測試報告
Test Report

號碼(No.): ETR24704875　　日期(Date): 31-Jul-2024　　

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 the applicant as)：

樣品名稱(Sample Name)	:	LEAD FREE PLATING USE MATTE TIN (使用霧錫電鍍)
樣品型號(Style/Item No.)	:	TIN PLATING SAMPLE

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收件日(Sample Receiving Date)	:	23-Jul-2024
測試期間(Testing Period)	:	23-Jul-2024 to 31-Jul-2024

測試需求(Test Requested) :

(1) 依據客戶指定，參考RoHS 2011/65/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(s).)

(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) : 請參閱下一頁 (Please refer to following 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 2011/65/EU Annex II暨其修訂指令(EU) 2015/863之限值要求。 (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.)

Troy Chang / Department Manager
Signed for and on behalf of
SGS TAIWAN LTD.
Chemical Laboratory - Taipei

測試部位敘述 (Test Part Description)

No.1　：　銀色金屬片 (SILVER COLORED METAL SHEET)

測試結果 (Test Results)

測試項目 (Test Items)	測試方法 (Method)	單位 (Unit)	MDL	結果 (Result) No.1	限值 (Limit)
鎘 (Cd) (Cadmium (Cd))	參考IEC 62321-5: 2013，以感應耦合電漿發射光譜儀分析。(With reference to IEC 62321-5: 2013, analysis was performed by ICP-OES.)	mg/kg	2	n.d.	100
鉛 (Pb) (Lead (Pb))		mg/kg	2	n.d.	1000
汞 (Hg) (Mercury (Hg))	參考IEC 62321-4: 2013+ AMD1: 2017，以感應耦合電漿發射光譜儀分析。(With reference to IEC 62321-4: 2013+ AMD1: 2017, analysis was performed by ICP-OES.)	mg/kg	2	n.d.	1000
六價鉻 (Hexavalent Chromium) Cr(VI) (#2)	參考IEC 62321-7-1: 2015，以紫外光-可見光分光光度計分析。(With reference to IEC 62321-7-1: 2015, analysis was performed by UV-VIS.)	μg/cm²	0.1	n.d.	-
一溴聯苯 (Monobromobiphenyl)	參考IEC 62321-6: 2015，以氣相層析儀/質譜儀分析。(With reference to IEC 62321-6: 2015, analysis was performed by GC/MS.)	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.	-
多溴聯苯總和 (Sum of PBBs)		mg/kg	-	n.d.	1000

測試項目 (Test Items)	測試方法 (Method)	單位 (Unit)	MDL	結果 (Result) No.1	限值 (Limit)
一溴聯苯醚 (Monobromodiphenyl ether)	參考IEC 62321-6: 2015，以氣相層析儀/質譜儀分析。(With reference to IEC 62321-6: 2015, analysis was performed by GC/MS.)	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.	-
多溴聯苯醚總和 (Sum of PBDEs)		mg/kg	-	n.d.	1000
鄰苯二甲酸丁苯甲酯 (BBP) (Butyl benzyl phthalate (BBP))	參考IEC 62321-8: 2017，以氣相層析儀/質譜儀分析。(With reference to IEC 62321-8: 2017, analysis was performed by GC/MS.)	mg/kg	50	n.d.	1000
鄰苯二甲酸二丁酯 (DBP) (Dibutyl phthalate (DBP))		mg/kg	50	n.d.	1000
鄰苯二甲酸二(2-乙基己基)酯 (DEHP) (Di-(2-ethylhexyl) phthalate (DEHP))		mg/kg	50	n.d.	1000
鄰苯二甲酸二異丁酯 (DIBP) (Diisobutyl phthalate (DIBP))		mg/kg	50	n.d.	1000
鄰苯二甲酸二異壬酯 (DINP) (Diisononyl phthalate (DINP)) (CAS No.: 28553-12-0, 68515-48-0)		mg/kg	50	n.d.	-
氟 (F) (Fluorine (F)) (CAS No.: 14762-94-8)	參考BS EN 14582: 2016，以離子層析儀分析。(With reference to BS EN 14582: 2016, analysis was performed by IC.)	mg/kg	50	n.d.	-
氯 (Cl) (Chlorine (Cl)) (CAS No.: 22537-15-1)		mg/kg	50	n.d.	-
溴 (Br) (Bromine (Br)) (CAS No.: 10097-32-2)		mg/kg	50	n.d.	-
碘 (I) (Iodine (I)) (CAS No.: 14362-44-8)		mg/kg	50	n.d.	-

