



WTF22H04078868X1C

# Test Report

Report No.: WTF22H04078868X1C

Date: Apr. 27, 2022

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Applicant: Ar Leader P. C. B (Zhuhai) Ltd.

Address: No. 1 Zhuoyue Road, Sanzao Town, Jinwan District, Zhuhai City

## Sample Information:

Sample Name: OSPENTEK PCB

Sample Received Date: Apr. 24, 2022

Testing Period: Apr. 24, 2022 - Apr. 27, 2022

Test Result: Please refer to the following page(s).

Test Requested:	Conclusion
As specified by client, to determine the Pb, Cd, Hg, Cr(VI), PBBs, PBDEs, DBP, BBP, DEHP, DIBP content in the sample with reference to EU RoHS Directive 2011/65/EU and its amendment Directive EU 2015/863.	PASS

Signed for and on behalf of HCT



Michael Huang



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**Test Result(s):**

Unit: mg/kg

Test Items	Test Method/ Equipment	MDL	Content	EU RoHS Directive 2011/65/EU and its amendment Directive EU 2015/863	
<b>Lead(Pb)</b>	IEC 62321-5:2013.	2	N.D.	1000	
<b>Cadmium(Cd)</b>	ICP-OES/AAS	2	N.D.	100	
<b>Mercury(Hg)</b>	IEC 62321-4:2013 +AMD1:2017. ICP-OES	2	N.D.	1000	
<b>Hexavalent Chromium(Cr(VI))</b>	IEC 62321-5:2013/ IEC 62321-7-2:2017. ICP-OES/AAS UV-VIS	8	N.D.	1000	
Mono-bromobiphenyl	IEC 62321-6:2015. GC-MS	5	N.D.	—	
Di-bromobiphenyl		5	N.D.		
Tri-bromobiphenyl		5	N.D.		
Tetra-bromobiphenyl		5	N.D.		
Penta-bromobiphenyl		5	N.D.		
Hexa-bromobiphenyl		5	N.D.		
Hepta-bromobiphenyl		5	N.D.		
Octa-bromobiphenyl		5	N.D.		
Nona-bromobiphenyl		5	N.D.		
Deca-bromobiphenyl		5	N.D.		
<b>Polybrominated Biphenyls(PBBs)</b>		—	N.D.		1000
Mono-bromodiphenyl ether		5	N.D.		—
Di-bromodiphenyl ether		5	N.D.		
Tri-bromodiphenyl ether	5	N.D.			
Tetra-bromodiphenyl ether	5	N.D.			
Penta-bromodiphenyl ether	5	N.D.			
Hexa-bromodiphenyl ether	5	N.D.			
Hepta-bromodiphenyl ether	5	N.D.			
Octa-bromodiphenyl ether	5	N.D.			
Nona-bromodiphenyl ether	5	N.D.			
Deca-bromodiphenyl ether	5	N.D.			
<b>Polybrominated DiphenylEthers(PBDEs)</b>	—	N.D.			



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Test Items	Test Method/Equipment	MDL	Content	EU RoHS Directive 2011/65/EU and its amendment Directive EU 2015/863
Dibutyl phthalate (DBP)	IEC 62321-8:2017, GC-MS	30	N.D.	1000
Butylbenzyl phthalate (BBP)		30	N.D.	1000
Di-(2-ethylhexyl) Phthalate(DEHP)		30	N.D.	1000
Di-iso-butyl phthalate(DIBP)		30	N.D.	1000

**Note:**

“—” =Not regulated

mg/kg (milligram per kilogram) = ppm (parts per million)

MDL=method detection limit

N.D.=not detected(less than method detection limit)

Results shown as N.D. are ignored in the sum calculation.

The detected Chromium (Cr) content is "N.D.", therefore, the Hexavalent Chromium (Cr (VI)) content is "N.D.", No need for validation test of the Hexavalent Chromium (Cr (VI)).

