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

Sample Name

**COPPER BONDING WIRE** 

Style/Item No.

iCu, DHF, MaxSoft, MaxSoft2, MaxSoftLD, RelCu and MaxSoftHR

Sample Receiving Date

28-Oct-2021

**Testing Period** 

28-Oct-2021 to 12-Nov-2021

**Test Requested** 

(1) As specified by client, with reference to RoHS 2011/65/EU Annex II and amending Directive (EU) 2015/863 to determine Cadmium, Lead, Mercury, Cr(VI), PBBs, PBDEs, DBP, BBP, DEHP, DIBP contents in the submitted sample(s).

(2) As specified by client, to test PAHs and other item(s).

**Test Results** Conclusion

Please refer to following pages.

(1) Based on the performed tests on submitted sample(s), the test results of Cadmium. Lead, Mercury, Cr(VI), PBBs, PBDEs, DBP, BBP, DEHP, DIBP comply with the limits as set by RoHS Directive (EU) 2015/863 amending Annex II to Directive 2011/65/EU.

Ray Chang, Ph.D./Departthe vivianage Signed for and on behalf SĞS TAIWAN LTD. Chemical Laboratory-Kaohsiung



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Test Part Description

No.1

: COPPER BONDING WIRE

### Test Result(s)

Test Item(s)	Method	Unit	MDL	Result	Limit
	1			No.1	
Cadmium (Cd) (CAS No.: 7440-43-9)	With reference to IEC 62321-5: 2013,	mg/kg	2	n.d.	100
	analysis was performed by ICP-OES.		1		1
Lead (Pb) (CAS No.: 7439-92-1)	With reference to IEC 62321-5: 2013,	mg/kg	2	n.d.	1000
	analysis was performed by ICP-OES.				
Mercury (Hg) (CAS No.: 7439-97-6)	With reference to IEC 62321-4: 2013+	mg/kg	2	n.d.	1000
	AMD1: 2017, analysis was performed		•		
	by ICP-OES.				
Hexavalent Chromium Cr(VI) (CAS No.:	With reference to IEC 62321-7-1: 2015,	μg/cm²	0.1	n.d.	-
18540-29-9) (#2)	analysis was performed by UV-VIS.				
Hexavalent Chromium Cr(VI) (CAS No.:	With reference to ISO 3613: 2010,	μg/cm²	0.02	n.d.	_
18540-29-9)	analysis was performed by UV-VIS.			:	
Hexavalent Chromium Cr(VI) (CAS No.:	With reference to IEC 62321-7-2: 2017,	mg/kg	8	n.d.	-
18540-29-9)	analysis was performed by UV-VIS.				
Hexavalent Chromium Cr(VI) (CAS No.:	With reference to US EPA 3060A: 1996,	mg/kg	2	n.d.	-
18540-29-9)	analysis was performed by UV-Vis.				
Monobromobiphenyl		mg/kg	5	n.d.	-
Dibromobiphenyl		mg/kg	5	n.d.	-
Tribromobiphenyl		mg/kg	5	n.d.	-
Tetrabromobiphenyl		mg/kg	5	n.d.	-
Pentabromobiphenyl	With reference to IEC 62321-6: 2015,	mg/kg	5	n.d.	-
Hexabromobiphenyl	analysis was performed by GC/MS.	mg/kg	5	n.d.	-
Heptabromobiphenyl	analysis was performed by Ge/Ws.	mg/kg	5	n.d.	-
Octabromobiphenyl		mg/kg	5	n.d.	-
Nonabromobiphenyl		mg/kg	5	n.d.	_
Decabromobiphenyl		mg/kg	5	n.d.	-
Sum of PBBs		mg/kg	-	n.d.	1000

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Test Item(s)	Method	Unit	MDL	Result	Limit
				No.1	1
Monobromodiphenyl ether		mg/kg	5	n.d.	_
Dibromodiphenyl ether		mg/kg	5	n.d.	-
Tribromodiphenyl ether		mg/kg	5	n.d.	-
Tetrabromodiphenyl ether		mg/kg	5	n.d.	-
Pentabromodiphenyl ether	With reference to IEC 62321-6: 2015,	mg/kg	5	n.d.	-
Hexabromodiphenyl ether	analysis was performed by GC/MS.	mg/kg	5	n.d.	-
Heptabromodiphenyl ether	analysis was periornied by GC/W3.	mg/kg	5	n.d.	-
Octabromodiphenyl ether		mg/kg	5	n.d.	-
Nonabromodiphenyl ether		mg/kg	5	n.d.	-
Decabromodiphenyl ether		mg/kg	5	n.d.	-
Sum of PBDEs		mg/kg	_	n.d.	1000
Butyl benzyl phthalate (BBP) (CAS No.:		mg/kg	50	n.d.	1000
85-68-7)					
Dibutyl phthalate (DBP) (CAS No.: 84-		mg/kg	50	n.d.	1000
74-2)					
Diisobutyl phthalate (DIBP) (CAS No.:		mg/kg	50	n.d.	1000
84-69-5)					
Di-(2-ethylhexyl) phthalate (DEHP)		mg/kg	50	n.d.	1000
(CAS No.: 117-81-7)					
Diisononyl phthalate (DINP) (CAS No.:		mg/kg	50	n.d.	_
28553-12-0, 68515-48-0)	With reference to IEC 62321-8: 2017,				
Diisodecyl phthalate (DIDP) (CAS No.:	analysis was performed by GC/MS.	mg/kg	50	n.d.	-
26761-40-0, 68515-49-1)					
Di-n-octyl phthalate (DNOP) (CAS No.:		mg/kg	50	n.d.	-
117-84-0)					
Bis-(2-methoxyethyl) phthalate (DMEP)		mg/kg	50	n.d.	-
(CAS No.: 117-82-8)					
Di-n-hexyl phthalate (DNHP) (CAS No.:		mg/kg	50	n.d.	-
84-75-3)					
Di-pentyl phthalate (DPP) (CAS No.:		mg/kg	50	n.d.	-
131-18-0)		-			
Tetrabromobisphenol A (TBBP-A) (CAS	With reference to RSTS-E&E-121,	mg/kg	10	n.d.	-
No.: 79-94-7)	analysis was performed by LC/MS.				

