中国认可
国际互认
检测
TESTING
CNAS L16762

TEST REPORT

Applicant:	Shenzhen Leadtek Optoelectronics CO.,Ltd
Address:	3rd Floor, Building 4, Zhipeng Industrial Prak, Fuyuan 1st Road, Heping Village, Baoan District, Shenzhen China

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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 Leadtek Optoelectronics CO.,Ltd
Address:	3rd Floor, Building 4, Zhipeng Industrial Prak, Fuyuan 1st Road, Heping Village, Baoan District, Shenzhen China
Production plant:	Shenzhen Leadtek Optoelectronics CO.,Ltd
Address:	3rd Floor, Building 4, Zhipeng Industrial Prak, Fuyuan 1st Road, Heping Village, Baoan District, Shenzhen China
Sample name:	Smart Display
Sample Condition:	Intact
Main Test Model:	LTK080WV50TRW01-KRP-V3
Series model：	See Attached Page
Sample Receiving Date:	Jul. 03, 2025
Testing Period:	Jul. 03, 2025 ~ Jul. 15, 2025
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 amending Annex II to Directive 2011/65/EU - Lead, Mercury, Cadmium, Hexavalent chromium, Polybrominated biphenyls (PBB), Polybrominated diphenyl ethers (PBDE), Bis (2-ethylhexyl) phthalate (DEHP), Butyl benzyl phthalate (BBP), Dibutyl phthalate (DBP) and Diisobutyl phthalate (DIBP)	Pass
Note: The judgment rule complies with the simple binary judgment rule	

********** FOR FURTHER DETAILS, PLEASE REFER TO THE FOLLOWING PAGE (S) **********

Ding Hua International Certification(Shenzhen) Co., Ltd.

Signature of Authorized Representative

WJ

Authorized signatory

1.Tested components

No.	Sample Description	REMARK
1	Transparent Glass Touch Screen	SEE THE PHOTO
2	FPC	SEE THE PHOTO
3	FPC	SEE THE PHOTO
4	Transparent Plastic Sheet With Adhesive Layer	SEE THE PHOTO
5	Display Screen Glass	SEE THE PHOTO
6	White Plastic Sticker	SEE THE PHOTO
7	Silver Metal Cover	SEE THE PHOTO
8	Transparent Plastic Board	SEE THE PHOTO
9	White Plastic Sheet	SEE THE PHOTO
10	Silver Reflective Plastic Sheet	SEE THE PHOTO
11	Translucent Plastic Sheet	SEE THE PHOTO
12	Black Plastic Frame	SEE THE PHOTO
13	PCB	SEE THE PHOTO
14	Patch LED	SEE THE PHOTO
15	Solder Point	SEE THE PHOTO
16	Black Plastic Heat Shrink Tube Sleeve	SEE THE PHOTO
17	Black Plastic Wire Skin	SEE THE PHOTO
18	White Plastic Wire Skin	SEE THE PHOTO
19	White Plastic Plugin	SEE THE PHOTO
20	Terminal Beige Plastic	SEE THE PHOTO
21	Patch Coil Inductor	SEE THE PHOTO
22	Patch Diode	SEE THE PHOTO
23	Black Ceramic Body Chip	SEE THE PHOTO
24	Black Plastic	SEE THE PHOTO
25	Terminal White Plastic	SEE THE PHOTO
26	Glass Diode	SEE THE PHOTO
27	Black Ceramic Power Amplifier	SEE THE PHOTO
28	Silver Metal Cover	SEE THE PHOTO
29	Terminal Beige Plastic	SEE THE PHOTO

30	Golden Metal Needle	SEE THE PHOTO
31	Triode	SEE THE PHOTO
32	Patch Capacitors	SEE THE PHOTO
33	PCB	SEE THE PHOTO
34	White Ceramic Sheet	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
1	Cd	BL	---	---	PASS
	Pb	BL	---	---	
	Hg	BL	---	---	
	Cr(VI)	BL	---	---	
	PBBs	BL	---	---	
	PBDEs	BL	---	---	
	DBP	---	BL	---	
	BBP	---	BL	---	
	DEHP	---	BL	---	
	DIBP	---	BL	---	
2	Cd	BL	---	---	PASS
	Pb	BL	---	---	
	Hg	BL	---	---	
	Cr(VI)	BL	---	---	
	PBBs	BL	---	---	
	PBDEs	BL	---	---	
	DBP	---	BL	---	
	BBP	---	BL	---	
	DEHP	---	BL	---	
	DIBP	---	BL	---	
3	Cd	BL	---	---	PASS
	Pb	BL	---	---	
	Hg	BL	---	---	
	Cr(VI)	BL	---	---	
	PBBs	BL	---	---	
	PBDEs	BL	---	---	
	DBP	---	BL	---	
	BBP	---	BL	---	
	DEHP	---	BL	---	
	DIBP	---	BL	---	

