

Test Report No. SHAEC2005245701 Date: 15 Apr 2020 Page 1 of 26

TSMC(CHINA)COMPANY LIMITED 4000,WENXIANG ROAD,SONGJIANG,SHANGHAI,CHINA

The following sample(s) was/were submitted and identified on behalf of the clients as: 8``Wafer

SGS Job No.: SP20-007927 - SH

Date of Sample Received: 09 Apr 2020

Testing Period: 09 Apr 2020 - 15 Apr 2020

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

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

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

Conclusion: Based on the performed tests on submitted sample(s), the results of Cadmium,

Lead, Mercury, Hexavalent chromium, Polybrominated biphenyls (PBBs),

Polybrominated diphenyl ethers (PBDEs) and Phthalates such as

Bis(2-ethylhexyl) phthalate (DEHP), Butyl benzyl phthalate (BBP), Dibutyl phthalate (DBP) and Diisobutyl phthalate (DIBP) comply with the limits as set by RoHS Directive (EU) 2015/863 amending Annex II to Directive 2011/65/EU.

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

Dora Hu

Approved Signatory



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Test Report Date: 15 Apr 2020 Page 2 of 26 No. SHAEC2005245701

Test Results:

Test Part Description:

Specimen No. SGS Sample ID Description

SHA20-052457.001 Colorful solid sheet SN₁

Remarks:

(1) 1 mg/kg = 0.0001%

(2) MDL = Method Detection Limit

(3) ND = Not Detected (< MDL)

(4) "-" = Not Regulated

RoHS Directive (EU) 2015/863 amending Annex II to Directive 2011/65/EU

Test Method: With reference to IEC 62321-4:2013+AMD1:2017, IEC62321-5:2013, IEC62321-7-2:2017, IEC 62321-6:2015 and IEC62321-8:2017, analyzed by ICP-OES, UV-Vis and GC-MS.

Test Item(s)	<u>Limit</u>	<u>Unit</u>	<u>MDL</u>	<u>001</u>
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
Sum of PBBs	1000	mg/kg	-	ND
Monobromobiphenyl	-	mg/kg	5	ND
Dibromobiphenyl	-	mg/kg	5	ND
Tribromobiphenyl	-	mg/kg	5	ND
Tetrabromobiphenyl	-	mg/kg	5	ND
Pentabromobiphenyl	-	mg/kg	5	ND
Hexabromobiphenyl	-	mg/kg	5	ND
Heptabromobiphenyl	-	mg/kg	5	ND
Octabromobiphenyl	-	mg/kg	5	ND
Nonabromobiphenyl	-	mg/kg	5	ND
Decabromobiphenyl	-	mg/kg	5	ND
Sum of PBDEs	1000	mg/kg	-	ND
Monobromodiphenyl ether	-	mg/kg	5	ND
Dibromodiphenyl ether	-	mg/kg	5	ND
Tribromodiphenyl ether	-	mg/kg	5	ND
Tetrabromodiphenyl ether	-	mg/kg	5	ND



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Test Report	No. SHAEC2005245701		Date:	15 Apr 2020	Page 3 of 26
Test Item(s)	<u>Limit</u>	<u>Unit</u>	<u>MDL</u>	<u>001</u>	
Pentabromodiphenyl ether	-	mg/kg	5	ND	
Hexabromodiphenyl ether	-	mg/kg	5	ND	
Heptabromodiphenyl ether	-	mg/kg	5	ND	
Octabromodiphenyl ether	-	mg/kg	5	ND	
Nonabromodiphenyl ether	-	mg/kg	5	ND	
Decabromodiphenyl ether	-	mg/kg	5	ND	
Di-butyl Phthalate (DBP)	1000	mg/kg	50	ND	
Benzyl Butyl Phthalate (BBP)	1000	mg/kg	50	ND	
Di-2-Ethyl Hexyl Phthalate (DEHP)	1000	mg/kg	50	ND	
Diisobutyl Phthalates (DIBP)	1000	mg/kg	50	ND	

Notes:

- (1) The maximum permissible limit is quoted from RoHS Directive (EU) 2015/863. IEC 62321 series is equivalent to EN 62321 series https://www.cenelec.eu/dyn/www/f?p=104:30:1742232870351101::::FSP_ORG_ID,FSP_LANG_ID: 1258637,25
- (2) 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.
- (3) The restriction of DEHP, BBP, DBP and DIBP shall not apply to toys which are already subject to the restriction of DEHP, BBP, DBP and DIBP through entry 51 of Annex XVII to Regulation (EC) No 1907/2006.

