

FORMOSA PLASTICS CORPORATION

NO.100, SHUI-GUAN RD., JEN-WU SHIANG, KAOHSIUNG COUNTY, Report No.: KA/2009/31237

TAIWAN R. O. C.

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

WHITE POLYVINYL CHLORIDE Sample Description

Style/Item No. **JW B60** Sample Receiving Date 2009/03/16

**Testing Period** 2009/03/16 TO 2009/03/24

: - Please see the next page(s) -Test Result(s)

Ray Chang / Asst. Manager Signed for and on behalf of **SGS Taiwan Limited** 



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Test Result(s)

PART NAME NO.1 : WHITE POLYVINYL CHLORIDE

Test Item (s)	Unit	Method	MDL	Result No. 1
Cadmium (Cd)	mg/kg	With reference to IEC 62321:2008.	2	n.d.
Cadifium (Cd)	ilig/kg	Determination of Cadmium by ICP-AES.	_	II.u.
	,	•		
Mercury (Hg)	mg/kg		2	n.d.
		Determination of Mercury by ICP-AES.		
Lead (Pb)	mg/kg	With reference to IEC 62321:2008.	2	n.d.
		Determination of Lead by ICP-AES.		
Hexavalent Chromium Cr(VI) by	mg/kg	With reference to IEC 62321:2008.	2	n.d.
alkaline extraction		Determination of Hexavalent Chromium for		
		non-metallic samples by UV/Vis		
		Spectrometry.		
Sum of PBBs		With reference to IEC 62321:2008. Determination of PBBs and PBDEs by GC/MS.	-	n.d.
Monobromobiphenyl			5	n.d.
Dibromobiphenyl			5	n.d.
Tribromobiphenyl			5	n.d.
Tetrabromobiphenyl	mg/kg		5	n.d.
Pentabromobiphenyl	IIIg/Kg		5	n.d.
Hexabromobiphenyl			5	n.d.
Heptabromobiphenyl			5	n.d.
Octabromobiphenyl			5	n.d.
Nonabromobiphenyl			5	n.d.
Decabromobiphenyl			5	n.d.
Sum of PBDEs			-	n.d.
Monobromodiphenyl ether			5	n.d.
Dibromodiphenyl ether			5	n.d.
Tribromodiphenyl ether		W// / 150 0004 000	5	n.d.
Tetrabromodiphenyl ether	mg/kg	With reference to IEC 62321:2008.	5	n.d.
Pentabromodiphenyl ether		Determination of PBBs and PBDEs by	5	n.d.
Hexabromodiphenyl ether	_	GC/MS.	5	n.d.
Heptabromodiphenyl ether	_		5	n.d.
Octabromodiphenyl ether	4		5	n.d.
Nonabromodiphenyl ether	4		5	n.d.
Decabromodiphenyl ether			5	n.d.



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Test Item (s)	Unit	Method	MDL	No. 1
Beryllium (Be)	mg/kg	With reference to US EPA 3052. Analysis	2	n.d.
		was performed by ICP-AES.		
Cobalt dichloride***	mg/kg	With reference to US EPA 3052. Analysis	2	n.d.
		was performed by ICP-AES.		
Chlorinated Paraffin	%	With reference to US EPA 3540C. Analysis	0.01	n.d.
(C10~C13)		was performed by GC/ECD.		
(CAS NO.: 010871-26-2)				
PCBs	mg/kg	With reference to US EPA 3540C. Analysis	0.5	n.d.
(Polychlorinated Biphenyls)		was performed by GC/ECD.		
(CAS NO.: 001336-36-3)		<b>,</b>		
Polychlorinated Naphthalene	mg/kg	With reference to US EPA 3540C. Analysis	5	n.d.
		was performed by GC/MS.		
PCTs	mg/kg		0.5	n.d.
(Polychlorinated Terphenyls)		was performed by GC/MS.		
PERFLUOROOCTANE	mg/kg		10	n.d.
SULFONATES (PFOS)		method for PFOS Content. Analysis was		
PFOS – Acid		performed by LC/MS.		
PFOS – Metal Salt		[		
PFOS – Amide				
2-(2-HYDROXY-3',5'-DI-T-	mg/kg	With reference to US EPA 3540C. Analysis	10	n.d.
BUTYLPHENYL)BENZOTRIAZOLE		was performed by GC/MS.		
(CAS NO.3846-71-7)		<b>'</b>		
Formaldehyde	mg/kg	With reference to DIN 53315. Analysis was	3	n.d.
(CAS NO.: 000050-00-0)		performed by HPLC/DAD.		
PVC	**	Analysis was performed by FTIR and	-	Positive
(CAS NO.: 9002-86-2)		FLAME Test.		
Asbestos				
Anthrophyllite	%	As per NIOSH 9000 method. Analysis was	1	Negative
(CAS NO.017068-78-9)		performed by XRD.		
Crocidolite	%	As per NIOSH 9000 method. Analysis was	1	Negative
(CAS NO.012001-28-4)		performed by XRD.		
Amosite	%	As per NIOSH 9000 method. Analysis was	1	Negative
(CAS NO.012172-73-5)		performed by XRD.		
Tremolite	%	As per NIOSH 9000 method. Analysis was	1	Negative
(CAS NO.014567-73-8)		performed by XRD.		
Chrysotile	%	As per NIOSH 9000 method. Analysis was	1	Negative
(CAS NO.012001-29-5)		performed by XRD.		
Actinolite	%	As per NIOSH 9000 method. Analysis was	1	Negative
(CAS NO.013768-00-8)		performed by XRD.		