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

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

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

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

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

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

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

Part No	Test Item	Results of EDXRF	Screening Result of PHTH	Result of Wet Chemical Testing (mg/kg)	Conclusion
25	Cd	BL	---	---	PASS
	Pb	BL	---	---	
	Hg	BL	---	---	
	Cr(VI)	BL	---	---	
	PBBs	BL	---	--	
	PBDEs	BL	---	--	
	DBP	---	BL	---	
	BBP	---	BL	---	
	DEHP	---	BL	---	
	DIBP	---	BL	---	
26	Cd	BL	---	---	PASS
	Pb	OL	---	39723#	
	Hg	BL	---	---	
	Cr(VI)	BL	---	---	
	PBBs	BL	---	---	
	PBDEs	BL	---	---	
	DBP	---	BL	---	
	BBP	---	BL	---	
	DEHP	---	BL	---	
	DIBP	---	BL	---	
27	Cd	BL	---	---	PASS
	Pb	BL	---	---	
	Hg	BL	---	---	
	Cr(VI)	BL	---	---	
	PBBs	BL	---	---	
	PBDEs	BL	---	---	
	DBP	---	BL	---	
	BBP	---	BL	---	
	DEHP	---	BL	---	
	DIBP	---	BL	---	

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

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

Part No	Test Item	Results of EDXRF	Screening Result of PHTH	Result of Wet Chemical Testing (mg/kg)	Conclusion
34	Cd	BL	---	---	PASS
	Pb	OL	---	1453#	
	Hg	BL	---	---	
	Cr(VI)	BL	---	---	
	PBBs	BL	---	---	
	PBDEs	BL	---	---	
	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.
#=As specified by client, Lead (Pb) in specimen No.**26, 34** is exempted by EU RoHS Directive 2011/65/EU based on |Annex III 7(c)-I|: Electrical and electronic components containing lead in a glass or ceramic other than dielectric ceramic in capacitors, e.g. piezoelectronic devices, or in a glass or ceramic matrix compound.

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	BL ≤ (70-3σ) < IN < (130+3σ) ≤ OL	LOD < IN< (150+3σ) ≤ OL
Pb	mg/kg	BL ≤ (700-3σ) < IN < (1300+3σ) ≤ OL	BL ≤ (700-3σ) < IN < (1300+3σ) ≤ OL	BL ≤ *(500*-3σ) < IN < *(1500*+3σ) ≤ OL
Hg	mg/kg	BL ≤ (700-3σ) < IN < (1300+3σ) ≤ OL	BL ≤ (700-3σ) < IN < (1300+3σ) ≤ OL	BL ≤ *(500*-3σ) < IN < *(1500*+3σ) ≤ OL
Br	mg/kg	BL ≤ (300-3σ) < IN	--	BL ≤ *(250*-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