測試項目 (Test Items)	測試方法 (Method)	單位 (Unit)	MDL	結果 (Result) No.1	限值 (Limit)
中鏈氯化石蠟(C14-C17) (MCCP) (Medium Chain Chlorinated Paraffins(C14-C17) (MCCP)) (CAS No.: 85535-85-9)	參考ISO 18219-2: 2021，以氣相層析儀/質譜儀分析。(With reference to ISO 18219-2: 2021, analysis was performed by GC/MS.)	mg/kg	50	n.d.	-
四溴雙酚-A (TBBP-A) (Tetrabromobisphenol A (TBBP-A)) (CAS No.: 79-94-7)	參考RSTS-E&E-121，以液相層析儀/質譜儀分析。(With reference to RSTS-E&E-121, analysis was performed by LC/MS.)	mg/kg	10	n.d.	-
多氯聯苯 (PCBs) (Polychlorinated biphenyls (PCBs))	參考US EPA 3550C: 2007，以氣相層析儀/質譜儀分析。(With reference to US EPA 3550C: 2007, analysis was performed by GC/MS.)	mg/kg	0.5	n.d.	-
鈹 (Be) (Beryllium (Be)) (CAS No.: 7440-41-7)	參考US EPA 3050B: 1996，以感應耦合電漿發射光譜儀分析。(With reference to US EPA 3050B: 1996, analysis was performed by ICP-OES.)	mg/kg	2	n.d.	-
銻 (Sb) (Antimony (Sb)) (CAS No.: 7440-36-0)	參考US EPA 3050B: 1996，以感應耦合電漿發射光譜儀分析。(With reference to US EPA 3050B: 1996, analysis was performed by ICP-OES.)	mg/kg	2	n.d.	-
砷 (As) (Arsenic (As)) (CAS No.: 7440-38-2)	參考US EPA 3052: 1996，以感應耦合電漿發射光譜儀分析。(With reference to US EPA 3052: 1996, analysis was performed by ICP-OES.)	mg/kg	2	n.d.	-
全氟辛烷磺酸及其鹽類 (PFOS and its salts) (Perfluorooctane sulfonates and its salts (PFOS and its salts)) (CAS No.: 1763-23-1 and its salts)	參考CEN/TS 15968: 2010，以液相層析串聯質譜儀分析。(With reference to CEN/TS 15968: 2010, analysis was performed by LC/MS/MS.)	mg/kg	0.01	n.d.	-
N-乙基全氟正辛磺醯胺 (EtFOSA) (N-ethylperfluoro-1-octanesulfonamide (EtFOSA)) (CAS No.: 4151-50-2)	參考CEN/TS 15968: 2010，以液相層析串聯質譜儀分析。(With reference to CEN/TS 15968: 2010, analysis was performed by LC/MS/MS.)	mg/kg	0.01	n.d.	-
N-甲基全氟正辛磺醯胺 (N-Me-FOSA) (N-Methyl-Perfluoroctanesulfonamide (N-Me-FOSA)) (CAS No.: 31506-32-8)	參考CEN/TS 15968: 2010，以液相層析串聯質譜儀分析。(With reference to CEN/TS 15968: 2010, analysis was performed by LC/MS/MS.)	mg/kg	0.01	n.d.	-

測試項目 (Test Items)	測試方法 (Method)	單位 (Unit)	MDL	結果 (Result) No.1	限值 (Limit)
N-乙基全氟辛基磺醯胺乙醇 (N-Et-FOSE alcohol) (N-Ethyl-Perfluoroctanesulfonamidoethanol (N-Et-FOSE alcohol)) (CAS No.: 1691-99-2)	參考CEN/TS 15968: 2010，以液相層析串聯質譜儀分析。(With reference to CEN/TS 15968: 2010, analysis was performed by LC/MS/MS.)	mg/kg	0.01	n.d.	-
N-甲基全氟辛基磺醯胺乙醇 (N-Me-FOSE alcohol) (N-Methyl-Perfluoroctanesulfonamidoethanol (N-Me-FOSE alcohol)) (CAS No.: 24448-09-7)	參考CEN/TS 15968: 2010，以液相層析串聯質譜儀分析。(With reference to CEN/TS 15968: 2010, analysis was performed by LC/MS/MS.)	mg/kg	0.01	n.d.	-
全氟辛基磺醯胺及其鹽類 (PFOSA and its salts) (Perfluoroctanesulfonamide and its salts (PFOSA and its salts)) (CAS No.: 754-91-6 and its salts)	參考CEN/TS 15968: 2010，以液相層析串聯質譜儀分析。(With reference to CEN/TS 15968: 2010, analysis was performed by LC/MS/MS.)	mg/kg	0.01	n.d.	-
全氟辛酸及其鹽類 (PFOA and its salts) (Perfluorooctanoic acid and its salts (PFOA and its salts)) (CAS No.: 335-67-1 and its salts)	參考CEN/TS 15968: 2010，以液相層析串聯質譜儀分析。(With reference to CEN/TS 15968: 2010, analysis was performed by LC/MS/MS.)	mg/kg	0.01	n.d.	-
全氟辛酸甲酯 (Me-PFOA) (Methyl perfluorooctanoate (Me-PFOA)) (CAS No.: 376-27-2)	參考CEN/TS 15968: 2010，以氣相層析儀/質譜儀分析。(With reference to CEN/TS 15968: 2010, analysis was performed by GC/MS.)	mg/kg	0.1	n.d.	-
全氟辛酸乙酯 (Et-PFOA) (Ethyl perfluorooctanoate (Et-PFOA)) (CAS No.: 3108-24-5)	參考CEN/TS 15968: 2010，以氣相層析儀/質譜儀分析。(With reference to CEN/TS 15968: 2010, analysis was performed by GC/MS.)	mg/kg	0.1	n.d.	-
全氟辛基碘烷 (PFOI) (Perfluoro-1-iodooctane (PFOI)) (CAS No.: 507-63-1)	參考CEN/TS 15968: 2010，以氣相層析儀/質譜儀分析。(With reference to CEN/TS 15968: 2010, analysis was performed by GC/MS.)	mg/kg	0.1	n.d.	-
3-全氟庚基丙酸 (7:3 FTCA) (3-Perfluoroheptyl propanoic acid (7:3 FTCA)) (CAS No.: 812-70-4)	參考CEN/TS 15968: 2010，以液相層析串聯質譜儀分析。(With reference to CEN/TS 15968: 2010, analysis was performed by LC/MS/MS.)	mg/kg	0.01	n.d.	-