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Test Item(s)	Method	Unit	MDL	Result	Limit
				No.1	
Hexabromocyclododecane (HBCDD)	With reference to IEC 62321: 2008,	mg/kg	5	n.d.	-
and all major diastereoisomers	analysis was performed by GC/MS.				
identified (α- HBCDD, β- HBCDD, γ- HBCDD) (CAS No.: 25637-99-4, 3194-					
155-6 (134237-51-7, 134237-50-6,					
[134237-52-8])					
Fluorine (F) (CAS No.: 14762-94-8)		1 no or /1 co	F0		
Chlorine (Cl) (CAS No.: 14762-94-8)	With reference to BS EN 14582: 2016,	mg/kg	50	n.d.	-
Bromine (Br) (CAS No.: 22337-13-1)	analysis was performed by IC.	mg/kg	50	n.d.	
lodine (I) (CAS No.: 10097-32-2)	analysis was performed by ic.	mg/kg	50	n.d.	-
Perfluorooctanoic acid (PFOA) and it's		mg/kg	50	n.d.	-
salt (CAS No.: 335-67-1 and its salts)		mg/kg	0.01	n.d.	-
Perfluorooctane sulfonate (PFOS) and	With reference to CEN/TS 15968: 2010,	100 GI /1 GI	0.01		
it's salt (CAS No.: 1763-23-1 and its	analysis was performed by LC/MS/MS.	mg/kg	0.01	n.d.	-
(salts)					
Polychlorinated biphenyls (PCBs)	With reference to US EPA 3550C: 2007,	mg/kg	0.5	n.d.	
l elyememated siphenyis (i ebs)	analysis was performed by GC/MS.	ilig/kg	0.5	11.0.	_
Polychlorinated naphthalene (PCNs)	With reference to US EPA 3550C: 2007,	mg/kg	5	n.d.	-
l engermenmateur mapminaterie (i ente)	analysis was performed by GC/MS.	1119/109	3	11.0.	-
Polychlorinated terphenyls (PCTs)	With reference to US EPA 3550C: 2007,	mg/kg	0.5	n.d.	
	analysis was performed by GC/MS.	, , , ,			
Short Chain Chlorinated Paraffins(C10-	With reference to ISO 18219: 2015,	mg/kg	50	n.d.	-
C13) (SCCP) (CAS No.: 85535-84-8)	analysis was performed by GC/MS.				
Bisphenol A (CAS No.: 80-05-7)	With reference to RSTS-CHEM-239-1,	mg/kg	1	n.d.	-
	analysis was performed by LC/MS/MS.				
Formaldehyde (CAS No.: 50-00-0)	With reference to ISO 17226-1: 2021,	mg/kg	3	n.d.	-
	analysis was performed by LC/DAD.				
Asbestos					
Actinolite (CAS No.: 77536-66-4)	With reference to EPA 600/R-93/116:	%	-	Negative	_
Amosite (CAS No.: 12172-73-5)	1993, analysis was performed by	%	-	Negative	-
Anthophyllite (CAS No.: 77536-67-5)	Stereo Microscope (SM), Dispersion	%	-	Negative	-
Chrysotile (CAS No.: 12001-29-5)	Staining Polarized Light Microscope	%	-	Negative	_
Crocidolite (CAS No.: 12001-28-4)	(DS-PLM) and X-ray Diffraction	%	_	Negative	-
Tremolite (CAS No.: 77536-68-6)	Spectrometer (XRD).	%	-	Negative	-

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Test Item(s)	Method	Unit	MDL	Result	Limit
				No.1	
Polycyclic Aromatic Hydrocarbons					
(PAHs)					
Benzo[a]pyrene (CAS No.: 50-32-8)	_	mg/kg	0.2	n.d.	-
Benzo[e]pyrene (CAS No.: 192-97-2)		mg/kg	0.2	n.d.	-
Benzo[a]anthracene (CAS No.: 56-55-3)		mg/kg	0.2	n.d.	-
Benzo[b]fluoranthene (CAS No.: 205-99-2)		mg/kg	0.2	n.d.	-
Benzo[j]fluoranthene (CAS No.: 205-82-3)		mg/kg	0.2	n.d.	-
Benzo[k]fluoranthene (CAS No.: 207- 08-9)		mg/kg	0.2	n.d.	-
Chrysene (CAS No.: 218-01-9)	   With reference to AfPS GS 2019:01	mg/kg	0.2	n.d.	-
Dibenzo[a,h]anthracene (CAS No.: 53-70-3)	PAK, analysis was performed by GC/MS.	mg/kg	0.2	n.d.	-
Benzo[g,h,i]perylene (CAS No.: 191-24-2)	GC/IVIS.	mg/kg	0.2	n.d.	-
Indeno[1,2,3-c,d]pyrene (CAS No.: 193- 39-5)		mg/kg	0.2	n.d.	-
Anthracene (CAS No.: 120-12-7)		mg/kg	0.2	n.d.	-
Fluoranthene (CAS No.: 206-44-0)		mg/kg	0.2	n.d.	-
Phenanthrene (CAS No.: 85-01-8)		mg/kg	0.2	n.d.	-
Pyrene (CAS No.: 129-00-0)		mg/kg	0.2	n.d.	-
Naphthalene (CAS No.: 91-20-3)		mg/kg	0.2	n.d.	-
Sum of 15 PAHs		mg/kg	-	n.d.	-
Acenaphthylene (CAS No.: 208-96-8)	With reference to AfPS GS 2019:01	mg/kg	0.2	n.d.	-
Acenaphthene (CAS No.: 83-32-9)	PAK, analysis was performed by	mg/kg	0.2	n.d.	-
Fluorene (CAS No.: 86-73-7)	GC/MS.	mg/kg	0.2	n.d.	-
Dimethyl fumarate (DMFu) (CAS No.: 624-49-7)	With reference to US EPA 3550C: 2007, analysis was performed by GC/MS.	mg/kg	0.1	n.d.	_
Polyvinyl chloride (PVC)	With reference to ASTM E1252: 2013, analysis was performed by FT-IR and Flame Test.	**	-	Negative	-