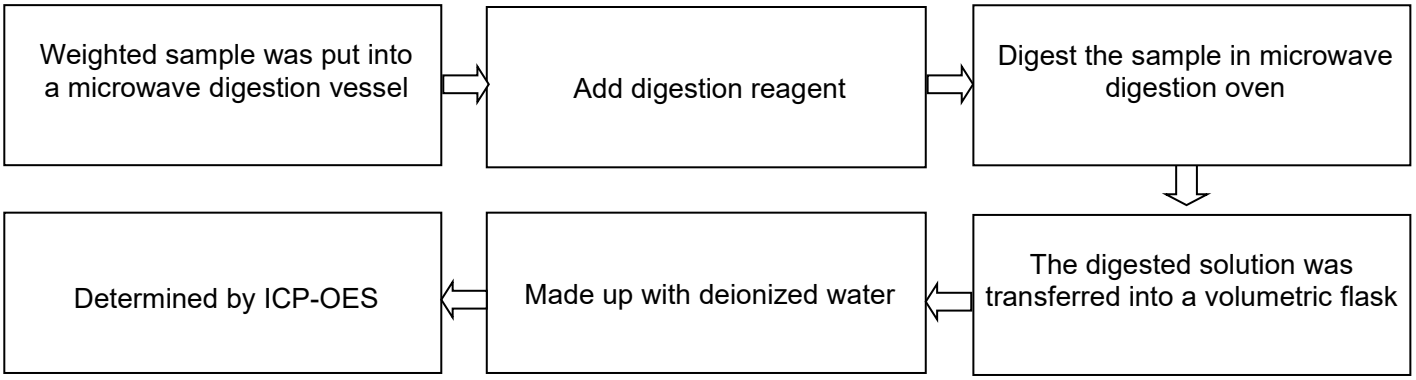
Unit:mg/kg

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

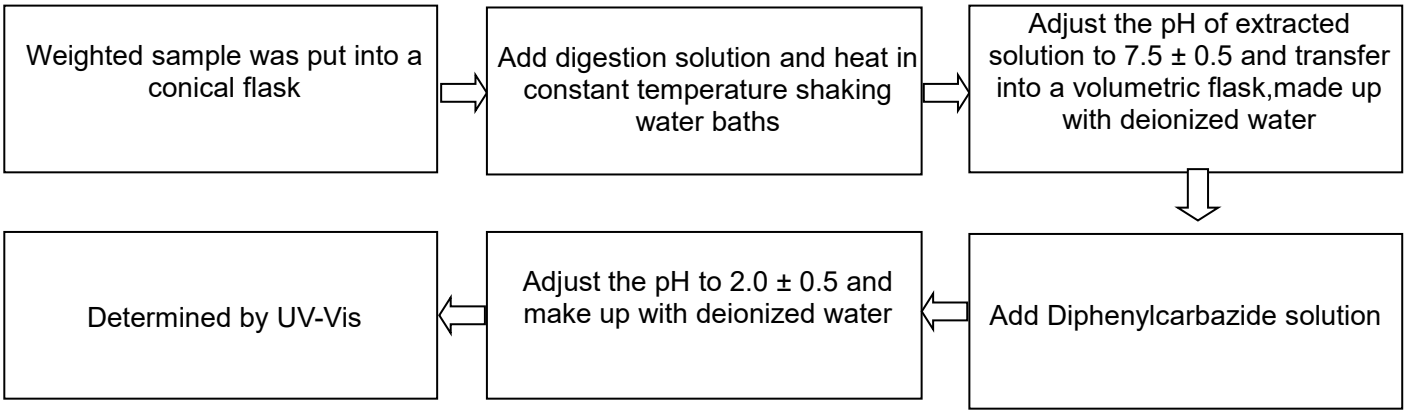
MDL of Cr(VI) for polymer, composite and leather sample is 10 mg/kg.
MDL of Cr(VI) for metal sample is 0.10μg/cm^2

4. Measurement Flowchart

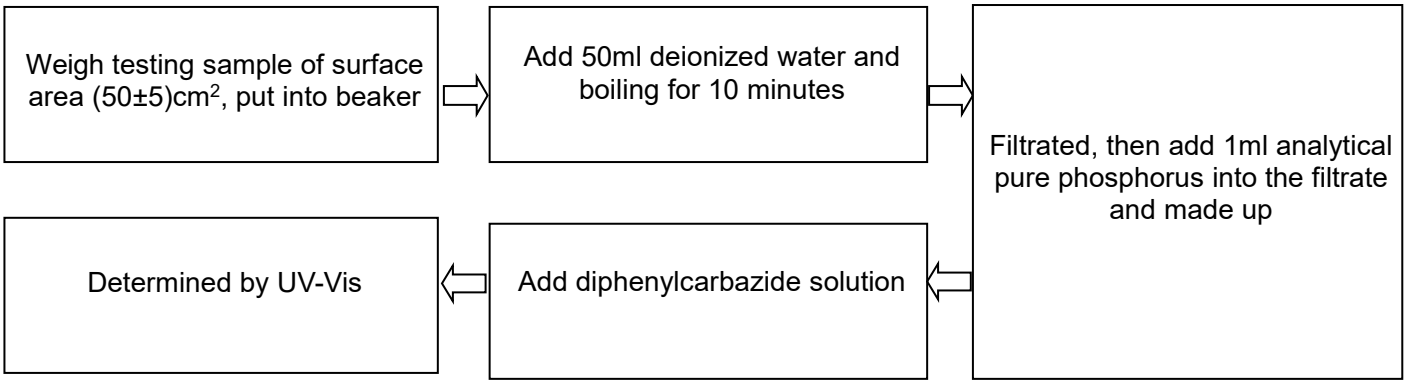
a. Test for Cd / Pb /Hg contents)