測試項目 (Test Items)	測試方法 (Method)	單位 (Unit)	MDL	結果 (Result) No.1	限值 (Limit)
1H,1H,2H,2H-全氟癸磺酸及其鹽類 (8:2 FTS and its salts) (1H,1H,2H,2H-Perfluorodecanesulfonic acid and its salts (8:2 FTS and its salts)) (CAS No.: 39108-34-4 and its salts)	參考CEN/TS 15968: 2010，以液相層析串聯質譜儀分析。(With reference to CEN/TS 15968: 2010, analysis was performed by LC/MS/MS.)	mg/kg	0.01	n.d.	-
1H,1H,2H,2H-全氟-1-癸醇 (8:2 FTOH) (1H,1H,2H,2H-Perfluoro-1-decanol (8:2 FTOH)) (CAS No.: 678-39-7)	參考CEN/TS 15968: 2010，以氣相層析儀/質譜儀分析。(With reference to CEN/TS 15968: 2010, analysis was performed by GC/MS.)	mg/kg	0.1	n.d.	-
1H,1H,2H,2H-全氟癸基丙烯酸酯 (8:2 FTA) (1H,1H,2H,2H-Perfluorodecyl acrylate (8:2 FTA)) (CAS No.: 27905-45-9)	參考CEN/TS 15968: 2010，以氣相層析儀/質譜儀分析。(With reference to CEN/TS 15968: 2010, analysis was performed by GC/MS.)	mg/kg	0.1	n.d.	-
1H,1H,2H,2H-全氟癸基甲基丙烯酸酯 (8:2 FTMA) (1H,1H,2H,2H-Perfluorodecyl methacrylate (8:2 FTMA)) (CAS No.: 1996-88-9)	參考CEN/TS 15968: 2010，以氣相層析儀/質譜儀分析。(With reference to CEN/TS 15968: 2010, analysis was performed by GC/MS.)	mg/kg	0.1	n.d.	-
2H,2H-全氟癸酸及其鹽類 (H2PFDA and its salts) (2H,2H-Perfluorodecane acid and its salts (H2PFDA and its salts)) (CAS No.: 27854-31-5 and its salts)	參考CEN/TS 15968: 2010，以液相層析串聯質譜儀分析。(With reference to CEN/TS 15968: 2010, analysis was performed by LC/MS/MS.)	mg/kg	0.01	n.d.	-
1H,1H,2H,2H-全氟癸基碘 (8_2 FTI) (1H,1H,2H,2H-Perfluorodecyl iodide (8_2 FTI)) (CAS No.: 2043-53-0)	參考CEN/TS 15968: 2010，以氣相層析儀/質譜儀分析。(With reference to CEN/TS 15968: 2010, analysis was performed by GC/MS.)	mg/kg	0.1	n.d.	-
1H,1H,2H,2H-全氟十七烷三甲基氧矽烷(8:2 FTSi(OC2H5)3) (1H,1H,2H,2H-Perfluorodecyltriethoxysilane (8:2 FTSi(OC2H5)3)) (CAS No.: 101947-16-4)	參考CEN/TS 15968: 2010，以氣相層析儀/質譜儀分析。(With reference to CEN/TS 15968: 2010, analysis was performed by GC/MS.)	mg/kg	0.1	n.d.	-
2H,2H,3H,3H-全氟癸酸及其鹽類 (4HPFUnA and its salts) (2H,2H,3H,3H-Perfluoroundecanoic Acid and its salts (4HPFUnA and its salts)) (CAS No.: 34598-33-9 and its salts)	參考CEN/TS 15968: 2010，以液相層析串聯質譜儀分析。(With reference to CEN/TS 15968: 2010, analysis was performed by LC/MS/MS.)	mg/kg	0.01	n.d.	-

測試項目 (Test Items)	測試方法 (Method)	單位 (Unit)	MDL	結果 (Result) No.1	限值 (Limit)
1H,1H,2H-全氟-1-癸烯 (PFDE) (1H,1H,2H-Heptadecafluoro-1-decene (PFDE)) (CAS No.: 21652-58-4)	參考CEN/TS 15968: 2010，以氣相層析儀/質譜儀分析。(With reference to CEN/TS 15968: 2010, analysis was performed by GC/MS.)	mg/kg	0.1	n.d.	-
雙(1H,1H,2H,2H-全氟癸基)磷酸酯及其鹽類 (8_2diPAP and its salts) (Bis(1H,1H,2H,2H-Perfluorodecyl)phosphate and its salts (8_2diPAP and its salts)) (CAS No.: 678-41-1 and its salts)	參考CEN/TS 15968: 2010，以液相層析串聯質譜儀分析。(With reference to CEN/TS 15968: 2010, analysis was performed by LC/MS/MS.)	mg/kg	0.01	n.d.	-

