

測試報告

Test Report

號碼(No.) : CE/2017/20956

日期(Date) : 2017/02/17

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南亞塑膠工業股份有限公司(台灣) / NAN YA PLASTICS CORPORATION (TAIWAN)



(南亞電子材料(昆山)有限公司 / NAN YA ELECTRONIC MATERIALS (KUNSHAN) CORP., LTD.)

(南亞電子材料(惠州)有限公司 / NAN YA ELECTRONIC MATERIALS (HUIZHOU) CORP., LTD.)

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(江蘇省昆山昆山市長江南路201號 / 201 CHANG JIANG ROAD(S) KUNSHAN ECONOMIC & TECHNICAL DEVELOPMENT ZONE, JIANG SU)

(廣東省惠州市博羅縣石灣鎮永石大道 / YONGSHI BOULEVARD SHIWAN TOWN BOLUO COUNTY HUIZHOU CITY GUANG DONG)

以下測試樣品係由申請廠商所提供及確認 (The following sample(s) was/were submitted and identified by/on behalf of the applicant as) :

送樣廠商(Sample Submitted By) : 南亞塑膠工業股份有限公司 (NAN YA PLASTICS CORPORATION)
樣品名稱(Sample Description) : LAMINATE (UL E98983)
樣品型號(Style/Item No.) : UV BLOCK FR-4-86
買主/訂單號碼(Buyer/Order No.) : 7116255
收件日期(Sample Receiving Date) : 2017/02/06
測試期間(Testing Period) : 2017/02/06 TO 2017/02/13

測試需求(Test Requested) :

- (1) 依據客戶指定, 參考RoHS2011/65/EU Annex II及其修訂指令(EU) 2015/863測試鎘、鉛、汞、六價鉻、多溴聯苯、多溴聯苯醚, DBP, BBP, DEHP, DIBP. (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.)
- (2) 其他測試項目請見下一頁. (Please refer to next pages for the other item(s).)

測試結果(Test Results) : 請見下一頁 (Please refer to next pages).

結論(Conclusion) : (1) 根據客戶所提供的樣品, 其鎘、鉛、汞、六價鉻、多溴聯苯、多溴聯苯醚, DBP, BBP, DEHP, DIBP的測試結果符合RoHS指令暨(EU) 2015/863之限值要求. (Based on the performed tests on submitted samples, the test results of Cadmium, Lead, Mercury, Cr(VI), PBBs, PBDEs, DBP, BBP, DEHP, DIBP comply with the limits as set by RoHS and amending Directive (EU) 2015/863.)



Troy Chang, Manager, Tech
Signed for and on behalf of
SGS TAIWAN LTD
Chemical Laboratory - Taipei

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測試結果(Test Results)

測試部位(PART NAME)No. 1 : 銅色板子 (COPPER COLORED SHEET)

測試項目 (Test Items)	單位 (Unit)	測試方法 (Method)	方法偵測 極限值 (MDL)	結果 (Result)	限值 (Limit)
			No. 1		
鎘 / Cadmium (Cd)	mg/kg	參考IEC 62321-5 (2013), 以感應耦合電漿原子發射光譜儀檢測. / With reference to IEC 62321-5 (2013) and performed by ICP-AES.	2	n. d.	100
鉛 / Lead (Pb)	mg/kg	參考IEC 62321-5 (2013), 以感應耦合電漿原子發射光譜儀檢測. / With reference to IEC 62321-5 (2013) and performed by ICP-AES.	2	3.40	1000
汞 / Mercury (Hg)	mg/kg	參考IEC 62321-4 (2013), 以感應耦合電漿原子發射光譜儀檢測. / With reference to IEC 62321-4 (2013) and performed by ICP-AES.	2	n. d.	1000
六價鉻 / Hexavalent Chromium Cr(VI)	mg/kg	參考IEC 62321 (2008), 以UV-VIS檢測. / With reference to IEC 62321 (2008) and performed by UV-VIS.	2	n. d.	1000
鈹 / Beryllium (Be)	mg/kg	參考US EPA 3052 (1996), 以感應耦合電漿原子發射光譜儀檢測. / With reference to US EPA 3052 (1996). Analysis was performed by ICP-AES.	2	n. d.	-
氧化鈹 / Beryllium oxide (BeO)**	mg/kg	參考US EPA 3052 (1996), 以感應耦合電漿原子發射光譜儀檢測. / With reference to US EPA 3052 (1996). Analysis was performed by ICP-AES.**	-	n. d.	-
六溴環十二烷及所有主要被辨別出的異構物 / Hexabromocyclododecane (HBCDD) and all major diastereoisomers identified (α -HBCDD, β -HBCDD, γ -HBCDD) (CAS No.: 25637-99-4 and 3194-55-6 (134237-51-7, 134237-50-6, 134237-52-8))	mg/kg	參考IEC 62321 (2008), 以氣相層析/質譜儀檢測. / With reference to IEC 62321 (2008). Analysis was performed by GC/MS.	5	n. d.	-

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測試項目 (Test Items)	單位 (Unit)	測試方法 (Method)	方法偵測 極限值 (MDL)	結果 (Result)	限值 (Limit)
				No. 1	
聚氯乙稀 / PVC	**	以紅外光譜分析及焰色法檢測. / Analysis was performed by FTIR and FLAME Test.	-	Negative	-
砷 / Arsenic (As) (※2)	mg/kg	參考SGS內部方法RSTS-EE-SVHC-007, 以感應耦合電漿原子發射光譜儀檢測. / SGS In-House method-RSTS-EE-SVHC-007. Analyzed by ICP-AES.	50	n. d.	-
五氧化二砷 / Diarsenic pentaoxide*** (CAS No. : 1303-28-2)	mg/kg	參考SGS內部方法RSTS-EE-SVHC-007, 以感應耦合電漿原子發射光譜儀檢測. / SGS In-House method-RSTS-EE-SVHC-007. Analyzed by ICP-AES.***	-	n. d.	-
三氧化二砷 / Diarsenic trioxide*** (CAS No. : 1327-53-3)	mg/kg		-	n. d.	-
硼 / Boron (B) (※2)	mg/kg	參考SGS內部方法RSTS-EE-SVHC-007, 以感應耦合電漿原子發射光譜儀檢測. / SGS In-House method-RSTS-EE-SVHC-007. Analyzed by ICP-AES.	50	n. d.	-
硼酸 / Boric acid*** (CAS No. : 10043-35-3; 11113-50-1)	mg/kg	參考SGS內部方法RSTS-EE-SVHC-007, 以感應耦合電漿原子發射光譜儀檢測. / SGS In-House method-RSTS-EE-SVHC-007. Analyzed by ICP-AES.***	-	n. d.	-
無水四硼酸二鈉 / Disodium tetraborate, anhydrous*** (CAS No. : 1303-96-4, 1330-43-4, 12179-04-3)	mg/kg		-	n. d.	-
水合硼酸鈉 / Tetraboron disodium heptaoxide, hydrate (CAS No. : 12267-73-1) (*2)	mg/kg	參考SGS內部方法RSTS-EE-SVHC-007, 以感應耦合電漿原子發射光譜儀檢測. / SGS In-House method-RSTS-EE-SVHC-007. Analyzed by ICP-AES.	-	n. d.	-
三丁基錫 / Tributyl Tin (TBT)	mg/kg	參考ISO 17353 (2004), 以氣相層析儀/火焰光度偵測器檢測. / With reference to ISO 17353 (2004). Analysis was performed by GC/FPD.	0.03	n. d.	-
三苯基錫 / Triphenyl Tin (TphT)	mg/kg		0.03	n. d.	-
二丁基錫 / Dibutyl Tin (DBT)	mg/kg		0.03	n. d.	-
二辛基錫 / Dioctyl Tin (DOT)	mg/kg		0.03	n. d.	-

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測試項目 (Test Items)	單位 (Unit)	測試方法 (Method)	方法偵測 極限值 (MDL)	結果 (Result) No. 1	限值 (Limit)
全氟辛烷磺酸 / Perfluorooctane sulfonates (PFOS-Acid, Metal Salt, Amide)	mg/kg	參考US EPA 3550C (2007), 以液相層析/質譜儀檢測。 / With reference to US EPA 3550C (2007). Analysis was performed by LC/MS.	10	n. d.	-
全氟辛酸 / PFOA (CAS No. : 335-67-1)	mg/kg		10	n. d.	-
2-[2-羥基-3',5'-二-叔-丁基苯基]-苯並三唑(紫外線吸收劑320) / 2-benzotriazol-2-yl-4,6-di-tert-butylphenol (UV-320) (CAS No. : 3846-71-7)	mg/kg	參考US EPA 3550C (2007), 以氣相層析/質譜儀檢測。 / With reference to US EPA 3550C (2007). Analysis was performed by GC/MS.	5	n. d.	-
二氯化鈷 / Cobalt dichloride (CAS No. : 7646-79-9)	mg/kg	參考SGS內部方法RSTS-EE-SVHC-007, 以感應耦合電漿原子發射光譜儀檢測。 / SGS In-House method-RSTS-EE-SVHC-007. Analyzed by ICP-AES.	50	n. d.	-
多氯聯苯 / Polychlorinated Biphenyls (PCBs) (CAS No. : 1336-36-3)	mg/kg	參考US EPA 3550C (2007), 以氣相層析/質譜儀檢測。 / With reference to US EPA 3550C (2007). Analysis was performed by GC/MS.	0.5	n. d.	-
多氯萘 / Polychlorinated Naphthalene (PCNs)	mg/kg		5	n. d.	-
多氯三聯苯 / Polychlorinated Terphenyls (PCTs)	mg/kg		0.5	n. d.	-
短鏈氯化石蠟 / Alkanes, C10-13, chloro (Short Chain Chlorinated Paraffins) (CAS No. : 85535-84-8)	mg/kg		100	n. d.	-
雙(2-甲氧基乙基)醚 / Bis(2-methoxyethyl) ether (CAS No. : 111-96-6)	mg/kg	參考US EPA 3550C (2007), 以氣相層析/質譜儀檢測。 / With reference to US EPA 3550C (2007). Analysis was performed by GC/MS.	10	n. d.	-
N,N-二甲基乙醯胺 / N,N-dimethylacetamide (DMAC) (CAS No. : 127-19-5)	mg/kg		10	n. d.	-
乙二醇二甲醚 / Ethylene glycol dimethyl ether (EGDME) (CAS No. : 110-71-4)	mg/kg		10	n. d.	-

