

Test Report

No.: SHAEC23016030102

Date: Oct 12, 2023

Page 1 of 13

Client Name: CSMC TECHNOLOGIES FAB2 CO.,LTD

Client Address: 14 LIANGXI ROAD,WUXI,JIANGSU 214061,CHINA

Sample Name: 6 IN WAFER

Model No.: BCD

The above sample(s) and information were provided by the client.

SGS Job No.: TIC1020230928113039MYCR

Sample Receiving Date: Oct 08, 2023

Testing Period: Oct 08, 2023 ~ Oct 12, 2023

Test Requested: Select test(s) as requested by the client.

Test Method(s): Please refer to next page(s).

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

Test Requirement	Conclusion
EU RoHS Directive (EU) 2015/863 amending Annex II to Directive 2011/65/EU- Lead, Mercury, Cadmium, Hexavalent chromium, Polybrominated biphenyls (PBBs), Polybrominated diphenyl ethers (PBDEs), Bis(2-ethylhexyl) phthalate (DEHP), Butyl benzyl phthalate (BBP), Dibutyl phthalate (DBP) and Diisobutyl phthalate (DIBP)	Pass
Halogen	See Results
Hexabromocyclododecane (HBCDD)	See Results
TBBP-A	See Results
Perfluorooctane Sulfonates (PFOS) and its derivatives and Perfluorooctanoic Acid (PFOA) and its salts	See Results

Signed for and on behalf of
SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd.



Sue Sheng
Approved Signatory



Test Report

No.: SHAEC23016030102

Date: Oct 12, 2023

Page 2 of 13

Test Result(s):

Test Part Description

SN ID	Sample No.	SGS Sample ID	Description
SN1	A1	SHA23-0160301-0001.C001	Colorful silicon wafer

Remarks:

- (1) 1 mg/kg = 1 ppm = 0.0001%
- (2) MDL = Method Detection Limit
- (3) ND = Not Detected (< MDL)
- (4) “-” = Not Regulated

EU RoHS Directive (EU) 2015/863 amending Annex II to Directive 2011/65/EU- Lead, Mercury, Cadmium, Hexavalent chromium, Polybrominated biphenyls (PBBs), Polybrominated diphenyl ethers (PBDEs), Bis(2-ethylhexyl) phthalate (DEHP), Butyl benzyl phthalate (BBP), Dibutyl phthalate (DBP) and Diisobutyl phthalate (DIBP)

Test Method: With reference to IEC 62321-4:2013+AMD1:2017, IEC 62321-5:2013, IEC 62321-7-2:2017, IEC 62321-6:2015 and IEC 62321-8:2017, analysis was performed by ICP-OES, UV-Vis and GC-MS.

Test Item(s)	Limit	Unit(s)	MDL	A1
Cadmium(Cd)	100	mg/kg	2	ND
Lead (Pb)	1000	mg/kg	2	ND
Mercury (Hg)	1000	mg/kg	2	ND
Hexavalent Chromium (Cr(VI))	1000	mg/kg	8	ND
Polybromobiphenyl (PBBs)	1000	mg/kg	-	ND
Monobromobiphenyl (MonoBB)	-	mg/kg	5	ND
Dibromobiphenyl (DiBB)	-	mg/kg	5	ND
Tribromobiphenyl (TriBB)	-	mg/kg		ND

Test Report

No.: SHAEC23016030102

Date: Oct 12, 2023

Page 3 of 13

Test Item(s)	Limit	Unit(s)	MDL	A1
Bis-(2-ethylhexyl) Phthalate(DEHP)	1000	mg/kg	50	ND
Diisobutyl Phthalate(DIBP)	1000	mg/kg	50	ND

Notes:

- (1) The maximum permissible limit is quoted from RoHS Directive (EU) 2015/863.
- (2) IEC 62321 series is equivalent to EN 62321 series.
- (3) The restriction of DEHP, BBP, DBP and DIBP shall apply to medical devices, including in vitro medical devices, and monitoring and control instruments, including industrial monitoring and control instruments, from 22 July 2021.

Halogen

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

Test Item(s)	Unit(s)	MDL	A1
Fluorine(F)			

Test Report

No.: SHAEC23016030102

Date: Oct 12, 2023

Page 4 of 13

Test Item(s)	CAS No.	Unit(s)	MDL	A1
N-methylperfluoro-1-octanesulfonamide (N-MeFOSA)	31506-32-8	mg/kg	0.010	ND
2-(N-ethylperfluoro-1-octanesulfonamido) -ethanol (N-EtFOSE)	1691-99-2	mg/kg	0.010	ND
2-(N-methylperfluoro-1-octanesulfonamido) -ethanol (N-MeFOSE)	24448-09-7	mg/kg	0.010	ND
Perfluorooctane Sulfonamide (PFOSA)	754-91-6	mg/kg	0.010	ND