備註(Note)：

1. mg/kg = ppm；0.1wt% = 0.1% = 1000ppm
2. MDL = Method Detection Limit (方法偵測極限值)
3. n.d. = Not Detected (未檢出)；小於MDL / Less than MDL
4. "-" = Not Regulated (無規格值)
5. (#2) =
   a. 當六價鉻結果大於0.13 μg/cm²，表示樣品表層含有六價鉻。(The sample is positive for Cr(VI) if the Cr(VI) concentration is greater than 0.13 μg/cm². The sample coating is considered to contain Cr(VI).)
   b. 當六價鉻結果為n.d. (濃度小於0.10 μg/cm²)，表示表層不含六價鉻。(The sample is negative for Cr(VI) if Cr(VI) is n.d. (concentration less than 0.10 μg/cm²). The coating is considered a non-Cr(VI) based coating)
   c. 當六價鉻結果介於 0.10 及 0.13 μg/cm² 時，無法確定塗層是否含有六價鉻。(The result between 0.10 μg/cm² and 0.13 μg/cm² is considered to be inconclusive - unavoidable coating variations may influence the determination.)
6. 除非另有說明，參照ILAC-G8:09/2019，採用簡單二元(w=0)允收規則進行符合性判定；根據此規則，符合性結果之判定係以測試結果與限值做比較。(Unless otherwise stated , the decision rule for conformity reporting is based on Binary Statement for Simple Acceptance Rule (w=0) stated in ILAC-G8:09/2019. According to this rule, the judgement of conformity is based on the comparing test results with limits.)

PFAS Remark：

現有PFAS定量技術是分析PFAS物質的特定結構，但同碳數族群之PFAS酸及鹽類物質，其可被辨識的特定結構相同，因此無法區別所分析的特定結構是來自酸或者鹽類，故測試結果為同碳數族群之PFAS之酸及鹽類物質的濃度總合。下表PFAS物質濃度皆已包含在測試結果中，相關資訊請參見下表：(下表列舉PFAS物質僅為範例，並不包含所有同碳數族群之PFAS鹽類。)

(The quantitative technology of PFAS is to analyze the specific structure of PFAS substances. However, PFAS acid and its salts with the same carbon number group have the same specific structure that can be identified. The tested results of the analyzed specific structure cannot be distinguished to identify the contribution from PFAS acid or its salts. Therefore, the tested results display the sum of concentrations of PFAS acids and its salts with the same carbon number group. The concentration of PFAS substances in the below table have been included in the tested results, please refer to the table for relevant information: (The listed PFAS substances are examples only, it do not include all PFAS salts with the same carbon number group.))

群組名稱 (Group Name)	物質名稱 (Substance Name)	CAS No.
PFOS, 及其鹽&衍生物 (PFOS, its salts & derivatives)	全氟辛烷磺酸 (Perfluorooctane sulfonates) (PFOS)	1763-23-1
	全氟辛基磺酸鉀 (PFOS-K) Potassium perfluorooctanesulfonate (PFOS-K)	2795-39-3
	全氟辛基磺酸鋰 (PFOS-Li) Perfluorooctanesulfonic acid, lithium salt (PFOS-Li)	29457-72-5
	全氟辛基磺酸銨 (PFOS-NH_4) Perfluorooctanesulfonic acid, ammonium salt (PFOS-NH_4)	29081-56-9
	全氟辛基磺酸二乙醇銨 (PFOS-$NH(OH)_2$) Perfluorooctane sulfonate diethanolamine salt (PFOS-$NH(OH)_2$)	70225-14-8
	全氟辛基磺酸四乙基銨 (PFOS-$N(C_2H_5)_4$) Perfluorooctanesulfonic acid,tetraethylammonium salt (PFOS-$N(C_2H_5)_4$)	56773-42-3
	全氟辛基磺酸二癸二甲基銨 (PFOS-DDA) N-decyl-N,N-dimethyldecan-1-aminium 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluorooctane-1-sulfonate (PFOS-DDA)	251099-16-8
	全氟辛基磺酸四丁基銨 (PFOS-$N(C_4H_9)_4$) TetrabutylAmmonium perfluorooctanesulfonate (PFOS-$N(C_4H_9)_4$)	111873-33-7
	全氟辛基磺醯氟 (POSF) Perfluorooctane sulfonyl fluoride (POSF)	307-35-7
	全氟辛基磺酸鎂 (PFOS-Mg) Perfluorooctanesulfonic acid, magnesium salt (PFOS-Mg)	91036-71-4
	全氟辛基磺酸鈉 (PFOS-Na) Perfluorooctanesulfonic acid, sodium salt (PFOS-Na)	4021-47-0
	全氟辛烷磺酸哌啶 Piperidine 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluorooctanesulfonate	71463-74-6