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Test Item (s)	Unit	Method	MDL	Result No. 1
Phthalates				
DEHP(Di-(2-ethylhexyl phthalate))	%	With reference to EN 14372 : 2004 method.	0.003	n.d.
(CAS No.000117-81-7)		Analysis was performed by GC/MS.		
DIDP(Di-isodecyl phthalate)	%	With reference to EN 14372 : 2004 method.	0.01	n.d.
(CAS No.026761-40-0)		Analysis was performed by GC/MS.		
DNOP(Di-n-octyl phthalate)	%	With reference to EN 14372 : 2004 method.	0.003	n.d.
(CAS No.000117-84-0)		Analysis was performed by GC/MS.		
DBP(Di-butyl phthalate)	%	With reference to EN 14372 : 2004 method.	0.003	n.d.
(CAS No.000084-74-2)		Analysis was performed by GC/MS.		
BBP(Benzyl butyl phthalate)	%	With reference to EN 14372 : 2004 method.	0.003	n.d.
(CAS No.000085-68-7)		Analysis was performed by GC/MS.		
DINP(Di-isononyl phthalate)	%	With reference to EN 14372 : 2004 method.	0.01	n.d.
(CAS No.028553-12-0)		Analysis was performed by GC/MS.		
DHP(Di-hexyl phthalate)	%	With reference to EN 14372 : 2004 method.	0.003	n.d.
(CAS No.000084-75-3)		Analysis was performed by GC/MS.		
Organic-TIN compounds				
Tributyl Tin(TBT)	mg/kg	With reference to DIN 38407-13. Analysis	0.03	n.d.
(CAS NO.: 000688-73-3)		was performed by GC/FPD.		
Triphenyl Tin(TphT)	mg/kg	With reference to DIN 38407-13. Analysis	0.03	n.d.
(CAS NO.: 000668-34-8)		was performed by GC/FPD.		
CHCs				
(Chlorinated hydrocarbon)				
1,1,1,2-Tetrachloroethane	mg/kg	With reference to US EPA 5021. Analysis	1	n.d.
(CAS NO.: 000630-20-6)		was performed by GC/MS.		
1,1,1-Trichloroethane	mg/kg	With reference to US EPA 5021. Analysis	1	n.d.
(CAS NO.: 000071-55-6)		was performed by GC/MS.		
1,1,2,2-Tetrachloroethane	mg/kg	With reference to US EPA 5021. Analysis	1	n.d.
(CAS NO.: 000079-34-5)		was performed by GC/MS.		
1,1,2-Trichloroethane	mg/kg	With reference to US EPA 5021. Analysis	1	n.d.
(CAS NO.: 000079-00-5)		was performed by GC/MS.		
1,1-Dichloroethene	mg/kg	With reference to US EPA 5021. Analysis	1	n.d.
(CAS NO.: 000075-35-4)		was performed by GC/MS.		
1,1-Dichloroethane	mg/kg	With reference to US EPA 5021. Analysis	1	n.d.
(CAS NO.: 000075-34-3)		was performed by GC/MS.		
1,1-Dichloropropene	mg/kg	With reference to US EPA 5021. Analysis	1	n.d.
(CAS NO.: 000563-58-6)		was performed by GC/MS.		
1,2,3-Trichloropropane	mg/kg		1	n.d.
(CAS NO.: 000096-19-5)		was performed by GC/MS.		
1,2-Dichloroethane	mg/kg	With reference to US EPA 5021. Analysis	1	n.d.
(CAS NO.: 000107-06-2)	540	was performed by GC/MS.	42 000	



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	1		1	Dogult
Test Item (s)	Unit	Method	MDL	Result No. 1
1,2-Dichloropropane	mg/kg	With reference to US EPA 5021. Analysis	1	n.d.
(CAS NO.: 000078-87-5)		was performed by GC/MS.		
1,3-Dichloropropane	mg/kg	With reference to US EPA 5021. Analysis	1	n.d.
(CAS NO.: 000142-28-9)		was performed by GC/MS.		
2,2-Dichloropropane	mg/kg	With reference to US EPA 5021. Analysis	1	n.d.
(CAS NO.: 000594-20-7)		was performed by GC/MS.		
Chloroethane	mg/kg	With reference to US EPA 5021. Analysis	1	n.d.
(CAS NO.: 000075-00-3)		was performed by GC/MS.		
Chloroform	mg/kg	With reference to US EPA 5021. Analysis	1	n.d.
(CAS NO.: 000067-66-3)		was performed by GC/MS.		
Chloromethane	mg/kg	With reference to US EPA 5021. Analysis	1	n.d.
(CAS NO.: 000074-87-3)		was performed by GC/MS.		
Cis-1,2-Dichloroethene	mg/kg	With reference to US EPA 5021. Analysis	1	n.d.
(CAS NO.: 000156-59-2)		was performed by GC/MS.		
Cis-1,3-Dichloropropene	mg/kg	With reference to US EPA 5021. Analysis	1	n.d.
(CAS NO.: 010061-01-5)		was performed by GC/MS.		
Hexachlorobutadiene	mg/kg	With reference to US EPA 5021. Analysis	1	n.d.
(CAS NO.: 000087-68-3)		was performed by GC/MS.		
Methylene Chloride	mg/kg	With reference to US EPA 5021. Analysis	1	n.d.
(CAS NO.: 000075-09-2)		was performed by GC/MS.		
trans-1,2-Dichloroethene	mg/kg	With reference to US EPA 5021. Analysis	1	n.d.
(CAS NO.: 000156-60-5)		was performed by GC/MS.		
trans-1,3-Dichloropropene	mg/kg	With reference to US EPA 5021. Analysis	1	n.d.
(CAS NO.: 010061-02-6)		was performed by GC/MS.		
Trichloroethylene	mg/kg	With reference to US EPA 5021. Analysis	1	n.d.
(CAS NO.: 000079-01-6)		was performed by GC/MS.		
Carbon Tetrachloride	mg/kg	With reference to US EPA 5021. Analysis	1	n.d.
		was performed by GC/MS.		
Methyl Chloroform	mg/kg	With reference to US EPA 5021. Analysis	1	n.d.
		was performed by GC/MS.		
Hydrofluorcarbon, fluorinated				
hydrocarbon, fluorohydrocarbon				
(HFC)				
HFC-23 (CHF3)	mg/kg	With reference to US EPA 5021. Analysis	1	n.d.
		was performed by GC/MS.		
HFC-32 (CH2F2)	mg/kg	With reference to US EPA 5021. Analysis	1	n.d.
		was performed by GC/MS.		



