

Test Report



Page 1 of 9

Report No. A2250399870101001R1

Company Name
shown on Report XIAMEN TONGFU MICROELECTRONICS CO., LTD.

Address NO.89 NANHAI 2ND ROAD, HAICANG DISTRICT, XIAMEN CITY, FUJIAN
PROVINCE

The following sample(s) and sample information was/were submitted and identified by/on the behalf of the applicant

Sample Name Gold bump
Sample Received Date Jun. 10, 2025
Testing Period Jun. 10, 2025 to Jun. 20, 2025

Test Requested As specified by client, to test Lead (Pb), Cadmium (Cd), Mercury (Hg), Hexavalent Chromium (Cr(VI)), Polybrominated Biphenyls (PBBs), Polybrominated Diphenyl Ethers (PBDEs), Phthalates (DBP, BBP, DEHP, DIBP), Arsenic(As), Beryllium(Be), Antimony(Sb), Fluorine (F), Chlorine (Cl), Bromine (Br), Iodine (I), Hexabromocyclododecane (HBCDD), Perfluorooctanoic Acid(PFOA), Perfluorooctane Sulfonates(PFOS) in the submitted sample(s).

Test Method Please refer to the following page(s).

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



Approved by

Hill Zheng

Date

Jun. 25, 2025

Hill Zheng

Technical Manager

No. R411771622

Centre Testing International Group Co., Ltd.

CTI Building, Xing Dong Community, Xin'an Sub-district, Bao'an District, Shenzhen City, Guangdong Province, P.R. China

Test Report

Report No. A2250399870101001R1

Page 2 of 9

Test Method

Test Item(s)	Test Method	Measured Equipment(s)
Lead (Pb)	IEC 62321-5:2013	ICP-OES
Cadmium (Cd)	IEC 62321-5:2013	ICP-OES
Mercury (Hg)	IEC 62321-4:2013+AMD1:2017 CSV	ICP-OES
Hexavalent Chromium (Cr(VI))	IEC 62321-7-2:2017 and/or determination of Total Chromium by IEC 62321-5:2013	UV-Vis/ICP-OES
Polybrominated Biphenyls (PBBs)	IEC 62321-12:2023	GC-MS
Polybrominated Diphenyl Ethers (PBDEs)	IEC 62321-12:2023	GC-MS
Phthalates (DBP, BBP, DEHP, DIBP)	IEC 62321-12:2023	GC-MS
Arsenic(As)	Refer to US EPA 3052:1996 & US EPA 6010D:2018	ICP-OES
Beryllium(Be)	Refer to US EPA 3052:1996 & US EPA 6010D:2018	ICP-OES
Antimony(Sb)	Refer to US EPA 3052:1996 & US EPA 6010D:2018	ICP-OES
Fluorine (F)	EN 14582:2016	IC
Chlorine (Cl)	EN 14582:2016	IC
Bromine (Br)	EN 14582:2016	IC
Iodine (I)	EN 14582:2016	IC
Hexabromocyclododecane (HBCDD)	IEC 62321-9:2021	GC-MS
Perfluorooctanoic Acid(PFOA)	CEN/TS 15968:2010	LC-MS-MS
Perfluorooctane Sulfonates(PFOS)	CEN/TS 15968:2010	LC-MS-MS

Test Report

Report No. A2250399870101001R1

Page 3 of 9

Test Result(s)

