BL		
-	DEHP		BL		
-	DIBP		BL		-



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Part No	Test Item	Results of EDXRF	Screening Result of PHTH	Result of Wet Chemical Testing (mg/kg)	Conclusion
_	Cd	BL			
	Pb	BL			
	Hg	BL			
	Cr(VI)	BL			
	PBBs	BL			1
70	PBDEs	BL			PASS
	DBP		BL		
-	BBP		BL		-
-	DEHP		BL		-
-	DIBP		BL		-
	Cd	BL			-
-	Pb	BL			
-	Hg	BL			
-	Cr(VI)	BL			
-	PBBs	BL			
71	PBDEs	BL			PASS
-	DBP		BL		-
-	BBP		BL		_
-	DEHP		BL		-
-	DIBP		BL		-
	Cd	BL			
-	Pb	BL			-
-	Hg	BL			-
-	Cr(VI)	BL			-
-	PBBs	IN		ND	
72	PBDEs	IN		ND	PASS
-	DBP		BL		
-	BBP		BL		-
-	DEHP		BL		-
-	DIBP		BL		-

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Part No	Test Item	Results of EDXRF	Screening Result of PHTH	Result of Wet Chemical Testing (mg/kg)	Conclusion
	Cd	BL			
	Pb	BL			
	Hg	BL			
	Cr(VI)	BL			
	PBBs	BL			
73	PBDEs	BL			PASS
	DBP		BL		
-	BBP		BL		1
	DEHP		BL		1
-	DIBP		BL		_
	Cd	BL			-
-	Pb	BL			
-	Hg	BL			
-	Cr(VI)	BL			
-	PBBs	BL			
74	PBDEs	BL			PASS
-	DBP		BL		-
-	BBP		BL		-
-	DEHP		BL		-
-	DIBP		BL		-
	Cd	BL			
	Pb	BL			
	Hg	BL			
ŀ	Cr(VI)	BL			1
-	PBBs	BL			1
75	PBDEs	BL			PASS
-	DBP		BL		1
-	BBP		BL		-
-	DEHP		BL		-
-	DIBP		BL		-

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Part No	Test Item	Results of EDXRF	Screening Result of PHTH	Result of Wet Chemical Testing (mg/kg)	Conclusion
	Cd	BL			
	Pb	BL			
	Hg	BL			
	Cr(VI)	BL			
	PBBs	BL			1
76	PBDEs	BL			PASS
-	DBP		BL		1
-	BBP		BL		-
-	DEHP		BL		-
-	DIBP		BL		-
	Cd	BL			-
-	Pb	BL			
-	Hg	BL			
-	Cr(VI)	BL			
-	PBBs	IN		ND	
77	PBDEs	IN		ND	- PASS
-	DBP		BL		-
-	BBP		BL		-
-	DEHP		BL		_
-	DIBP		BL		_
	Cd	BL			
	Pb	BL			_
-	Hg	BL			1
-	Cr(VI)	BL			1
-	PBBs	BL			1
78	PBDEs	BL			PASS
-	DBP		BL		1
-	BBP		BL		1
-	DEHP		BL		1
-	DIBP		BL		1

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Part No	Test Item	Results of EDXRF	Screening Result of PHTH	Result of Wet Chemical Testing (mg/kg)	Conclusion
_	Cd	BL			
	Pb	BL			
	Hg	BL			
	Cr(VI)	BL			
	PBBs	BL			
79	PBDEs	BL			PASS
-	DBP		BL		-
-	BBP		BL		
-	DEHP		BL		-
-	DIBP		BL		_
	Cd	BL			-
-	Pb	BL			
-	Hg	BL			
-	Cr(VI)	BL			
-	PBBs	BL			
80	PBDEs	BL			PASS
-	DBP		BL		
-	BBP		BL		
-	DEHP		BL		
-	DIBP		BL		
	Cd	BL			
-	Pb	BL			
-	Hg	BL			-
-	Cr(VI)	BL			
-	PBBs	BL			
81	PBDEs	BL			PASS
-	DBP		BL		
-	BBP		BL		
-	DEHP		BL		
-	DIBP		BL		-

