

Test Report (SVHC)	No.:	SHAEC23009266412	Date:	Jul 11, 2023	Page 1 o			
Client Name:	CSMC Techno	logies FAB2 CO.,LTD						
Client Address:	8 Xinzhou Roa	d,Wuxi,Jiangsu						
Sample Name:	8	IN WAFER						
Model No.:	A	dvance						
The above samp	ble(s) and inform	nation were provided by th	e client.					
SGS Job No.:	S	P23-011485						
Sample Receivir	ng Date: Ju	Jun 30, 2023 Jun 30, 2023 ~ Jul 07, 2023						
Testing Period:	Ju							
Test Requested:	A (i S E R (i n c i In R P	s requested by client, SVH) Two hundred and thirty-fi ubstances of Very High Co uropean Chemicals Agenc egulation (EC) No 1907/20 i) One (1) potential Substa otification of WTO on Jun 1 ii) Eleven (11) potential Su tention List published by E egulation (EC) No 1907/20 ease refer to next page(s)	C screening is ve (235) subs incern (SVHC y (ECHA) on 06 concerning nces of Very , 2021. bstances of V uropean Cher 06 concerning	s performed acco tances in the Ca) for authorizatio and before Jun 1 g the REACH. High Concern (S Yery High Concern micals Agency (E g the REACH.	ording to: Indidate List of n published by 4, 2023 regarding WHC) in the rn (SVHC) in the ECHA) regarding			
Test Result(s):	P	ease refer to next page(s).						

Summary:

According to the specified scope and evaluation screening, the test results of	Dooo
SVHC are 0.1% (w/w) in the submitted sample.	F d 5 5

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

Dora Hu Approved Signatory



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Remark :

1. The chemical analysis of specified SVHC is performed by means of currently available analytical techniques against the following SVHC related documents published by ECHA: http://echa.europa.eu/web/guest/candidate-list-table

These lists are under evaluation by ECHA and may subject to change in the future.

2. REACH obligation:

2.1 Concerning article(s):

Communication:

Article 33 of Regulation (EC) No 1907/2006 requires supplier of an article containing a substance meeting the criteria in Article 57 and identified in accordance with Article 59(1) in a concentration above 0.1% weight by weight (w/w) shall provide the recipient of the article with sufficient information, available to the supplier, to allow safe use of the article including, as a minimum, the name of that substance in the Candidate List.

Notification:

In accordance with Regulation (EC) No 1907/2006, any EU producer or importer of articles shall notify ECHA, in accordance with paragraph 4 of Article 7, if a substance meets the criteria in Article 57 and is identified in accordance with Article 59(1) of the Regulation, if (a) the substance in the Candidate List is present in those articles in quantities totaling over one tonne per producer or importer per year; and (b) the substance in the Candidate List is present in those articles above a concentration of 0.1% weight by weight (w/w).

SGS adopts the ruling of the Court of Justice of the European Union on the definition of an article under REACH unless indicated otherwise. Detail explanation is available at the following link: http://www.sgs.com/-/media/global/documents/technical-documents/technical-bulletins/sgs-crs-position-statement-on-svhc-in-articles-a4-en-16-06.pdf?la=en

2.2 Concerning material(s):

Test results in this report are based on the tested sample. This report refers to testing result of tested sample submitted as homogenous material(s). In case such material is being used to compose an article, the results indicated in this report may not represent SVHC concentration in such article. If this report refers to testing result of composite material group by equal weight proportion, the material in each composite test group may come from more than one article.

If the sample is a substance or mixture, and it directly exports to EU, client has the obligation to comply with the supply chain communication obligation under Article 31 of Regulation (EC) No. 1907/2006 and the conditions of Authorization of substance of very high concern included in the Annex XIV of the Regulation (EC) No. 1907/2006.

2.3 Concerning substance and preparation:

If a SVHC is found over 0.1% (w/w) and/or the specific concentration limit which is set in Regulation (EC) No 1272/2008 and its amendments, client is suggested to prepare a Safety Data Sheet (SDS) against the SVHC to comply with the supply chain communication obligation under Regulation (EC) No 1907/2006, in which:

- a substance that is classified as hazardous under the CLP Regulation (EC) No 1272/2008.