Tested Item(s)	Result	MDL
	001	
Lead (Pb)	N.D.	2 mg/kg
Cadmium (Cd)	N.D.	2 mg/kg
Mercury (Hg)	N.D.	2 mg/kg
Hexavalent Chromium (Cr(VI))	N.D.	8 mg/kg
Tested Item(s)	Result	MDL
	001	
Polybrominated Biphenyls (PBBs)		
Monobromobiphenyl	N.D.	25 mg/kg
Dibromobiphenyl	N.D.	25 mg/kg
Tribromobiphenyl	N.D.	25 mg/kg
Tetrabromobiphenyl	N.D.	25 mg/kg
Pentabromobiphenyl	N.D.	25 mg/kg
Hexabromobiphenyl	N.D.	25 mg/kg
Heptabromobiphenyl	N.D.	25 mg/kg
Octabromobiphenyl	N.D.	25 mg/kg
Nonabromobiphenyl	N.D.	25 mg/kg
Decabromobiphenyl	N.D.	25 mg/kg
Tested Item(s)	Result	MDL
	001	
Polybrominated Diphenyl Ethers (PBDEs)		
Monobromodiphenyl ether	N.D.	25 mg/kg
Dibromodiphenyl ether	N.D.	25 mg/kg
Tribromodiphenyl ether	N.D.	25 mg/kg
Tetrabromodiphenyl ether	N.D.	25 mg/kg
Pentabromodiphenyl ether	N.D.	25 mg/kg
Hexabromodiphenyl ether	N.D.	25 mg/kg
Heptabromodiphenyl ether	N.D.	25 mg/kg
Octabromodiphenyl ether	N.D.	25 mg/kg
Nonabromodiphenyl ether	N.D.	25 mg/kg
Decabromodiphenyl ether	N.D.	25 mg/kg

Test Report

Report No. A2250399870101001R1

Page 4 of 9

Test Result(s)

Tested Item(s)	Result	MDL
	001	
Phthalates (DBP, BBP, DEHP, DIBP)		
Dibutyl phthalate (DBP) CAS#:84-74-2	N.D.	50 mg/kg
Butyl benzyl phthalate (BBP) CAS#:85-68-7	N.D.	50 mg/kg
Di-(2-ethylhexyl) phthalate (DEHP) CAS#:117-81-7	N.D.	50 mg/kg
Diisobutyl phthalate (DIBP) CAS#:84-69-5	N.D.	50 mg/kg
Tested Item(s)	Result	MDL
	001	
Arsenic (As)	N.D.	10 mg/kg
Beryllium (Be)	N.D.	2 mg/kg
Antimony (Sb)	N.D.	5 mg/kg
Tested Item(s)	Result	MDL
	001	
Fluorine (F)	N.D.	10 mg/kg
Chlorine (Cl)	N.D.	10 mg/kg
Bromine (Br)	N.D.	10 mg/kg
Iodine (I)	N.D.	10 mg/kg
Tested Item(s)	Result	MDL
	001	
Hexabromocyclododecane (HBCDD)	N.D.	20 mg/kg
Tested Item(s)	Result	MDL
	001	
Perfluorooctanoic Acid (PFOA)	N.D.	0.010 mg/kg
Tested Item(s)	Result	MDL
	001	
Perfluorooctane Sulfonates (PFOS)	N.D.	0.010 mg/kg

Test Report

Report No. A2250399870101001R1

Page 5 of 9

Sample/Part Description

No.	CTI Sample ID	Description
1	001	Wafer(Tested as a whole)

Remark:

- The sample(s) had been dissolved totally tested for Lead, Cadmium, Mercury, Arsenic, Beryllium, Antimony.
- The sample(s) was tested as a whole, because it's impossible to disassemble or separate it by current equipment and technology. The result(s) shown on this report may be different from the content of any homogeneous material.
- MDL = Method Detection Limit
- N.D. = Not Detected (<MDL)
- mg/kg = ppm = parts per million

Note: This testing report revised “Sample Name” based on the original report of No. A2250399870101001. This testing report displaces the original one which was invalid since the date of this testing report released.

