



中国认可
国际互认
检测
TESTING
CNAS L4136



WTH24H03057829R1X1C



TEST REPORT

Report No : WTH24H03057829R1X1C
 Applicant : Foshan Blue Rocket Electronics Co.,Ltd.
 Address : NO. 45 GUXIN ROAD, CHANCHENG DISTRICT, FOSHAN,
 GUANGDONG, P.R.C.
 Sample Name : Semiconductor Device
 Sample Model : TSOT23-6
 Test Requested : Refer to next page (s)
 Test Conclusion : Refer to next page (s)
 Date of Receipt sample : 2024-03-20
 Testing period : 2024-03-20 ~ 2024-03-23
 Date of Issue : 2024-03-28
 Test Result : Refer to next page (s)

Prepared By:

Shenzhen Hongcai Testing Technology Co., Ltd.

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Signed for and on behalf of
 Shenzhen Hongcai Testing Technology Co., Ltd.



Michael Huang
 Shenzhen Hongcai Testing Technology Co., Ltd.
<http://www.hct-test.com>

Test Requested	Test Conclusion
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

Test Result(s):

Test Method/Equipment: IEC 62321-5:2013, IEC 62321-4:2013+AMD1:2017, IEC 62321-7-2:2017, IEC 62321-6:2015, IEC 62321-8:2017; ICP-OES, UV-VIS, GC-MS

Test Item(s)	Unit	MDL	Result(s)	Limit
			1-1	
Lead(Pb)	mg/kg	2	ND	1000
Cadmium(Cd)	mg/kg	2	ND	100
Mercury(Hg)	mg/kg	2	ND	1000
Hexavalent Chromium(Cr(VI))	mg/kg	8	ND	1000
Mono-bromobiphenyl	mg/kg	5	ND	—
Di-bromobiphenyl	mg/kg	5	ND	—
Tri-bromobiphenyl	mg/kg	5	ND	—
Tetra-bromobiphenyl	mg/kg	5	ND	—
Penta-bromobiphenyl	mg/kg	5	ND	—
Hexa-bromobiphenyl	mg/kg	5	ND	—
Hepta-bromobiphenyl	mg/kg	5	ND	—
Octa-bromobiphenyl	mg/kg	5	ND	—
Nona-bromobiphenyl	mg/kg	5	ND	—
Deca-bromobiphenyl	mg/kg	5	ND	—
Polybrominated Biphenyls(PBBs)	mg/kg	—	ND	1000
Mono-bromodiphenyl ether	mg/kg	5	ND	—
Di-bromodiphenyl ether	mg/kg	5	ND	—
Tri-bromodiphenyl ether	mg/kg	5	ND	—
Tetra-bromodiphenyl ether	mg/kg	5	ND	—
Penta-bromodiphenyl ether	mg/kg	5	ND	—
Hexa-bromodiphenyl ether	mg/kg	5	ND	—
Hepta-bromodiphenyl ether	mg/kg	5	ND	—
Octa-bromodiphenyl ether	mg/kg	5	ND	—
Nona-bromodiphenyl ether	mg/kg	5	ND	—
Deca-bromodiphenyl ether	mg/kg	5	ND	—
Polybrominated Diphenyl Ethers(PBDEs)	mg/kg	—	ND	1000
Dibutyl phthalate(DBP)	mg/kg	30	ND	1000
Butylbenzyl phthalate(BBP)	mg/kg	30	ND	1000
Di-(2-ethylhexyl) phthalate(DEHP)	mg/kg	30	ND	1000
Di-iso-butyl phthalate(DIBP)	mg/kg	30	ND	1000



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Test Method/Equipment: IEC 62321-5:2013,IEC 62321-4:2013+AMD1:2017,IEC 62321-7-1:2015; AAS,ICP-OES,UV-VIS

Test Item(s)	Unit	MDL	Result(s)	Limit
			1-2	
Lead(Pb)	mg/kg	2	29	1000
Cadmium(Cd)	mg/kg	2	ND	100
Mercury(Hg)	mg/kg	2	ND	1000
Hexavalent Chromium(Cr(VI))	µg/cm ²	0.1	ND	◆

Note:

The sample(s) had been dissolved totally tested for Lead,Cadmium,Mercury.

µg/cm² =microgram per square centimeter

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

ND=Not Detected

MDL=Method Detection Limit

Results shown as ND are ignored in the sum calculation.

The detected Chromium (Cr) content is "ND", therefore, the Hexavalent Chromium (Cr (VI)) content is "ND", 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.