群組名稱 (Group Name)	物質名稱 (Substance Name)	CAS No.
PFOSA, 及其鹽 (PFOSA, its salts)	全氟辛基磺醯胺 (Perfluoroctanesulfonamide) (PFOSA)	754-91-6
	全氟辛基磺醯胺鋰鹽 (1:1) (PFOSA-Li) Perfluorooctanesulfonamide lithium salt (1:1) (PFOSA-Li)	76752-79-9
	全氟辛基磺醯胺鈉鹽 (1:1) (PFOSA-Na) Perfluorooctanesulfonamide Sodium salt (1:1) (PFOSA-Na)	76752-78-8
	全氟辛基磺醯胺鉀鹽 (1:1) (PFOSA-K) Perfluorooctanesulfonamide Potassium salt (1:1) (PFOSA-K)	76752-70-0
	全氟辛基磺醯胺銨鹽 (1:1) (PFOSA-NH_4) Perfluorooctanesulfonamide Ammonium salt (1:1) (PFOSA-NH_4)	76752-72-2
PFOA, 及其鹽&衍生物 (PFOA, its salts & derivatives)	全氟辛酸 (Perfluorooctanoic acid) (PFOA)	335-67-1
	全氟辛酸鈉 (PFOA-Na) Sodium perfluorooctanoate (PFOA-Na)	335-95-5
	全氟辛酸鉀 (PFOA-K) Potassium perfluorooctanoate (PFOA-K)	2395-00-8
	全氟辛酸銀 (PFOA-Ag) Silver perfluorooctanote (PFOA-Ag)	335-93-3
	全氟辛氟 (PFOA-F) Perfluorooctanoyl fluoride (PFOA-F)	335-66-0
	全氟辛酸銨 (APFO) Ammonium pentadecafluorooctanoate (APFO)	3825-26-1
	全氟辛酸鋰 (PFOA-Li) Lithium perfluorooctanoate (PFOA-Li)	17125-58-5
	全氟辛酸鈷 (PFOA-Co) Cobalt perfluorooctanoate (PFOA-Co)	35965-01-6
	全氟辛酸銫 (PFOA-Cs) Cesium perfluorooctanoate (PFOA-Cs)	17125-60-9
	全氟辛酸鉻 (PFOA-Cr(3^+)) Octanoic acid, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-pentadecafluoro-, chromium(3+) (PFOA-Cr(3^+))	68141-02-6
	全氟辛酸-哌嗪(2:1) PFOA-NH($C_4H_{10}N$) Pentadecafluorooctanoic acid--piperazine (2/1)PFOA-NH($C_4H_{10}N$)	423-52-9
	全氟辛酸鹽 Pentadecafluorooctanoate (anion)	45285-51-6
	全氟辛酸酐 Perfluorooctanoic Anhydride	33496-48-9

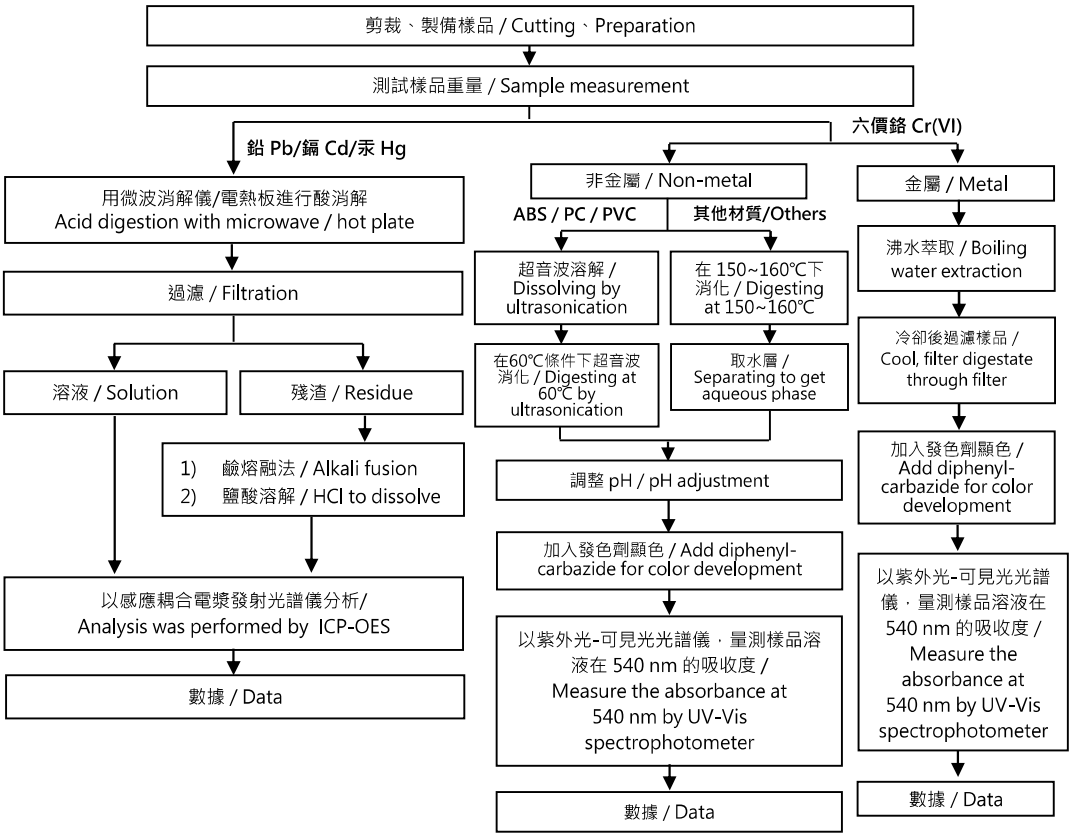
群組名稱 (Group Name)	物質名稱 (Substance Name)	CAS No.
8:2 FTS, 及其鹽 (8:2 FTS, its salts)	1H,1H,2H,2H-全氟癸磺酸 (1H,1H,2H,2H-Perfluorodecanesulfonic acid) (8:2 FTS)	39108-34-4
	1H, 1H, 2H, 2H-全氟癸磺酸鉀 (8:2 FTS-K) 1H,1H,2H,2H-Perfluorodencane sulfonate acid Potassium salt (8:2 FTS-K)	438237-73-1
	1H, 1H, 2H, 2H-全氟癸磺酸銨 (8:2 FTS-NH_4) 1H,1H,2H,2H-Perfluorodencane sulfonate acid Ammonium salt (8:2 FTS-NH_4)	149724-40-3
	1H, 1H, 2H, 2H-全氟癸磺酸鈉 (8:2 FTS-Na) 1H,1H,2H,2H-Perfluorodencane sulfonate acid Sodium salt (8:2 FTS-Na)	27619-96-1
H2PFDA, 及其鹽 (H2PFDA, its salts)	2H,2H-全氟癸酸 (2H,2H-Perfluorodecane acid) (H2PFDA)	27854-31-5
	四丁基磷2H,2H-全氟癸酸酯 Tetrabutylphosphonium 2H,2H-Perfluorodecanoate	882489-14-7
4HPFUnA, 及其鹽 (4HPFUnA, its salts)	2H,2H,3H,3H-全氟癸酸 (2H,2H,3H,3H-Perfluoroundecanoic Acid) (4HPFUnA)	34598-33-9
	2H,2H,3H,3H-全氟癸酸鉀 (H4PFUnA-K) Potassium 2H,2H,3H,3H-Perfluoroundecanoate (H4PFUnA-K)	83310-58-1
8:2diPAP, 及其鹽 (8:2diPAP, its salts)	雙(1H,1H,2H,2H-全氟癸基)磷酸酯 (Bis(1H,1H,2H,2H-Perfluorodecyl)phosphate) (8:2diPAP)	678-41-1
	雙(1H,1H,2H,2H-全氟癸基)磷酸酯鈉 (8:2diPAP-Na) Sodium bis(1H,1H,2H,2H-perfluorodecyl)phosphate (8:2diPAP-Na)	114519-85-6