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Test Item(s)	Method	Unit	MDL	Result	Limit
				No.1	
Tributyl tin (TBT)	With reference to ISO 17353: 2004, analysis was performed by GC/FPD.	mg/kg	0.03	n.d.	-
Bis(tributyltin) oxide (TBTO) (CAS No.: 56-35-9)	Calculated from the result of Tributyl Tin (TBT).	mg/kg	0.03▲	n.d.	-
Triphenyl tin (TPT)	With reference to ISO 17353: 2004, analysis was performed by GC/FPD.	mg/kg	0.03	n.d.	-
Dioctyl tin (DOT)	With reference to ISO 17353: 2004, analysis was performed by GC/FPD.	mg/kg	0.03	n.d.	-
Dibutyl tin (DBT)	With reference to ISO 17353: 2004, analysis was performed by GC/FPD.	mg/kg	0.03	n.d.	-
AZO Dyes					
4-Aminobiphenyl (CAS No.: 92-67-1)	With reference to EN ISO 14362-1: 2017, analysis was performed by GC/MS and HPLC/DAD.	mg/kg	3	n.d.	-
Benzidine (CAS No.: 92-87-5)	With reference to EN ISO 14362-1: 2017, analysis was performed by GC/MS and HPLC/DAD.	mg/kg	3	n.d.	_
4-chloro-o-toluidine (CAS No.: 95-69- 2)	With reference to EN ISO 14362-1: 2017, analysis was performed by GC/MS and HPLC/DAD.	mg/kg	3	n.d.	-
2-Naphthylamine (CAS No.: 91-59-8)	With reference to EN ISO 14362-1: 2017, analysis was performed by GC/MS and HPLC/DAD.	mg/kg	3	n.d.	-
o-Aminoazotoluene (CAS No.: 97-56-3)	With reference to EN ISO 14362-1: 2017, analysis was performed by GC/MS and HPLC/DAD.	mg/kg	3	n.d.	-
5-Nitro-o-toluidine (CAS No.: 99-55-8)	With reference to EN ISO 14362-1: 2017, analysis was performed by GC/MS and HPLC/DAD.	mg/kg	3	n.d.	-
4-Chloroaniline (CAS No.: 106-47-8)	With reference to EN ISO 14362-1: 2017, analysis was performed by GC/MS and HPLC/DAD.	mg/kg	3	n.d.	-
4-Methoxy-m-phenylenediamine / 2,4- Diaminoanisole (CAS No.: 615-05-4)	With reference to EN ISO 14362-1: 2017, analysis was performed by GC/MS and HPLC/DAD.	mg/kg	3	n.d.	-

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Test Item(s)	Method	Unit	MDL	Result	Limit
				No.1	]
4,4'-Methylenedianiline (CAS No.: 101-77-9)	With reference to EN ISO 14362-1: 2017, analysis was performed by GC/MS and HPLC/DAD.	mg/kg	3	n.d.	-
3,3'-Dichlorobenzidine (CAS No.: 91-94-1)	With reference to EN ISO 14362-1: 2017, analysis was performed by GC/MS and HPLC/DAD.	mg/kg	3	n.d.	-
3,3'-Dimethoxybenzidine (CAS No.: 119-90-4)	With reference to EN ISO 14362-1: 2017, analysis was performed by GC/MS and HPLC/DAD.	mg/kg	3	n.d.	-
3,3'-Dimethylbenzidine (CAS No.: 119-93-7)	With reference to EN ISO 14362-1: 2017, analysis was performed by GC/MS and HPLC/DAD.	mg/kg	3	n.d.	_
4,4'-Methylenedi-o-toluidine (CAS No.: 838-88-0)	With reference to EN ISO 14362-1: 2017, analysis was performed by GC/MS and HPLC/DAD.	mg/kg	3	n.d.	-
6-Methoxy-m-toluidine (CAS No.: 120-71-8)	With reference to EN ISO 14362-1: 2017, analysis was performed by GC/MS and HPLC/DAD.	mg/kg	3	n.d.	-
4,4'-Methylene-bis-(2-chloro-Aniline) (CAS No.: 101-14-4)	With reference to EN ISO 14362-1: 2017, analysis was performed by GC/MS and HPLC/DAD.	mg/kg	3	n.d.	-
4,4'-Oxydianiline (CAS No.: 101-80-4)	With reference to EN ISO 14362-1: 2017, analysis was performed by GC/MS and HPLC/DAD.	mg/kg	3	n.d.	-
4,4'-Thiodianiline (CAS No.: 139-65-1)	With reference to EN ISO 14362-1: 2017, analysis was performed by GC/MS and HPLC/DAD.	mg/kg	3	n.d.	-
o-Toluidine (CAS No.: 95-53-4)	With reference to EN ISO 14362-1: 2017, analysis was performed by GC/MS and HPLC/DAD.	mg/kg	3	n.d.	-
2,4-Diaminotoluene (CAS No.: 95-80-7)	With reference to EN ISO 14362-1: 2017, analysis was performed by GC/MS and HPLC/DAD.	mg/kg	3	n.d.	-