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多溴聯苯總和 / Sum of PBBs	mg/kg	參考IEC 62321-6 (2015), 以氣相層析/質譜儀檢測. / With reference to IEC 62321-6 (2015) and performed by GC/MS.	-	n. d.	1000
一溴聯苯 / Monobromobiphenyl	mg/kg		5	n. d.	-
二溴聯苯 / Dibromobiphenyl	mg/kg		5	n. d.	-
三溴聯苯 / Tribromobiphenyl	mg/kg		5	n. d.	-
四溴聯苯 / Tetrabromobiphenyl	mg/kg		5	n. d.	-
五溴聯苯 / Pentabromobiphenyl	mg/kg		5	n. d.	-
六溴聯苯 / Hexabromobiphenyl	mg/kg		5	n. d.	-
七溴聯苯 / Heptabromobiphenyl	mg/kg		5	n. d.	-
八溴聯苯 / Octabromobiphenyl	mg/kg		5	n. d.	-
九溴聯苯 / Nonabromobiphenyl	mg/kg		5	n. d.	-
十溴聯苯 / Decabromobiphenyl	mg/kg		5	n. d.	-
多溴聯苯醚總和 / Sum of PBDEs	mg/kg		-	n. d.	1000
一溴聯苯醚 / Monobromodiphenyl ether	mg/kg		5	n. d.	-
二溴聯苯醚 / Dibromodiphenyl ether	mg/kg		5	n. d.	-
三溴聯苯醚 / Tribromodiphenyl ether	mg/kg		5	n. d.	-
四溴聯苯醚 / Tetrabromodiphenyl ether	mg/kg		5	n. d.	-
五溴聯苯醚 / Pentabromodiphenyl ether	mg/kg		5	n. d.	-
六溴聯苯醚 / Hexabromodiphenyl ether	mg/kg		5	n. d.	-
七溴聯苯醚 / Heptabromodiphenyl ether	mg/kg		5	n. d.	-
八溴聯苯醚 / Octabromodiphenyl ether	mg/kg		5	n. d.	-
九溴聯苯醚 / Nonabromodiphenyl ether	mg/kg	5	n. d.	-	
十溴聯苯醚 / Decabromodiphenyl ether	mg/kg	5	n. d.	-	
富馬酸二甲酯 / Dimethyl Fumarate (CAS No. : 624-49-7)	mg/kg	參考US EPA 3550C (2007), 以氣相層析/質譜儀檢測. / With reference to US EPA 3550C (2007). Analysis was performed by GC/MS.	0.1	n. d.	-
磷酸三(2-氯乙基)酯 / Tris (2-chloroethyl) phosphate (TCEP) (CAS No. : 115-96-8)	mg/kg	參考US EPA 3550C (2007), 以氣相層析/質譜儀檢測. / With reference to US EPA 3550C (2007). Analysis was performed by GC/MS.	5	n. d.	-

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				No. 1	
磷酸三(1-氯-2-丙基)酯 / Tris(1-chloro-2-propyl) phosphate (TCPP) (CAS No. : 13674-84-5)	mg/kg	參考US EPA 3550C (2007), 以氣相層析/質譜儀檢測。 / With reference to US EPA 3550C (2007). Analysis was performed by GC/MS.	5	n. d.	-
磷酸三(1,3-二氯異丙基)酯 / Tris(1,3-dichloro-2-propyl)phosphate (TDCPP) (CAS No. : 13674-87-8)	mg/kg	參考US EPA 3550C (2007), 以氣相層析/質譜儀檢測。 / With reference to US EPA 3550C (2007). Analysis was performed by GC/MS.	5	n. d.	-
磷酸三(二甲苯)酯 / Trixylyl phosphate (TXP) (CAS No. : 25155-23-1)	mg/kg	參考US EPA 3550C (2007), 以氣相層析/質譜儀檢測。 / With reference to US EPA 3550C (2007). Analysis was performed by GC/MS.	25	n. d.	-
對特辛基苯酚 / 辛基酚 / 4-(1,1,3,3-tetramethylbutyl) phenol, (4-tert-Octylphenol) (CAS No. : 140-66-9)	mg/kg	參考US EPA 3550C (2007), 以液相層析/質譜儀檢測。 / With reference to US EPA 3550C (2007). Analysis was performed by LC/MS.	10	n. d.	-
石棉 / Asbestos					
陽起石綿 / Actinolite (CAS No. : 77536-66-4)	%	參考EPA 600/R-93/116 (1993) / 立體顯微鏡 (SM), 分散染色式偏光顯微鏡 (DS-PLM)及X光繞射光譜分析法 (XRD) / With reference to EPA 600/R-93/116 (1993). Analysis was performed by Stereo Microscope (SM), Dispersion Staining Polarized Light Microscope (DS-PLM) and X-ray Diffraction Spectrometer (XRD).	-	Negative	-
鐵石綿(褐石綿) / Amosite (CAS No. : 12172-73-5)	%		-	Negative	-
斜方角閃石綿 / Anthophyllite (CAS No. : 77536-67-5)	%		-	Negative	-
溫石綿(白石綿) / Chrysotile (CAS No. : 12001-29-5)	%		-	Negative	-
青石綿 / Crocidolite (CAS No. : 12001-28-4)	%		-	Negative	-
透閃石綿 / Tremolite (CAS No. : 77536-68-6)	%	-	Negative	-	
過氯酸鹽 / Perchlorate (CAS No. : 14797-73-0)	mg/kg	以離子層析儀檢測。 / Analysis was performed by IC.	0.006	n. d.	-

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測試項目 (Test Items)	單位 (Unit)	測試方法 (Method)	方法偵測 極限值 (MDL)	結果 (Result)	限值 (Limit)
				No. 1	
偶氮 (AZO)					
1): 4-氨基二苯 / 4-AMINODIPHENYL (CAS No. : 92-67-1)	mg/kg	參考LFGB 82.02-2 (2013), 以氣相層析/質譜儀檢測。 / With reference to LFGB 82.02-2 (2013). Analysis was performed by GC/MS.	3	n. d.	-
2): 聯苯胺 / BENZIDINE (CAS No. : 92-87-5)	mg/kg	參考LFGB 82.02-2 (2013), 以氣相層析/質譜儀檢測。 / With reference to LFGB 82.02-2 (2013). Analysis was performed by GC/MS.	3	n. d.	-
3): 4-氯鄰甲苯胺 / 4-CHLORO-0-TOLUIDINE (CAS No. : 95-69-2)	mg/kg	參考LFGB 82.02-2 (2013), 以氣相層析/質譜儀檢測。 / With reference to LFGB 82.02-2 (2013). Analysis was performed by GC/MS.	3	n. d.	-
4): 2-萘胺 / 2-NAPHTHYLAMINE (CAS No. : 91-59-8)	mg/kg	參考LFGB 82.02-2 (2013), 以氣相層析/質譜儀檢測。 / With reference to LFGB 82.02-2 (2013). Analysis was performed by GC/MS.	3	n. d.	-
5): 鄰氨基二甲基偶氮 / 0-AMINOAZOTOLUENE (CAS No. : 97-56-3)	mg/kg	參考LFGB 82.02-2 (2013), 以氣相層析/質譜儀檢測。 / With reference to LFGB 82.02-2 (2013). Analysis was performed by GC/MS.	3	n. d.	-
6): 對硝基鄰甲苯胺 / 2-AMINO-4-NITROTOLUENE (CAS No. : 99-55-8)	mg/kg	參考LFGB 82.02-2 (2013), 以氣相層析/質譜儀檢測。 / With reference to LFGB 82.02-2 (2013). Analysis was performed by GC/MS.	3	n. d.	-
7): 對氯苯胺 / P-CHLOROANILINE (CAS No. : 106-47-8)	mg/kg	參考LFGB 82.02-2 (2013), 以氣相層析/質譜儀檢測。 / With reference to LFGB 82.02-2 (2013). Analysis was performed by GC/MS.	3	n. d.	-
8): 4-甲氧基-間苯二胺 / 2,4-DIAMINOANISOLE (CAS No. : 615-05-4)	mg/kg	參考LFGB 82.02-2 (2013), 以氣相層析/質譜儀檢測。 / With reference to LFGB 82.02-2 (2013). Analysis was performed by GC/MS.	3	n. d.	-
9): 4,4'-二氨基二苯甲烷 / 4,4'-DIAMINODIPHENYLMETHANE (CAS No. : 101-77-9)	mg/kg	參考LFGB 82.02-2 (2013), 以氣相層析/質譜儀檢測。 / With reference to LFGB 82.02-2 (2013). Analysis was performed by GC/MS.	3	n. d.	-
10): 3,3'-二氯聯苯胺 / 3,3'-DICHLOROBENZIDINE (CAS No. : 91-94-1)	mg/kg	參考LFGB 82.02-2 (2013), 以氣相層析/質譜儀檢測。 / With reference to LFGB 82.02-2 (2013). Analysis was performed by GC/MS.	3	n. d.	-

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測試項目 (Test Items)	單位 (Unit)	測試方法 (Method)	方法偵測 極限值 (MDL)	結果 (Result)	限值 (Limit)
				No. 1	
11): 3,3'-二甲氧基聯苯胺 / 3,3'-DIMETHOXYBENZIDINE (CAS No. : 119-90-4)	mg/kg	參考LFGB 82.02-2 (2013), 以氣相層析/質譜儀檢測。 / With reference to LFGB 82.02-2 (2013). Analysis was performed by GC/MS.	3	n. d.	-
12): 3,3'-二甲基聯苯胺 / 3,3'-DIMETHYLBENZIDINE (CAS No. : 119-93-7)	mg/kg	參考LFGB 82.02-2 (2013), 以氣相層析/質譜儀檢測。 / With reference to LFGB 82.02-2 (2013). Analysis was performed by GC/MS.	3	n. d.	-
13): 3,3'-二甲基-4,4'-二氨基二苯甲烷 / 3,3'-DIMETHYL-4,4'-DIAMINODIPHENYLMETHANE (CAS No. : 838-88-0)	mg/kg	參考LFGB 82.02-2 (2013), 以氣相層析/質譜儀檢測。 / With reference to LFGB 82.02-2 (2013). Analysis was performed by GC/MS.	3	n. d.	-
14): 2-甲氧基-5-甲基聯苯 / P-CRESIDINE (2-METHOXY-5-METHYLANILINE) (CAS No. : 120-71-8)	mg/kg	參考LFGB 82.02-2 (2013), 以氣相層析/質譜儀檢測。 / With reference to LFGB 82.02-2 (2013). Analysis was performed by GC/MS.	3	n. d.	-
15): 4,4'-亞甲基雙(氯苯胺) / 4,4'-METHYLENE-BIS-(2-CHLOROANILINE) (CAS No. : 101-14-4)	mg/kg	參考LFGB 82.02-2 (2013), 以氣相層析/質譜儀檢測。 / With reference to LFGB 82.02-2 (2013). Analysis was performed by GC/MS.	3	n. d.	-
16): 4,4'-氧化雙苯胺 / 4,4'-OXYDIANILINE (CAS No. : 101-80-4)	mg/kg	參考LFGB 82.02-2 (2013), 以氣相層析/質譜儀檢測。 / With reference to LFGB 82.02-2 (2013). Analysis was performed by GC/MS.	3	n. d.	-
17): 4,4'-硫代雙苯胺 / 4,4'-THIODIANILINE (CAS No. : 139-65-1)	mg/kg	參考LFGB 82.02-2 (2013), 以氣相層析/質譜儀檢測。 / With reference to LFGB 82.02-2 (2013). Analysis was performed by GC/MS.	3	n. d.	-
18): 鄰甲苯胺 / O-TOLUIDINE (CAS No. : 95-53-4)	mg/kg	參考LFGB 82.02-2 (2013), 以氣相層析/質譜儀檢測。 / With reference to LFGB 82.02-2 (2013). Analysis was performed by GC/MS.	3	n. d.	-
19): 2,4-二氨基甲苯 / 2,4-TOLYLENEDIAMINE (CAS No. : 95-80-7)	mg/kg	參考LFGB 82.02-2 (2013), 以氣相層析/質譜儀檢測。 / With reference to LFGB 82.02-2 (2013). Analysis was performed by GC/MS.	3	n. d.	-
20): 2,4,5-三甲基苯胺 / 2,4,5-TRIMETHYLANILINE (CAS No. : 137-17-7)	mg/kg	參考LFGB 82.02-2 (2013), 以氣相層析/質譜儀檢測。 / With reference to LFGB 82.02-2 (2013). Analysis was performed by GC/MS.	3	n. d.	-