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		I	l Beer		
Test Item (s)	Unit	Method	MDL	Result No. 1	
HFC-41 (CH3F)	mg/kg	With reference to US EPA 5021. Analysis	1	n.d.	
, ,		was performed by GC/MS.			
HFC-43-10mee (C5H2F10)	mg/kg	With reference to US EPA 5021. Analysis	1	n.d.	
, ,		was performed by GC/MS.			
HFC-125 (C2HF5)	mg/kg	With reference to US EPA 5021. Analysis	1	n.d.	
, ,		was performed by GC/MS.			
HFC-134 (C2H2F4)	mg/kg	With reference to US EPA 5021. Analysis	1	n.d.	
,		was performed by GC/MS.			
HFC-134a (CH2FCF3)	mg/kg	With reference to US EPA 5021. Analysis	1	n.d.	
		was performed by GC/MS.			
HFC-143 (C2H3F3)	mg/kg	With reference to US EPA 5021. Analysis	1	n.d.	
		was performed by GC/MS.			
HFC-143a (C2H3F3)	mg/kg	With reference to US EPA 5021. Analysis	1	n.d.	
		was performed by GC/MS.			
HFC-152a (C2H4F2)	mg/kg	With reference to US EPA 5021. Analysis	1	n.d.	
		was performed by GC/MS.			
HFC-227ea (C3HF7)	mg/kg	With reference to US EPA 5021. Analysis	1	n.d.	
		was performed by GC/MS.			
HFC-236cb (CH2FCF2CF3)	mg/kg	With reference to US EPA 5021. Analysis	1	n.d.	
		was performed by GC/MS.			
HFC-236fa (C3H2F6)	mg/kg	With reference to US EPA 5021. Analysis	1	n.d.	
		was performed by GC/MS.			
HFC-236ea (CHF2CHFCF3)	mg/kg	With reference to US EPA 5021. Analysis	1	n.d.	
		was performed by GC/MS.			
HFC-245ca (C3H3F5)	mg/kg	With reference to US EPA 5021. Analysis	1	n.d.	
		was performed by GC/MS.			
HFC-245fa (CHF2CH2CF3)	mg/kg	With reference to US EPA 5021. Analysis	1	n.d.	
		was performed by GC/MS.			
HFC-365mfc (CF3CH2CF2CH3)	mg/kg	With reference to US EPA 5021. Analysis	1	n.d.	
		was performed by GC/MS.			
PERFLUOROCARBON(PFC)					
F14	mg/kg	With reference to US EPA 5021. Analysis	1	n.d.	
		was performed by GC/MS.			
Fluorocarbon 116	mg/kg	With reference to US EPA 5021. Analysis	1	n.d.	
		was performed by GC/MS.			



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#### Result **MDL** Test Item (s) Unit Method No. 1 Freon 218 With reference to US EPA 5021. Analysis mg/kg n.d. 1 was performed by GC/MS. Decafluorobutane With reference to US EPA 5021. Analysis 1 n.d. mg/kg was performed by GC/MS. Freon C 318 With reference to US EPA 5021. Analysis 1 mg/kg n.d. was performed by GC/MS. Perfluoro-1-butene With reference to US EPA 5021. Analysis mg/kg 1 n.d. was performed by GC/MS. Perfluoroisobutene mg/kg With reference to US EPA 5021. Analysis 1 n.d. was performed by GC/MS. 1,4-Dihydrooctafluorobutane With reference to US EPA 5021. Analysis 1 n.d. mg/kg was performed by GC/MS. Nonafluoro-2-With reference to US EPA 5021, Analysis mg/kg n.d. (trifluoromethyl)butane was performed by GC/MS. Perfluoro-n-pentane With reference to US EPA 5021. Analysis n.d. mg/kg was performed by GC/MS. mg/kg 2-Perfluoromethylpentane With reference to US EPA 5021. Analysis 1 n.d. was performed by GC/MS. With reference to US EPA 5021. Analysis Perfluorohexane mg/kg n.d. was performed by GC/MS. CFCs(Chlorofluorocarbons) & **HALON** Chlorofluorocarbon-11 mg/kg With reference to US EPA 5021. Analysis n.d. (CAS NO.: 000075-69-4) was performed by GC/MS. With reference to US EPA 5021. Analysis Chlorofluorocarbon-12 mg/kg n.d. (CAS NO.: 000075-71-8) was performed by GC/MS. With reference to US EPA 5021. Analysis 1 Chlorofluorocarbon-113 mg/kg n.d. (CAS NO.: 000076-13-1) was performed by GC/MS. With reference to US EPA 5021. Analysis Chlorofluorocarbon-114 mg/kg n.d. (CAS NO.: 000076-14-2) was performed by GC/MS. Chlorofluorocarbon-115 With reference to US EPA 5021. Analysis 1 n.d. mg/kg (CAS NO.: 000076-15-3) was performed by GC/MS. With reference to US EPA 5021. Analysis Chlorofluorocarbon-13 mg/kg 1 n.d. was performed by GC/MS. (CAS NO.: 000075-72-9) Chlorofluorocarbon-111 mg/kg With reference to US EPA 5021. Analysis 1 n.d. (CAS NO.: 000354-56-3) was performed by GC/MS. Chlorofluorocarbon-112 mg/kg With reference to US EPA 5021. Analysis n.d. (CAS NO.: 000076-12-0) was performed by GC/MS.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. This test report cannot be reproduced, except