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Part No	Test Item	Results of EDXRF	Screening Result of PHTH	Result of Wet Chemical Testing (mg/kg)	Conclusion
	Cd	BL			
	Pb	BL			
	Hg	BL			
	Cr(VI)	BL			
	PBBs	BL			
82	PBDEs	BL			PASS
	DBP		BL		
-	BBP		BL		1
-	DEHP		BL		-
-	DIBP		BL		_
	Cd	BL			-
-	Pb	BL			
-	Hg	BL			
-	Cr(VI)	BL			
-	PBBs	BL			
83	PBDEs	BL			PASS
-	DBP		BL		-
-	BBP		BL		-
-	DEHP		BL		-
	DIBP		BL		-
	Cd	BL			
ŀ	Pb	BL			1
-	Hg	BL			-
-	Cr(VI)	BL			-
-	PBBs	BL			-
84	PBDEs	BL			PASS
-	DBP		BL		-
-	BBP		BL		-
-	DEHP		BL		-
-	DIBP		BL		-

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Part No	Test Item	Results of EDXRF	Screening Result of PHTH	Result of Wet Chemical Testing (mg/kg)	Conclusion
_	Cd	BL			_
_	Pb	BL			
_	Hg	BL			
	Cr(VI)	BL			
05	PBBs	BL			
85	PBDEs	BL			PASS
	DBP		BL		
	BBP		BL		
	DEHP		BL		
	DIBP		BL		
	Cd	BL			
	Pb	BL			-
	Hg	BL			
	Cr(VI)	BL			
	PBBs	BL			
86	PBDEs	BL			– PASS
-	DBP		BL		
-	BBP		BL		
-	DEHP		BL		-
-	DIBP		BL		-
	Cd	BL			
	Pb	BL			
	Hg	BL			
F	Cr(VI)	BL			
ľ	PBBs	BL			1
87	PBDEs	BL			PASS
-	DBP		BL		
-	BBP		BL		
-	DEHP		BL		
	DIBP		BL		-

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Part No	Test Item	Results of EDXRF	Screening Result of PHTH	Result of Wet Chemical Testing (mg/kg)	Conclusion
88	Cd	BL			PASS
	Pb	BL			
	Hg	BL			
	Cr(VI)	BL			
	PBBs	BL			
	PBDEs	BL			
	DBP		BL		
	BBP		BL		
	DEHP		BL		
	DIBP		BL		
89	Cd	BL			PASS
	Pb	BL			
	Hg	BL			
	Cr(VI)	BL			
	PBBs	BL			
	PBDEs	BL			
	DBP		BL		
	BBP		BL		
	DEHP		BL		
	DIBP		BL		
90	Cd	BL			PASS
	Pb	BL			
	Hg	BL			
	Cr(VI)	BL			
	PBBs	BL			
	PBDEs	BL			
	DBP		BL		
	BBP		BL		
	DEHP		BL		
-	DIBP		BL		



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Part No	Test Item	Results of EDXRF	Screening Result of PHTH	Result of Wet Chemical Testing (mg/kg)	Conclusion	
	Cd	BL				
	Pb	BL			_	
	Hg	BL			_	
	Cr(VI)	BL				
	PBBs	BL				
91	PBDEs	BL			PASS	
	DBP		BL		-	
	BBP		BL		-	
-	DEHP		BL			
-	DIBP		BL		-	
	Cd	BL				
-	Pb	BL			-	
-	Hg	BL			-	
-	Cr(VI)	BL			-	
-	PBBs	BL			PASS	
92	PBDEs	BL				
-	DBP		BL		-	
-	BBP		BL		-	
-	DEHP		BL		1	
-	DIBP				-	
	Cd	BL	BL			
F	Pb	BL				
-	Hg	BL			1	
-	Cr(VI)	BL			1	
-	PBBs				1	
93	PBDEs				PASS	
-	DBP				1	
-	BBP				1	
-	DEHP				1	
-	DIBP				1	