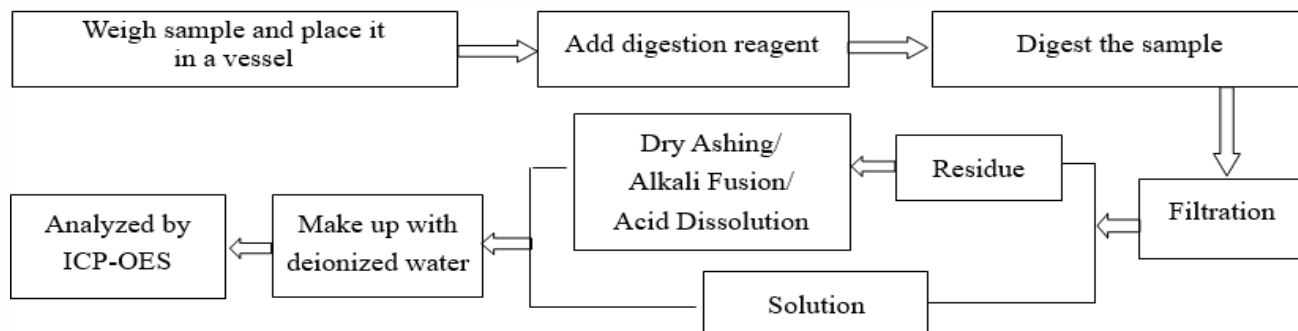
Test Report

Report No. A2250399870101001R1

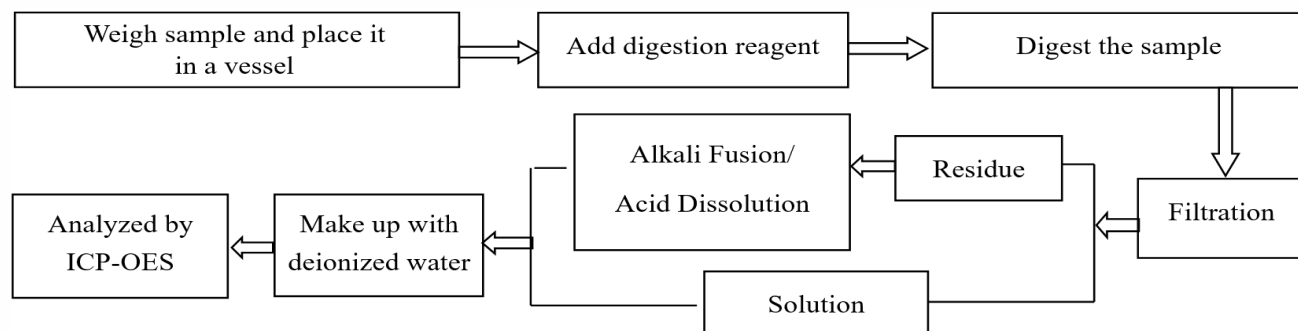
Page 6 of 9

Test Process

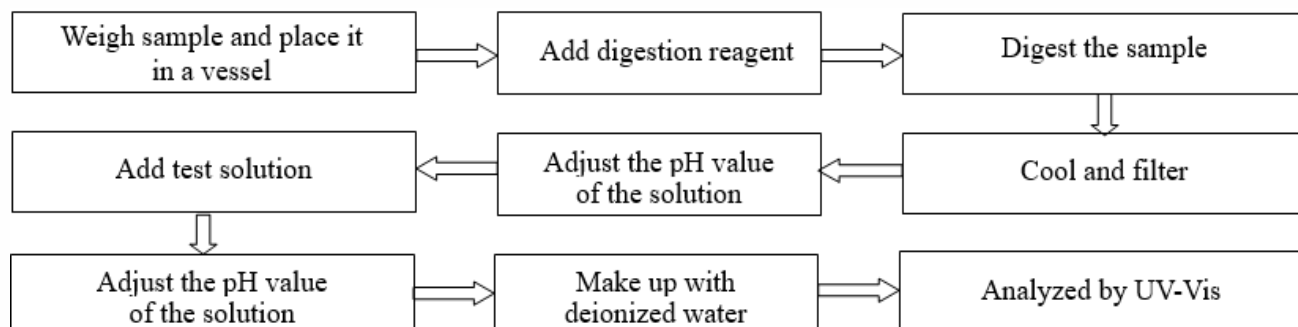
1. Lead (Pb), Cadmium (Cd), Chromium (Cr)