Radioactive element

Test Method: With reference to US EPA Method 3052:1996, analysis was performed by ICP-MS

Test Item(s)	<u>Unit</u>	<u>MDL</u>	<u>001</u>
Cesium (Cs)	mg/kg	1	ND*
Strontium (Sr)	mg/kg	1	ND*
Uranium (U)	mg/kg	1	ND*
Thorium (Th)	mg/kg	1	ND*

Notes:

Element(s)

Test Method: With reference to US EPA 3052:1996, analysis was performed by ICP-OES.



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^{*} No radioactivity is detected by geiger counter



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Test Report	No. SHAEC2005245701	Date: 15 Apr 2020	Page 4 of 26

Test Item(s)	<u>Unit</u>	<u>MDL</u>	<u>001</u>
Beryllium (Be)	mg/kg	5	ND
Antimony (Sb)	mg/kg	10	ND

<u>Halogen</u>

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

Test Item(s)	<u>Unit</u>	<u>MDL</u>	<u>001</u>
Fluorine (F)	mg/kg	50	ND
Chlorine (CI)	mg/kg	50	ND
Bromine (Br)	mg/kg	50	ND
lodine (I)	mg/kg	50	ND

<u>ODS</u>

Test Method: With reference to US EPA 5021A:2014, analysis was performed by HS-GC-MS.

Test Item(s)	CAS NO.	<u>Unit</u>	<u>MDL</u>	<u>001</u>
CFC				
CFC-11	75-69-4	μg/g	0.1	ND
CFC-12	75-71-8	μg/g	0.1	ND
CFC-113	76-13-1	μg/g	0.1	ND
CFC-114	76-14-2	μg/g	0.1	ND
CFC-13	75-72-9	μg/g	0.1	ND
CFC-111	354-56-3	μg/g	0.1	ND
CFC-112	76-11-9	μg/g	0.1	ND
CFC-112	76-12-0	μg/g	0.1	ND
CFC-113	354-58-5	μg/g	0.1	ND
CFC-114	374-07-2	μg/g	0.1	ND
CFC-115	76-15-3	μg/g	0.1	ND
CFC-211	422-78-6	μg/g	0.1	ND
CFC-212	661-96-1	μg/g	0.1	ND
CFC-213	1652-89-7	μg/g	0.1	ND
CFC-214	677-68-9	μg/g	0.1	ND
CFC-215	1599-41-3	μg/g	0.1	ND
CFC-215	76-17-5	μg/g	0.1	ND



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Test Item(s)	CAS NO.	<u>Unit</u>	MDL	<u>001</u>	
CFC-216	661-97-2	μg/g	0.1	ND	
CFC-216	1652-80-8	μg/g	0.1	ND	
CFC-217	422-86-6	μg/g	0.1	ND	
HCFC					
HCFC-21	75-43-4	μg/g	0.1	ND	
HCFC-22	75-45-6	μg/g	0.1	ND	
HCFC-123	306-83-2	μg/g	0.1	ND	
HCFC-124	2837-89-0	μg/g	0.1	ND	
HCFC-141b	1717-00-6	μg/g	0.1	ND	
HCFC-142b	75-68-3	μg/g	0.1	ND	
HCFC-31	593-70-4	μg/g	0.1	ND	
HCFC-121	354-14-3	μg/g	0.1	ND	
HCFC-122	354-21-2	μg/g	0.1	ND	
HCFC-123a	354-23-4	μg/g	0.1	ND	
HCFC-124a	354-25-6	μg/g	0.1	ND	
HCFC-131	359-28-4	μg/g	0.1	ND	
HCFC-131a	811-95-0	μg/g	0.1	ND	
HCFC-132a	471-43-2	μg/g	0.1	ND	
HCFC-132b	1649-08-7	μg/g	0.1	ND	
HCFC-133a	75-88-7	μg/g	0.1	ND	
HCFC-221	422-26-4	μg/g	0.1	ND	
HCFC-222	422-30-0	μg/g	0.1	ND	
HCFC-223	422-52-6	μg/g	0.1	ND	
HCFC-225ca	422-56-0	μg/g	0.1	ND	
HCFC-225cb	507-55-1	μg/g	0.1	ND	
HCFC-226	431-87-8	μg/g	0.1	ND	
HCFC-231	421-94-3	μg/g	0.1	ND	
HCFC-232	460-89-9	µg/g	0.1	ND	
HCFC-233	7125-84-0	µg/g	0.1	ND	
HCFC-234	425-94-5	µg/g	0.1	ND	
HCFC-235	460-92-4	µg/g	0.1	ND	
HCFC-241	666-27-3	μg/g	0.1	ND	
HCFC-242	460-63-9	μg/g	0.1	ND	
HCFC-243	338-75-0	μg/g	0.1	ND	
HCFC-244	679-85-6	μg/g	0.1	ND	
HCFC-251	421-41-0	µg/g	0.1	ND	
HCFC-252	819-00-1	µg/g	0.1	ND	
HCFC-253	460-35-5	µg/g	0.1	ND	
HCFC-261	7799-56-6	µg/g	0.1	ND	
HCFC-261	420-97-3	µg/g	0.1	ND	