重金屬流程圖 / Analytical flow chart of heavy metal

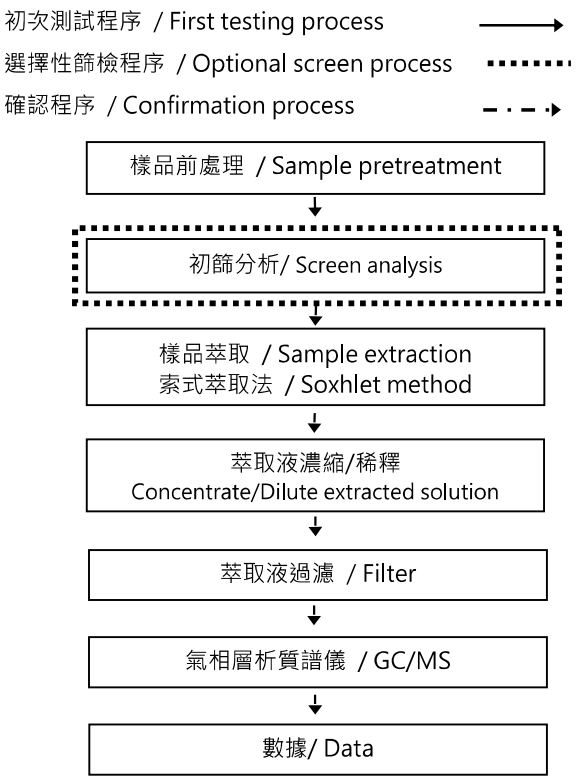
根據以下的流程圖之條件，樣品已完全溶解。（六價鉻測試方法除外）

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

（Cr^{6+} test method excluded）

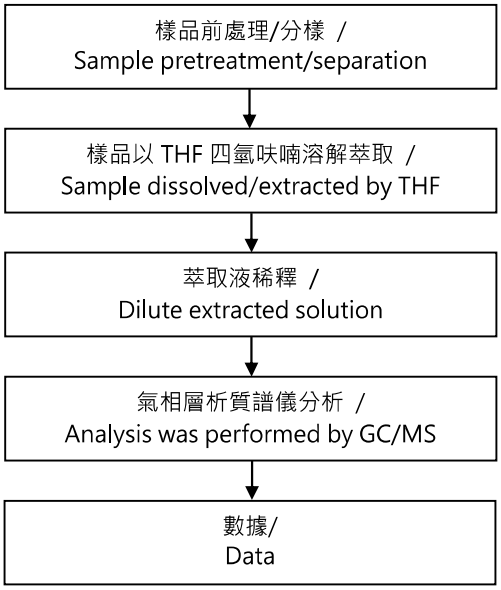


多溴聯苯/多溴聯苯醚分析流程圖 / Analytical flow chart - PBBs/PBDEs

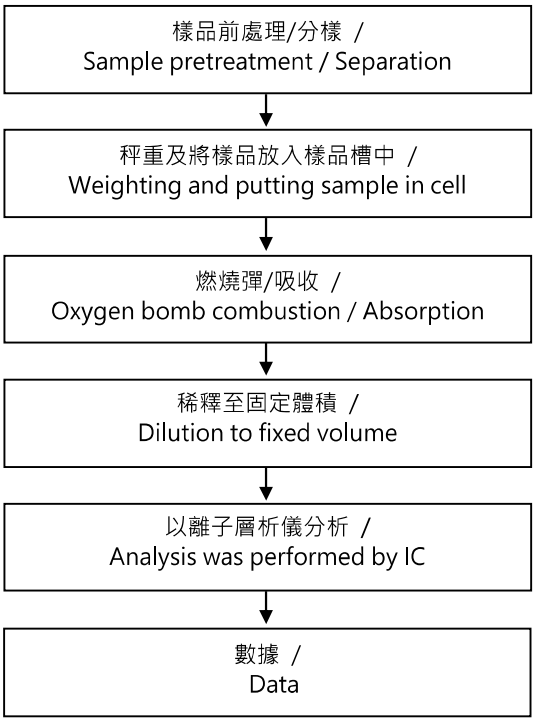


可塑劑分析流程圖 / Analytical flow chart - Phthalate

【測試方法/Test method: IEC 62321-8】



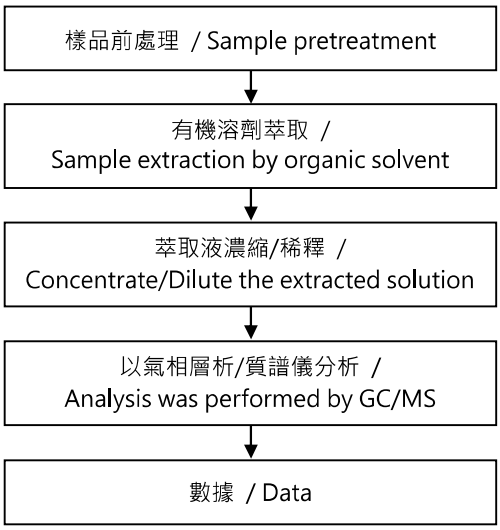