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Part No	Test Item	Results of EDXRF	Screening Result of PHTH	Result of Wet Chemical Testing (mg/kg)	Conclusion	
	Cd	BL				
	Pb	BL				
	Hg	BL				
	Cr(VI)	BL				
	PBBs	BL				
94	PBDEs	BL			PASS	
-	DBP		BL		-	
-	BBP		BL			
-	DEHP		BL			
-	DIBP		BL		_	
	Cd	BL				
-	Pb	BL			_	
-	Hg	BL				
-	Cr(VI)	BL				
-	PBBs					
95	PBDEs				PASS	
-	DBP					
-	BBP					
-	DEHP				-	
-	DIBP				-	
	Cd	BL				
-	Pb	BL			-	
-	Hg	BL			-	
-	Cr(VI)	BL				
-	PBBs	BL				
96	PBDEs	BL			PASS	
-	DBP		BL			
-	BBP		BL			
-	DEHP		BL			
-	DIBP		BL			



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Part No	Test Item	Results of EDXRF	Screening Result of PHTH	Result of Wet Chemical Testing (mg/kg)	Conclusion	
_	Cd	BL				
	Pb	BL				
	Hg	BL				
	Cr(VI)	BL				
	PBBs					
97	PBDEs				PASS	
-	DBP					
-	BBP					
-	DEHP					
-	DIBP					
	Cd	BL				
-	Pb	BL				
=	Hg	BL				
-	Cr(VI)	BL				
	PBBs					
98	PBDEs				PASS	
-	DBP					
-	BBP					
-	DEHP					
-	DIBP					
	Cd	BL				
	Pb	BL				
-	Hg	BL				
	Cr(VI)	BL				
	PBBs	BL				
99	PBDEs	BL			PASS	
Ē	DBP		BL			
	BBP		BL			
	DEHP		BL			
	DIBP		BL			



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Part No	Test Item	Results of EDXRF	Screening Result of PHTH	Result of Wet Chemical Testing (mg/kg)	Conclusion	
_	Cd	BL				
_	Pb	BL			_	
	Hg	BL				
	Cr(VI)	BL				
	PBBs]	
100	PBDEs				PASS	
-	DBP					
-	BBP					
-	DEHP					
-	DIBP					
	Cd	BL				
-	Pb	BL				
-	Hg	BL				
-	Cr(VI)	BL				
	PBBs	BL			PASS	
101	PBDEs	BL				
-	DBP		BL			
-	BBP		BL		-	
-	DEHP		BL		-	
-	DIBP		BL		-	
	Cd	BL				
-	Pb	BL				
-	Hg	BL]	
-	Cr(VI)	BL]	
	PBBs	BL			1	
102	PBDEs	BL			PASS	
-	DBP		BL		1	
-	BBP		BL		1	
-	DEHP		BL		1	
-	DIBP		BL]	

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Part No	Test Item	Results of EDXRF	Screening Result of PHTH	Result of Wet Chemical Testing (mg/kg)	Conclusion
	Cd	BL			
	Pb	BL			_
	Hg	BL			
	Cr(VI)	BL			
400	PBBs				
103	PBDEs				PASS
	DBP				
	BBP				
	DEHP				
	DIBP				
	Cd	BL			
	Pb	BL			
	Hg	BL			
	Cr(VI)	BL			
104	PBBs	BL			
104	PBDEs	BL			PASS
	DBP		BL		
	BBP		BL]
	DEHP		BL]
	DIBP		BL		

Note:

BL = Below Limit

OL= Limit exceeded

--- = No Testing Required

mg/kg = milligram per kilogram

IN = Inconclusive

ND = Not Detected (lower than MDL)

Negative = Result indicates the absence of hexavalent chromium in the tested sample.

= According to the product specification provided from client, specimen No.8 of the submitted sample are copper alloy containing up to 40000 mg/kg Lead by weight which is exempted by RoHS regulatory (Directive 2015/863/EU amending Annex II to Directive 2011/65/EU of The European Parliament and of The Council of 31 March 2015).



Remark:

- **1.** (a) There are the results on total Br while test items on restricted substances are PBBs and PBDEs. There is the result on total Cr while test item on restricted substances is Cr(VI).
 - (b) Results are obtained by EDXRF for primary screening, and further chemical testing by ICP-OES (for Cd, Pb, Hg), UV-Vis (for Cr(VI)) and GC-MS (for PBBs, PBDEs) is recommended to be performed if the concentration exceeds the below warning value according to IEC62321-3-1:2013 (unit: mg/kg).