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				No.1	
2,4,5-Trimethylaniline (CAS No.: 137-	With reference to EN ISO 14362-1:	mg/kg	3	n.d.	-
17-7)	2017, analysis was performed by				
	GC/MS and HPLC/DAD.				
2-Methoxyaniline (CAS No.: 90-04-0)	With reference to EN ISO 14362-1:	mg/kg	3	n.d.	-
	2017, analysis was performed by				
	GC/MS and HPLC/DAD.				
4-Aminoazobenzene(4-AAB) (CAS No.:	With reference to EN ISO 14362-1:	mg/kg	3	n.d.	-
60-09-3)	2017 and EN ISO 14362-3: 2017,				
	analysis was performed by GC/MS and				1
	HPLC/DAD.				
2,4-Xylidine (CAS No.: 95-68-1)	With reference to EN ISO 14362-1:	mg/kg	3	n.d.	-
	2017, analysis was performed by				
	GC/MS and HPLC/DAD.				
2,6-Xylidine (CAS No.: 87-62-7)	With reference to EN ISO 14362-1:	mg/kg	3	n.d.	-
	2017, analysis was performed by				
	GC/MS and HPLC/DAD.				
Chlorofluorocarbons (CFCs)					
CFC-11 (CAS No.: 75-69-4)	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	_
	analysis was performed by GC/MS.				
CFC-12 (CAS No.: 75-71-8)	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	-
	analysis was performed by GC/MS.				
CFC-13 (CAS No.: 75-72-9)	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	
	analysis was performed by GC/MS.				
CFC-111 (CAS No.: 354-56-3)	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	-
	analysis was performed by GC/MS.				
CFC-112 (CAS No.: 76-12-0)	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	-
	analysis was performed by GC/MS.				
CFC-113 (CAS No.: 76-13-1)	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	-
	analysis was performed by GC/MS.				
CFC-114 (CAS No.: 76-14-2)	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	-
	analysis was performed by GC/MS.				
CFC-115 (CAS No.: 76-15-3)	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	-
	analysis was performed by GC/MS.				
CFC-211 (CAS No.: 422-78-6)	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	-
	analysis was performed by GC/MS.				

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				No.1	
CFC-212 (CAS No.: 3182-26-1)	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	-
	analysis was performed by GC/MS.				
CFC-213 (CAS No.: 2354-06-5)	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	_
	analysis was performed by GC/MS.				
CFC-214 (CAS No.: 29255-31-0)	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	-
	analysis was performed by GC/MS.				
CFC-215 (CAS No.: 4259-43-2)	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	-
	analysis was performed by GC/MS.				
CFC-216 (CAS No.: 661-97-2)	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	-
	analysis was performed by GC/MS.				
CFC-217 (CAS No.: 422-86-6)	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	_
	analysis was performed by GC/MS.				
Hydrochlorofluorocarbons (HCFCs)					
HCFC-21 (CAS No.: 75-43-4)	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	-
	analysis was performed by GC/MS.				
HCFC-22 (CAS No.: 75-45-6)	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	-
	analysis was performed by GC/MS.				
HCFC-31 (CAS No.: 593-70-4)	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	-
	analysis was performed by GC/MS.				
HCFC-121 (CAS No.: 354-14-3)	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	_
	analysis was performed by GC/MS.				
HCFC-122 (CAS No.: 354-21-2)	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	-
	analysis was performed by GC/MS.				
HCFC-123 (CAS No.: 306-83-2)	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	-
	analysis was performed by GC/MS.				
HCFC-124 (CAS No.: 2837-89-0)	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	
	analysis was performed by GC/MS.				
HCFC-131 (CAS No.: 359-28-4)	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	-
	analysis was performed by GC/MS.				
HCFC-141b (CAS No.: 1717-00-6)	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	-
	analysis was performed by GC/MS.				
HCFC-221 (CAS No.: 422-26-4)	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	-
·	analysis was performed by GC/MS.				
HCFC-222 (CAS No.: 422-49-1)	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	-
•	analysis was performed by GC/MS.				

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				No.1	
HCFC-223 (CAS No.: 422-52-6)	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	_
	analysis was performed by GC/MS.				
HCFC-224 (CAS No.: 422-54-8)	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	-
	analysis was performed by GC/MS.				
HCFC-225ca (CAS No.: 422-56-0)	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	-
	analysis was performed by GC/MS.				
HCFC-225cb (CAS No.: 507-55-1)	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	-
	analysis was performed by GC/MS.				
HCFC-226 (CAS No.: 431-87-8)	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	_
	analysis was performed by GC/MS.				
HCFC-231 (CAS No.: 421-94-3)	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	
	analysis was performed by GC/MS.				
HCFC-232 (CAS No.: 460-89-9)	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	_
	analysis was performed by GC/MS.				
HCFC-233 (CAS No.: 7125-84-0)	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	-
, , , , , , , , , , , , , , , , , , ,	analysis was performed by GC/MS.				
HCFC-234 (CAS No.: 425-94-5)	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	-
	analysis was performed by GC/MS.				
HCFC-235 (CAS No.: 460-92-4)	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	
	analysis was performed by GC/MS.				
HCFC-241 (CAS No.: 666-27-3)	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	-
	analysis was performed by GC/MS.				
HCFC-242 (CAS No.: 460-63-9)	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	-
	analysis was performed by GC/MS.				
HCFC-243 (CAS No.: 460-69-5)	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	-
	analysis was performed by GC/MS.				
HCFC-244	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	-
	analysis was performed by GC/MS.				
HCFC-251 (CAS No.: 421-41-0)	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	-
	analysis was performed by GC/MS.				
HCFC-252 (CAS No.: 819-00-1)	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	-
,	analysis was performed by GC/MS.				
HCFC-253 (CAS No.: 460-35-5)	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	-
	analysis was performed by GC/MS.				

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				No.1	1
HCFC-261 (CAS No.: 420-97-3)	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	-
	analysis was performed by GC/MS.				
HCFC-262 (CAS No.: 421-02-03)	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	-
	analysis was performed by GC/MS.				
HCFC-271 (CAS No.: 430-55-7)	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	_
	analysis was performed by GC/MS.				
HCFC-133a (CAS No.: 75-88-7)	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	-
	analysis was performed by GC/MS.				
HCFC-142b (CAS No.: 75-68-3)	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	-
	analysis was performed by GC/MS.				
HCFC-132b (CAS No.: 1649-08-7)	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	-
	analysis was performed by GC/MS.				
Hydrochlorofluorocarbon-141 (HCFC-	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	-
141)	analysis was performed by GC/MS.				
Hydrochlorofluorocarbon-142 (HCFC-	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	-
142)	analysis was performed by GC/MS.				
Hydrochlorofluorocarbon-151 (HCFC-	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	-
151)	analysis was performed by GC/MS.				
Hydrochlorofluorocarbon-225 (HCFC-	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	-
225)	analysis was performed by GC/MS.				
Halons					
Halon-1211 (CAS No.: 353-59-3)	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	-
	analysis was performed by GC/MS.				
Halon-1301 (CAS No.: 75-63-8)	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	-
	analysis was performed by GC/MS.				
Halon-2402 (CAS No.: 124-73-2)	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	-
	analysis was performed by GC/MS.				
Bromomethane (CAS No.: 74-83-9)	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	-
	analysis was performed by GC/MS.				
Hydrobromofluorocarbons (HBFCs)					
HBFC-121B4 (C2HFBr4)	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	-
	analysis was performed by GC/MS.				
HBFC-122B3 (C2HF2Br3)	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	-
	analysis was performed by GC/MS.				İ