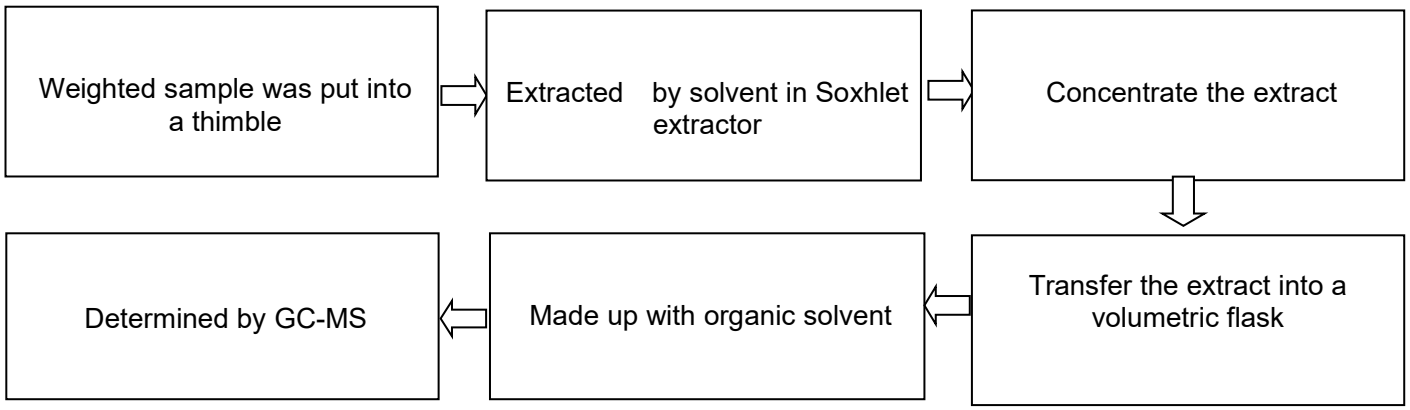
b. Test for Cr(VI) content (for non-metal)



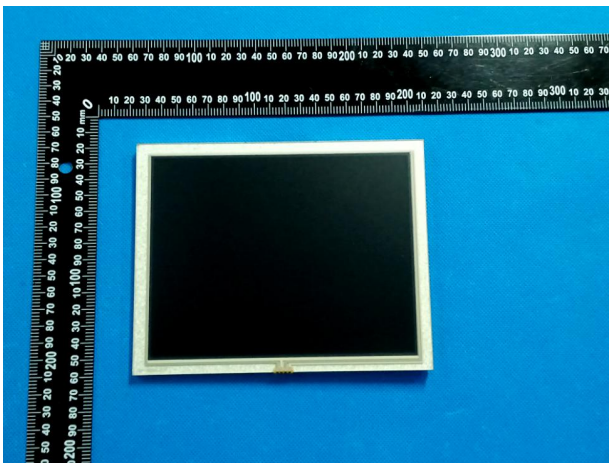
c. Test for Cr(VI) content (for metal)

