

TEST REPORT

CheckCode:904230

Report

No.:C202411292384-1E-G1

Company Name: Shanghai Eastsoft Microelectronics Co.,Ltd.
Address: 3rd Floor, Building 12,Phoenix Park, No.1515 Gumei Road, Xuhui District,Shanghai.

The following sample information is provided by the client and responsible for its authenticity

Sample Name: SOP Chip
Model: SOP8
Reference Model: MSOP8/SSOP8/TSSOP8
Sample State: Normal

Date of Receipt: Dec. 6, 2024 Test Period: Dec. 6, 2024 – Dec. 13, 2024

Test Request: 1) As specified by client, to determine the Lead(Pb), Cadmium(Cd), Mercury(Hg), Hexavalent Chromium [Cr(VI)], Polybrominated biphenyls (PBBs), Polybrominated diphenyl ethers (PBDEs), Bis(2-ethylhexyl) phthalate (DEHP), Butyl benzyl phthalate (BBP), Dibutyl phthalate (DBP), Diisobutyl phthalate (DIBP) content in the submitted sample(s).

Judge Standard: 1) RoHS Directive (EU) 2015/863 amending Annex II to Directive 2011/65/EU.
2) EN 61249-2-21:2003

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

Conclusion: 1) Based on the performed test on submitted sample, the result(s) comply with the limits as set by RoHS Directive (EU) 2015/863 amending Annex II to Directive 2011/65/EU.
2) Based on the performed test on submitted sample, the result(s) comply with the limits as set by EN 61249-2-21:2003.

Edited by Guo Yiqing Reviewed by Zhang Lina Approved by Zhang Xiaoping



扫一扫 验真伪

Issue date:Jan.3,2025

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Laboratory Add: No. 31, Nanxiang 2nd Road, Science City, Huangpu District, Guangzhou, P.R.China
Tel: 4006020999 Fax: +86-020-38698685 Website: <http://www.grgttest.com>

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Sample description:

Sample No.	Description
1	Black body
2	Silvery metal pin

- Remark:
- 1) mg/kg = ppm
 - 2) MDL = Method Detection Limit
 - 3) "N.D." = Not Detected (Below Method Detection Limit)
 - 4) For metal sample
 - a. The sample is negative for Cr(VI) if Cr(VI) is N.D.(concentration less than $0.10 \mu\text{g}/\text{cm}^2$).The sample coating is considered a non- Cr(VI) based coating.
 - b. The sample is positive for Cr(VI) if the Cr(VI) concentration is greater than $0.13 \mu\text{g}/\text{cm}^2$.The sample coating is considered to contain Cr(VI).
 - c. The result between $0.10 \mu\text{g}/\text{cm}^2$ and $0.13 \mu\text{g}/\text{cm}^2$ is considered to be inconclusive. unavoidable coating variations may influence the determination.
 - 5) This report C202411292384-1E-G1 is the modification of report C202411292384-1E. The original report C202411292384-1E is invalid since this report is sent out.

Test result(s):

1) RoHS

Test method:

Test Item(s)	Test Method	Measuring Instrument	Limit
Lead (Pb)	IEC 62321-5:2013	ICP-OES/AAS	1000mg/kg
Cadmium (Cd)	IEC 62321-5:2013	ICP-OES	100mg/kg
Mercury (Hg)	IEC 62321-4:2013 +AMD1:2017	ICP-OES	1000mg/kg
Hexavalent Chromium [Cr (VI)]	IEC 62321-7-1:2015	UV-Vis	---
	IEC 62321-7-2:2017	UV-Vis	1000mg/kg
Polybrominated biphenyls (PBBs)	IEC 62321-6:2015	GC-MS	1000mg/kg

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Test Item(s)	Test Method	Measuring Instrument	Limit
Polybrominated diphenyl ethers (PBDEs)	IEC 62321-6:2015	GC-MS	1000mg/kg
Bis(2-ethylhexyl) phthalate (DEHP)	IEC 62321-8:2017	GC-MS	1000mg/kg
Butyl benzyl phthalate (BBP)	IEC 62321-8:2017	GC-MS	1000mg/kg
Dibutyl phthalate (DBP)	IEC 62321-8:2017	GC-MS	1000mg/kg
Diisobutyl phthalate (DIBP)	IEC 62321-8:2017	GC-MS	1000mg/kg