Element	Unit	Polymer	Metal	Composite Material
Cd	mg/kg	BL ≤ (70-3σ) < IN < (130+3σ) ≤ OL	$\begin{array}{llllllllllllllllllllllllllllllllllll$	$LOD < IN < (150+3\sigma) \le OL$
Pb	mg/kg	BL ≤ (700-3σ) < IN < (1300+3σ) ≤ OL	BL ≤ (700-3σ) < IN < (1300+3σ) ≤ OL	$\begin{array}{l} BL \leq (500\text{-}3\sigma) < IN < (1500\text{+}3\sigma) \\ \leq OL \end{array}$
Hg	mg/kg	BL ≤ (700-3σ) < IN < (1300+3σ) ≤ OL	BL ≤ (700-3σ) < IN < (1300+3σ) ≤ OL	$\begin{array}{l} BL \leq (500\text{-}3\sigma) < IN < (1500\text{+}3\sigma) \\ \leq OL \end{array}$
Br	mg/kg	BL ≤ (300-3σ) < IN		BL ≤ <i>(250-</i> 3σ) < IN
Cr	mg/kg	BL ≤ (700-3σ) < IN	BL ≤ (700-3σ) < IN	BL ≤ (500-3σ) < IN

BL = Below Limit

OL = Over Limit

IN = Inconclusive

LOD = Limit of Detection

mg/kg=ppm= milligram per kilogram

(c) Screening results of PHTH are for hybrid test by GC-MS, and further chemical testing by GC-MS (for DBP, BBP, DEHP and DIBP) are recommended to be performed if the concentration exceeds the below warning value (unit: mg/kg).

Compound	Polymer
DBP	BL ≤ 600< IN
BBP	BL ≤ 600< IN
DEHP	BL ≤ 600< IN
DIBP	BL ≤ 600< IN

mg/kg = milligram per kilogram 1% = 10000 mg/kg = 10000 ppm



2. Test Method

Tested Item(s)	Test Method	Measured Equipment(s)
Lead (Pb)	IEC62321-5:2013	ICP-OES
Cadmium (Cd)	IEC62321-5:2013	ICP-OES
Mercury (Hg)	IEC 62321-4:2013+AMD1:2017	ICP-OES
Hexavalent chromium (Cr(VI)) for plastic	IEC62321-7-2:2017 and/or determination of Total Chromium by IEC 62321-5:2013	UV-Vis/ICP-OES
Hexavalent chromium (Cr(VI)) for coating on metals	IEC62321-7-1:2015 and/or determination of Total Chromium by IEC 62321-5:2013	UV-Vis/ICP-OES
Polybrominated Biphenyls (PBBs)	IEC62321-6:2015	GC-MS
Polybrominated Diphenyl Ethers (PBDEs)	IEC62321-6:2015	GC-MS
Phthalates (DBP, BBP, DEHP, DIBP)	IEC62321-8:2017	GC-MS

3. RoHS Requirement

Unit:mg/kg

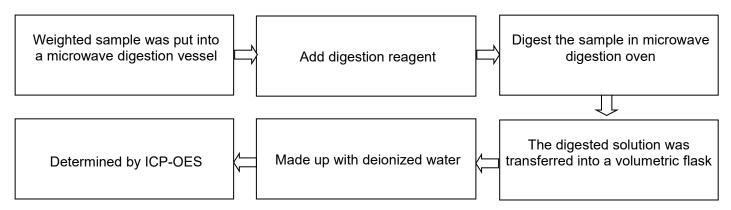
Restricted substances	Cd	Pb	Hg	Cr(VI)	PBBs	PBDEs	BBP	DBP	DEHP	DIBP
MDL	10	10	10		100	100	100	100	100	100
RoHS limit	100	1000	1000	1000	1000	1000	1000	1000	1000	1000

MDL of Cr(VI) for polymer, composite and leather sample is 10 mg/kg. MDL of Cr(VI) for metal sample is $0.10 \mu g/cm^2$