- a mixture that is classified as hazardous under the CLP Regulation (EC) No 1272/2008, when it contains a substance with concentration equal to, or greater than the classification limit as set in Regulation (EC) No. 1272/2008; or

- a mixture is not classified as hazardous under the CLP Regulation (EC) No 1272/2008, but contains either:



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(a) a substance posing human health or environmental hazards in an individual concentration of 1 % by weight for mixtures that are solid or liquids (i.e., non-gaseous mixtures) or 0.2 % by volume for gaseous mixtures; or

(b) a substance that is PBT, or vPvB in an individual concentration of 0.1 % by weight for mixtures that are solid or liquids (i.e., non-gaseous mixtures); or

(c) a substance on the SVHC candidate list (for reasons other than those listed above), in an individual concentration of 0.1 % by weight for non-gaseous mixtures; or

- (d) a substance for which there are Europe-wide workplace exposure limits
- 3. If a SVHC is found over the reporting limit, client is suggested to identify the composite component which contains the SVHC and the exact concentration of the SVHC b



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Test Results: (Substances in the Candidate List of SVHC)

Batch	Substance Name	CAS No.	001 Concentration (%)	RL (%)
-	All tested SVHC in Candidate list	-	ND	-

Test Results: (Potential SVHC)

Batch	Substance Name	CAS No.	001 Concentration (%)	RL (%)
/	All tested Potential SVHC	-	ND	-

Notes:

- (1) The table above only shows detected SVHC, and SVHC that below RL are not reported. Please refer to Appendix for the full list of tested SVHC.
- (2) RL = Reporting Limit (Test data will be shown if it RL. RL is not regulatory limit.) ND = Not detected (lower than RL), ND is denoted on the SVHC substance.
- (3) * The test result is based on the calculation of selected element(s) and to the worst-case scenario.
 ** The test result is based on the calculation of selected marker(s) and to the worst-case scenario.
 Calculated concentration of boric compounds are based on water extractive boron detected by ICP-OES.
 Calculated concentration of Barium diboron tetraoxide is based on water extractive boron and barium detected by ICP-OES.

 $\label{eq:RL} RL = 0.005\% is evaluated for element (i.e. cobalt, arsenic, lead, chromium (VI), aluminum, zirconium, boron, stronq56.nq5447.67 Tm0 g0 G[()] TJET \columbus beta 56.64 387.89 481.9 183.98 reW* nBT/0 g.9(I)5(t, 7.89 481.98 183.98 reW* nBT/0 g.9(I)5(t, 7.89 183.98 183.98$



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Appendix Full list of tested SVHC:

Batch	No.	Substance Name	CAS No.	RL (%)
I	1	4,4'-Diaminodiphenylmethane(MDA)	101-77-9	0.050
I	2	5-tert-butyl-2,4,6-trinitro-m-xylene (musk xylene)	81-15-2	0.050
I	3	Alkanes, C10-13, chloro (Short Chain Chlorinated Paraffins)	85535-84-8	0.050
I	4	Anthracene	120-12-7	0.050
I	5	Benzyl butyl phthalate (BBP)	85-68-7	0.050
I	6	Bis(2-ethylhexyl)phthalate (DEHP)	117-81-7	0.050
I	7	Bis(tributyltin)oxide (TBTO)	56-35-9	0.050
I	8	Cobalt dichloride*	7646-79-9	0.005
I	9	Diarsenic pentaoxide*	1303-28-2	0.005
I	10	Diarsenic trioxide*	1327-53-3	0.005
I	11	Dibutyl phthalate (DBP)	84-74-2	0.050
Ι	12	Hexabromocyclododecane (HBCDD) and all major diastereoisomers identified (-HBCDD, -HBCDD, -HBCDD)	-	0.050
I	13	Lead hydrogen arsenate*	7784-40-9	0.005
I	14	Sodium dichromate*	10588-01-9 /7789-12-0	0.005
I	15	Triethyl arsenate*	15606-95	