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Test Report	No. SHAEC	2005245701	Date: 1	5 Apr 2020	Page 6 of 26
Test Item(s)	CAS NO.	<u>Unit</u>	MDL	<u>001</u>	
HCFC-271	430-55-7	μg/g	0.1	ND	
HCFC-262	102738-79-4	μg/g	0.1	ND	
HCFC-262	420-99-5	μg/g	0.1	ND	
Halon					
Halon 1211	353-59-3	μg/g	0.1	ND	
Halon 1301	75-63-8	μg/g	0.1	ND	
Halon 2402	124-73-2	μg/g	0.1	ND	
HBFC					
CHF₂Br	1511-62-2	μg/g	0.1	ND	
CH₂FBr	373-52-4	μg/g	0.1	ND	
C ₂ HFBr ₄		μg/g	0.1	ND	
C ₂ HF ₂ Br ₃		μg/g	0.1	ND	
C ₂ HF ₃ Br ₂	354-04-1	μg/g	0.1	ND	
C₂HF₄Br		μg/g	0.1	ND	
C₂H₂FBr₃		μg/g	0.1	ND	
$C_2H_2F_2Br_2$	75-82-1	μg/g	0.1	ND	
C₂H₂F₃Br	421-06-7	μg/g	0.1	ND	
C₂H₃FBr₂		μg/g	0.1	ND	
C ₂ H ₃ F ₂ Br	359-07-9	μg/g	0.1	ND	
C₂H₄FBr	762-49-2	μg/g	0.1	ND	
C₃HFBr ₆		µg/g	0.1	ND	
C ₃ HF ₂ Br ₅		μg/g	0.1	ND	
C₃HF₃Br₄		μg/g	0.1	ND	
C₃HF₄Br₃		μg/g ,	0.1	ND	
C₃HF₅Br₂		μg/g ,	0.1	ND	
C₃HF₀Br		μg/g ,	0.1	ND	
C₃H₂FBr₅		μg/g	0.1	ND	
C₃H₂F₂Br₄		μg/g	0.1	ND	
C3H ₂ F ₃ Br ₃		μg/g	0.1	ND	
C₃H₂F₄Br₂		μg/g	0.1	ND	
C₃H₂F₅Br		μg/g	0.1	ND ND	
C₃H₃FBr₄ C₃H₃F₂Br₃		μg/g	0.1	ND ND	
		μg/g	0.1	ND ND	
C₃H₃F₃Br₂ C₃H₃F₄Br		μg/g	0.1 0.1	ND ND	
		μg/g			
C₃H₄FBr₃ C₃H₄F₂Br₂		μg/g	0.1 0.1	ND ND	
C3H4F3Br		μg/g		ND ND	
C3H4F3DI C3H5FBr2		μg/g	0.1 0.1	ND ND	
C3H5F2Br		μg/g	0.1	ND ND	
∪31 151 2DI		μg/g	U. I	טאו	