◆ = According to the test method IEC 62321-7-1:2015:①The sample is positive for Cr(VI) if the Cr(VI) concentration is greater than 0.13µg/cm². The sample coating is considered to contain Cr(VI); ②The sample is negative for Cr(VI) if Cr(VI) is ND (concentration less than 0.10µg/cm²). The coating is considered a non-Cr(VI) based coating; ③The result between 0.10µg/cm² and 0.13µg/cm² is considered to be inconclusive -unavoidable coating variations may influence the determination; The surface difference of samples from different individuals may affect the determination results of Cr(VI); Information on storage conditions and production date of the tested sample is unavailable and thus Cr(VI) results represent status of the sample at the time of testing.

This report replaces the report which report No. is WTH24H03057829R1C.

Sample Description:

No.	HCT Sample ID	Test Part Description		Note
1-1	WTH24H03057829C~7831C.1	1-1	Black body	●
1-2		1-2	Silver metal pin	●

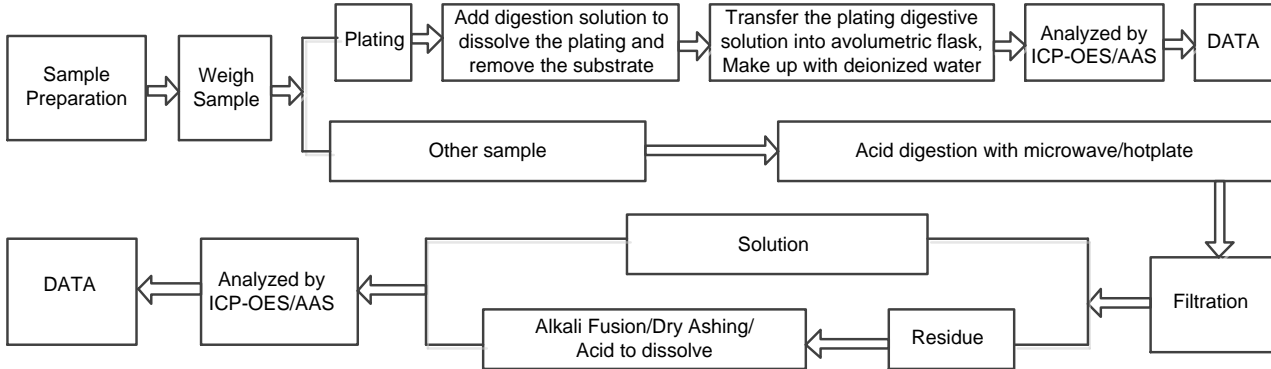
Note:

●=Actual tested sample

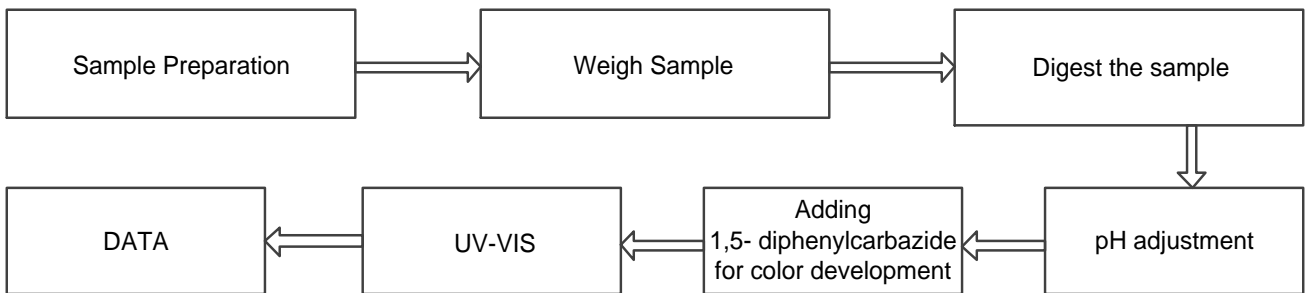
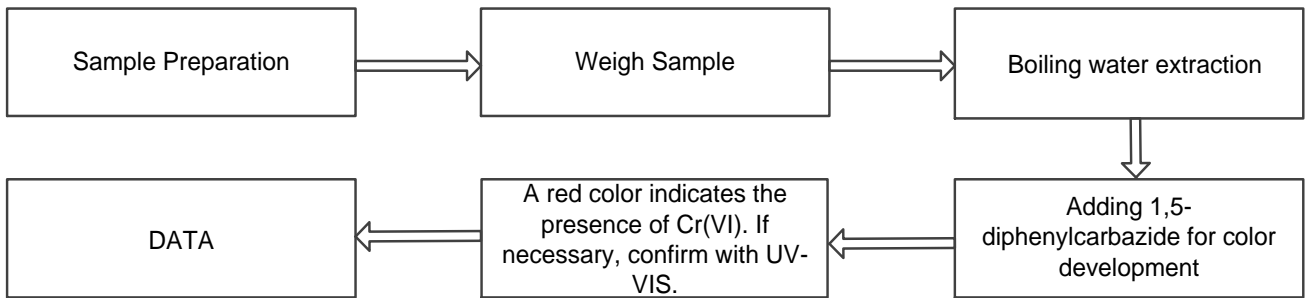