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				No.1	
HBFC-123B2 (C2HF3Br2)	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	_
	analysis was performed by GC/MS.				
HBFC-124B1 (C2HF4Br)	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	-
	analysis was performed by GC/MS.				
HBFC-131B3 (C2H2FBr3)	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	-
	analysis was performed by GC/MS.				
HBFC-132B2 (C2H2F2Br2)	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	-
	analysis was performed by GC/MS.				
HBFC-133B1 (C2H2F3Br)	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	-
	analysis was performed by GC/MS.				
HBFC-141B2 (C2H3FBr2)	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	1
	analysis was performed by GC/MS.				
HBFC-142B1 (C2H3F2Br)	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	-
	analysis was performed by GC/MS.				
HBFC-151B1 (C2H4FBr)	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	-
	analysis was performed by GC/MS.				
HBFC-21B2 (CHFBr2) (CAS No.: 1868-	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	-
53-7)	analysis was performed by GC/MS.				
HBFC-221B6 (C3HFBr6)	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	-
	analysis was performed by GC/MS.				
HBFC-222B5 (C3HF2Br5)	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	-
	analysis was performed by GC/MS.				
HBFC-223B4 (C3HF3Br4)	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	-
	analysis was performed by GC/MS.				
HBFC-224B3 (C3HF4Br3)	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	-
	analysis was performed by GC/MS.				
HBFC-225B2 (C3HF5Br2)	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	-
	analysis was performed by GC/MS.				
HBFC-226B1 (C3HF6Br)	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	-
	analysis was performed by GC/MS.				
HBFC-22B1 (CHF2Br) (CAS No.: 1511-	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	-
62-2)	analysis was performed by GC/MS.				
HBFC-231B5 (C3H2FBr5)	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	-
	analysis was performed by GC/MS.				

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				No.1	
HBFC-232B4 (C3H2F2Br4)	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	-
	analysis was performed by GC/MS.				
HBFC-233B3 (C3H2F3Br3)	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	-
	analysis was performed by GC/MS.				
HBFC-234B2 (C3H2F4Br2)	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	-
	analysis was performed by GC/MS.				
HBFC-235B1 (C3H2F5Br)	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	_
	analysis was performed by GC/MS.				
HBFC-241B4 (C3H3FBr4)	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	-
	analysis was performed by GC/MS.				
HBFC-242B3 (C3H3F2Br3)	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	-
	analysis was performed by GC/MS.				
HBFC-243B2 (C3H3F3Br2)	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	-
	analysis was performed by GC/MS.				
HBFC-244B1 (C3H3F4Br)	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	-
	analysis was performed by GC/MS.				
HBFC-251B3 (C3H4FBr3)	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	-
	analysis was performed by GC/MS.				
HBFC-252B2 (C3H4F2Br2)	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	-
	analysis was performed by GC/MS.				
HBFC-253B1 (C3H4F3Br)	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	-
	analysis was performed by GC/MS.				
HBFC-261B2 (C3H5FBr2)	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	-
	analysis was performed by GC/MS.				
HBFC-262B1 (C3H5F2Br)	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	-
	analysis was performed by GC/MS.				
HBFC-271B1 (C3H6FBr)	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	-
	analysis was performed by GC/MS.				
HBFC-31B1 (CH2FBr) (CAS No.: 373-52-	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	-
4)	analysis was performed by GC/MS.				
Hydrofluorocarbon (HFCs)					
HFC-125 (C2HF5)	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	-
	analysis was performed by GC/MS.				
HFC-134 (C2H2F4)	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	-
	analysis was performed by GC/MS.				

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, 550				No.1	
HFC-134a (CH2FCF3) (CAS No.: 811-	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	
97-2)	analysis was performed by GC/MS.	" "		İ	
HFC-143 (CH3F3)	With reference to US EPA 5021A: 2014,	mg/kg 1		n.d.	-
, ,	analysis was performed by GC/MS.				
HFC-143a (CH3F3)	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	-
·	analysis was performed by GC/MS.				
HFC-152a (C2H4F2) (CAS No.: 75-37-6)	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	-
,	analysis was performed by GC/MS.				
HFC-227ea (C3HF7) (CAS No.: 431-89-	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	
0)	analysis was performed by GC/MS.				
HFC-23 (CHF3) (CAS No.: 75-46-7)	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	-
	analysis was performed by GC/MS.				
HFC-236ea (C3H2F6) (CAS No.: 431-63-	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	-
0)	analysis was performed by GC/MS.				
HFC-236fa (CAS No.: 431-63-0)	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	-
	analysis was performed by GC/MS.				
HFC-245ca (C3H3F5)	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	-
	analysis was performed by GC/MS.				- Composition -
HFC-245fa (C3H3F5)	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	_
	analysis was performed by GC/MS.			- Morror	
HFC-32 (CH2F2) (CAS No.: 75-10-5)	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	-
	analysis was performed by GC/MS.				
HFC-365mfc (C4H5F5)	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	_
	analysis was performed by GC/MS.				
HFC-43-10mee (C5H2F10)	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	-
	analysis was performed by GC/MS.				
HFC-41 (CH3F) (CAS No.: 593-53-3)	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	-
	analysis was performed by GC/MS.				
Perfluorocarbon (PFCs)					- vana suvani s
Fluorocarbon 116 (CAS No.: 76-16-4)	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	-
	analysis was performed by GC/MS.				
1,4-dihydrooctafluorobutane (CAS No.:	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	-
377-36-6)	analysis was performed by GC/MS.				
2-Perfluoromethylpentane (CAS No.:	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	-
355-04-4)	analysis was performed by GC/MS.				