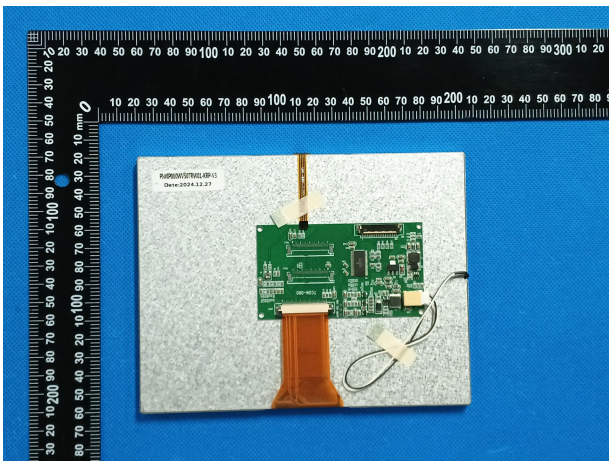


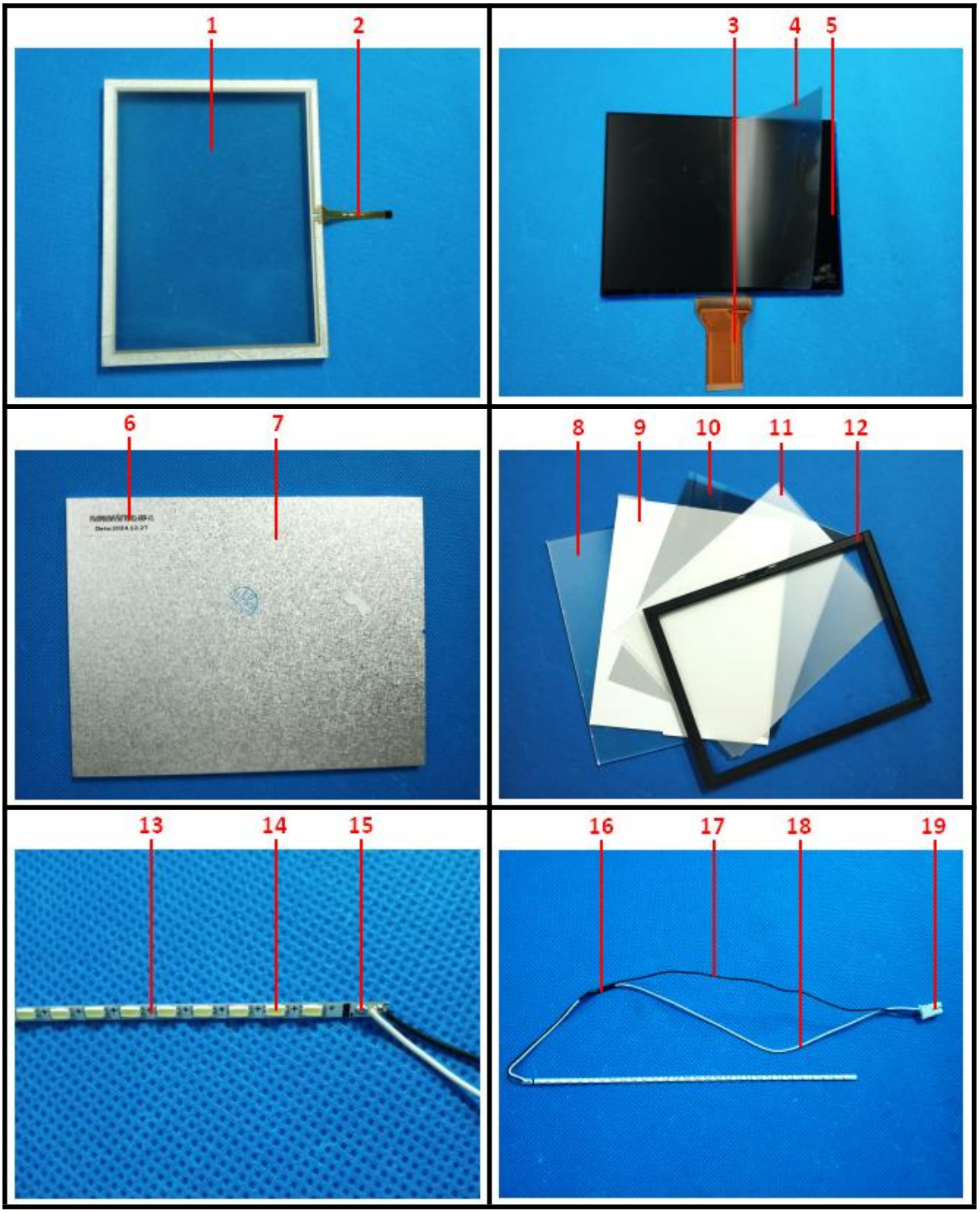
d. Test for PBBs,PBDEs,DBP,BBP,DEHP,DIBP