鹵素分析流程圖 / Analytical flow chart - Halogen



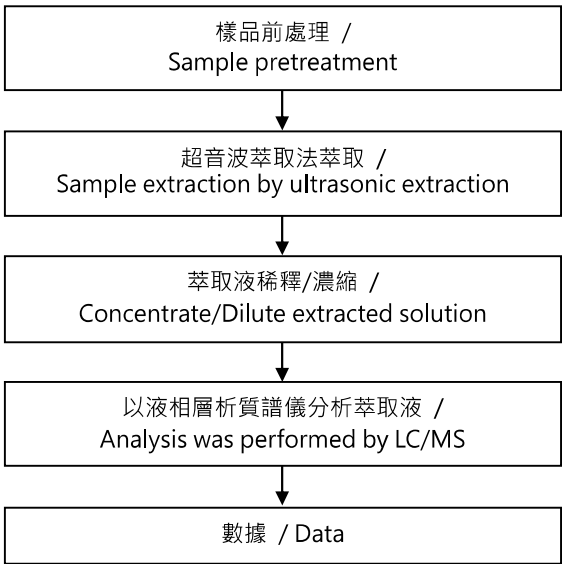
分析流程圖 / Analytical flow chart

【適用於：多氯聯苯、多氯奈、多氯三聯苯、滅蟻靈、氯化石蠟、DBBT】

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



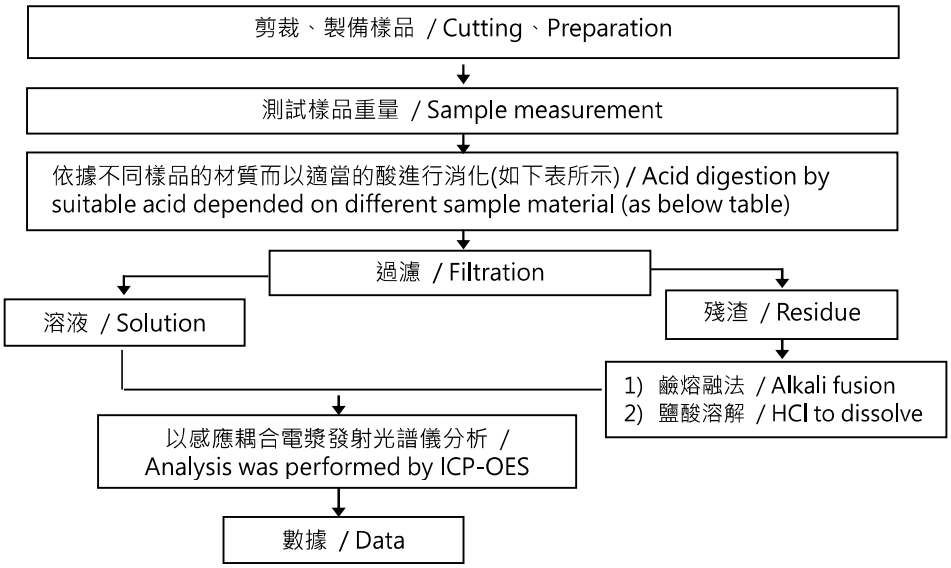
四溴雙酚-A 分析流程圖 / Analytical flow chart - TBBP-A



元素以 ICP-OES 分析的消化流程圖

(Flow chart of digestion for the elements analysis performed by ICP-OES)

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.