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測試項目 (Test Items)	單位 (Unit)	測試方法 (Method)	方法偵測 極限值 (MDL)	結果 (Result)	限值 (Limit)
			No. 1	No. 1	
21): 鄰位甲氧基苯胺 / O-ANISIDINE (CAS No. : 90-04-0)	mg/kg	參考LFGB 82.02-2 (2013), 以氣相層析/質譜儀檢測。 / With reference to LFGB 82.02-2 (2013). Analysis was performed by GC/MS.	3	n. d.	-
22): 對氨基偶氮苯 / 4-AMINOAZOBENZENE (CAS No. : 60-09-3)	mg/kg	參考LFGB 82.02-2 (2013), 以氣相層析/質譜儀檢測。 / With reference to LFGB 82.02-2 (2013). Analysis was performed by GC/MS.	3	n. d.	-
23): 2,4-二甲基苯胺 / 2,4-XYLIDINE (CAS No. : 95-68-1)	mg/kg	參考LFGB 82.02-2 (2013), 以氣相層析/質譜儀檢測。 / With reference to LFGB 82.02-2 (2013). Analysis was performed by GC/MS.	3	n. d.	-
24): 2,6-二甲基苯胺 / 2,6-XYLIDINE (CAS No. : 87-62-7)	mg/kg	參考LFGB 82.02-2 (2013), 以氣相層析/質譜儀檢測。 / With reference to LFGB 82.02-2 (2013). Analysis was performed by GC/MS.	3	n. d.	-
氫氟碳化物 / HFCs (Hydrofluorocarbon)					
氫氟碳化物 (HFC)-23 (CHF3) (CAS No. : 75-46-7)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測。 / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.	-
氫氟碳化物 (HFC)-32 (CH2F2) (CAS No. : 75-10-5)	mg/kg		1	n. d.	-
氫氟碳化物 (HFC)-41 (CH3F) (CAS No. : 593-53-3)	mg/kg		1	n. d.	-
氫氟碳化物 (HFC)-43-10mee (C5H2F10)	mg/kg		1	n. d.	-
氫氟碳化物 (HFC)-125 (C2HF5)	mg/kg		1	n. d.	-
氫氟碳化物 (HFC)-134 (C2H2F4)	mg/kg		1	n. d.	-
氫氟碳化物 (HFC)-134a (CH2FCF3) (CAS No. : 811-97-2)	mg/kg		1	n. d.	-
氫氟碳化物 (HFC)-143 (CH3F3)	mg/kg		1	n. d.	-
氫氟碳化物 (HFC)-143a (CH3F3)	mg/kg		1	n. d.	-
氫氟碳化物 (HFC)-152a (C2H4F2) (CAS No. : 75-37-6)	mg/kg		1	n. d.	-

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測試項目 (Test Items)	單位 (Unit)	測試方法 (Method)	方法偵測 極限值 (MDL)	結果 (Result)	限值 (Limit)
				No. 1	
氫氟碳化物 (HFC)-227ea (C3HF7) (CAS No. : 431-89-0)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測。 / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.	-
氫氟碳化物 (HFC)-236fa (C3H2F6)	mg/kg		1	n. d.	-
氫氟碳化物 (HFC)-236ea (C3H2F6) (CAS No. : 431-63-0)	mg/kg		1	n. d.	-
氫氟碳化物 (HFC)-245ca (C3H3F5)	mg/kg		1	n. d.	-
氫氟碳化物 (HFC)-245fa (C3H3F5)	mg/kg		1	n. d.	-
氫氟碳化物 (HFC)-365mfc (C4H5F5)	mg/kg		1	n. d.	-
全氟碳化物 / PFCs (Perfluorocarbon)					
四氟甲烷 / F14 (CAS No. : 75-73-0)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測。 / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.	-
六氟乙烷 / Fluorocarbon 116 (CAS No. : 76-16-4)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測。 / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.	-
八氟丙烷 / Freon 218 (CAS No. : 76-19-7)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測。 / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.	-
十氟丁烷 / Decafluorobutane (CAS No. : 355-25-9)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測。 / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.	-
八氟環丁烷 / Freon C318 (CAS No. : 115-25-3)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測。 / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.	-
全氟-1-丁烯 / Perfluor-1-butene (CAS No. : 357-26-6)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測。 / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.	-
全氟異丁烯 / perfluorisobutene (CAS No. : 382-21-8)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測。 / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.	-

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(江蘇省昆山昆山市長江南路201號 / 201 CHANG JIANG ROAD(S) KUNSHAN ECONOMIC & TECHNICAL DEVELOPMENT ZONE, JIANG SU)

(廣東省惠州市博羅縣石灣鎮永石大道 / YONGSHI BOULEVARD SHIWAN TOWN BOLUO COUNTY HUIZHOU CITY GUANG DONG)

測試項目 (Test Items)	單位 (Unit)	測試方法 (Method)	方法偵測 極限值 (MDL)	結果 (Result)	限值 (Limit)
				No. 1	
1,4-二氯八氟丁烷 / 1,4-dihydrooctafluorobutane (CAS No. : 377-36-6)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測。 / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.	-
2-全氟甲基丁烷 / nonafluor-2-(trifluoromethyl)butane (CAS No. : 594-91-2)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測。 / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.	-
全氟戊烷 / perfluoro-n-pentane (CAS No. : 678-26-2)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測。 / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.	-
2-全氟甲基戊烷 / 2-perfluoromethylpentane (CAS No. : 355-04-4)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測。 / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.	-
全氟己烷 / perfluorohexane (CAS No. : 355-42-0)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測。 / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.	-
氟氯碳化物 / CFCs (Chlorofluorocarbons)					
Group I					
氟氯碳化物 (Chlorofluorocarbon)-11 (CAS No. : 75-69-4)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測。 / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.	-
氟氯碳化物 (Chlorofluorocarbon)-12 (CAS No. : 75-71-8)	mg/kg		1	n. d.	-
氟氯碳化物 (Chlorofluorocarbon)-113 (CAS No. : 76-13-1)	mg/kg		1	n. d.	-
氟氯碳化物 (Chlorofluorocarbon)-114 (CAS No. : 76-14-2)	mg/kg		1	n. d.	-
氟氯碳化物 (Chlorofluorocarbon)-115 (CAS No. : 76-15-3)	mg/kg		1	n. d.	-

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測試項目 (Test Items)	單位 (Unit)	測試方法 (Method)	方法偵測 極限值 (MDL)	結果 (Result) No. 1	限值 (Limit)
Group III					
氟氯碳化物 (Chlorofluorocarbon)-13 (CAS No. : 75-72-9)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀 檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.	-
氟氯碳化物 (Chlorofluorocarbon)-111 (CAS No. : 354-56-3)	mg/kg		1	n. d.	-
氟氯碳化物 (Chlorofluorocarbon)-112 (CAS No. : 76-12-0)	mg/kg		1	n. d.	-
氟氯碳化物 (Chlorofluorocarbon)-211 (CAS No. : 422-78-6)	mg/kg		1	n. d.	-
氟氯碳化物 (Chlorofluorocarbon)-212 (CAS No. : 3182-26-1)	mg/kg		1	n. d.	-
氟氯碳化物 (Chlorofluorocarbon)-213 (CAS No. : 2354-06-5)	mg/kg		1	n. d.	-
氟氯碳化物 (Chlorofluorocarbon)-214 (CAS No. : 29255-31-0)	mg/kg		1	n. d.	-
氟氯碳化物 (Chlorofluorocarbon)-215 (CAS No. : 4259-43-2)	mg/kg		1	n. d.	-
氟氯碳化物 (Chlorofluorocarbon)-216 (CAS No. : 661-97-2)	mg/kg		1	n. d.	-
氟氯碳化物 (Chlorofluorocarbon)-217 (CAS No. : 422-86-6)	mg/kg		1	n. d.	-
氟氯氫碳化物 / HCFCs (Hydrochlorofluorocarbons)					
氟氯氫碳化物 (HCFC)-21 (CAS No. : 75-43-4)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀 檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.	-
氟氯氫碳化物 (HCFC)-22 (CAS No. : 75-45-6)	mg/kg		1	n. d.	-