Test Flow Chart:

Lead(Pb), Cadmium(Cd), Mercury(Hg), Chromium(Cr)

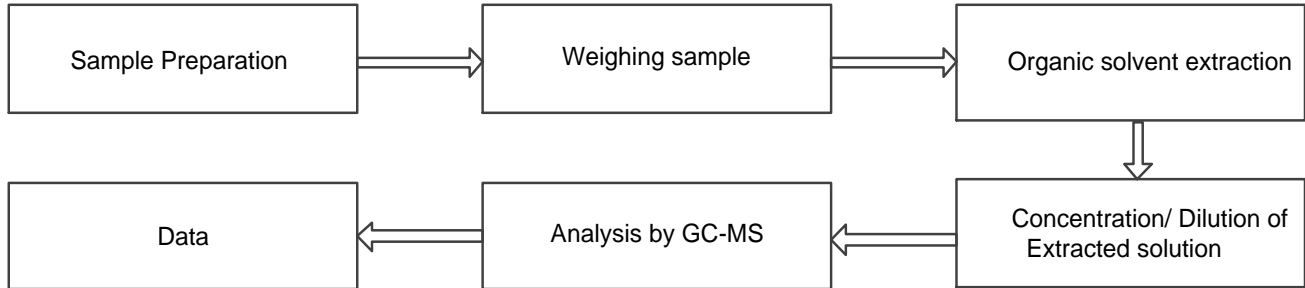


Hexavalent Chromium(Cr(VI))

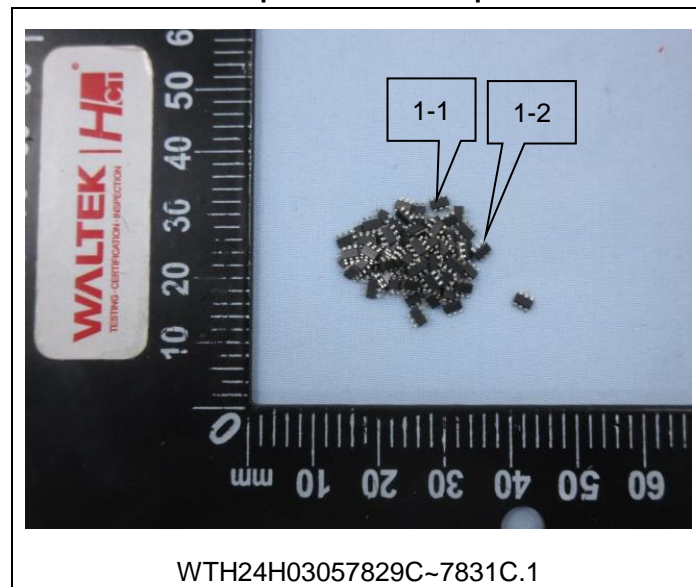


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Polybrominated Biphenyls(PBBs), Polybrominated Diphenyl Ethers(PBDEs), Dibutyl phthalate(DBP), Butylbenzyl phthalate(BBP), Di-(2-ethylhexyl) phthalate(DEHP), Di-iso-butyl phthalate(DIBP)



The photo of the sample



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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)(conclusion) 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.
5. The result(s) in no CMA logo report shall only be used for client's scientific research, teaching, internal quality control, product research and development, etc..and just for internal reference.
6. The "n" in CNAS logo report means that the test item(s) was (were) currently not applying for CNAS accreditation.
7. Decision rules used in this report:
 - (1)According to the Decision rules in the regulations/standards listed in the Test Requested;
 - (2)If there is no Decision rules specified in the regulations listed in the Test Requested, then according to CNAS-GL015 Guidelines on Decision Rules and Statements of Conformity, 6.2.1, Simple Acceptance ($w=0$) of The binary Decision rule:
PASS (Accepted) - The measured value is within the tolerance interval.
FAIL (Rejected) - The measured value is outside the tolerance interval.

===== End of Report =====