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Batch	No.	Substance Name	CAS No.	RL (%)
	36	Trichloroethylene	79-01-6	0.050
IV	37	2-Ethoxyethanol	110-80-5	0.050
IV	38	2-Methoxyethanol	109-86-4	0.050
IV	39	Chromic acid, Oligomers of chromic acid and dichromic acid, Dichromic acid*	-	0.005
IV	40	Chromium trioxide*	1333-82-0	0.005
IV	41	Cobalt(II) carbonate*	513-79-1	0.005
IV	42	Cobalt(II) diacetate*	71-48-7	0.005
IV	43	Cobalt(II) dinitrate*	10141-05-6	0.005
IV	44	Cobalt(II) sulphate*	10124-43-3	0.005
V	45	1.2.3-trichloropropane	96-18-4	0.050
V	46	1,2-Benzenedicarboxylic acid, di-C6-8- branched alkyl esters, C7-rich	71888-89-6	0.050
V	47	1,2-Benzenedicarboxylic acid, di-C7-11- branched and linear alkyl esters	68515-42-4	0.050
V	48	1-methyl-2-pyrrolidone	872-50-4	0.050
V	49	2-ethoxyethyl acetate	111-15-9	0.050
V	50	Hydrazine	302-01-2	0.050
V	51	strontium chromate*	7789-06-2	0.005
VI	52	1,2-Dichloroethane	107-06-2	0.050
VI	53	2,2'-dichloro-4,4'-methylenedianiline	101-14-4	0.050
VI	54	2-Methoxyaniline; o-Anisidine	90-04-0	0.050
VI	55	4-(1,1,3,3-tetramethylbutyl)phenol	140-66-9	0.050
VI	56	Aluminosilicate Refractory Ceramic Fibres*	-	0.005
VI	57	Arsenic acid*	7778-39-4	0.005
VI	58	Bis(2-methoxyethyl) ether	111-96-6	0.050
VI	59	Bis(2-methoxyethyl) phthalate	117-82-8	0.050
VI	60	Calcium arsenate*	7778-44-1	0.005
VI	61	Dichromium tris(chromate)*	24613-89-6	0.005
VI	62	Formaldehyde, oligomeric reaction products with aniline	25214-70-4	0.050
VI	63	Lead diazide. Lead azide*	13424-46-9	0.005
VI	64	Lead dipicrate*	6477-64-1	0.005
VI	65	Lead styphnate*	15245-44-0	0.005
VI	66	N.N-dimethylacetamide	127-19-5	0.050
VI	67	Pentazinc chromate octahydroxide*	49663-84-5	0.005
VI	68	Phenolphthalein	77-09-8	0.050
VI	69	Potassium hydroxyoctaoxodizincatedichromate*	11103-86-9	0.005
VI	70	Trilead diarsenate*	3687-31-8	0.005
VI	71	Zirconia Aluminosilicate Refractory Ceramic Fibres*	-	0.005
VII	72	[4-[[4-anilino-1-naphthyl][4- (dimethylamino)phenyl]methylene]cyclohexa- 2,5-dien-1-ylidene] dimethylammonium chloride (C.I. Basic Blue 26)§	2580-56-5	0.050
VII	73	[4-[4,4'-bis(dimethylamino) benzhydrylidene]cyclohexa-2,5-dien-1-	548-62-9	0.050

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	Batch	No.	Substance Name	CAS No.	RL (%)
			ylidene]dimethylammonium chloride (C.I. Basic Violet 3) §		
	VII	74	1,2-bis(2-methoxyethoxy)ethane (TEGDME; triglyme)	112-49-2	0.050
	VII	75	1,2-dimethoxyethane; ethylene glycol dimethyl ether (EGDME)	110-71-4	0.050
	VII	76	4,4'-bis(dimethylamino) benzophenone (Michler's Ketone)	90-94-8	0.050
	VII	77	4,4'-bis(dimethylamino)-4"-(methylamino)trityl alcohol§	561-41-1	0.050
	VII	78	Diboron trioxide*	1303-86-2	0.005
_	VII	79	Formamide	75-12-7	0.050