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Test Item (s)	Unit	Method	MDL	Result No. 1	
Chlorofluorocarbon-211	mg/kg	With reference to US EPA 5021. Analysis	1	n.d.	
(CAS NO.: 135401-87-5)		was performed by GC/MS.			
Chlorofluorocarbon-212	mg/kg		1	n.d.	
(CAS NO.: 076564-99-3)		was performed by GC/MS.			
Chlorofluorocarbon-213	mg/kg		1	n.d.	
(CAS NO.: 060285-54-3)		was performed by GC/MS.			
Chlorofluorocarbon-214	mg/kg		1	n.d.	
(CAS NO.: 002268-46-4)		was performed by GC/MS.			
Chlorofluorocarbon-215	mg/kg	With reference to US EPA 5021. Analysis	1	n.d.	
(CAS NO.: 000076-17-5)		was performed by GC/MS.			
Chlorofluorocarbon-216	mg/kg	With reference to US EPA 5021. Analysis	1	n.d.	
(CAS NO.: 001652-80-8)		was performed by GC/MS.			
Chlorofluorocarbon-217	mg/kg	With reference to US EPA 5021. Analysis	1	n.d.	
(CAS NO.: 000422-86-6)		was performed by GC/MS.			
HALON-1211	mg/kg	With reference to US EPA 5021. Analysis	1	n.d.	
		was performed by GC/MS.			
HALON-1301	mg/kg		1	n.d.	
		was performed by GC/MS.			
HALON-2402	mg/kg	With reference to US EPA 5021. Analysis	1	n.d.	
		was performed by GC/MS.			
HCFC's					
(Hydrogenated					
Hydrochlorofluorocarbon-21	mg/kg	With reference to US EPA 5021. Analysis	1	n.d.	
(CAS NO.: 000075-43-4)		was performed by GC/MS.			
Hydrochlorofluorocarbon-22	mg/kg	With reference to US EPA 5021. Analysis	1	n.d.	
(CAS NO.: 000075-45-6)		was performed by GC/MS.			
Hydrochlorofluorocarbon-31	mg/kg	With reference to US EPA 5021. Analysis	1	n.d.	
(CAS NO.: 000593-70-4)		was performed by GC/MS.			
Hydrochlorofluorocarbon-121	mg/kg	With reference to US EPA 5021. Analysis	1	n.d.	
(CAS NO.: 130879-71-9)		was performed by GC/MS.			
Hydrochlorofluorocarbon-122	mg/kg	With reference to US EPA 5021. Analysis	1	n.d.	
(CAS NO.: 041834-16-6)		was performed by GC/MS.			
Hydrochlorofluorocarbon-123	mg/kg	With reference to US EPA 5021. Analysis	1	n.d.	
(CAS NO.: 034077-87-7)		was performed by GC/MS.			
Hydrochlorofluorocarbon-124	mg/kg		1	n.d.	
(CAS NO.: 063938-10-3)		was performed by GC/MS.			
Hydrochlorofluorocarbon-131	mg/kg		1	n.d.	
(CAS NO.: 134237-34-6)		was performed by GC/MS.			