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Test Report	No. SHAEC200524570	1	Date: 1	5 Apr 2020	Page 7 of 26
Test Item(s)	CAS NO.	<u>Unit</u>	MDL	<u>001</u>	
C₃H₅FBr		μg/g	0.1	ND	
Others					
Dibromofluoromethane	1868-53-7	µg/g	0.1	ND	
Methyl bromide	74-83-9	μg/g	0.1	ND	
Bromochloromethane	74-97-5	μg/g	0.1	ND	
HFC					
HFC-23	75-46-7	μg/g	0.1	ND	
HFC-32	75-10-5	μg/g	0.1	ND	
HFC-41	593-53-3	μg/g	0.1	ND	
HFC-43-10mee		μg/g	0.1	ND	
HFC-125	354-33-6	μg/g	0.1	ND	
HFC-134	359-35-3	µg/g	0.1	ND	
HFC-134a	811-97-2	μg/g	0.1	ND	
HFC-152a	75-37-6	µg/g	0.1	ND	
HFC-143	420-46-2	μg/g	0.1	ND	
HFC-143a	430-66-0	μg/g	0.1	ND	
HFC-227ea		μg/g	0.1	ND	
HFC-236cb		µg/g	0.1	ND	
HFC-236ea	431-63-0	µg/g	0.1	ND	
HFC-236fa	690-39-1	μg/g	0.1	ND	
HFC-245ca	679-86-7	μg/g	0.1	ND	
HFC-245fa		μg/g	0.1	ND	
HFC-365mfc		μg/g	0.1	ND	
PFC					
Perfluoromethane	75-73-0	μg/g	0.1	ND	
Perfluoroethane	76-16-4	μg/g	0.1	ND	
Perfluoropropane	76-19-7	μg/g	0.1	ND	
Perfluorobutane	355-25-9	μg/g	0.1	ND	
Perfluoropentane	678-26-2	µg/g	0.1	ND	
Perfluorohexane	355-42-0	µg/g	0.1	ND	
Perfluorocyclobutane	115-25-3	µg/g	0.1	ND	
CHC					
1,3-dichloropropane	142-28-9	µg/g	0.1	ND	
2,2-dichloropropane	594-20-7	µg/g	0.1	ND	
Carbon tetrachloride	56-23-5	µg/g	0.1	ND	
chloroethane	75-00-3	µg/g	0.1	ND	
Chloroform	67-66-3	µg/g	0.1	ND	
chloromethane	74-87-3	μg/g	0.1	ND	
Cis-1,2-dichloroethene	156-59-2	μg/g	0.1	ND	
Cis-1,3-dichloropropene	10061-01-5	μg/g	0.1	ND	



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Test Report	No. SHAEC20052	No. SHAEC2005245701		5 Apr 2020	Page 8 of 26
Test Item(s)	CAS NO.	<u>Unit</u>	<u>MDL</u>	<u>001</u>	
Hexachlorobutadiene	87-68-3	μg/g	0.1	ND	
Methylene chloride	75-09-2	μg/g	0.1	ND	
Tetrachloroethene	127-18-4	μg/g	0.1	ND	
Trans-1,2-dichloroethene	156-60-5	μg/g	0.1	ND	
Trans-1,3-dichloropropene	10061-02-6	μg/g	0.1	ND	
Trichloroethylene	79-01-6	μg/g	0.1	ND	
1,1,1,2-tetrachloroethane	630-20-6	μg/g	0.1	ND	
1,1,1-trichloroethane	71-55-6	μg/g	0.1	ND	
1,1,2,2-tetrachloroethane	79-34-5	μg/g	0.1	ND	
1,1,2-trichloroethane	79-00-5	μg/g	0.1	ND	
1,1-dichloroethane	75-34-3	μg/g	0.1	ND	
1,1-dichloroethene	75-35-4	μg/g	0.1	ND	
1,1-dichloropropene	563-58-6	μg/g	0.1	ND	
1,2,3-trichloropropane	96-18-4	μg/g	0.1	ND	
1,2-dichloroethane	107-06-2	μg/g	0.1	ND	
1,2-dichloropropane	78-87-5	μg/g	0.1	ND	

Polychlorinated Naphthalenes (PCNs)

Test Method: With reference to US EPA 8081B: 2007, analysis was performed by GC-MS