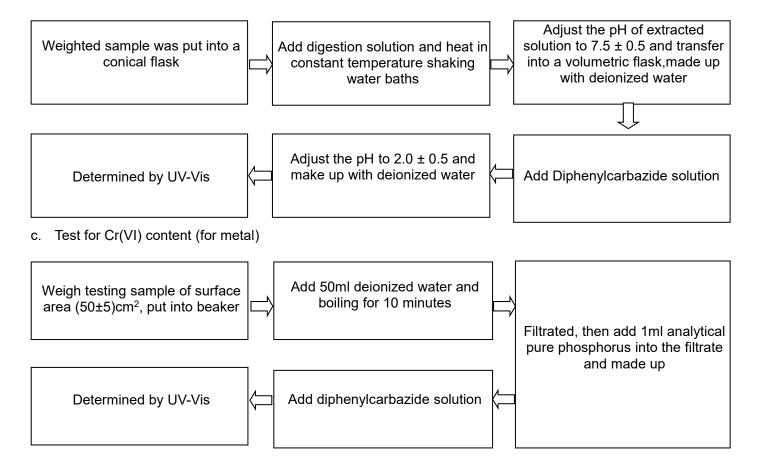


4. Measurement Flowchart

a. Test for Cd / Pb /Hg contents)



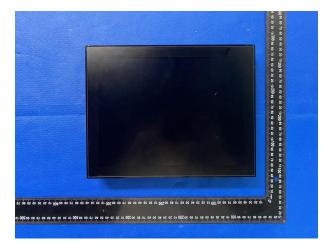
b. Test for Cr(VI) content (for non-metal)

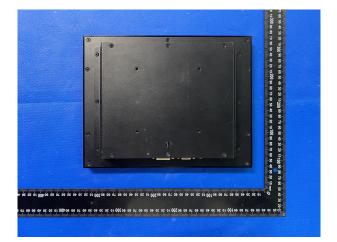




Report No.: DH2024080012 Date: Sept. 02, 2024 Page 45 of 49 d. Test for PBBs,PBDEs,DBP,BBP,DEHP,DIBP Weighted sample was put into a thimble Extracted by solvent in Soxhlet extractor Concentrate the extract Determined by GC-MS Made up with organic solvent Transfer the extract into a volumetric flask

5.Photo(s) of the sample(s)