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Test Item (s)	Unit	Method	MDL	Result No. 1
Hydrochlorofluorocarbon-132	mg/kg	With reference to US EPA 5021. Analysis	1	n.d.
(CAS NO.: 025915-78-0)		was performed by GC/MS.		
Hydrochlorofluorocarbon-133	mg/kg	With reference to US EPA 5021. Analysis	1	n.d.
(CAS NO.: 001330-45-6)		was performed by GC/MS.		
Hydrochlorofluorocarbon-141	mg/kg	With reference to US EPA 5021. Analysis	1	n.d.
(CAS NO.: 025167-88-8)		was performed by GC/MS.		
Hydrochlorofluorocarbon-141b	mg/kg	With reference to US EPA 5021. Analysis	1	n.d.
(CAS NO.: 001717-00-6)		was performed by GC/MS.		
Hydrochlorofluorocarbon-142	mg/kg	With reference to US EPA 5021. Analysis	1	n.d.
(CAS NO.: 025497-29-4)		was performed by GC/MS.		
Hydrochlorofluorocarbon-142b	mg/kg	With reference to US EPA 5021. Analysis	1	n.d.
(CAS NO.: 000075-68-3)		was performed by GC/MS.		
Hydrochlorofluorocarbon-151	mg/kg	With reference to US EPA 5021. Analysis	1	n.d.
(CAS NO.: 001615-75-4)		was performed by GC/MS.		
Hydrochlorofluorocarbon-221	mg/kg	With reference to US EPA 5021. Analysis	1	n.d.
(CAS NO.: 134237-35-7)		was performed by GC/MS.		
Hydrochlorofluorocarbon-222	mg/kg	With reference to US EPA 5021. Analysis	1	n.d.
(CAS NO.: 134237-36-8)		was performed by GC/MS.		
Hydrochlorofluorocarbon-223	mg/kg	With reference to US EPA 5021. Analysis	1	n.d.
(CAS NO.: 134237-37-9)		was performed by GC/MS.		
Hydrochlorofluorocarbon-224	mg/kg	With reference to US EPA 5021. Analysis	1	n.d.
(CAS NO.: 134237-38-0)		was performed by GC/MS.		
Hydrochlorofluorocarbon-225	mg/kg	With reference to US EPA 5021. Analysis	1	n.d.
(CAS NO.: 127564-92-5)		was performed by GC/MS.		
Hydrochlorofluorocarbon-225ca	mg/kg	With reference to US EPA 5021. Analysis	1	n.d.
(CAS NO.: 000422-56-0)		was performed by GC/MS.		
Hydrochlorofluorocarbon-225cb	mg/kg	With reference to US EPA 5021. Analysis	1	n.d.
(CAS NO.: 000507-55-1)		was performed by GC/MS.		
Hydrochlorofluorocarbon-226	mg/kg	With reference to US EPA 5021. Analysis	1	n.d.
(CAS NO.: 134308-72-8)		was performed by GC/MS.		
Hydrochlorofluorocarbon-231	mg/kg	With reference to US EPA 5021. Analysis	1	n.d.
(CAS NO.: 134190-48-0)		was performed by GC/MS.		
Hydrochlorofluorocarbon-232	mg/kg	With reference to US EPA 5021. Analysis	1	n.d.
(CAS NO.: 134237-39-1)		was performed by GC/MS.		
Hydrochlorofluorocarbon-233	mg/kg	With reference to US EPA 5021. Analysis	1	n.d.
(CAS NO.: 134237-40-4)		was performed by GC/MS.		



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Test Item (s)	Unit	Method	MDL	Result
Lhudra ah la raffu a ra a rhan 224	/	With reference to UC FDA 5004. Analysis	1	No. 1
Hydrochlorofluorocarbon-234	mg/kg	With reference to US EPA 5021. Analysis	1	n.d.
(CAS NO.: 127564-83-4)	//	was performed by GC/MS.		- 1
Hydrochlorofluorocarbon-235	mg/kg	With reference to US EPA 5021. Analysis	1	n.d.
(CAS NO.: 134237-83-5)		was performed by GC/MS.		
Hydrochlorofluorocarbon-241	mg/kg	With reference to US EPA 5021. Analysis	1	n.d.
(CAS NO.: 134190-49-1)		was performed by GC/MS.		
Hydrochlorofluorocarbon-242	mg/kg	With reference to US EPA 5021. Analysis	1	n.d.
(CAS NO.: 134237-42-6)		was performed by GC/MS.		
Hydrochlorofluorocarbon-243	mg/kg	With reference to US EPA 5021. Analysis	1	n.d.
(CAS NO.: 134237-43-7)		was performed by GC/MS.		
Hydrochlorofluorocarbon-244	mg/kg	With reference to US EPA 5021. Analysis	1	n.d.
(CAS NO.: 134190-50-4)		was performed by GC/MS.		
Hydrochlorofluorocarbon-251	mg/kg	With reference to US EPA 5021. Analysis	1	n.d.
(CAS NO.: 134190-51-5)		was performed by GC/MS.		
Hydrochlorofluorocarbon-252	mg/kg	With reference to US EPA 5021. Analysis	1	n.d.
(CAS NO.: 134190-52-6)		was performed by GC/MS.		
Hydrochlorofluorocarbon-253	mg/kg	With reference to US EPA 5021. Analysis	1	n.d.
(CAS NO.: 134237-44-8)		was performed by GC/MS.		
Hydrochlorofluorocarbon-261	mg/kg	With reference to US EPA 5021. Analysis	1	n.d.
(CAS NO.: 134237-45-9)		was performed by GC/MS.		
Hydrochlorofluorocarbon-262	mg/kg	With reference to US EPA 5021. Analysis	1	n.d.
(CAS NO.: 134190-53-7)		was performed by GC/MS.		
Hydrochlorofluorocarbon-271	mg/kg	With reference to US EPA 5021. Analysis	1	n.d.
(CAS NO.: 134190-54-8)	lg,g	was performed by GC/MS.		
HBFC's (Hydrogenated		was performed by Gorme.		
bromofluorocarbons)				
HBFC-21B2	mg/kg	With reference to US EPA 5021. Analysis	1	n.d.
		was performed by GC/MS.		
HBFC-22B1	mg/kg	With reference to US EPA 5021. Analysis	1	n.d.
	l mg/kg	was performed by GC/MS.		ii.u.
HBFC-31B1	ma/ka	With reference to US EPA 5021. Analysis	1	n.d.
	'''g/'Ng	was performed by GC/MS.	'	ii.u.
HBFC-121B4	mg/kg	With reference to US EPA 5021. Analysis	1	n.d.
	I mg/kg	was performed by GC/MS.	'	ii.u.
HBFC-122B3	mg/kg	With reference to US EPA 5021. Analysis	1	n.d.
	I mg/kg		'	11.u.
		was performed by GC/MS.		