Test Item(s)	<u>Unit</u>	<u>MDL</u>	<u>001</u>
2-Chlorinated Naphthalene	mg/kg	5	ND
1,4-Dichlorinated Naphthalene	mg/kg	5	ND
1,5-Dichlorinated Naphthalene	mg/kg	5	ND
1,2-Dichlorinated Naphthalene	mg/kg	5	ND
1,8-Dichlorinated Naphthalene	mg/kg	5	ND
1,2,3-Trichlorinated Naphthalene	mg/kg	5	ND
1,2,3,4-Tetrachlorinated Naphthalene	mg/kg	5	ND
1,2,3,4,6-Pentachlorinated Naphthalene	mg/kg	5	ND
Octa-chlorinaed Naphthalene	mg/kg	5	ND
1-Chlorinated Naphthalene	mg/kg	5	ND

Organic-tin compounds

Test Method: With reference to ISO 17353: 2004 with carbamate, analysis was performed by GC-MS.



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Test Report	No. SHAEC2005245701	Date: 15 Apr 2020	Page 9 of 26

Test Item(s)	<u>Unit</u>	<u>MDL</u>	<u>001</u>
Tributyl tin (TBT)	mg/kg	0.02	ND
Triphenyl tin (TPhT)	mg/kg	0.02	ND

Asbestos

Test Method: With reference to NIOSH 9000:2015 and ISO 22262-1:2012. analysis was performed by X-ray diffractometer (XRD) and Polarized light microscope (PLM).

Test Item(s) Actinolite	<u>CAS NO.</u> 77536-66-4	<u>Unit</u> %	MDL 0.1	<u>001</u> Negative
Amosite	12172-73-5	%	0.1	Negative
Anthophyllite	77536-67-5	%	0.1	Negative
Chrysotile	12001-29-5 132207-32-0	%	0.1	Negative
Crocidolite	12001-28-4	%	0.1	Negative
Tremolite	77536-68-6	%	0.1	Negative

Notes:

(1) Negative = the absence of asbestos, Positive = the presence of asbestos.

VOC

Test Method: With reference to US EPA 5021A:2014, analysis was performed by HS-GC-MS.

Test Item(s)	<u>Unit</u>	<u>MDL</u>	<u>001</u>
Trichloroethylene	mg/kg	1	ND

Alkanes C10-C13, chloro (short-chain chlorinated paraffins) (SCCP)

Test Method: With reference to ISO 18219: 2015, analysis was performed by GC-NCI-MS



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Test Report No. SHAEC2005245701 Date: 15 Apr 2020 Page 10 of 26

Test Item(s) Unit MDL 001

Alkanes C10-C13, chloro (short-chain chlorinated mg/kg 50 ND

paraffins) (SCCP)

Tetrabromobisphenol A (TBBP-A)

Test Method: With reference to US EPA 3540C: 1996, analysis was performed by GC-MS.

 Test Item(s)
 Unit
 MDL
 001

 Tetrabromobisphenol A (TBBP-A)
 mg/kg
 10
 ND

Glycol ether content

Test Method: With reference to US EPA method 3550C:2007. Analysis was performed by GC-MS.

Test Item(s)	CAS NO.	<u>Unit</u>	<u>MDL</u>	<u>001</u>
EGEE	110-80-5	mg/kg	10	ND
EGMEA	110-49-6	mg/kg	10	ND
EGEEA	111-15-9	mg/kg	10	ND
DEGDME	111-96-6	mg/kg	10	ND
EGME	109-86-4	mg/kg	10	ND

Polychlorinated Biphenyls (PCBs)

Test Method: With reference to US EPA 8082A: 2007, analysis was performed by GC-MS

Test Item(s)	CAS NO.	<u>Unit</u>	<u>MDL</u>	<u>001</u>
2,4,4'-Trichlorobiphenyl (PCB 28)	7012-37-5	mg/kg	0.5	ND
2,2',5,5'-Tetrachloro-biphenyl (PCB 52)	35693-99-3	mg/kg	0.5	ND
2,2',4,5,5'-Pentachloro-biphenyl (PCB 101)	37680-73-2	mg/kg	0.5	ND
2,3',4,4',5-Pentachlorobiphenyl (PCB 118)	31508-00-6	mg/kg	0.5	ND
2,2',3,4,4',5'-Hexachloro-biphenyl (PCB 138)	35065-28-2	mg/kg	0.5	ND
2,2',4,4',5,5'-Hexachloro-biphenyl (PCB 153)	35065-27-1	mg/kg	0.5	ND
2,2',3,4,4',5,5'-Heptachlorobiphenyl (PCB 180)	35065-29-3	mg/kg	0.5	ND



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No. SHAEC2005245701

Page 11 of 26

Date: 15 Apr 2020

Azo Dyes

Test Method: According to Ref. EN 14362-1:2012- Analysis was conducted with GC-MS/HPLC-DAD.