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測試項目 (Test Items)	單位 (Unit)	測試方法 (Method)	方法偵測 極限值 (MDL)	結果 (Result) No. 1	限值 (Limit)
			1	n. d.	-
氟氯氫碳化物 (HCFC)-31 (CAS No. : 593-70-4)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測。 / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.	-
氟氯氫碳化物 (HCFC)-121 (CAS No. : 354-14-3)	mg/kg		1	n. d.	-
氟氯氫碳化物 (HCFC)-122 (CAS No. : 354-21-2)	mg/kg		1	n. d.	-
氟氯氫碳化物 (HCFC)-123 (CAS No. : 306-83-2)	mg/kg		1	n. d.	-
氟氯氫碳化物 (HCFC)-124 (CAS No. : 2837-89-0)	mg/kg		1	n. d.	-
氟氯氫碳化物 (HCFC)-131 (CAS No. : 359-28-4)	mg/kg		1	n. d.	-
氟氯氫碳化物 (HCFC)-132b (CAS No. : 1649-08-7)	mg/kg		1	n. d.	-
氟氯氫碳化物 (HCFC)-133a (CAS No. : 75-88-7)	mg/kg		1	n. d.	-
氟氯氫碳化物 (HCFC)-141b (CAS No. : 1717-00-6)	mg/kg		1	n. d.	-
氟氯氫碳化物 (HCFC)-142b (CAS No. : 75-68-3)	mg/kg		1	n. d.	-
氟氯氫碳化物 (HCFC)-221 (CAS No. : 422-26-4)	mg/kg		1	n. d.	-
氟氯氫碳化物 (HCFC)-222 (CAS No. : 422-49-1)	mg/kg		1	n. d.	-
氟氯氫碳化物 (HCFC)-223 (CAS No. : 422-52-6)	mg/kg		1	n. d.	-
氟氯氫碳化物 (HCFC)-224 (CAS No. : 422-54-8)	mg/kg		1	n. d.	-
氟氯氫碳化物 (HCFC)-225ca (CAS No. : 422-56-0)	mg/kg		1	n. d.	-

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測試項目 (Test Items)	單位 (Unit)	測試方法 (Method)	方法偵測 極限值 (MDL)	結果 (Result) No. 1	限值 (Limit)
			1	n. d.	-
氟氯氫碳化物 (HCFC)-225cb (CAS No. : 507-55-1)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測。 / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.	-
氟氯氫碳化物 (HCFC)-226 (CAS No. : 431-87-8)	mg/kg		1	n. d.	-
氟氯氫碳化物 (HCFC)-231 (CAS No. : 421-94-3)	mg/kg		1	n. d.	-
氟氯氫碳化物 (HCFC)-232 (CAS No. : 460-89-9)	mg/kg		1	n. d.	-
氟氯氫碳化物 (HCFC)-233 (CAS No. : 7125-84-0)	mg/kg		1	n. d.	-
氟氯氫碳化物 (HCFC)-234 (CAS No. : 425-94-5)	mg/kg		1	n. d.	-
氟氯氫碳化物 (HCFC)-235 (CAS No. : 460-92-4)	mg/kg		1	n. d.	-
氟氯氫碳化物 (HCFC)-241 (CAS No. : 666-27-3)	mg/kg		1	n. d.	-
氟氯氫碳化物 (HCFC)-242 (CAS No. : 460-63-9)	mg/kg		1	n. d.	-
氟氯氫碳化物 (HCFC)-243 (CAS No. : 460-69-5)	mg/kg		1	n. d.	-
氟氯氫碳化物 (HCFC)-244	mg/kg		1	n. d.	-
氟氯氫碳化物 (HCFC)-251 (CAS No. : 421-41-0)	mg/kg		1	n. d.	-
氟氯氫碳化物 (HCFC)-252 (CAS No. : 819-00-1)	mg/kg		1	n. d.	-
氟氯氫碳化物 (HCFC)-253 (CAS No. : 460-35-5)	mg/kg		1	n. d.	-
氟氯氫碳化物 (HCFC)-261 (CAS No. : 420-97-3)	mg/kg		1	n. d.	-

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測試項目 (Test Items)	單位 (Unit)	測試方法 (Method)	方法偵測 極限值 (MDL)	結果 (Result)	限值 (Limit)
				No. 1	
氟氯氫碳化物 (HCFC)-262 (CAS No. : 421-02-03)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.	-
氟氯氫碳化物 (HCFC)-271 (CAS No. : 430-55-7)	mg/kg		1	n. d.	-
海龍 (Halons)					
海龍 (Halon)-1211 (CAS No. : 353-59-3)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.	-
海龍 (Halon)-1301 (CAS No. : 75-63-8)	mg/kg		1	n. d.	-
海龍 (Halon)-2402 (CAS No. : 124-73-2)	mg/kg		1	n. d.	-
溴甲烷 / Bromomethane (CAS No. : 74-83-9)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.	-
不完全鹵化氟溴化物 / HBFCs (Hydrobromofluorocarbons)					
不完全鹵化氟溴化物 (HBFC)-21B2 (CHFBr ₂) (CAS No. : 1868-53-7)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.	-
不完全鹵化氟溴化物 (HBFC)-22B1 (CHF ₂ Br) (CAS No. : 1511-62-2)	mg/kg		1	n. d.	-
不完全鹵化氟溴化物 (HBFC)-31B1 (CH ₂ FBr) (CAS No. : 373-52-4)	mg/kg		1	n. d.	-
不完全鹵化氟溴化物 (HBFC)-121B4 (C ₂ HFBr ₄)	mg/kg		1	n. d.	-
不完全鹵化氟溴化物 (HBFC)-122B3 (C ₂ HF ₂ Br ₃)	mg/kg		1	n. d.	-
不完全鹵化氟溴化物 (HBFC)-123B2 (C ₂ HF ₃ Br ₂)	mg/kg		1	n. d.	-
不完全鹵化氟溴化物 (HBFC)-124B1 (C ₂ HF ₄ Br)	mg/kg		1	n. d.	-

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測試項目 (Test Items)	單位 (Unit)	測試方法 (Method)	方法偵測 極限值 (MDL)	結果 (Result) No. 1	限值 (Limit)
			1	n. d.	-
不完全鹵化氟溴化物 (HBFC)-131B3 (C2H2FBr3)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀 檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.	-
不完全鹵化氟溴化物 (HBFC)-132B2 (C2H2F2Br2)	mg/kg		1	n. d.	-
不完全鹵化氟溴化物 (HBFC)-133B1 (C2H2F3Br)	mg/kg		1	n. d.	-
不完全鹵化氟溴化物 (HBFC)-141B2 (C2H3FBr2)	mg/kg		1	n. d.	-
不完全鹵化氟溴化物 (HBFC)-142B1 (C2H3F2Br)	mg/kg		1	n. d.	-
不完全鹵化氟溴化物 (HBFC)-151B1 (C2H4FBr)	mg/kg		1	n. d.	-
不完全鹵化氟溴化物 (HBFC)-221B6 (C3HFBr6)	mg/kg		1	n. d.	-
不完全鹵化氟溴化物 (HBFC)-222B5 (C3HF2Br5)	mg/kg		1	n. d.	-
不完全鹵化氟溴化物 (HBFC)-223B4 (C3HF3Br4)	mg/kg		1	n. d.	-
不完全鹵化氟溴化物 (HBFC)-224B3 (C3HF4Br3)	mg/kg		1	n. d.	-
不完全鹵化氟溴化物 (HBFC)-225B2 (C3HF5Br2)	mg/kg		1	n. d.	-
不完全鹵化氟溴化物 (HBFC)-226B1 (C3HF6Br)	mg/kg		1	n. d.	-
不完全鹵化氟溴化物 (HBFC)-231B5 (C3H2FBr5)	mg/kg		1	n. d.	-
不完全鹵化氟溴化物 (HBFC)-232B4 (C3H2F2Br4)	mg/kg		1	n. d.	-

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測試項目 (Test Items)	單位 (Unit)	測試方法 (Method)	方法偵測 極限值 (MDL)	結果 (Result)	限值 (Limit)
				No. 1	
不完全鹵化氟溴化物 (HBFC)-233B3 (C3H2F3Br3)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀 檢測。 / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.	-
不完全鹵化氟溴化物 (HBFC)-234B2 (C3H2F4Br2)	mg/kg		1	n. d.	-
不完全鹵化氟溴化物 (HBFC)-235B1 (C3H2F5Br)	mg/kg		1	n. d.	-
不完全鹵化氟溴化物 (HBFC)-241B4 (C3H3FBr4)	mg/kg		1	n. d.	-
不完全鹵化氟溴化物 (HBFC)-242B3 (C3H3F2Br3)	mg/kg		1	n. d.	-
不完全鹵化氟溴化物 (HBFC)-243B2 (C3H3F3Br2)	mg/kg		1	n. d.	-
不完全鹵化氟溴化物 (HBFC)-244B1 (C3H3F4Br)	mg/kg		1	n. d.	-
不完全鹵化氟溴化物 (HBFC)-251B3 (C3H4FBr3)	mg/kg		1	n. d.	-
不完全鹵化氟溴化物 (HBFC)-252B2 (C3H4F2Br2)	mg/kg		1	n. d.	-
不完全鹵化氟溴化物 (HBFC)-253B1 (C3H4F3Br)	mg/kg		1	n. d.	-
不完全鹵化氟溴化物 (HBFC)-261B2 (C3H5FBr2)	mg/kg		1	n. d.	-
不完全鹵化氟溴化物 (HBFC)-262B1 (C3H5F2Br)	mg/kg		1	n. d.	-
不完全鹵化氟溴化物 (HBFC)-271B1 (C3H6FBr)	mg/kg		1	n. d.	-

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				No. 1	
氯化碳氫化物 / CHCs (Chlorinate hydrocarbon)					
1, 1, 1, 2-四氯乙烷 / 1, 1, 1, 2-Tetrachloroethane (CAS No.: 630-20-6)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測。 / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.	-
1, 1, 1-三氯乙烷 / 1, 1, 1-Trichloroethane (CAS No.: 71-55-6)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測。 / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.	-
1, 1, 2, 2-四氯乙烷 / 1, 1, 2, 2-Tetrachloroethane (CAS No.: 79-34-5)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測。 / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.	-
1, 1, 2-三氯乙烷 / 1, 1, 2-Trichloroethane (CAS No.: 79-00-5)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測。 / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.	-
1, 1-二氯乙烷 / 1, 1-Dichloroethane (CAS No.: 75-34-3)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測。 / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.	-
1, 1-二氯乙烯 / 1, 1-Dichloroethene (CAS No.: 75-35-4)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測。 / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.	-
1, 1-二氯丙烯 / 1, 1-Dichloropropene (CAS No.: 563-58-6)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測。 / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.	-
1, 2, 3-三氯丙烷 / 1, 2, 3-Trichloropropane (CAS No.: 96-18-4)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測。 / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.	-
1, 2-二氯乙烷 / 1, 2-Dichloroethane (CAS No.: 107-06-2)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測。 / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.	-