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#### 

Test Item (s)	Unit	Method	MDL	Result
( )			IVIDL	No. 1
HBFC-123B2	mg/kg	With reference to US EPA 5021. Analysis	1	n.d.
		was performed by GC/MS.		
HBFC-124B1	mg/kg	With reference to US EPA 5021. Analysis	1	n.d.
		was performed by GC/MS.		
HBFC-131B3	mg/kg	With reference to US EPA 5021. Analysis	1	n.d.
		was performed by GC/MS.		
HBFC-132B2	mg/kg	With reference to US EPA 5021. Analysis	1	n.d.
		was performed by GC/MS.		
HBFC-133B1	mg/kg	With reference to US EPA 5021. Analysis	1	n.d.
		was performed by GC/MS.		
HBFC-141B2	mg/kg	With reference to US EPA 5021. Analysis	1	n.d.
		was performed by GC/MS.		
HBFC-142B1	mg/kg		1	n.d.
		was performed by GC/MS.		
HBFC-151B1	mg/kg	With reference to US EPA 5021. Analysis	1	n.d.
		was performed by GC/MS.		
HBFC-221B6	mg/kg	With reference to US EPA 5021. Analysis	1	n.d.
		was performed by GC/MS.		
HBFC-222B5	mg/kg	With reference to US EPA 5021. Analysis	1	n.d.
		was performed by GC/MS.		
HBFC-223B4	mg/kg	With reference to US EPA 5021. Analysis	1	n.d.
		was performed by GC/MS.		
HBFC-224B3	mg/kg	With reference to US EPA 5021. Analysis	1	n.d.
		was performed by GC/MS.		
HBFC-225B2	mg/kg	With reference to US EPA 5021. Analysis	1	n.d.
		was performed by GC/MS.		
HBFC-226B1	mg/kg	With reference to US EPA 5021. Analysis	1	n.d.
		was performed by GC/MS.		
HBFC-231B5	mg/kg	With reference to US EPA 5021. Analysis	1	n.d.
		was performed by GC/MS.		
HBFC-232B4	mg/kg	With reference to US EPA 5021. Analysis	1	n.d.
		was performed by GC/MS.		
HBFC-233B3	mg/kg		1	n.d.
		was performed by GC/MS.		
HBFC-234B2	mg/kg		1	n.d.
		was performed by GC/MS.		



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			l Beer		
Test Item (s)	Unit	Method	MDL	Result No. 1	
HBFC-235B1	mg/kg	With reference to US EPA 5021. Analysis	1	n.d.	
		was performed by GC/MS.			
HBFC-241B4	mg/kg	With reference to US EPA 5021. Analysis	1	n.d.	
		was performed by GC/MS.			
HBFC-242B3	mg/kg	With reference to US EPA 5021. Analysis	1	n.d.	
		was performed by GC/MS.			
HBFC-243B2	mg/kg	With reference to US EPA 5021. Analysis	1	n.d.	
		was performed by GC/MS.			
HBFC-244B1	mg/kg	With reference to US EPA 5021. Analysis	1	n.d.	
		was performed by GC/MS.			
HBFC-251B3	mg/kg		1	n.d.	
		was performed by GC/MS.			
HBFC-252B2	mg/kg	With reference to US EPA 5021. Analysis	1	n.d.	
		was performed by GC/MS.			
HBFC-253B1	mg/kg	With reference to US EPA 5021. Analysis	1	n.d.	
		was performed by GC/MS.			
HBFC-261B2	mg/kg	With reference to US EPA 5021. Analysis	1	n.d.	
		was performed by GC/MS.			
HBFC-262B1	mg/kg	With reference to US EPA 5021. Analysis	1	n.d.	
		was performed by GC/MS.			
HBFC-271B1	mg/kg	With reference to US EPA 5021. Analysis	1	n.d.	
		was performed by GC/MS.			
Bromomethane	mg/kg	With reference to US EPA 5021. Analysis	1	n.d.	
		was performed by GC/MS.			
AZO					
1):4-AMINODIPHENYL	mg/kg	With reference to LMBG 82.02-2. Analysis	3	n.d.	
(CAS NO.92-67-1)		was performed by GC/MS.			
2):BENZIDINE	mg/kg	With reference to LMBG 82.02-2. Analysis	3	n.d.	
(CAS NO.92-87-5)		was performed by GC/MS.			
3):4-CHLORO-O-TOLUIDINE	mg/kg	With reference to LMBG 82.02-2. Analysis	3	n.d.	
(CAS NO.95-69-2)		was performed by GC/MS.			
4):2-NAPHTHYLAMINE	mg/kg	With reference to LMBG 82.02-2. Analysis	3	n.d.	
(CAS NO.91-59-8)		was performed by GC/MS.			
5):O-AMINO-AZOTOLUENE	mg/kg	With reference to LMBG 82.02-2. Analysis	3	n.d.	
(CAS NO.97-56-3)		was performed by GC/MS.			
6):2-AMINO-4-NITROTOLUENE	mg/kg	With reference to LMBG 82.02-2. Analysis	3	n.d.	
(CAS NO.99-55-8)		was performed by GC/MS.			