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Test Item(s)	t Item(s) Method		MDL	Result	Limit
·				No.1	
Decafluorobutane (CAS No.: 355-25-9)	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	-
	analysis was performed by GC/MS.				
Freon 14 (CAS No.: 75-73-0)	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	_
	analysis was performed by GC/MS.				
Freon 218 (CAS No.: 76-19-7)	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	_
	analysis was performed by GC/MS.				
Nonafluor-2-(trifluoromethyl)butane	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	-
(CAS No.: 594-91-2)	analysis was performed by GC/MS.				
Perfluor-1-butene (CAS No.: 357-26-6)	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	-
	analysis was performed by GC/MS.				
Perfluorisobutene (CAS No.: 382-21-8)	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	_
	analysis was performed by GC/MS.				
Perfluorohexane (CAS No.: 355-42-0)	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	_
	analysis was performed by GC/MS.				
Perfluoro-n-pentane (CAS No.: 678-26-	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	-
2)	analysis was performed by GC/MS.	5 5			
Freon C318 (CAS No.: 115-25-3)	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	-
	analysis was performed by GC/MS.				
Chlorinate hydrocarbon (CHCs)	-				
Carbon tetrachloride (CAS No.: 56-23-	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	_
5)	analysis was performed by GC/MS.				
1,1,1-Trichloroethane (CAS No.: 71-55-	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	-
6)	analysis was performed by GC/MS.				
1,1,1,2-Tetrachloroethane (CAS No.:	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	-
630-20-6)	analysis was performed by GC/MS.			İ	
1,1,2,2-Tetrachloroethane (CAS No.:	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	-
79-34-5)	analysis was performed by GC/MS.				
1,1,2-Trichloroethane (CAS No.: 79-00-	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	-
5)	analysis was performed by GC/MS.				
1,1-Dichloroethane (CAS No.: 75-34-3)	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	-
	analysis was performed by GC/MS.				
1,1-Dichloroethylene (CAS No.: 75-35-	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	-
4)	analysis was performed by GC/MS.				İ
1,1-Dichloropropene (CAS No.: 563-58-	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	-
6)	analysis was performed by GC/MS.				

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Test Item(s)	Method	Unit	MDL	Result	Limit
				No.1	
1,2,3-Trichloropropane (CAS No.: 96-	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	_
18-4)	analysis was performed by GC/MS.				
1,2-Dichloroethane (CAS No.: 107-06-	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	_
2)	analysis was performed by GC/MS.				
1,2-Dichloropropane (CAS No.: 78-87-	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	-
5)	analysis was performed by GC/MS.				
1,3-Dichloropropane (CAS No.: 142-28-	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	-
9)	analysis was performed by GC/MS.				
2,2-Dichloropropane (CAS No.: 594-20-	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	-
[7]	analysis was performed by GC/MS.				
Chloroform (CAS No.: 67-66-3)	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	-
	analysis was performed by GC/MS.				
Chloromethane (CAS No.: 74-87-3)	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	_
	analysis was performed by GC/MS.				
cis-1,2-Dichloroethene (CAS No.: 156-	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	-
59-2)	analysis was performed by GC/MS.				
cis-1,3-Dichloropropene (CAS No.:	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	-
10061-01-5)	analysis was performed by GC/MS.				
Dichloromethane (CAS No.: 75-09-2)	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	_
	analysis was performed by GC/MS.				
Tetrachloroethene (CAS No.: 127-18-4)	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	-
	analysis was performed by GC/MS.				
trans-1,2-Dichloroethene (CAS No.:	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	-
156-60-5)	analysis was performed by GC/MS.				
trans-1,3-Dichloropropene (CAS No.:	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	
10061-02-6)	analysis was performed by GC/MS.				
Trichloroethylene (CAS No.: 79-01-6)	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	-
	analysis was performed by GC/MS.				
Chloroethane (CAS No.: 75-00-3)	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	-
	analysis was performed by GC/MS.				
Hexachlorobutadiene (CAS No.: 87-68-	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	-
3)	analysis was performed by GC/MS.				
Bromochloromethane (CAS No.: 74-97-	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	-
5)	analysis was performed by GC/MS.				

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Test Item(s)	Method	Unit	MDL	Result	Limit
				No.1	
Sulphur hexafluoride (SF6) (CAS No.:	With reference to US EPA 5021A: 2014,	mg/kg	1	n.d.	-
2551-62-4)	analysis was performed by GC/MS.				
Perchlorate (CAS No.: 14797-73-0)	Analysis was performed by IC.	μg/g	0.006	n.d.	
Chromium (Cr) (CAS No.: 7440-47-3)	With reference to US EPA 3052: 1996,	mg/kg	2	n.d.	-
	analysis was performed by ICP-OES.				
Selenium (Se) (CAS No.: 7782-49-2)	With reference to US EPA 3052: 1996,	mg/kg	2	n.d.	-
	analysis was performed by ICP-OES.				
Antimony (Sb) (CAS No.: 7440-36-0)	With reference to US EPA 3052: 1996,	mg/kg	2	n.d.	-
	analysis was performed by ICP-OES.				
Antimony trioxide (Sb <sub>2</sub> O <sub>3</sub> ) (CAS No.:	Calculated from the result of Antimony.	mg/kg	2▲	n.d.	-
1309-64-4)					
Arsenic (As) (CAS No.: 7440-38-2)	With reference to US EPA 3052: 1996,	mg/kg	2	n.d.	-
	analysis was performed by ICP-OES.				
Phosphorus (P) (CAS No.: 7723-14-0)	With reference to US EPA 3052: 1996,	mg/kg	2	n.d.	-
	analysis was performed by ICP-OES.				
Barium (Ba) (CAS No.: 7440-39-3)	With reference to US EPA 3052: 1996,	mg/kg	2	n.d.	-
	analysis was performed by ICP-OES.		ľ		
TBBP-A-bis (CAS No.: 21850-44-2)	With reference to US EPA 3550C: 2007,	mg/kg	5	n.d.	-
	analysis was performed by GC/MS.				