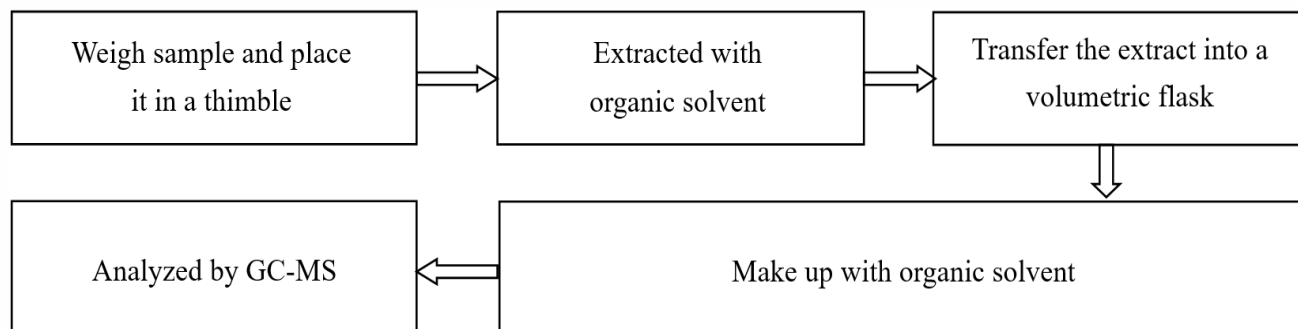
2. Mercury (Hg)