Test Item	Sample	Unit	MDL
	1		
Lead (Pb)	N.D.	mg/kg	2
Cadmium (Cd)	N.D.	mg/kg	2
Mercury (Hg)	N.D.	mg/kg	2
Hexavalent Chromium [Cr(VI)]	N.D.	mg/kg	8

Test Item	Sample	Unit	MDL
	2		
Lead (Pb)	N.D.	mg/kg	2
Cadmium (Cd)	N.D.	mg/kg	2
Mercury (Hg)	N.D.	mg/kg	2
Hexavalent Chromium [Cr(VI)]	N.D.	µg/cm ²	0.10

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Test Item	Sample	Unit	MDL
	1		
Sum of PBBs	N.D.	mg/kg	---
Monobromobiphenyl	N.D.	mg/kg	50
Dibromobiphenyl	N.D.	mg/kg	50
Tribromobiphenyl	N.D.	mg/kg	50
Tetrabromobiphenyl	N.D.	mg/kg	50
Pentabromobiphenyl	N.D.	mg/kg	50
Hexabromobiphenyl	N.D.	mg/kg	50
Heptabromobiphenyl	N.D.	mg/kg	50
Octabromobiphenyl	N.D.	mg/kg	50
Nonabromobiphenyl	N.D.	mg/kg	50
Decabromobiphenyl	N.D.	mg/kg	50
Sum of PBDEs	N.D.	mg/kg	---
Monobromodiphenyl ether	N.D.	mg/kg	50
Dibromodiphenyl ether	N.D.	mg/kg	50
Tribromodiphenyl ether	N.D.	mg/kg	50
Tetrabromodiphenyl ether	N.D.	mg/kg	50
Pentabromodiphenyl ether	N.D.	mg/kg	50
Hexabromodiphenyl ether	N.D.	mg/kg	50
Heptabromodiphenyl ether	N.D.	mg/kg	50
Octabromodiphenyl ether	N.D.	mg/kg	50
Nonabromodiphenyl ether	N.D.	mg/kg	50
Decabromodiphenyl ether	N.D.	mg/kg	50

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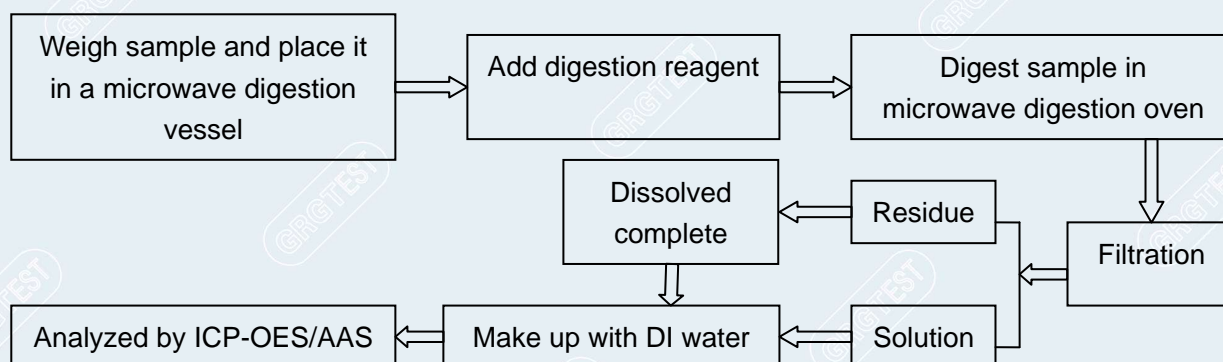
Test Item	Sample	Unit	MDL
	1		
Bis(2-ethylhexyl) phthalate (DEHP)	N.D.	mg/kg	50
Butyl benzyl phthalate (BBP)	N.D.	mg/kg	50
Dibutyl phthalate (DBP)	N.D.	mg/kg	50
Diisobutyl phthalate (DIBP)	N.D.	mg/kg	50

2) Halogen

Test Method: With reference to EN 14582: 2016, analysis was performed by Ion Chromatography.