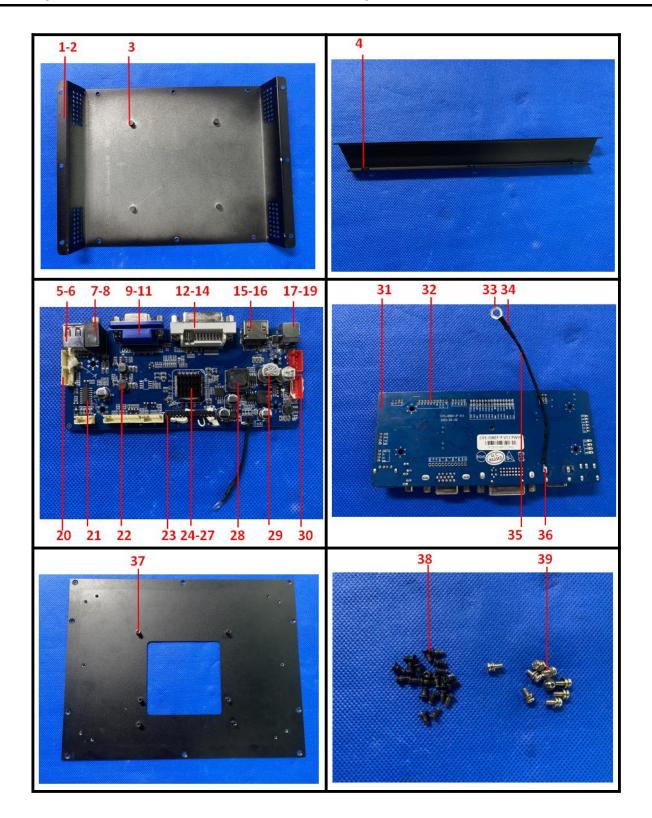




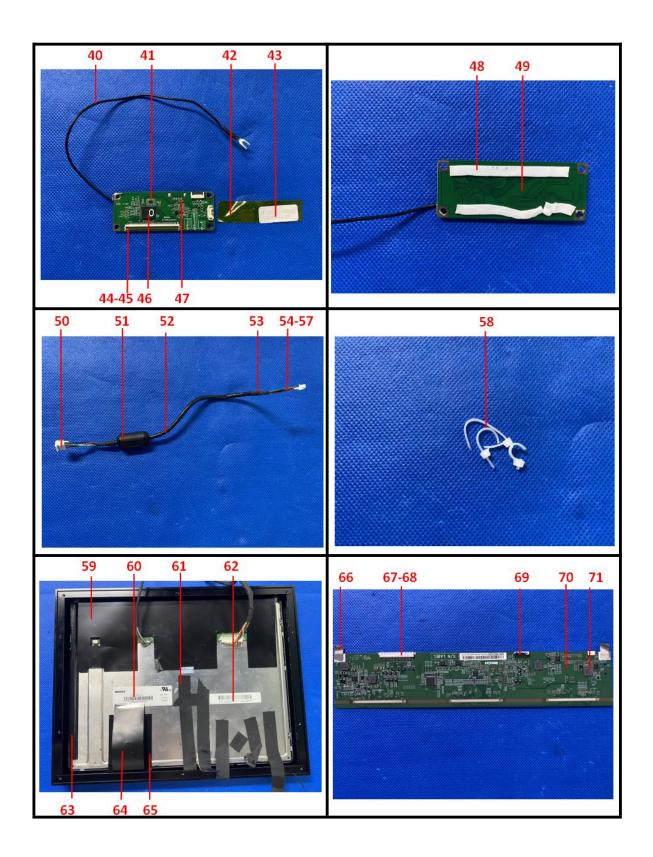
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409-1, building F, Guanghong Meiju, No. 163 North Pingxin Road, Pinghu Street, Longgang District, Shenzhen, Guangdong, China Web: http://www.dhia.com.cn

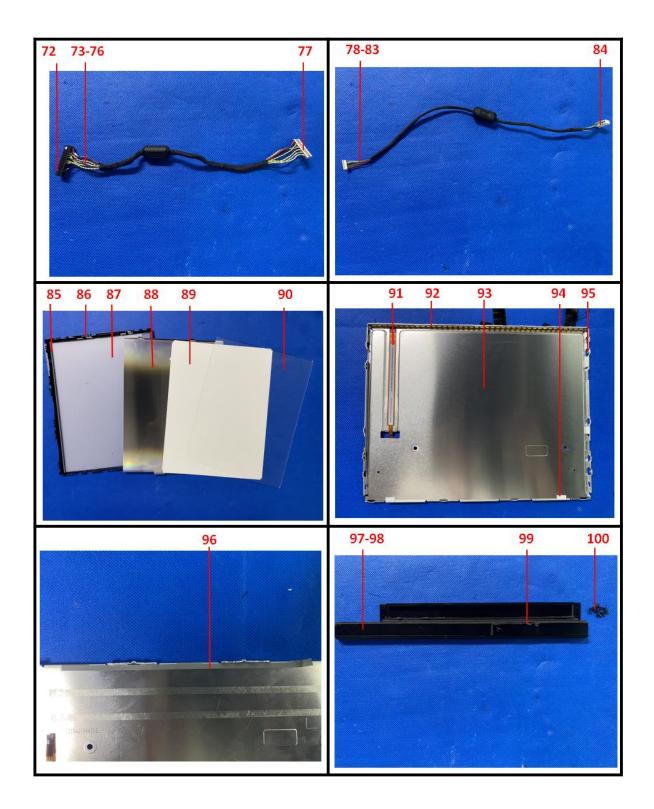




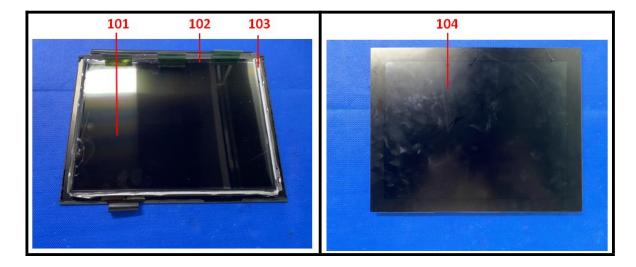












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