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測試項目 (Test Items)	單位 (Unit)	測試方法 (Method)	方法偵測 極限值 (MDL)	結果 (Result)	限值 (Limit)
				No. 1	
1,2-二氯丙烷 / 1,2-Dichloropropane (CAS No. : 78-87-5)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀 檢測。 / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.	-
1,3-二氯丙烷 / 1,3-Dichloropropane (CAS No. : 142-28-9)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀 檢測。 / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.	-
2,2-二氯丙烷 / 2,2-Dichloropropane (CAS No. : 594-20-7)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀 檢測。 / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.	-
四氯甲烷 (四氯化碳) / Carbon tetrachloride (CAS No. : 56-23-5)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀 檢測。 / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.	-
氯乙烷 / Chloroethane (CAS No. : 75-00- 3)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀 檢測。 / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.	-
氯仿 / Chloroform (CAS No. : 67-66-3)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀 檢測。 / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.	-
氯甲烷 / Chloromethane (CAS No. : 74- 87-3)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀 檢測。 / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.	-
順-1,2-二氯乙烯 / cis-1,2- Dichloroethene (CAS No. : 156-59-2)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀 檢測。 / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.	-
順-1,3-二氯丙烯 / cis-1,3- Dichloropropene (CAS No. : 10061-01-5)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀 檢測。 / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.	-
六氯丁二烯 / Hexachlorobutadiene (CAS No. : 87-68-3)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀 檢測。 / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.	-

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測試項目 (Test Items)	單位 (Unit)	測試方法 (Method)	方法偵測 極限值 (MDL)	結果 (Result)	限值 (Limit)
				No. 1	
二氯甲烷 / Dichloromethane (CAS No. : 75-09-2)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測。 / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.	-
四氯乙烯 / Tetrachloroethene (CAS No. : 127-18-4)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測。 / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.	-
反-1,2-二氯乙烯 / trans-1,2-Dichloroethene (CAS No. : 156-60-5)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測。 / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.	-
反-1,3-二氯丙烯 / trans-1,3-Dichloropropene (CAS No. : 10061-02-6)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測。 / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.	-
三氯乙烯 / Trichloroethylene (CAS No. : 79-01-6)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測。 / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.	-
六氟化硫 / Sulfur Hexafluoride (SF6) (CAS No. : 2551-62-4)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測。 / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.	-
N-苯基苯胺與苯乙烯和2,4,4-三甲基戊烯的反應物 / Benzenamine, N-phenyl-, reaction products with styrene and 2,4,4-trimethylpentene (BNST) (CAS No. : 68921-45-9)	mg/kg	參考US EPA 3550C (2007), 以氣相層析/質譜儀檢測。 / With reference to US EPA 3550C (2007). Analysis was performed by GC/MS.	100	n. d.	-
2-(2'-羥基-3',5'-二叔-戊基苯基)苯並三唑(紫外線吸收劑328) / 2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328) (CAS No. : 25973-55-1)	mg/kg	參考US EPA 3550C (2007), 以氣相層析/質譜儀檢測。 / With reference to US EPA 3550C (2007). Analysis was performed by GC/MS.	5	n. d.	-

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測試項目 (Test Items)	單位 (Unit)	測試方法 (Method)	方法偵測 極限值 (MDL)	結果 (Result)	限值 (Limit)
				No. 1	
二辛基錫 / Dioctyl Tin (DOT)	mg/kg	參考SGS內部方法RSTS-EE-SVHC-007, 以氣相層析/質譜儀定性、氣相層析儀/火焰光度偵測器定量。 / SGS In-House method-RSTS-EE-SVHC-007. Qualitative by GC/MS. Quantitative by GC/FPD.	230	n. d.	-
二正辛基-雙(2-乙基己基巰基乙酸酯)錫 / 2-ethylhexyl 10-ethyl-4, 4-dioctyl-7-oxo-8-oxa-3, 5-dithia-4-stannatetradecanoate (DOTE)***(CAS No.: 15571-58-1)	mg/kg	參考SGS內部方法RSTS-EE-SVHC-007, 以氣相層析/質譜儀定性、氣相層析儀/火焰光度偵測器定量。 / SGS In-House method-RSTS-EE-SVHC-007. Qualitative by GC/MS. Quantitative by GC/FPD.***	-	n. d.	-
單辛基錫 / Monooctyltin (MOT)	mg/kg	參考SGS內部方法RSTS-EE-SVHC-007, 以氣相層析/質譜儀定性、氣相層析儀/火焰光度偵測器定量。 / SGS In-House method-RSTS-EE-SVHC-007. Qualitative by GC/MS. Quantitative by GC/FPD.	138	n. d.	-
二正辛基-雙(2-乙基己基巰基乙酸酯)錫和單辛基-三(2-乙基己基巰基乙酸酯)錫的反應物 / Reaction mass of 2-ethylhexyl 10-ethyl-4, 4-dioctyl-7-oxo-8-oxa-3, 5-dithia-4-stannatetradecanoate and 2-ethylhexyl 10-ethyl-4-[[2-[(2-ethylhexyl)oxy]-2-oxoethyl]thio]-4-octyl-7-oxo-8-oxa-3, 5-dithia-4-stannatetradecanoate (reaction mass of DOTE and MOTE)***	mg/kg	參考SGS內部方法RSTS-EE-SVHC-007, 以氣相層析/質譜儀定性、氣相層析儀/火焰光度偵測器定量。 / SGS In-House method-RSTS-EE-SVHC-007. Qualitative by GC/MS. Quantitative by GC/FPD.***	-	n. d.	-
鄰苯二甲酸二己酯(支鏈和直鏈) / 1, 2-Benzenedicarboxylic acid, dihexyl ester, branched and linear (CAS No.: 68515-50-4)	mg/kg	參考IEC 62321-8/CD (2013), 以氣相層析儀/質譜儀檢測。 / With reference to IEC 62321-8/CD (2013). Analysis was performed by GC/MS.	50	n. d.	-
鄰苯二甲酸二(2-乙基己基)酯 / DEHP (Di-(2-ethylhexyl) phthalate) (CAS No.: 117-81-7)	mg/kg		50	n. d.	1000

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測試項目 (Test Items)	單位 (Unit)	測試方法 (Method)	方法偵測 極限值 (MDL)	結果 (Result) No. 1	限值 (Limit)
			50	n. d.	1000
鄰苯二甲酸二丁酯 / DBP (Dibutyl phthalate) (CAS No. : 84-74-2)	mg/kg	參考 IEC 62321-8/CD (2013), 以氣相層析儀/質譜儀檢測。 / With reference to IEC 62321-8/CD (2013). Analysis was performed by GC/MS.	50	n. d.	1000
鄰苯二甲酸丁苄甲酯 / BBP (Butyl Benzyl phthalate) (CAS No. : 85-68-7)	mg/kg		50	n. d.	1000
鄰苯二甲酸二異丁酯 / DIBP (Di-isobutyl phthalate) (CAS No. : 84-69-5)	mg/kg		50	n. d.	1000
鄰苯二甲酸二異壬酯 / DINP (Di-isononyl phthalate) (CAS No. : 28553-12-0; 68515-48-0)	mg/kg		50	n. d.	-
鄰苯二甲酸二異癸酯 / DIDP (Di-isodecyl phthalate) (CAS No. : 26761-40-0; 68515-49-1)	mg/kg		50	n. d.	-
鄰苯二甲酸二正辛酯 / DNOP (Di-n-octyl phthalate) (CAS No. : 117-84-0)	mg/kg		50	n. d.	-
鄰苯二甲酸二正己酯 / DNHP (Di-n-hexyl phthalate) (CAS No. : 84-75-3)	mg/kg		50	n. d.	-
鄰苯二甲酸二(C6-8支鏈與直鏈)烷基酯, 富C7 / DIHP (1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich) (CAS No. : 71888-89-6)	mg/kg		50	n. d.	-
鄰苯二甲酸二(C7-11支鏈與直鏈)烷基酯 / DHNUP (1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters) (CAS No. : 68515-42-4)	mg/kg		50	n. d.	-
鄰苯二甲酸二(2-甲氧基乙基)酯 / DMEP (Bis(2-methoxyethyl) phthalate) (CAS No. : 117-82-8)	mg/kg		50	n. d.	-
鄰苯二甲酸二異戊酯 / DIPP (Di-isopentyl phthalate) (CAS No. : 605-50-5)	mg/kg		50	n. d.	-

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測試項目 (Test Items)	單位 (Unit)	測試方法 (Method)	方法偵測 極限值 (MDL)	結果 (Result)	限值 (Limit)
				No. 1	
鄰苯二甲酸二(支鏈及直鏈戊基)酯 / 1,2-Benzenedicarboxylic acid, dipentylester, branched and linear (CAS No.: 84777-06-0)	mg/kg	參考IEC 62321-8/CD (2013), 以氣相層析儀/質譜儀檢測. / With reference to IEC 62321-8/CD (2013). Analysis was performed by GC/MS.	50	n. d.	-
鄰苯二甲酸二戊酯 / Di-n-pentyl phthalate (CAS No.: 131-18-0)	mg/kg		50	n. d.	-
鄰苯二甲酸正戊異戊酯 / NPIPP (N-pentyl-isopentyl phthalate) (CAS No.: 776297-69-9)	mg/kg		50	n. d.	-
鄰苯二甲酸二乙酯 / DEP (Di-ethyl phthalate) (CAS No.: 84-66-2)	mg/kg		50	n. d.	-
鄰苯二甲酸二甲酯 / DMP (Di-methyl phthalate) (CAS No.: 131-11-3)	mg/kg		50	n. d.	-
氧化雙三丁基錫 / Bis(tributyltin)oxide (TBTO)*** (CAS No.: 56-35-9)	mg/kg	參考ISO 17353 (2004), 以氣相層析儀/火焰光度偵測器檢測. / With reference to ISO 17353 (2004). Analysis was performed by GC/FPD.	-	n. d.	-
鹵素(氯) / Halogen-Chlorine (Cl) (CAS No.: 22537-15-1)	mg/kg	參考BS EN 14582 (2007), 以離子層析儀分析. / With reference to BS EN 14582 (2007). Analysis was performed by IC.	50	398	-
鹵素(溴) / Halogen-Bromine (Br) (CAS No.: 10097-32-2)	mg/kg	參考BS EN 14582 (2007), 以離子層析儀分析. / With reference to BS EN 14582 (2007). Analysis was performed by IC.	50	60800	-
紅磷 / Red phosphorus	**	以熱裂解-氣相層析/質譜儀分析. / Analysis was performed by Pyrolyzer-GC/MS.	-	Negative	-

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備註(Note) :