3. Hexavalent Chromium (Cr(VI))



4. Polybrominated Biphenyls (PBBs), Polybrominated Diphenyl Ethers (PBDEs)

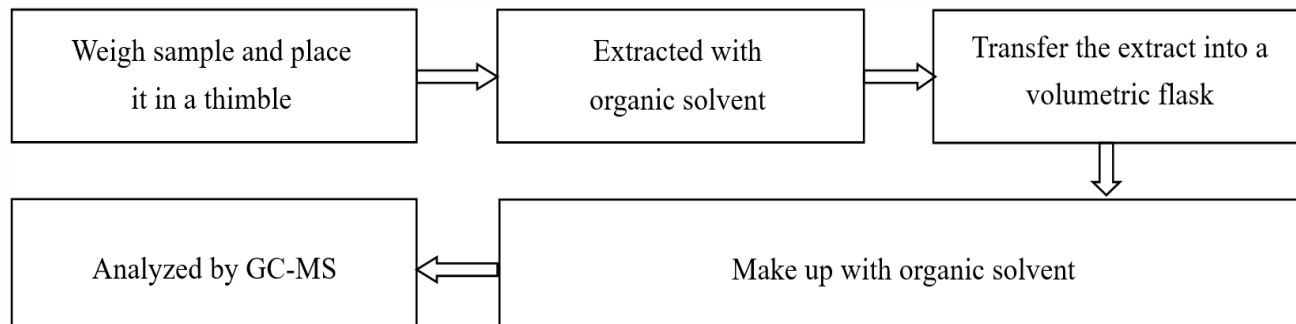


Test Report

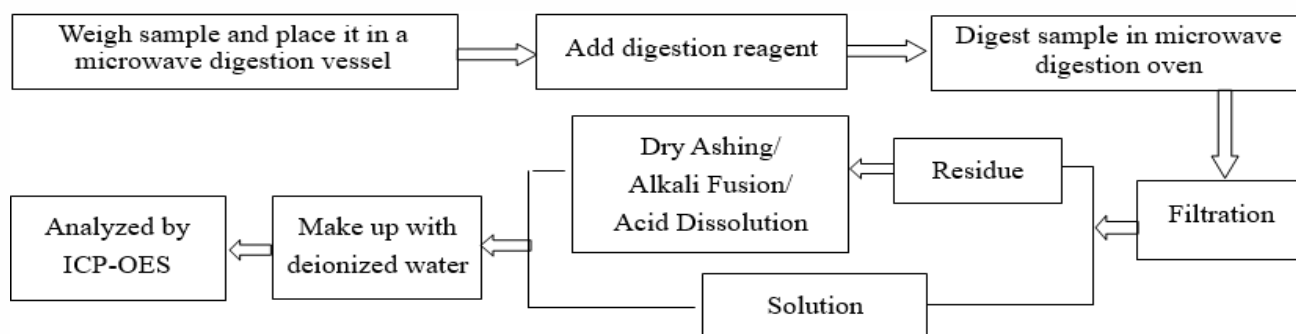
Report No. A2250399870101001R1

Page 7 of 9

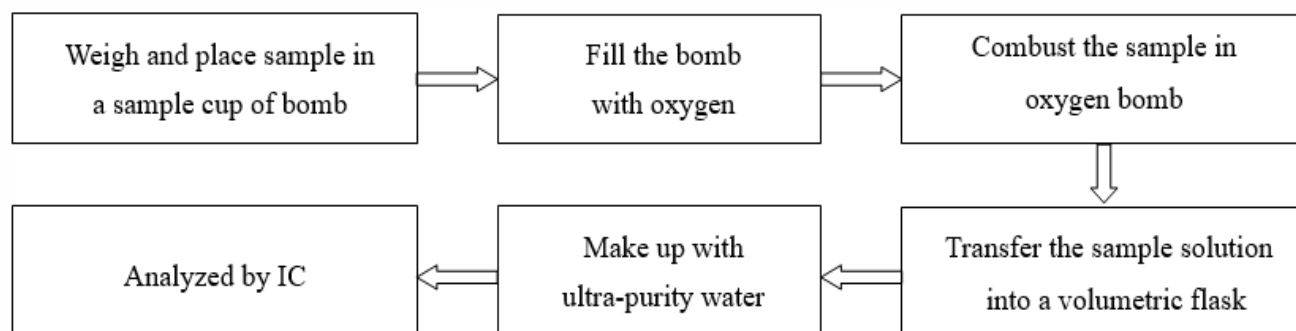
5. Phthalates (DBP, BBP, DEHP, DIBP)



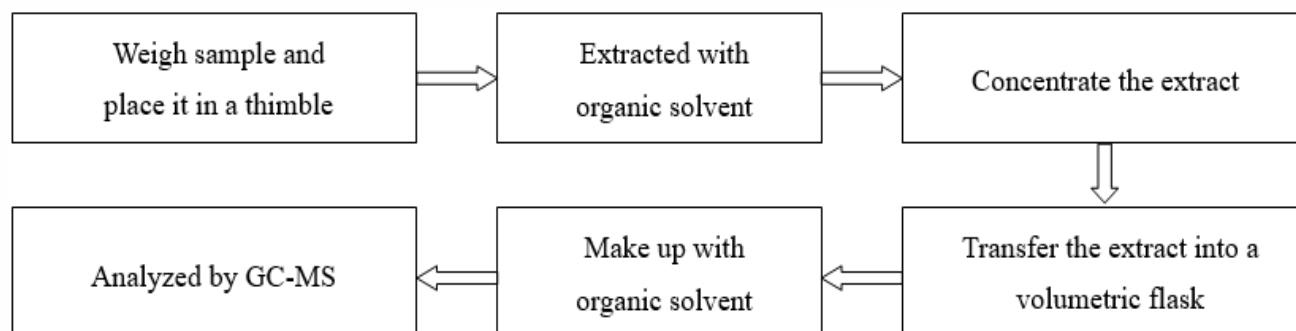
6. Arsenic(As), Beryllium(Be), Antimony(Sb)