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



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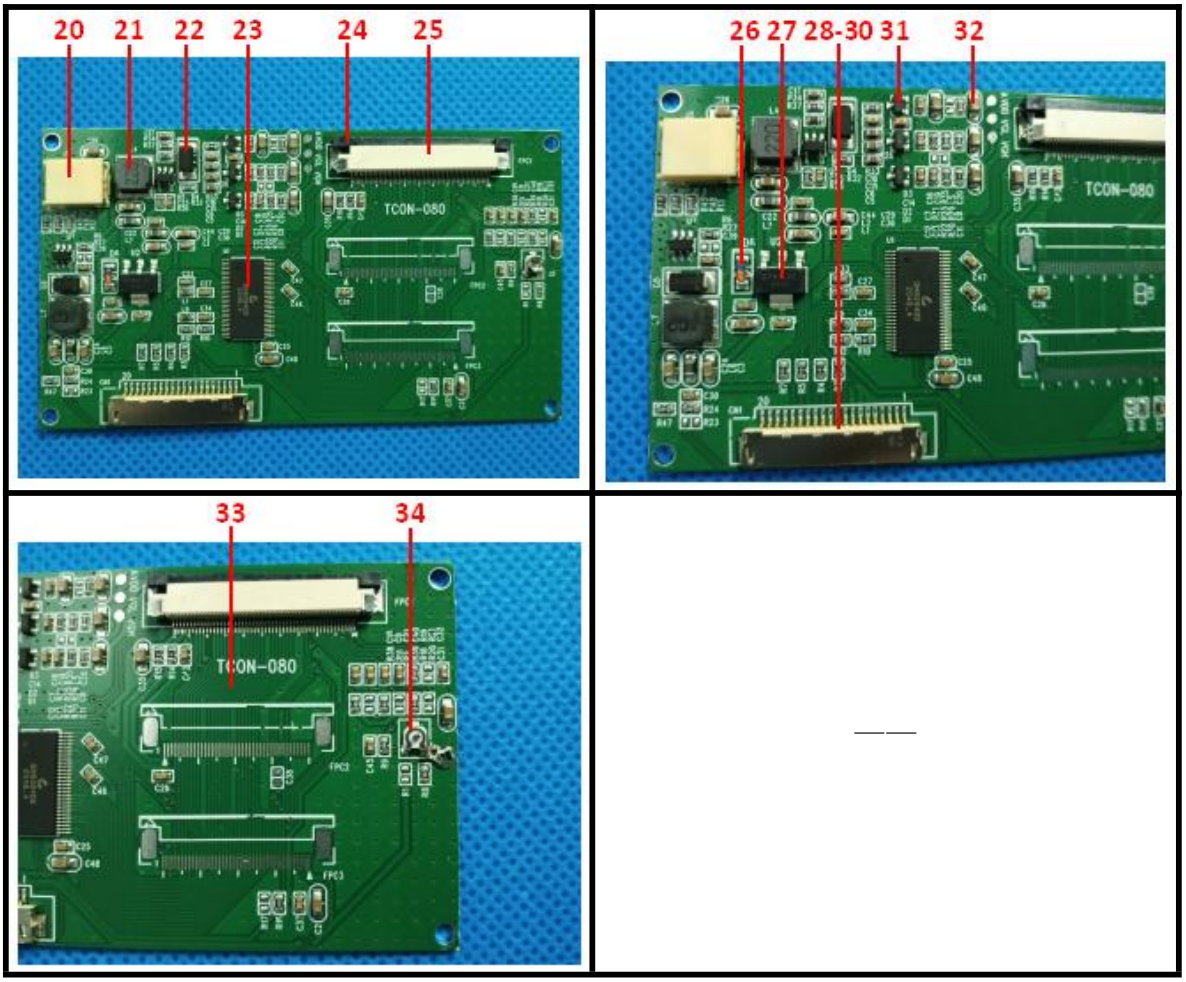
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TCON-080

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Series model：

LTK095XXXXXX SERIES、LTK096XXXXXX SERIES、
LTK013XXXXXX SERIES、LTK015XXXXXX SERIES、
LTK018XXXXXX SERIES、LTK020XXXXXX SERIES、
LTK021XXXXXX SERIES、LTK024XXXXXX SERIES、
LTK028XXXXXX SERIES、LTK034XXXXXX SERIES、
LTK346XXXXXX SERIES、LTK035XXXXXX SERIES、
LTK039XXXXXX SERIES、LTK040XXXXXX SERIES、
LTK043XXXXXX SERIES、LTK050XXXXXX SERIES、
LTK055XXXXXX SERIES、LTK060XXXXXX SERIES、
LTK062XXXXXX SERIES、LTK068XXXXXX SERIES、
LTK069XXXXXX SERIES、LTK070XXXXXX SERIES、
LTK078XXXXXX SERIES、LTK080XXXXXX SERIES、
LTK088XXXXXX SERIES、LTK100XXXXXX SERIES、
LTK101XXXXXX SERIES、LTK104XXXXXX SERIES、
LTK113XXXXXX SERIES、LTK116XXXXXX SERIES、
LTK121XXXXXX SERIES、LTK123XXXXXX SERIES、
LTK133XXXXXX SERIES、LTK156XXXXXX SERIES、
LTK185XXXXXX SERIES、LTK190XXXXXX SERIES、
LTK215XXXXXX SERIES

The results of this report apply only to samples received， Without written authorization, any copy of this report for propaganda is invalid.

.....End of Report.....