Test Report

No.: SHAEC23016030102

Date: Oct 12, 2023

Page 5 of 13

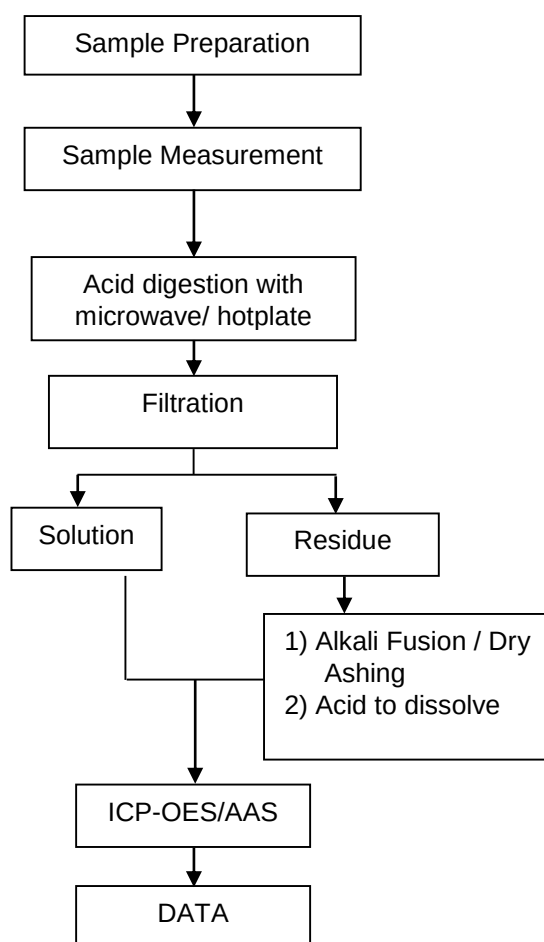
ATTACHMENTS

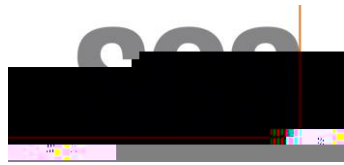
Elements Testing Flow Chart

Name of the person who made testing: Meria Jin/Sielina Song

Name of the person in charge of testing: Luna Xu/Bob Zhang

These samples were dissolved totally by pre-conditioning method according to below flow chart.





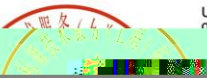
Test Report

No.: SHAEC23016030102

Date: Oct 12, 2023

Page 7 of 13

Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service, and is not to be relied upon as a contract. The document is available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is



Test Report

No.: SHAEC23016030102

Date: Oct 12, 2023

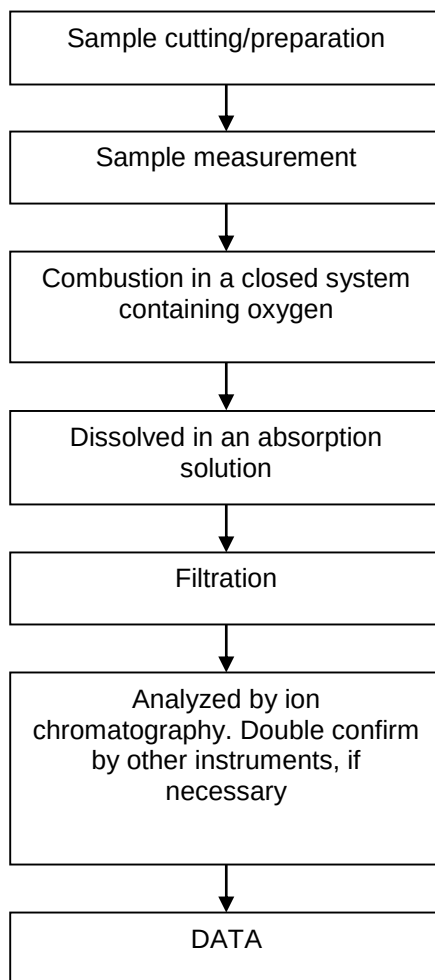
Page 9 of 13

ATTACHMENTS

Halogen Testing Flow Chart

Name of the person who made testing: Andy Zhang

Name of the person in charge of testing: Allen Chen



Test Report

No.: SHAEC23016030102

Date: Oct 12, 2023

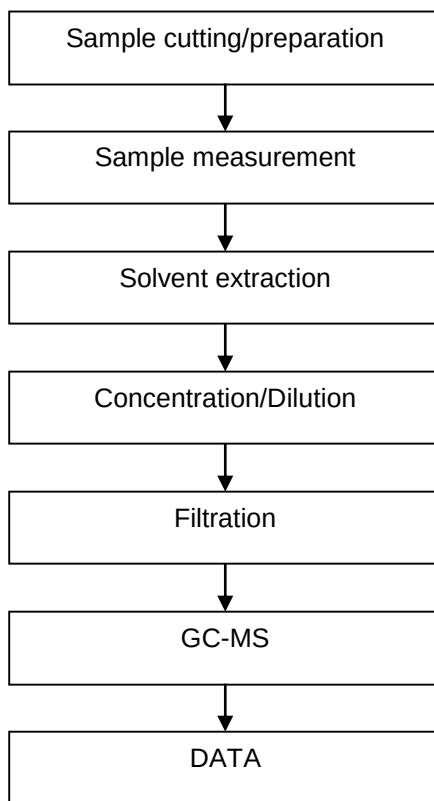
Page 10 of 13

ATTACHMENTS

HBCDD Testing Flow Chart

Name of the person who made testing: Lucky Liu

Name of the person in charge of testing: Sherry Shi



Test Report

No.: SHAEC23016030102

Date: Oct 12, 2023

Page 11 of 13

ATTACHMENTS

TBBP-A Testing Flow Chart

Name of the person who made testing: Lucky Liu

Test Report

No.: SHAEC23016030102

Date: Oct 12, 2023

Page 12 of 13

ATTACHMENTS

PFASs/ PFOS/PFOA Testing Flow Chart

Name of the person who made testing: Richer Yu

Name of the person in charge of testing: Richer Yu