7. Fluorine (F), Chlorine (Cl), Bromine (Br), Iodine (I)

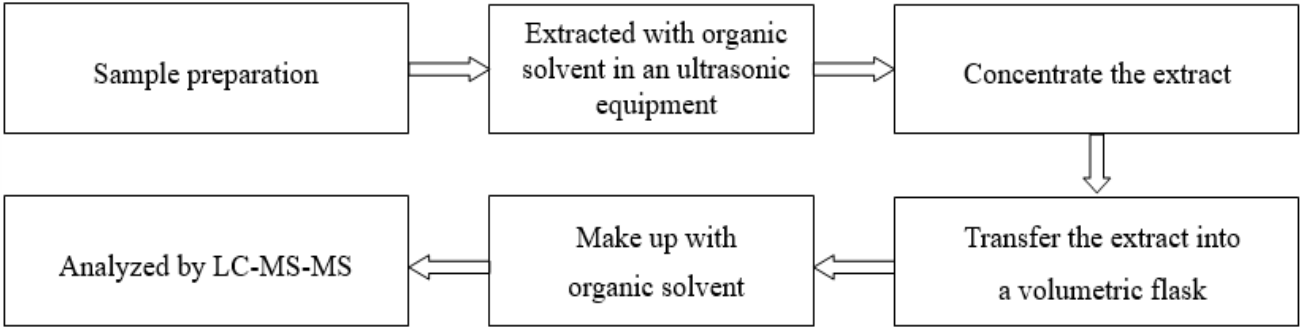


8. Hexabromocyclododecane (HBCDD)



Test Report

Report No. A2250399870101001R1 Page 8 of 9
9. Perfluorooctanoic Acid(PFOA), Perfluorooctane Sulfonates(PFOS)

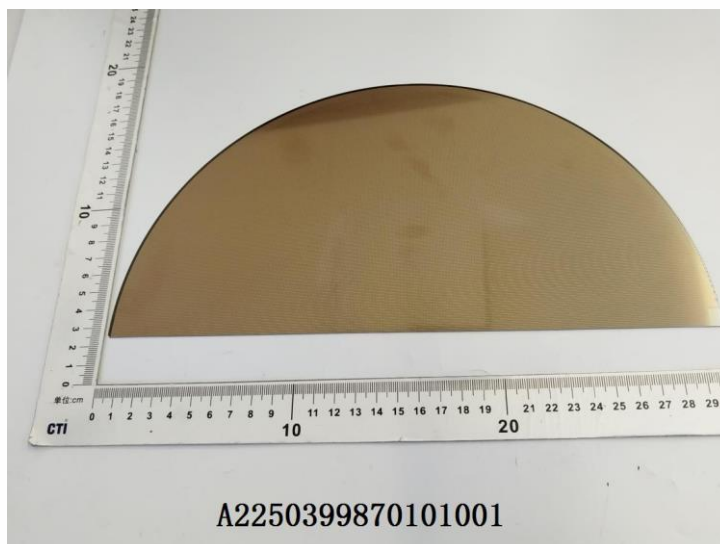


Test Report

Report No. A2250399870101001R1

Page 9 of 9

Photo(s) of the sample(s)



Statement:

1. This report is considered invalid without approved signature, special seal and the seal on the perforation;
2. The Company Name shown on Report and Address, the sample(s) and sample information was/were provided by the applicant who should be responsible for the authenticity which CTI hasn't verified;
3. The result(s) shown in this report refer(s) only to the sample(s) tested;
4. Unless otherwise stated, the decision rule for conformity reporting is based on Binary Statement for Simple Acceptance Rule (w=0) stated in ILAC-G8:09/2019 / CNAS-GL015:2022;
5. Without written approval of CTI, this report can't be reproduced except in full;
6. In case of any discrepancy between the English version and Chinese version of the testing reports (if generated), the Chinese version shall prevail.

*** End of report ***