1. mg/kg = ppm ; 0.1wt% = 1000ppm
2. MDL = Method Detection Limit (方法偵測極限值)
3. n. d. = Not Detected (未檢出)
4. "-" = Not Regulated (無規格值)
5. **= Qualitative analysis (No Unit) 定性分析(無單位)
6. Negative = Undetectable 陰性(未偵測到); Positive = Detectable 陽性(已偵測到)
7. 石綿定性分析試驗範圍: <0.1%~100%, 石綿鑑定的判定基準是以檢出含有石綿纖維為『Positive』, 未檢出石綿纖維為『Negative』。 / 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. ***: 該物質是由二辛基錫、單辛基錫、三丁基錫或各別元素(例如: 砷、硼、鉍)之測試結果計算得知。其MDL是針對二辛基錫、單辛基錫、三丁基錫或元素(例如: 砷、硼、鉍)之評估。(The substance was calculated by the test results of Dioctyl Tin (DOT), MonoctylTin (MOT), Tributyl Tin (TBT) or element (Ex. Arsenic, Boron, Beryllium respectively). The MDL was evaluated for Dioctyl Tin (DOT), MonoctylTin (MOT), Tributyl Tin (TBT) or element (Ex. Arsenic, Boron, Beryllium respectively).)
9. (*2): 水合硼酸鈉: 依照歐洲化學總署解釋以無水四硼酸二鈉數據作為代表(歐洲化學總署回信編號 Ref no.: INC 000000032519) / Tetraboron disodium heptaoxide, hydrate: Only anhydrous form of disodium tetraborate is relevant and considered according to ECHA explanation (Ref no.: INC 000000032519).
10. 參數換算表 / Parameter Conversion Table : http://twap.sgs.com/sgsrsts/chn/download-REACH_tw.asp
11. (*2): 被萃取出之溶出硼/砷是以感應耦合電漿原子發射光譜儀檢測得之。 / The extracted soluble Boron / Arsenic are detected by ICP-AES.
12. 鈹青銅是一種主要成份為鈹及銅的合金, 當偵測不到總鈹含量時, 亦表示不含鈹青銅。(Since beryllium copper is a metal alloy of copper and beryllium and the test result is n.d. for beryllium, we can have conclusion that the beryllium copper is n.d..)

PFOS參考資訊(Reference Information) : 持久性有機污染物 POPs - (EU) 757/2010

PFOS濃度在物質或製備中不得超過0.001%(10ppm), 在半成品、成品或零部件中不得超過0.1%(1000ppm), 在紡織品或塗層材料中不得超過1µg/m²。

(Outlawing PFOS as substances or preparations in concentrations above 0.001% (10ppm), in semi-finished products or articles or parts at a level above 0.1%(1000ppm), in textiles or other coated materials above 1 µg/m².)

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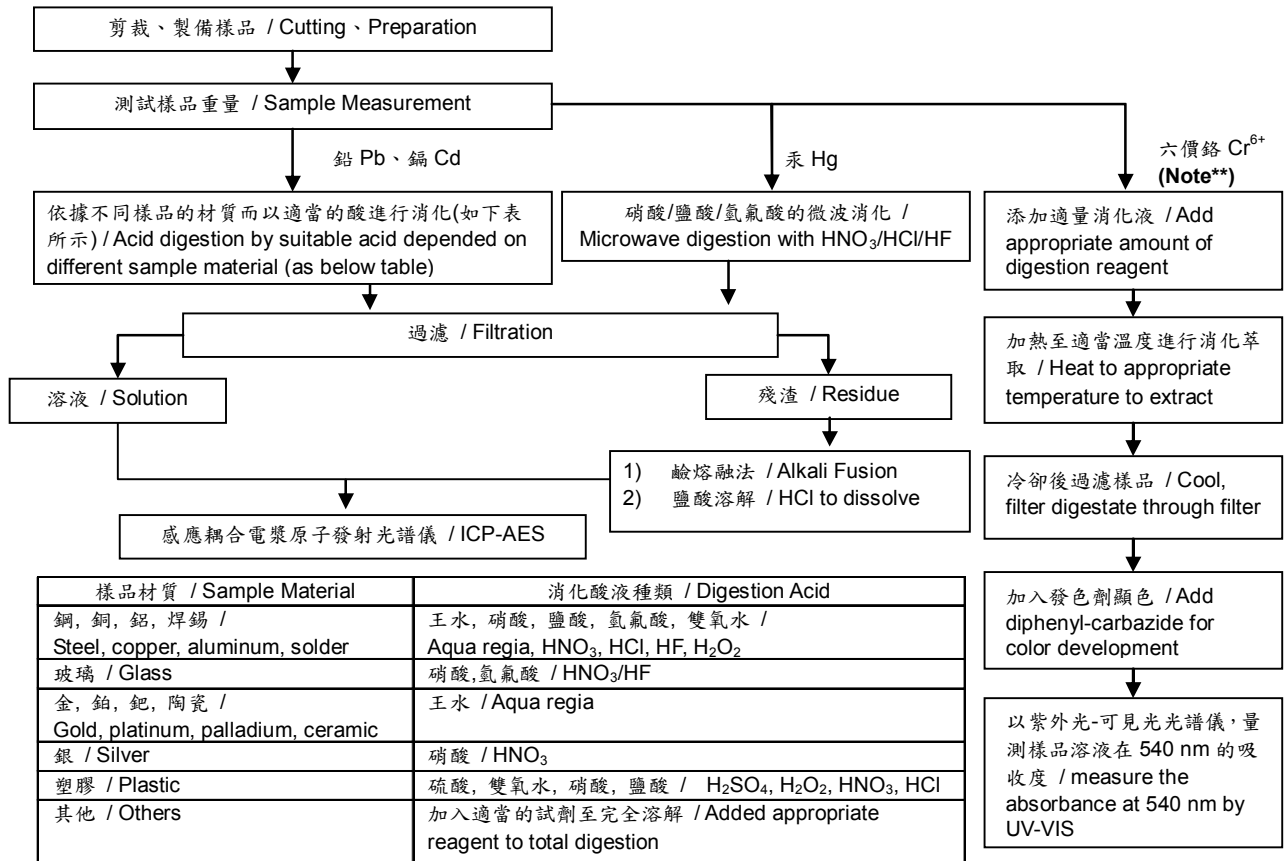
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根據以下的流程圖之條件，樣品已完全溶解。(六價鉻測試方法除外)

These samples were dissolved totally by pre-conditioning method according to below flow chart. (Cr⁶⁺ test method excluded)

- 測試人員：王志瑋 / Technician : JR Wang
- 測試負責人：張啟興 / Supervisor: Troy Chang



Note (For IEC 62321)**

- (1) 針對非金屬材料加入鹼性消化液，加熱至 90~95°C 萃取。 / For non-metallic material, add alkaline digestion reagent and heat to 90~95°C.
- (2) 針對金屬材料加入純水，加熱至沸騰萃取。 / For metallic material, add pure water and heat to boiling.

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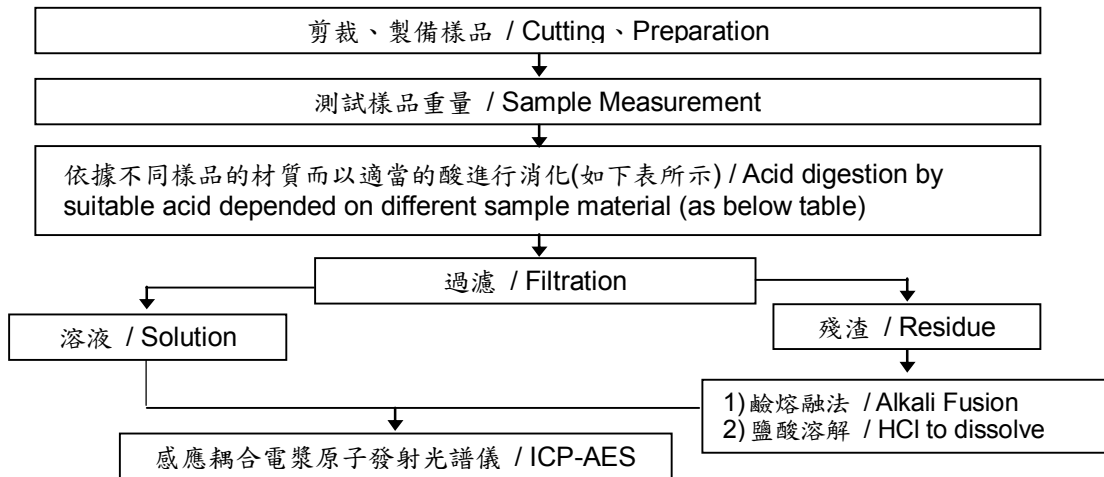
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根據以下的流程圖之條件，樣品已完全溶解。 / These samples were dissolved totally by pre-conditioning method according to below flow chart.

- 測試人員：王志瑋 / Technician : JR Wang
- 測試負責人：張啟興 / Supervisor: Troy Chang

元素以 ICP-AES 分析的消化流程圖
(Flow Chart of digestion for the elements analysis performed by ICP-AES)



鋼,銅,鋁,焊錫 / Steel, copper, aluminum, solder	王水,硝酸,鹽酸,氫氟酸,雙氧水 / Aqua regia, HNO ₃ , HCl, HF, H ₂ O ₂
玻璃 / Glass	硝酸,氫氟酸 / HNO ₃ /HF
金,鉑,鈀,陶瓷 / Gold, platinum, palladium, ceramic	王水 / Aqua regia
銀 / Silver	硝酸 / HNO ₃
塑膠 / Plastic	硫酸,雙氧水,硝酸,鹽酸 / H ₂ SO ₄ , H ₂ O ₂ , HNO ₃ , HCl
其他 / Others	加入適當的試劑至完全溶解 / Added appropriate reagent to total digestion

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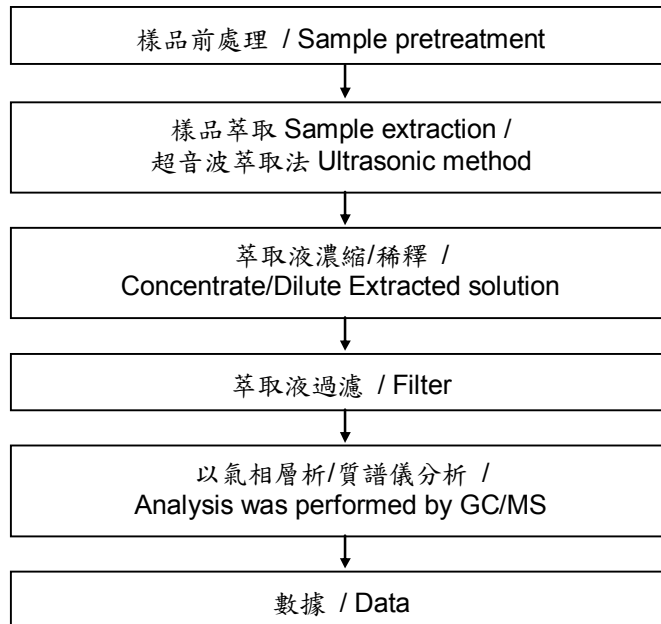
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分析流程圖 / Analytical flow chart