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#### Note:

- 1. mg/kg = ppm; 0.1wt% = 1000ppm
- 2. MDL = Method Detection Limit
- 3. n.d. = Not Detected (Less than MDL)
- 4. "-" = Not Regulated
- 5. \*\*= Qualitative analysis (No Unit)
- 6. Negative = Undetectable ; Positive = Detectable
- 7. Testing range of asbestos qualitative analysis is from less than 0.1% to 100%. The judgment criterion: asbestos fibers being found is shown as "Positive"; asbestos fibers not being found is shown as "Negative".
- 8. PFOS and its salts including:
  - CAS No.: 29081-56-9, 2795-39-3, 29457-72-5, 70225-14-8, 56773-42-3, 251099-16-8, 307-35-7.
- 9. PFOA and its salts including:
  - CAS No.: 3825-26-1, 335-95-5, 2395-00-8, 335-93-3, 335-66-0.
- 10. (#2) =
  - a. The sample is positive for Cr(VI) if the Cr(VI) concentration is greater than 0.13  $\mu$ g/cm<sup>2</sup>. The sample coating is considered to contain Cr(VI).
  - b. The sample is negative for Cr(VI) if Cr(VI) is n.d. (concentration less than 0.10  $\mu$ g/cm<sup>2</sup>). The coating is considered a non-Cr(VI) based coating
  - c. The result between 0.10  $\mu$ g/cm² and 0.13  $\mu$ g/cm² is considered to be inconclusive unavoidable coating variations may influence the determination.
- 11. ▲ : The MDL was evaluated for element / tested substance.

Conversion Formula :  $AX = A \times F$ 

AX	A	F
Bis(tributyltin)oxide (TBTO)	Tributyl Tin (TBT)	1.024
Antimony trioxide (Sb <sub>2</sub> O <sub>3</sub> )	Antimony	1.1971

Parameter Conversion Table: https://eecloud.sqs.com/Region TW/DocDownload.aspx#otherDoc

12. The statement of compliance conformity is based on comparison of testing results and limits.

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### Remark:

△ AfPS (German commission for Product Safety): GS PAHs requirements

	Category 1	Category 2		Category 3		
Parameter	Materials intended to be placed in the mouth, or materials in toys (Directive 2009/48/EC) or articles for children up to 3 years of age with intended long-	Materials that are not in Category 1, with intended or foreseeable long-term skin contact (> 30 seconds) or short-term repetitive contact with the skin.		Materials not covered by		
	term skin contact (> 30 seconds).	a. Use by children under 14	b. Other consumer products	a. Use by children under 14	b. Other consumer products	
Naphthalene	< 1	<	: 2	< 10		
Phenanthrene						
Anthracene	< 1 Sum	< 5 Sum	< 10 Sum	< 20 Sum	< 50 Sum	
Fluoranthene	V I Sulli	V 5 Suiti	\ 10 Juiii	\ 20 Juiii	\ 50 3dill	
Pyrene						
Benzo[a]anthracene	< 0.2	< 0.2	< 0.5	< 0.5	< 1	
Chrysene	< 0.2	< 0.2	< 0.5	< 0.5	< 1	
Benzo[b]fluoranthene	< 0.2	< 0.2	< 0.5	< 0.5	< 1	
Benzo[j]fluoranthene	< 0.2	< 0.2	< 0.5	< 0.5	< 1	
Benzo[k]fluoranthene	< 0.2	< 0.2	< 0.5	< 0.5	< 1	
Benzo[a]pyrene	< 0.2	< 0.2	< 0.5	< 0.5	< 1	
Benzo[e]pyrene	< 0.2	< 0.2	< 0.5	< 0.5	< 1	
Indeno[1,2,3-c,d] pyrene	< 0.2	< 0.2	< 0.5	< 0.5	< 1	
Dibenzo[a,h]anthracene	< 0.2	< 0.2	< 0.5	< 0.5	< 1	
Benzo[g,h,i]perylene	< 0.2	< 0.2	< 0.5	< 0.5	< 1	
Sum of 15 PAH	< 1	< 5	< 10	< 20	< 50	

Unit: mg/kg

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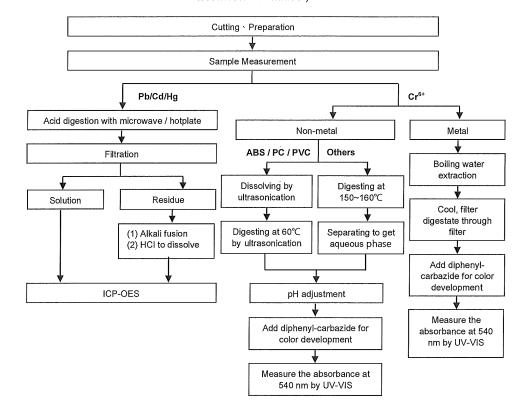
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#### Analytical flow chart of Heavy Metal

These samples were dissolved totally by pre-conditioning method according to below flow chart. ( Cr<sup>6+</sup> test method excluded )



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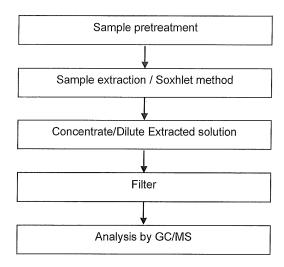


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#### PBB/PBDE analytical FLOW CHART



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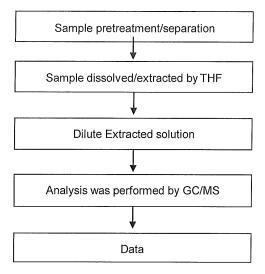
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### Analytical flow chart of phthalate content

[Test method: IEC 62321-8]



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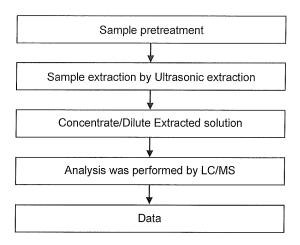