Test Item	Sample	Unit	MDL	Limit	Conclusion
	1				
Fluorine (F)	N.D.	mg/kg	25	---	---
Chlorine (Cl)	N.D.	mg/kg	25	≤900	Comply
Bromine (Br)	N.D.	mg/kg	25	≤900	Comply
Iodine (I)	N.D.	mg/kg	25	---	---
Sum of Cl & Br	N.D.	mg/kg	---	≤1500	Comply

Test Process for Pb / Cd / Hg



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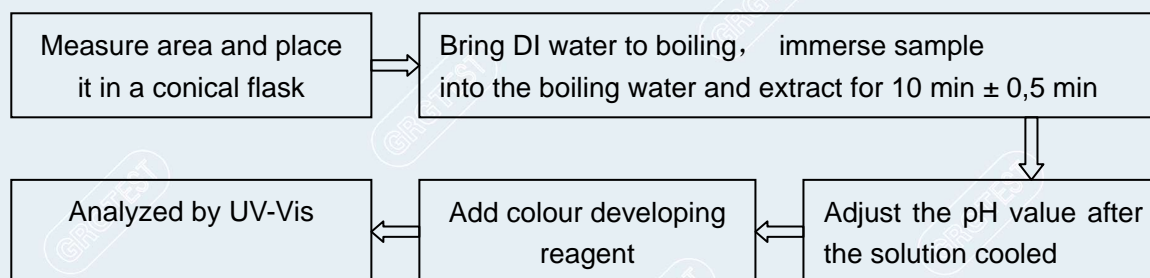
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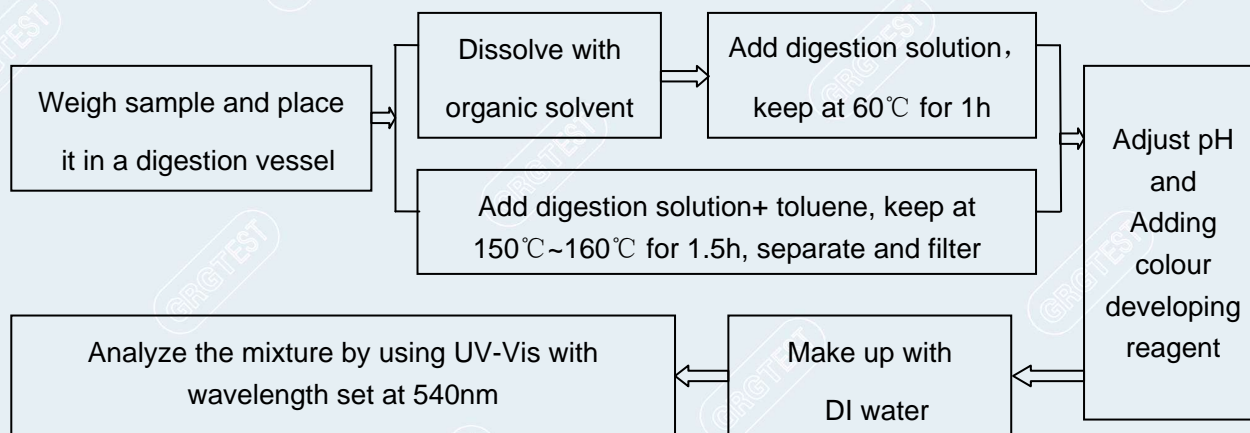
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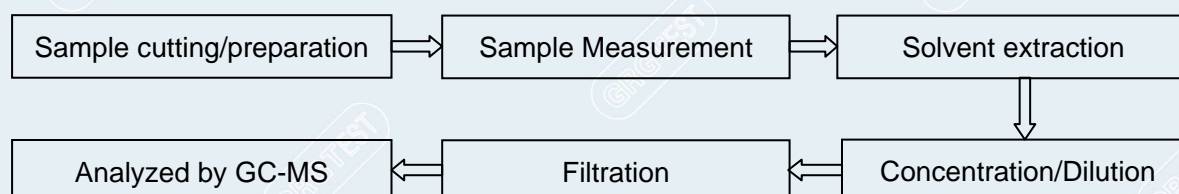
Test Process for Cr (VI) (metal / plating)



Test Process for Cr (VI) (Nonmetal)