- 測試人員：涂雅苓 / Technician: Yaling Tu
- 測試負責人：張啟興 / Supervisor: Troy Chang

【富馬酸二甲酯(DMFU)、六溴環十二烷(HBCDD)、乙二醇醚及其酯類(Ethylene glycol ether)、BNST】



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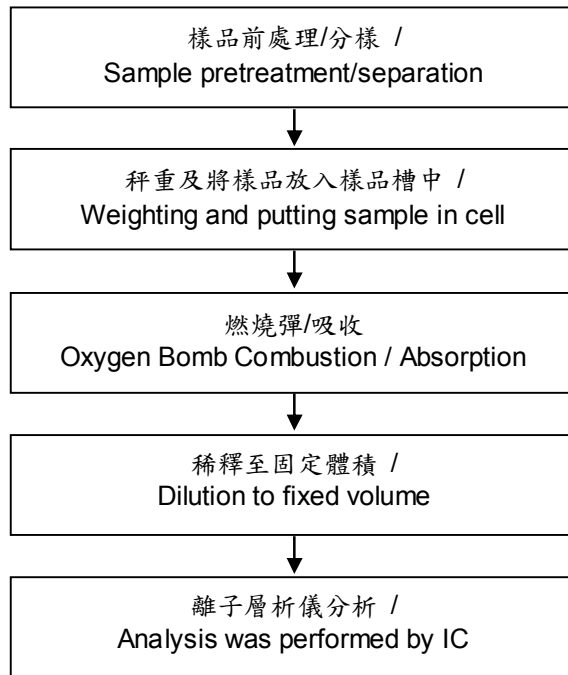
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鹵素分析流程圖 / Analytical flow chart - Halogen

- 測試人員：陳恩臻 / Technician: Rita Chen
- 測試負責人：張啟興 / Supervisor: Troy Chang



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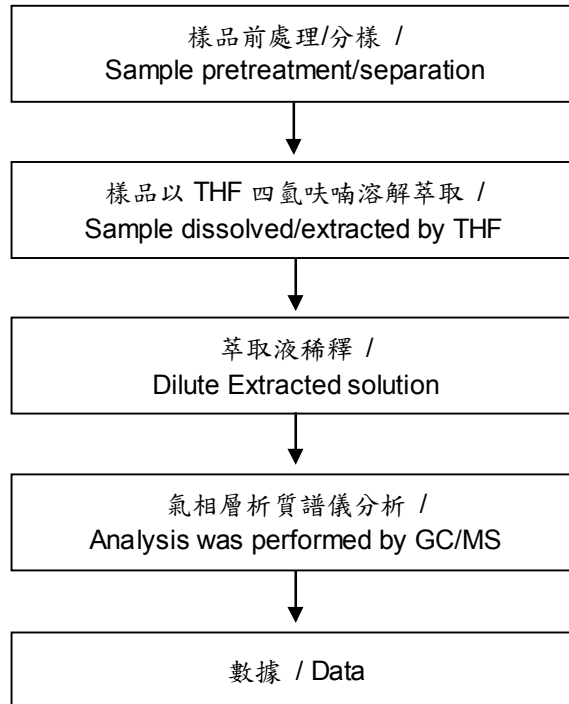
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可塑劑分析流程圖 / Analytical flow chart - Phthalate

- 測試人員：徐毓明 / Technician: Andy Shu
- 測試負責人：張啟興 / Supervisor nt: Troy Chang

【測試方法/Test method: IEC 62321-8】



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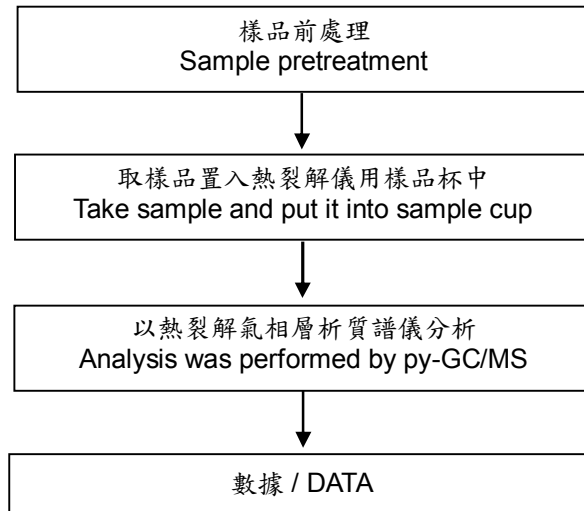
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紅磷分析流程 / Analytical flow chart - Red phosphorus

- 測試人員：涂雅苓 / Technician: Yaling Tu
- 測試負責人：張啟興 / Supervisor: Troy Chang



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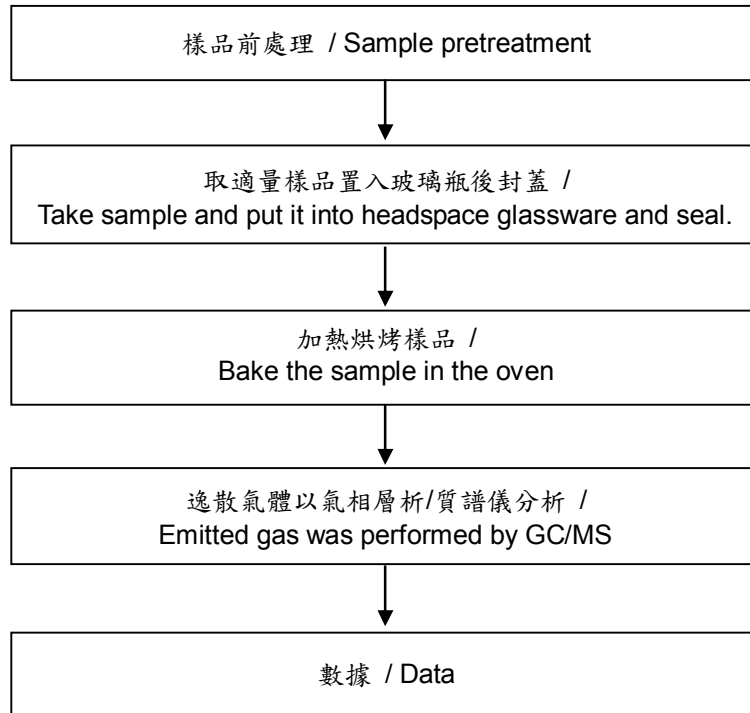


揮發性有機化合物分析流程圖 /

Analytical flow chart - volatile organic compounds (VOCs)

- 測試人員：吳椿景 / Technician : Chun Wu
- 測試負責人：陳新智 / Supervisor : Shinjyh Chen

【參考方法(Reference method) : US EPA 5021, 5021A】



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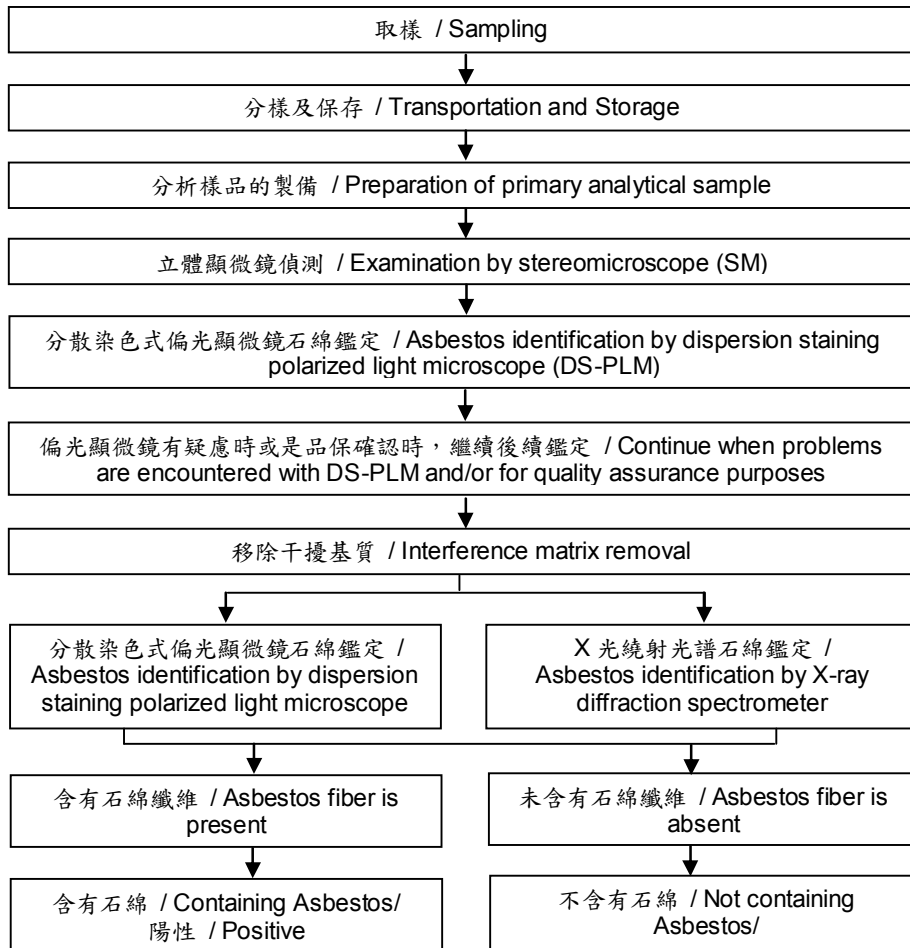
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石綿鑑定分析流程圖 / Analysis flow chart for determination of Asbestos