Test Item(s)	CAS NO.	Unit	MDL	001
4-Aminobiphenyl	92-67-1	mg/kg	5	ND
Benzidine	92-87-5	mg/kg	5	ND
4-chloro-o-toluidine	95-69-2	mg/kg	5	ND
2-naphthylamine	91-59-8	mg/kg	5	ND
o-aminoazotoluene	97-56-3	mg/kg	5	ND
5-nitro-o-toluidine / 2-Amino-4-nitrotoluene	99-55-8	mg/kg	5	ND
4-chloroaniline	106-47-8	mg/kg	5	ND
4-methoxy-m-phenylenediamine / 2,4-Diaminoanisole	615-05-4	mg/kg	5	ND
4,4'-diaminodiphenylmethane	101-77-9	mg/kg	5	ND
3,3'-dichlorobenzidine	91-94-1	mg/kg	5	ND
3.3'-dimethoxybenzidine	119-90-4	mg/kg	5	ND
3,3'-dimethylbenzidine	119-93-7	mg/kg	5	ND
3,3'-Dimethyl-4,4'-diaminodiphenylmethane /	838-88-0	mg/kg	5	ND
4,4'-methylenedi-o-toluidine				
p-cresidine	120-71-8	mg/kg	5	ND
4,4'-methylene-bis-(2-chloroaniline)	101-14-4	mg/kg	5	ND
4,4'-oxydianiline	101-80-4	mg/kg	5	ND
4,4'-thiodianiline	139-65-1	mg/kg	5	ND
o-toluidine	95-53-4	mg/kg	5	ND
4-methyl-m-phenylenediamine / 2,4-Toluylendiamine	95-80-7	mg/kg	5	ND
2,4,5-trimethylaniline	137-17-7	mg/kg	5	ND
4-aminoazobenzene	60-09-3	mg/kg	5	ND
O-Anisidine	90-04-0	mg/kg	5	ND
2,4-Xylidine	95-68-1	mg/kg	5	ND
2,6-Xylidine	87-62-7	mg/kg	5	ND
Conclusion				##

Notes:

- (1) The EN 14362-1:2012 method will enable further cleavage of 4-aminoazobenzene to non-forbidden amines: aniline and 1,4-phenylenediamine. If aniline and/or 1,4-phenylenediamine is not found (i.e. 5mg/kg) by mentioned test method, test result for 4-aminoazobenzene (CAS no. 60-09-3) is considered as "not detected" (i.e. <5mg/kg). Otherwise, the test method of EN 14362-3:2012 will be employed to verify the presence of 4-aminoazobenzene.
- (2) ## = For textiles no relevant amine exceeding 30 ppm (mg/kg) is required, the test method is only



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Test Report No. SHAEC2005245701 Date: 15 Apr 2020

applicable for textile and the result is only for client's information.

- (3) Whenever 4-aminodiphenyl (CAS number 92-67-1), 2-naphylamine (CAS number 91-59-8) and 4-methoxy-m-phenylene-diamine (CAS number 615-05-4) is found, the use of banned azo colorants cannot be reliably ascertained without additional information, e.g. the chemical structure of the colorants used.
- (4) In case polyurethane materials are used, e.g. PU foams and coatings and in prints, it cannot be ruled out that certain amines, e.g. 4,4'-methylene-dianiline (MDA, CAS number 101-77-9) and
- 2,4-toluylen-diamine (TDA, CAS number 95-80-7) are released from the PU component and not from a banned azo colorant.
- (5) In case of pigment prints care has to be taken that 4,4'-methylene-dianiline (MDA, CAS number 101-77-9) is not released from a source of banned azo colorants but from e.g. a chemical fixing agent.
- (6) These tests were subcontracted to SGS Changzhou Chemical Lab.