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		<b>88</b> (1 1		Result	
Test Item (s)	Unit	Method	MDL	No. 1	
7):P-CHLOROANILINE	mg/kg	With reference to LMBG 82.02-2. Analysis	3	n.d.	
(CAS NO.106-47-8)		was performed by GC/MS.			
8):2,4-DIAMINOANISOLE	mg/kg	With reference to LMBG 82.02-2. Analysis	3	n.d.	
(CAS NO.615-05-4)		was performed by GC/MS.			
9):4,4-	mg/kg	With reference to LMBG 82.02-2. Analysis	3	n.d.	
DIAMINODIPHENYLMETHANE		was performed by GC/MS.			
10):3,3-DICHLOROBENZIDINE	mg/kg	With reference to LMBG 82.02-2. Analysis	3	n.d.	
(CAS NO.91-94-1)		was performed by GC/MS.			
11):3,3-DIMETHOXYBENZIDINE	mg/kg	With reference to LMBG 82.02-2. Analysis	3	n.d.	
(CAS NO.119-90-4)		was performed by GC/MS.			
12):3,3-DIMETHYLBENZIDINE	mg/kg	With reference to LMBG 82.02-2. Analysis	3	n.d.	
(CAS NO.119-93-7)		was performed by GC/MS.			
13):3,3-DIMETHYL-	mg/kg	With reference to LMBG 82.02-2. Analysis	3	n.d.	
4,4-		was performed by GC/MS.			
DIAMINODIPHENYLMETHA					
14):P-CRESIDINE	mg/kg	With reference to LMBG 82.02-2. Analysis	3	n.d.	
(2-METHOXY-5-		was performed by GC/MS.			
METHYLANILINE)					
15):4,4-METHYLENE-BIS-	mg/kg	With reference to LMBG 82.02-2. Analysis	3	n.d.	
(2-CHLORANILINE)		was performed by GC/MS.			
(CAS NO.101-14-4)					
16):4,4-OXYDIANILINE	mg/kg	With reference to LMBG 82.02-2. Analysis	3	n.d.	
(CAS NO.101-80-4)		was performed by GC/MS.			
17):4,4-THIODIANILINE	mg/kg		3	n.d.	
(CAS NO.139-65-1)		was performed by GC/MS.			
18):O-TOLUIDINE	mg/kg	With reference to LMBG 82.02-2. Analysis	3	n.d.	
(CAS NO.95-53-4)		was performed by GC/MS.			
19):2-4-TOLUYLENDIAMINE	mg/kg		3	n.d.	
(CAS NO.95-80-7)		was performed by GC/MS.			
20):2,4,5-TRIMETHYLANILINE	mg/kg		3	n.d.	
(CAS NO.137-17-7)		was performed by GC/MS.			
21):O-ANISIDINE	mg/kg	,	3	n.d.	
(CAS NO.90-04-0)		was performed by GC/MS.			
22):P-AMINOAZOBENZENE	mg/kg	With reference to LMBG 82.02-Z. Analysis	3	n.d.	
(CAS NO.60-09-3)		was performed by GC/MS.			
23):2,4-XYLIDINE	mg/kg	•	3	n.d.	
(CAS NO.95-68-1)		was performed by GC/MS.			
24):2,6-XYLIDINE	mg/kg		3	n.d.	
(CAS NO.87-62-7)		was performed by GC/MS.			



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Note : 1. mg/kg = ppm ; 0.1wt% = 1000ppm

2. n.d. = Not Detected

3. MDL = Method Detection Limit

4. " - " = Not Regulated

- 5. The exemption of DecaBDE in polymeric application according 2005/717/EC was overruled by the European Court of Justice by its decision of 01.04.2008. Subsequently DecaBDE will be included in the sum of PBDE after 01.07.2008
- 6. \*\* = Qualitative analysis (No Unit)
- 7. Negative = Undetectable / Positive = Detectable
- 8. Amending for the 22nd Council Directive 76/769/EEC notified under document 2005/84/EC, total concentration of three compounds DEHP, DBP and BBP shall not be greater than 0.1% and total concentration of three compounds DINP, DIDP and DNOP shall not be greater than 0.1%.
- 9. \*\*\*The substance is calculated by the test results of Cobalt. The MDL is evaluated for Cobalt or Phosphorus respectively.)
- 10. The Asbestos test was subcontracted to other SGS Laboratory.
- 11. The PVC & ASBESTOS test was subcontracted to other SGS Laboratory.

#### PFOS Reference Information: Directive 2006/122/EC

- (1) May not be placed on the market or used as a substance or constituent of preparations in a concentration equal to or higher than 0.005 % by mass.
- (2) May not be placed on the market in semi-finished products or articles, or parts thereof, if the concentration of PFOS is equal to or higher than 0.1 % by mass calculated with reference to the mass of structurally or microstructurally distinct parts that contain PFOS or, for textiles or other coated materials, if the amount of PFOS is equal to or higher than 1µg/m² of the coated material.



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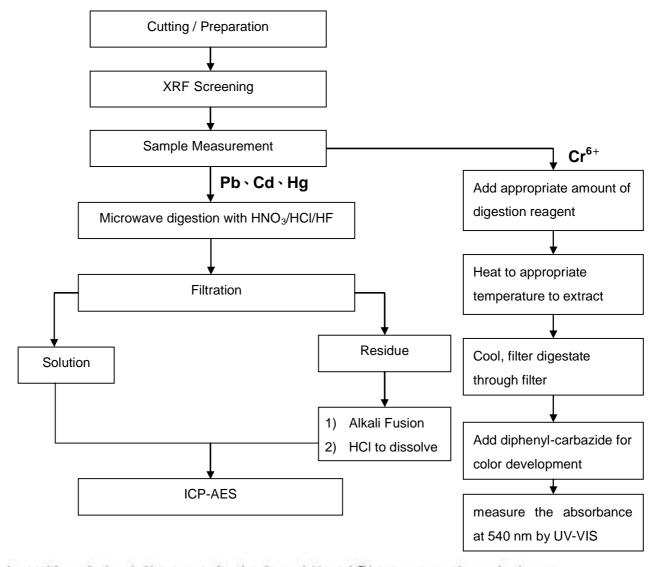
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1) These samples were dissolved totally by pre-conditioning method according to below flow chart.