Test Process for PBBs & PBDEs



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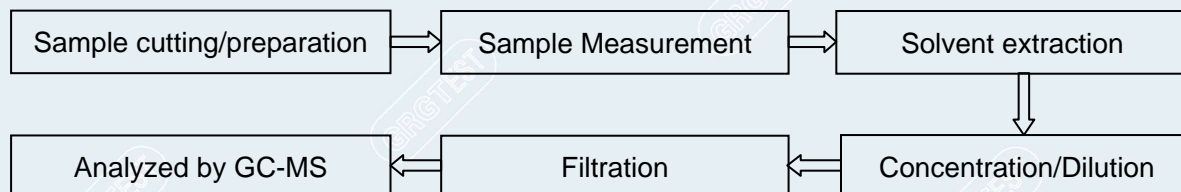
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Test Process for Phthalates



Halogen test process:

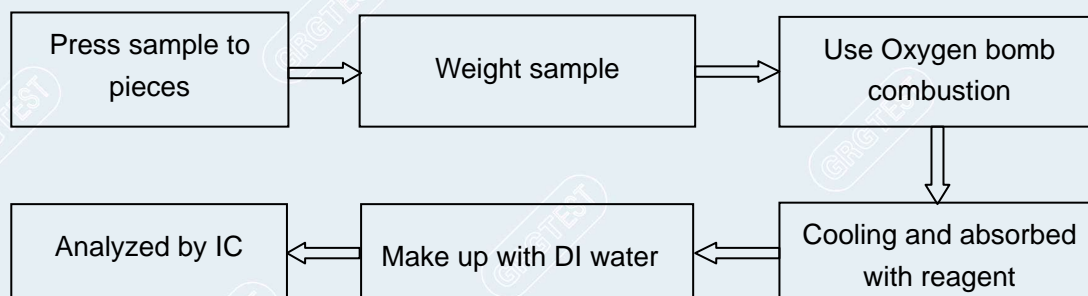
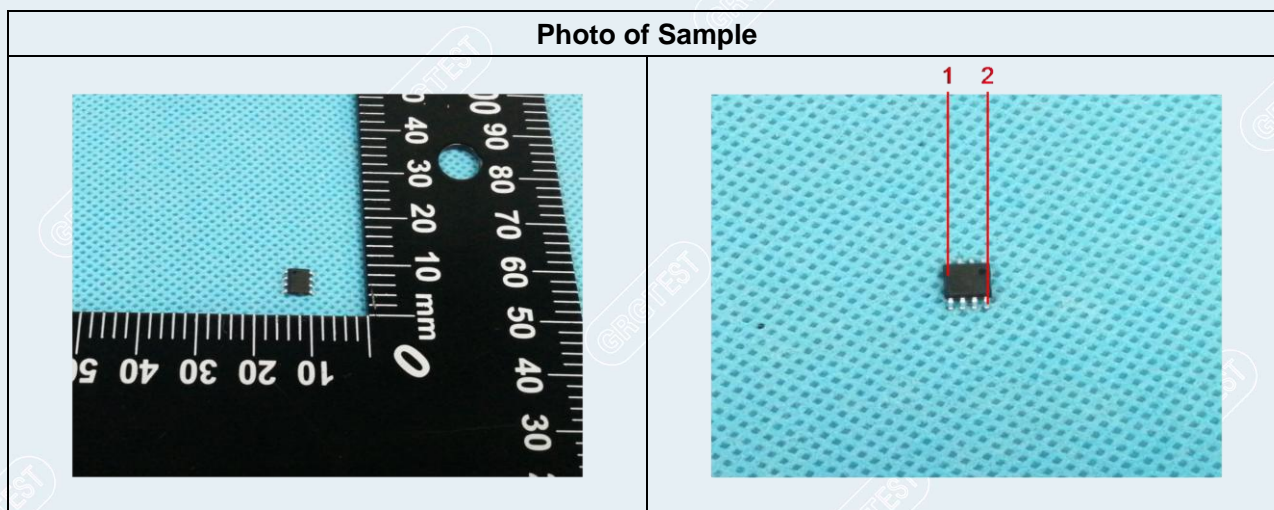


Photo of Sample



-----End of Report-----

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