Perfluorooctane Sulfonates (PFOS)^ and Perfluorooctanoic Acid (PFOA)

Test Method: With reference to CEN/TS 15968:2010, analysis is performed by LC-MS or LC-MS-MS.

Test Item(s)	<u>Unit</u>	<u>MDL</u>	<u>001</u>
Perfluorooctane Sulfonates (PFOS) [^]	mg/kg	0.01	ND
Perfluorooctanoic Acid (PFOA)	mg/kg	0.01	ND

Notes:

(1) ^ PFOS refer to Perfluoroctanesulfonic acid and its derivatives including Perfluoroctanesulfonic acid, Perfluoroctane sulfonamide, N-Methylperfluoroctane sulfonamide, N-Ethylperfluoroctane sulfonamidoethanol and N-Ethylperfluoroctane sulfonamidoethanol.



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No. SHAEC2005245701

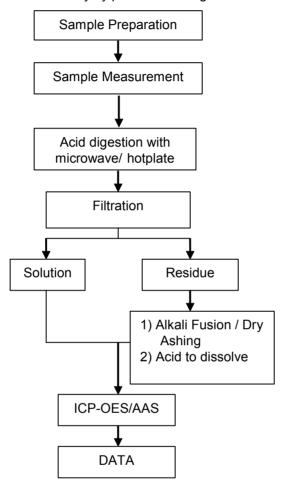
Page 13 of 26

Date: 15 Apr 2020

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Elements (IEC62321) Testing Flow Chart

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





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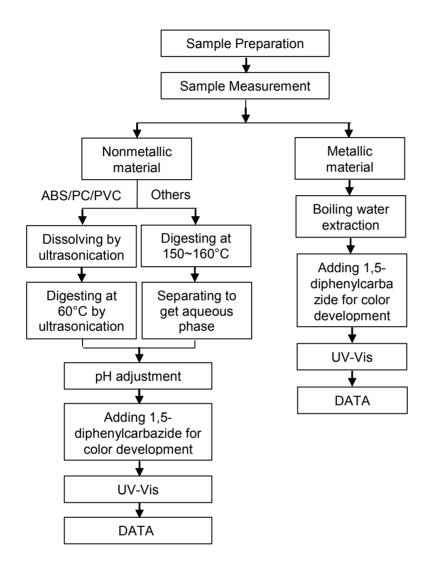
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Hexavalent Chromium (Cr(VI)) Testing Flow Chart





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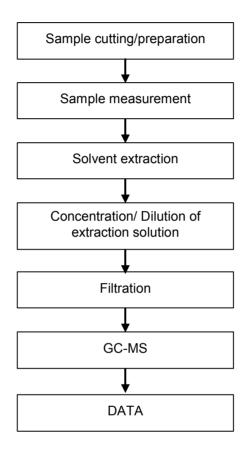
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No. SHAEC2005245701

Date: 15 Apr 2020 Page 15 of 26

PBBs/PBDEs Testing Flow Chart





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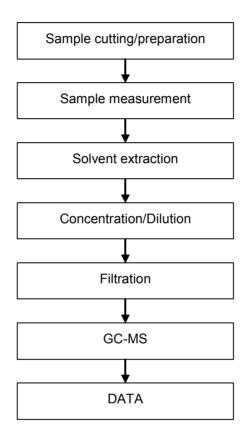
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No. SHAEC2005245701

Date: 15 Apr 2020 Page 16 of 26

Phthalates Testing Flow Chart





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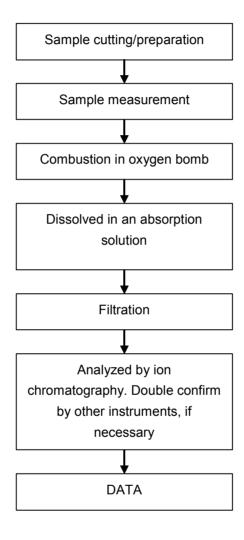
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Halogen Testing (oxygen bomb) Flow Chart





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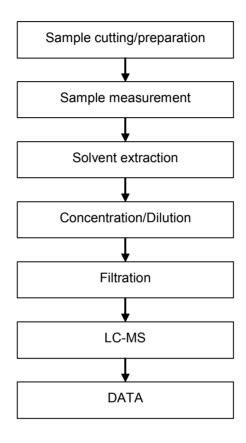
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No. SHAEC2005245701