(Cr6+ test method excluded)

2) Name of the person who made measurement: Hungming Li

3) Name of the person in charge of measurement: Ray Chang



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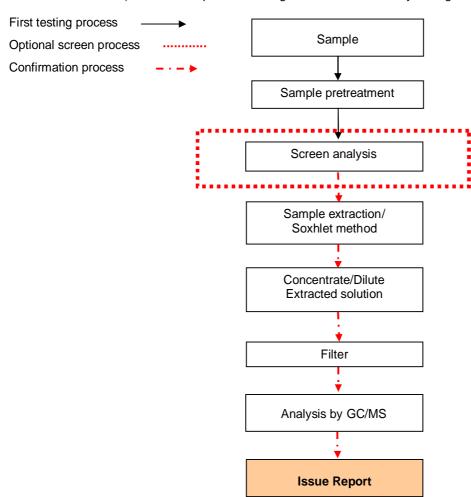


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#### PBB/PBDE analytical FLOW CHART

- 1) Name of the person who made measurement: Anson Tsao
- 2) Name of the person in charge of measurement: Ray Chang





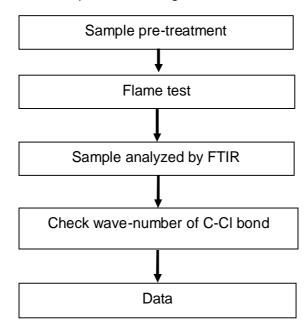
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### Analysis flow chart for determination of **PVC** in polymer material

- 1) Name of the person who made measurement: Joyce Chiu
- 2) Name of the person in charge of measurement: Roger Lin



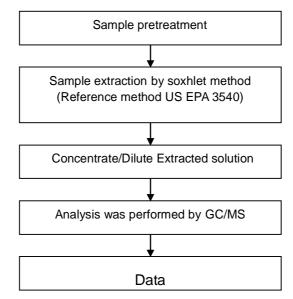


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#### Analytical flow chart of benzotriazole content

- 1) Name of the person who made measurement: Anson Tsao
- 2) Name of the person in charge of measurement: Ray Chang





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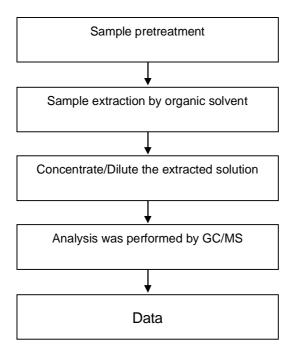
Date

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#### Chlorinated Flame retardant analytical flow chart

- Name of the person who made measurement: Anson Tsao
- Name of the person in charge of measurement: Ray Chang
- Reference method: US EPA 8270D, US EPA 3540
- Test Items: PCNs, PCTs, Mirex





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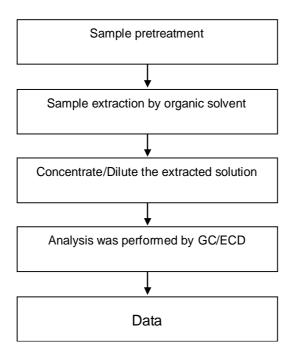
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#### Chlorinated Flame retardant analytical flow chart

1) Name of the person who made measurement: Anson Tsao

2) Name of the person in charge of measurement: Ray Chang

Reference method: USEPA 3540 Test Items: PCBs, CP, MCCP



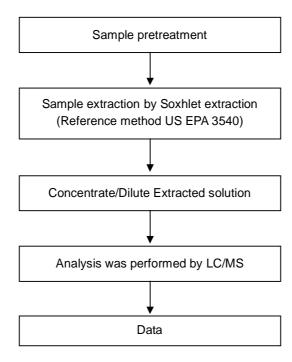


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#### Analytical flow chart of PFOS content

- 1) Name of the person who made measurement: Anson Tsao
- 2) Name of the person in charge of measurement: Ray Chang





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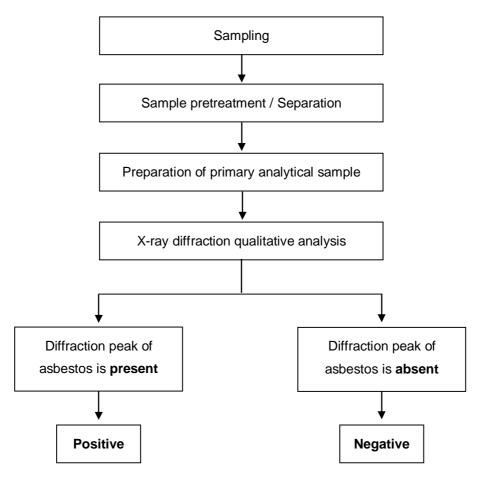
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#### **Analysis flow chart for determination of Asbestos**

- 1) Name of the person who made measurement: Victor Kao
- 2) Name of the person in charge of measurement: James Lu



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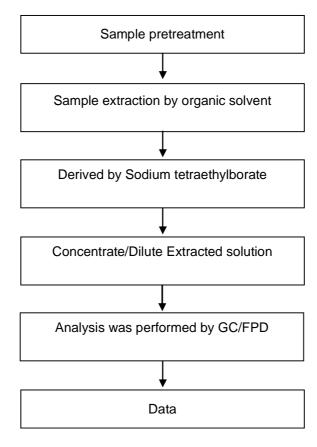


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#### **Analytical flow chart of Organic-Tin content**

- 1) Name of the person who made measurement: Anson Tsao
- 2) Name of the person in charge of measurement: Ray Chang



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\*\* End of Report \*\*