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Batch	No.	Substance Name	CAS No.	RL (%)
Х	146	Dihexyl phthalate	84-75-3	0.050
х	147	Disodium 3,3'-[[1,1'-biphenyl]-4,4'- diylbis(azo)]bis(4-aminonaphthalene-1- sulphonate) (C.I. Direct Red 28)	573-58-0	0.050
х	148	Disodium 4-amino-3-[[4'-[(2,4- diaminophenyl)azo][1,1'-biphenyl]-4-yl]azo] -5- hydroxy-6-(phenylazo)naphthalene-2,7- disulphonate (C.I. Direct Black 38)	1937-37-7	0.050
Х	149	Imidazolidine-2-thione; (2-imidazoline-2-thiol)	96-45-7	0.050
Х	150	Lead di(acetate)*	301-04-2	0.005
Х	151	Trixylyl phosphate	25155-23-1	0.050
XI	152	1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear	68515-50-4	0.050
XI	153	Cadmium chloride*	10108-64-2	0.005
XI	154	Sodium perborate; perboric acid, sodium salt*	-	0.005
XI	155	Sodium peroxometaborate*	7632-04-4	0.005
XII	156	2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	25973-55-1	0.050
XII	157	2-benzotriazol-2-yl-4,6-di-tert-butylphenol (UV-320)	3846-71-7	0.050
XII	158	2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa- 3,5-dithia-4-stannatetradecanoate (DOTE)	15571-58-1	0.050
XII	159	Cadmium fluoride*	7790-79-6	0.005
XII	160	Cadmium sulphate*	10124-36-4 /31119-53-6	0.005
XII	161	Reaction mass of 2-ethylhexyl 10-ethyl-4,4- dioctyl-7-oxo-8-oxa-3,5-dithia-4- stannatetradecanoate & 2-ethylhexyl 10-ethyl- 4-[[2-[(2-ethylhexyl)oxy]-2-oxoethyl]thio]-4- octyl-7-oxo-8-oxa-3,5-dithia-4- stannatetradecanoate (reaction mass of DOTE & MOTE)	-	0.050
XIII	162	1,2-benzenedicarboxylic acid, di-C6-10-alkyl esters; 1,2-benzenedicarboxylic acid, mixed decyl and hexyl and octyl diesters with 0.3% of dihexyl phthalate	-	0.050
XIII	163	5-sec-butyl-2-(2,4-dimethylcyclohex-3-en-1- yl)-5-methyl-1,3-dioxane [1], 5-sec-butyl-2- (4,6-dimethylcyclohex-3-en-1-yl)-5-methyl-1,3- dioxane [2] [covering any of the individual isomers of [1] and [2] or any combination thereof]	-	0.050
XIV	164	1,3-propanesultone	1120-71-4	0.050
XIV	165	2,4-di-tert-butyl-6-(5-chlorobenzotriazol-2-yl) phenol (UV-327)	3864-99-1	0.050
XIV	166	2-(2H-benzotriazol-2-yl)-4-(tert-butyl)-6-(sec- butyl) phenol (UV-350)	36437-37-3	0.050
XIV	167	Nitrobenzene	98-95-3	0.050

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B	atch	No.	Substance Name	CAS No.	RL (%)
;	XXI	201	Tris(4-nonylphenyl, branched and linear) phosphite (TNPP) with 0.1% w/w of 4- nonylphenol, branched and linear (4-NP)	-	0.050
>	XII	202	2-benzyl-2-dimethylamino-4'- morpholinobutyrophenone	119313-12-1	0.050
>	(XII	203	2-methyl-1-(4-methylthiophenyl)-2- morpholinopropan-1-one	71868-10-5	0.050
>	(XII	204	Diisohexyl phthalate	71850-09-4	0.050
>	XII	205	Perfluorobutane sulfonic acid (PFBS) and its salts	-	0.050
Х	XIII	206	1-vinylimidazole	1072-63-5	0.050
X	XIII	207	2-methylimidazole	693-98-1	0.050
Х	XIII	208	Butyl 4-hydroxybenzoate	94-26-8	0.050
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Batch	No.	Substance Name	CAS No.	RL (%)
		(isopropyl or isobutyl or 2-ethylhexyl) phosphorodithioate		
XXVI	223	Tris(2-methoxyethoxy)vinylsilane	1067-53-4	0.050
XXVII	224	N-(hydroxymethyl)acrylamide	924-42-5	0.050
XXVIII	225	1,1'-[ethane-1,2-diylbisoxy]bis[2,4,6- tribromobenzene]	37853-59-1	0.050
XXVIII	226	2,2',6,6'-tetrabromo-4,4'- isopropylidenediphenol	79-94-7	0.050
XXVIII	227	4,4'-sulphonyldiphenol	80-09-1	0.050
XXVIII	228	Barium diboron tetraoxide*	13701-59-2	0.005
XXVIII	229	Bis(2-ethylhexyl) tetrabromophthalate covering any of the individual isomers and/or combinations thereof	-	0.050

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Test Report (SVHC) ATTACHMENTS

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Testing Flow Chart

Name of the person who made testing: Jo Li/ Winnie Shi Name of the person in charge of testing: Katie Huang





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Sample photos:



SGS authenticate the photo on original report only *** End of Report ***