Date: 15 Apr 2020 Page 18 of 26

PFOS/PFOA Testing Flow Chart





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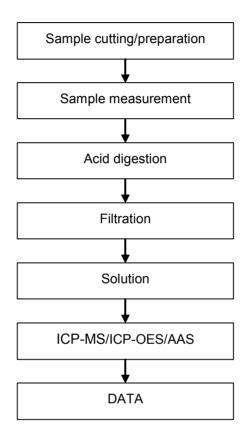


No. SHAEC2005245701

Page 19 of 26

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Elements Testing Flow Chart





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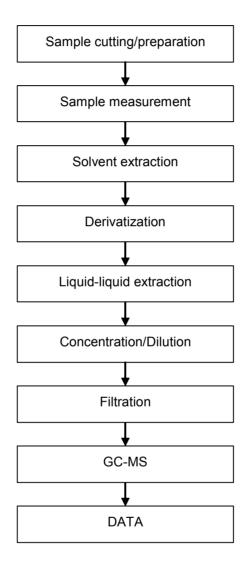


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No. SHAEC2005245701

Date: 15 Apr 2020 Page 20 of 26

Organotin Testing Flow Chart





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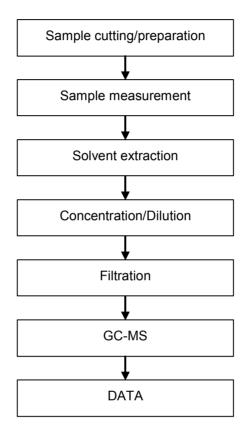


No. SHAEC2005245701

Page 21 of 26

Date: 15 Apr 2020

PCB Testing Flow Chart





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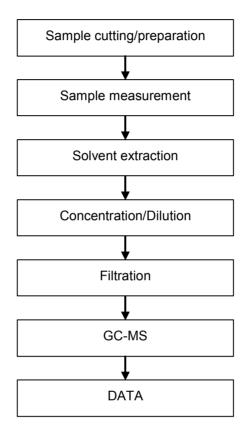


No. SHAEC2005245701

Page 22 of 26

Date: 15 Apr 2020

PCN Testing Flow Chart





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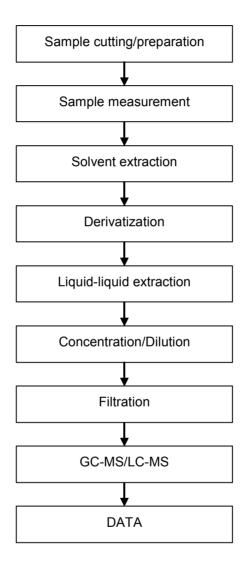


No. SHAEC2005245701

Page 23 of 26

Date: 15 Apr 2020

TBBP-A Testing Flow Chart





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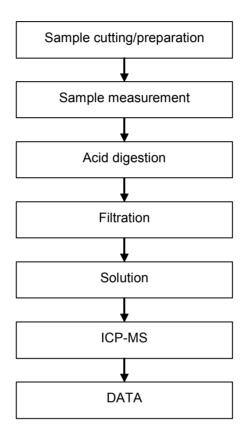
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No. SHAEC2005245701

Date: 15 Apr 2020 Page 24 of 26

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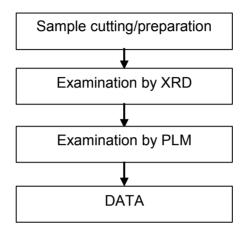
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Page 25 of 26

Date: 15 Apr 2020

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Asbestos Testing Flow Chart





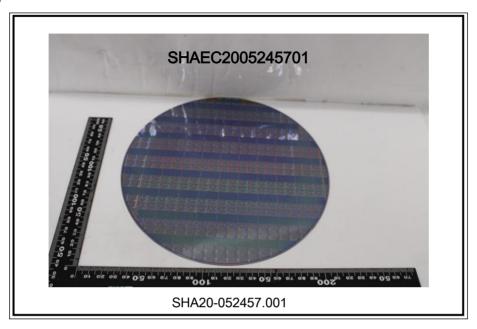
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No. SHAEC2005245701 Date: 15 Apr 2020 Page 26 of 26

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