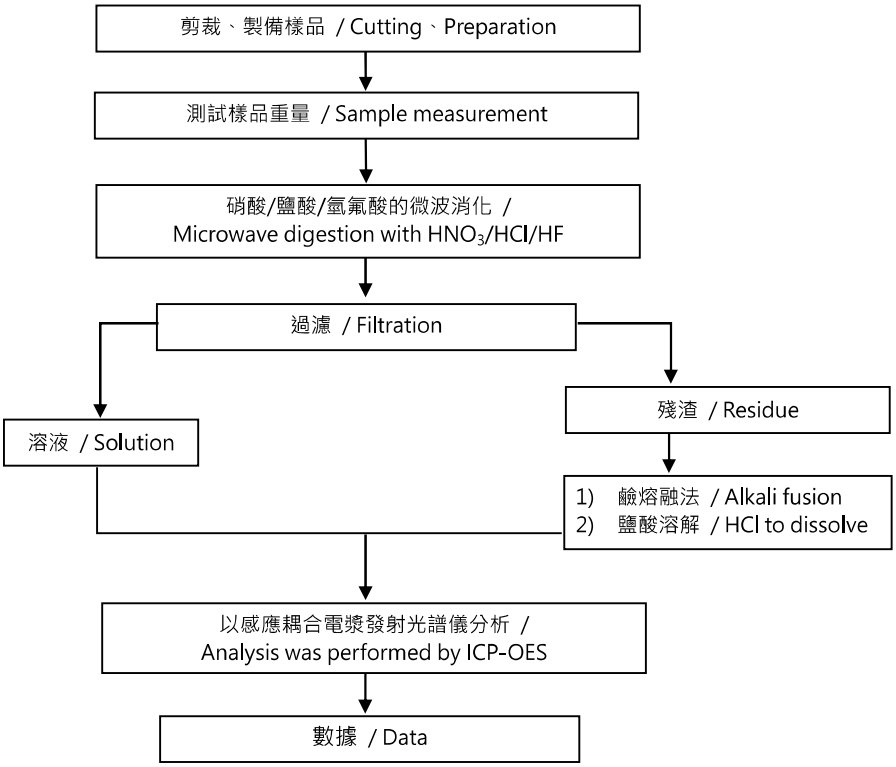
鋼,銅,鋁,焊錫 / Steel, copper, aluminum, solder	王水,硝酸,鹽酸,氫氟酸,雙氧水 / Aqua regia, HNO_3, HCl, HF, H_2O_2
玻璃 / Glass	硝酸,氫氟酸 / HNO_3,HF
金,鉑,鈀,陶瓷 / Gold, platinum, palladium, ceramic	王水 / Aqua regia
銀 / Silver	硝酸 / HNO_3
塑膠 / Plastic	硫酸,雙氧水,硝酸,鹽酸 / H_2SO_4, H_2O_2, HNO_3, HCl
其他 / Others	加入適當的試劑至完全溶解 / Added appropriate reagent to total digestion

元素(含重金屬)分析流程圖 / Analytical flow chart of elements (Heavy metal included)

根據以下的流程圖之條件，樣品已完全溶解。

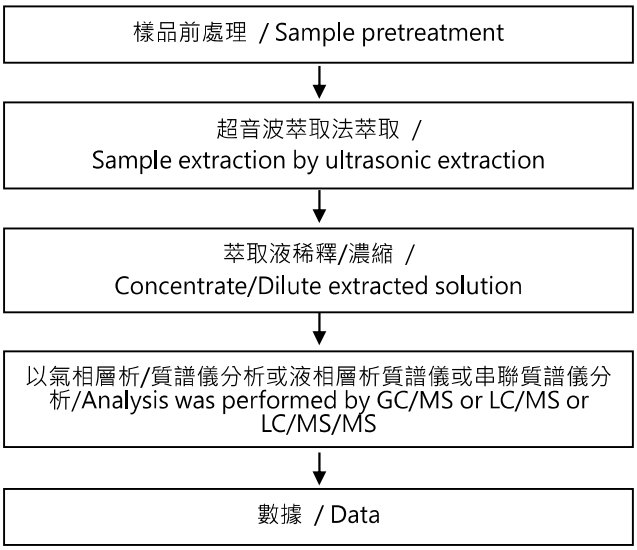
These samples were dissolved totally by pre-conditioning method according to below flow chart.

【參考方法/Reference method：US EPA 3051A、US EPA 3052】



* US EPA 3051A 方法未添加氫氟酸 / US EPA 3051A method does not add HF.

全氟化合物(包含全氟辛酸/全氟辛烷磺酸/其相關化合物等等)分析流程圖 / Analytical flow chart – PFAS (including PFOA/PFOS/its related compound, etc.)



* 照片中如有箭頭標示，則表示為實際檢測之樣品/部位. *
(The tested sample / part is marked by an arrow if it's shown on the photo.)

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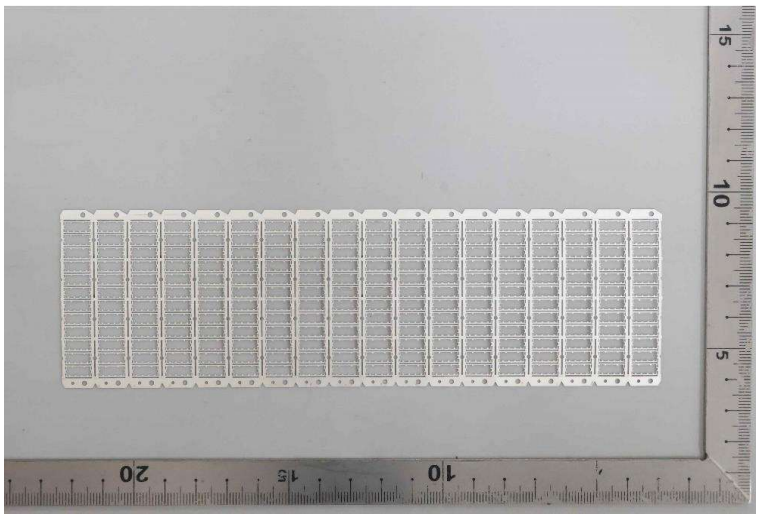

** 報告結尾 (End of Report) **