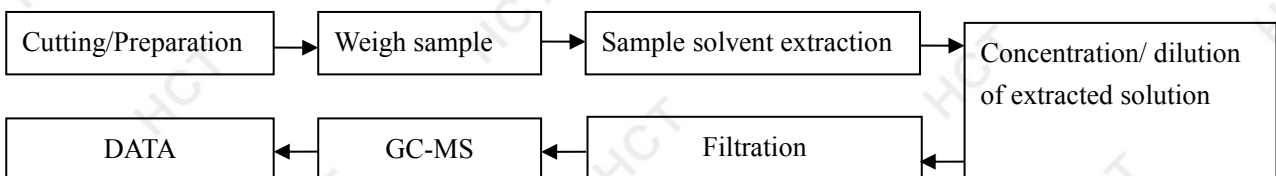
If Chromium (Cr) content exceeds Hexavalent Chromium (Cr (VI)) method detection limit, Validation test of the Hexavalent Chromium (Cr (VI)) is required.

This report replaces the report which report No. is WTF22H04078868C

**Sample Description:**

No.	HCT Sample ID	Test Part Description
1	WTF22H04078867C~870C.2	2 Cream clad copper laminate board with green/white coating, golden plating

**Test Flow Chart (DBP, BBP, DEHP, DIBP)**



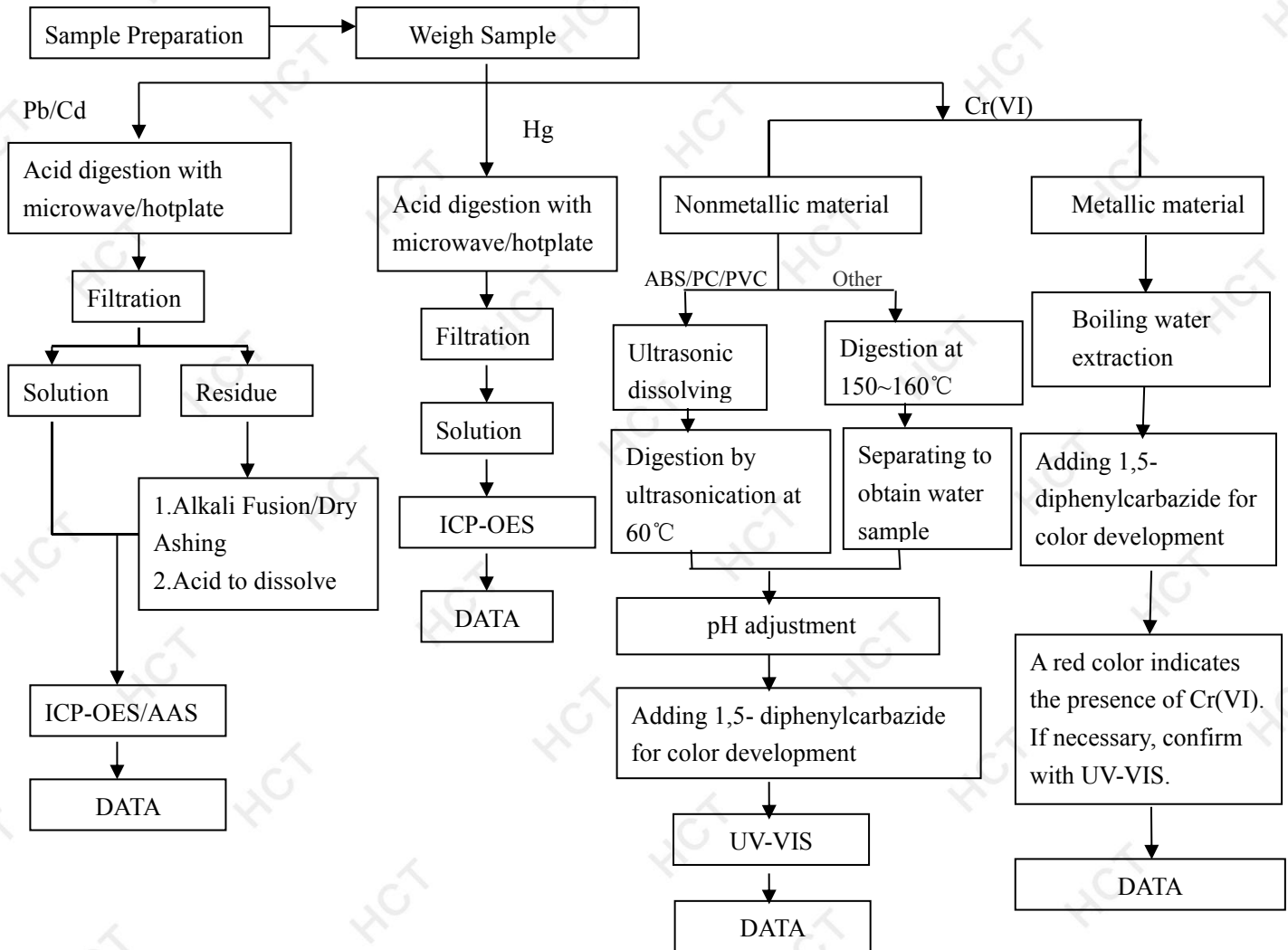
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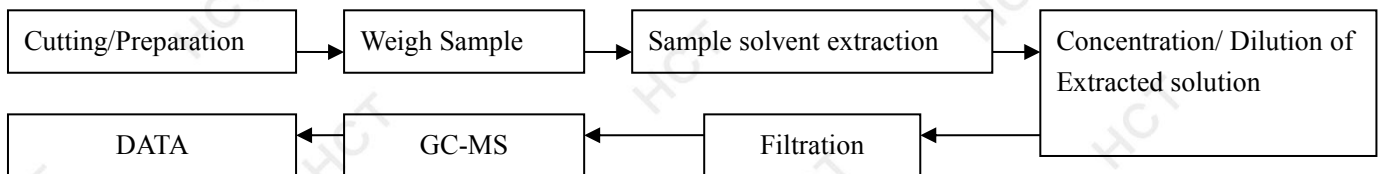
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## Test Flow Chart (Pb, Cd, Hg, Cr(VI), PBBs, PBDEs)