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### TBBP-A analytical flow chart



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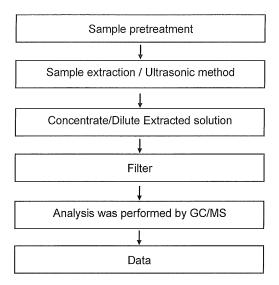


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#### Analytical flow chart - HBCDD



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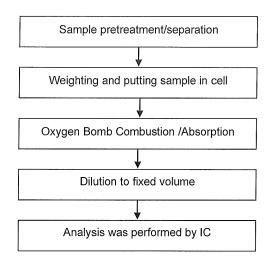


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#### Analytical flow chart of Halogen



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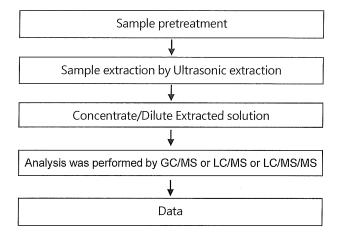


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### Analytical flow chart - PFAS (including PFOA/PFOS/its related compound, etc.)



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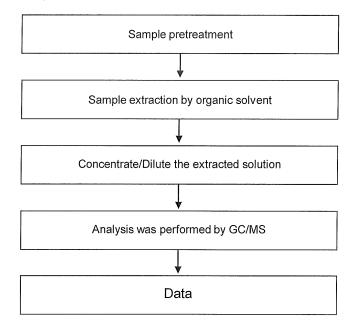
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### Analytical flow chart

\* Apply to: PCBs, PCNs, PCTs, Mirex, Chlorinated Paraffins, DBBT



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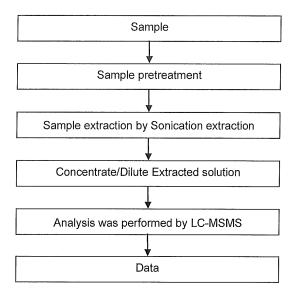


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### **BPA analytical FLOW CHART**



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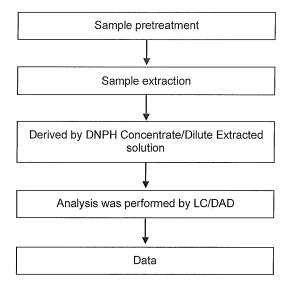


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### Analytical flow chart - Formaldehyde



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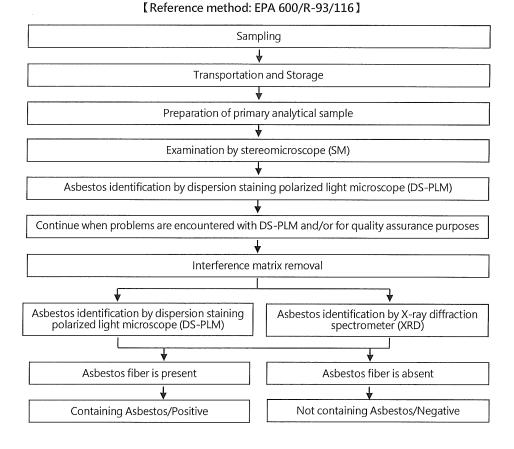


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# Analysis flow chart for determination of Asbestos



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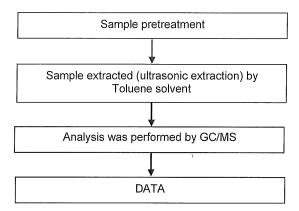


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### PAHs (PolyAromaticHydrocarbons) analytical flow chart



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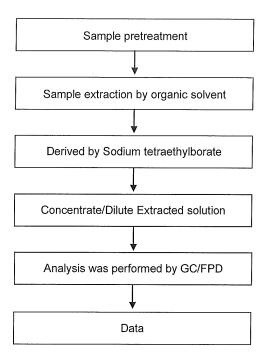


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### Analytical flow chart - Organic-Tin



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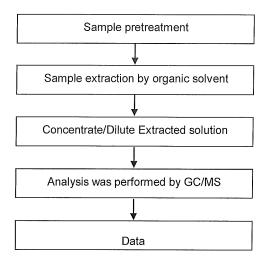


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### Analytical flow chart of Dimethyl Fumarate



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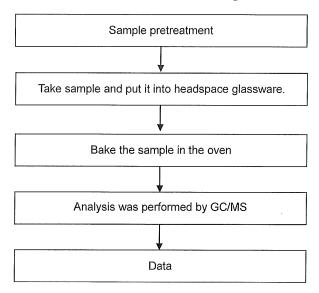
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### Analytical flow chart of volatile organic compounds (VOCs)

[Reference method: US EPA 5021A]



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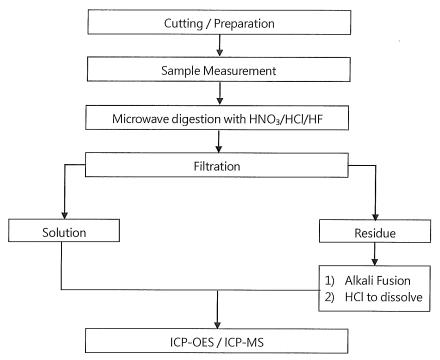
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### Analytical flow chart of Elements (Heavy metal included)

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

【Reference method: US EPA 3051 \ US EPA 3052】



\* US EPA 3051 method does not add HF.

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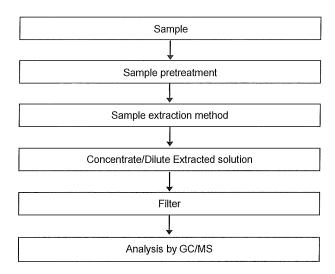


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### Analytical flow chart of TBBP-A-bis



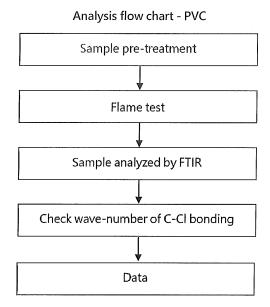
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\* The tested sample / part is marked by an arrow if it's shown on the photo. \*

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\*\* End of Report \*\*

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