- 測試人員：高鍵忠 / Technician: Victor Kao
- 測試負責人：魏明芬 / Supervisor: Wendy Wei

【參考方法(Reference method): EPA 600/R-93/116】



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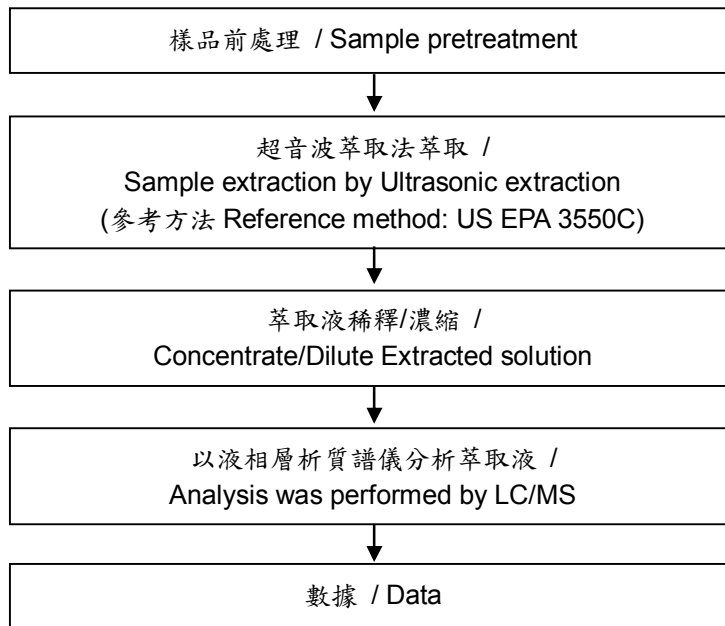
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全氟辛酸/全氟辛烷磺酸分析流程圖 / Analytical flow chart - PFOA/PFOS

- 測試人員：涂雅苓 / Technician: Yaling Tu
- 測試負責人：張啟興 / Supervisor: Troy Chang



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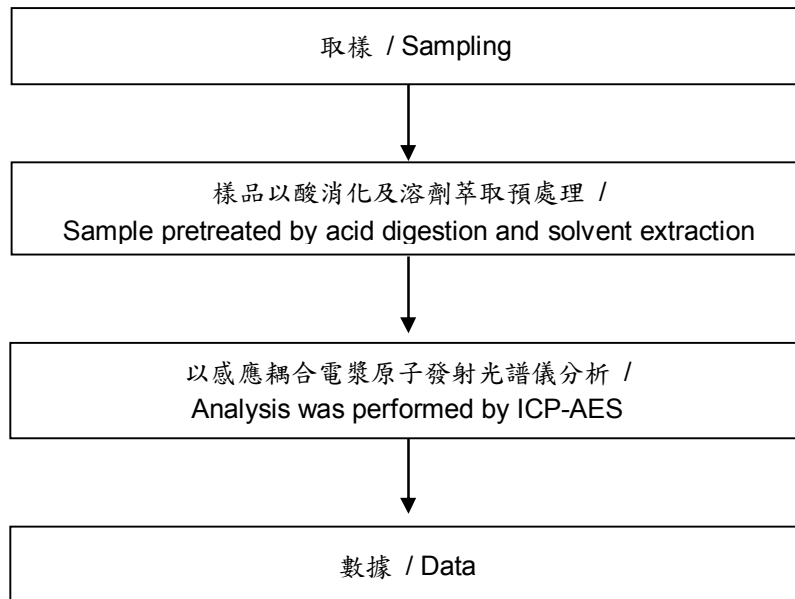
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二氯化鈷分析流程圖 / Analytical flow chart - Cobalt dichloride

- 測試人員：王志瑋 / Technician : JR Wang
- 測試負責人：張啟興 / Supervisor: Troy Chang



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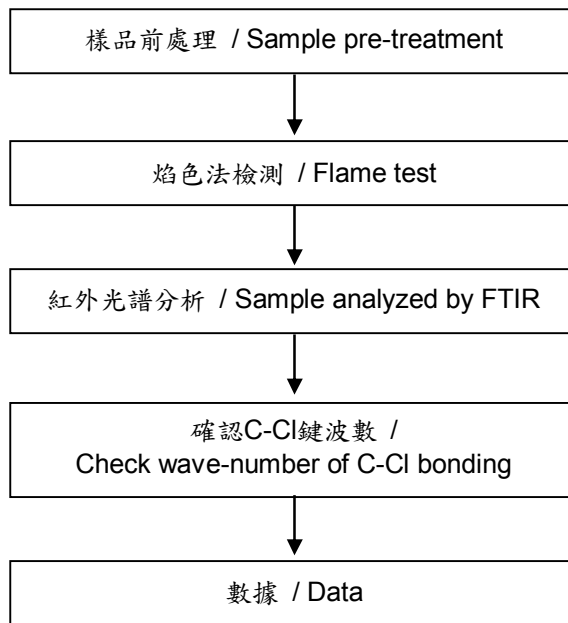
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聚氯乙稀物質判定分析流程圖 / Analysis flow chart - PVC

- 測試人員：涂雅苓 / Technician: Yaling Tu
- 測試負責人：張啟興 / Supervisor: Troy Chang



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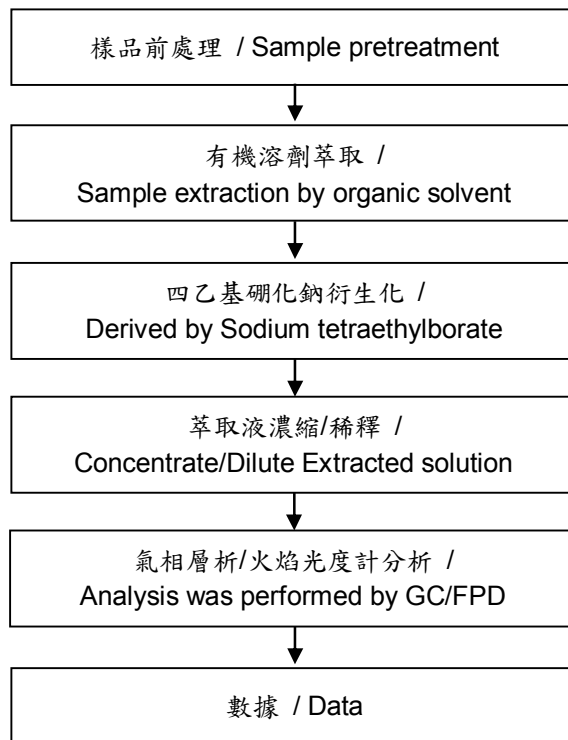
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有機錫分析流程圖 / Analytical flow chart - Organic-Tin

- 測試人員：涂雅苓 / Technician: Yaling Tu
- 測試負責人：張啟興 / Supervisor: Troy Chang



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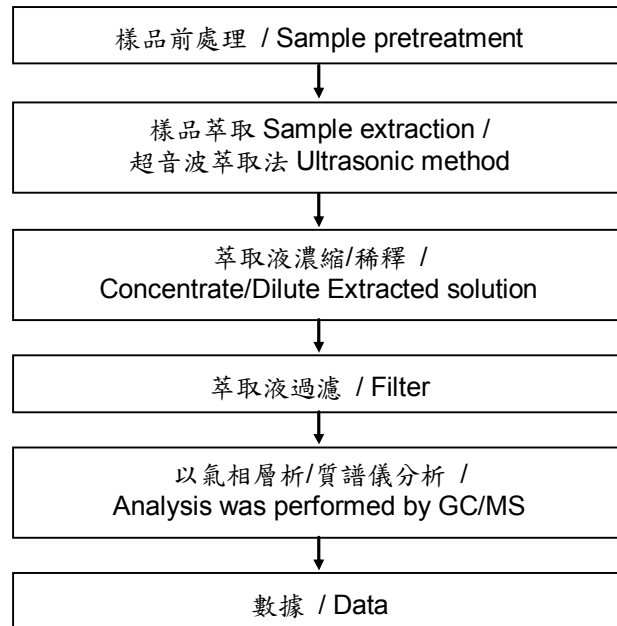
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分析流程圖 / Analytical flow chart

- 測試人員：涂雅苓 / Technician: Yaling Tu
- 測試負責人：張啟興 / Supervisor: Troy Chang

【多氯三聯苯(PCTs)、多氯奈(PCNs)、多氯聯苯(PCBs)、氯化石蠟(SCCP)】



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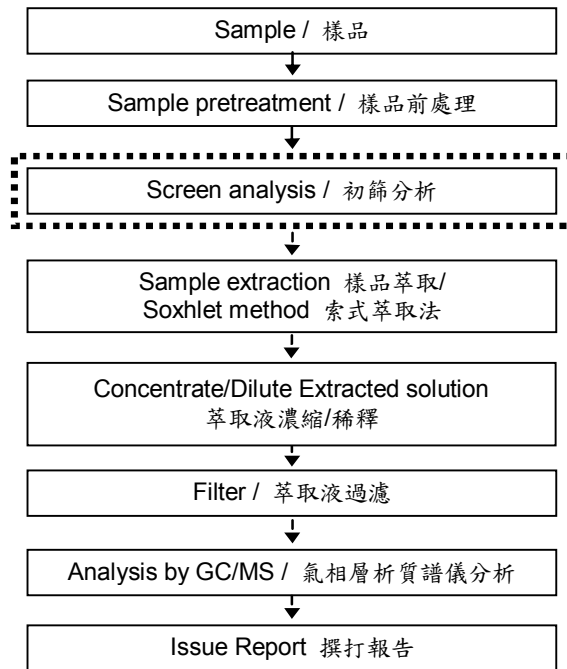
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多溴聯苯/多溴聯苯醚分析流程圖 / Analytical flow chart - PBB/PBDE

- 測試人員：涂雅苓 / Technician: Yaling Tu
- 測試負責人：張啟興 / Supervisor: Troy Chang

初次測試程序 / First testing process —————>
 選擇性篩檢程序 / Optional screen process
 確認程序 / Confirmation process - - - .>



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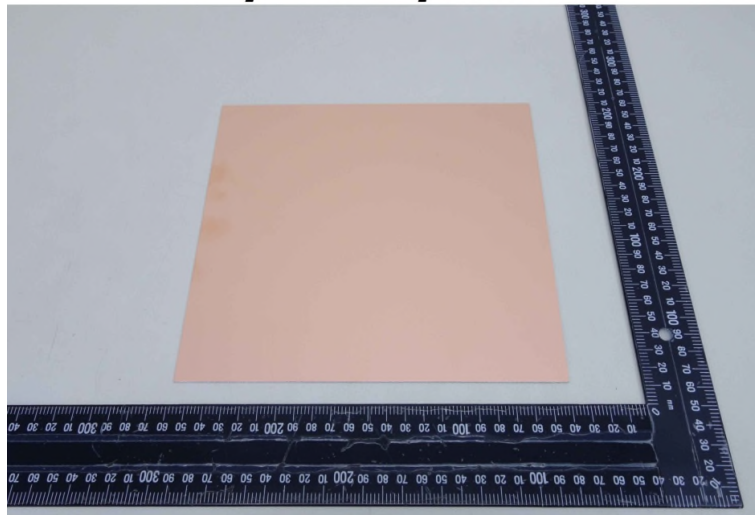
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(The tested sample / part is marked by an arrow if it's shown on the photo.)

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