These sample were dissolved totally by pre-conditioning method according to above flow chart(Cr(VI) test method excluded)

### PBBs/PBDEs



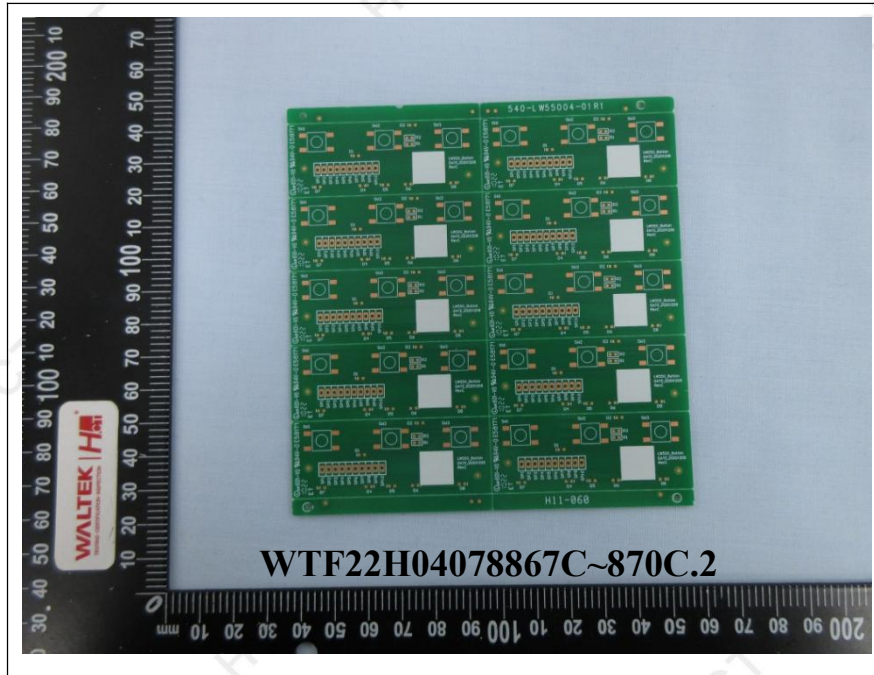
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## The photo of the sample



### Statement:

1. This report is considered invalid without approved signature and special seal;
2. The Applicant name and Address, the sample(s) and sample information was/were provided by the applicant who should be responsible for the authenticity which HCT hasn't verified;
3. The result(s) shown in this report refer(s) only to the sample(s) tested;
4. Without written approval of HCT, this report can't be reproduced except in full.

\*\*\*End\*\*\*

