

測試報告

Test Report

號碼(No.): ETR23A03343

日期(Date): 26-Oct-2023

頁數(Page): 1 of 45

MAGNETICS DIVISION OF SPANG & COMPANY
110 DELTA DRIVE PITTSBURGH, PENNSYLVANIA USA 15238

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) :


送樣廠商(Sample Submitted By) : MAGNETICS DIVISION OF SPANG & COMPANY
樣品名稱(Sample Name) : HIGH DC BIAS XFLUX CORE


=====
收件日(Sample Receiving Date) : 19-Oct-2023
測試期間(Testing Period) : 19-Oct-2023 to 26-Oct-2023

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




PIN CODE: A15401FA

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com.tw/terms-of-service> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com.tw/terms-of-service>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

測試報告

Test Report

號碼(No.): ETR23A03343

日期(Date): 26-Oct-2023

頁數(Page): 2 of 45

MAGNETICS DIVISION OF SPANG & COMPANY
110 DELTA DRIVE PITTSBURGH, PENNSYLVANIA USA 15238

測試部位敘述 (Test Part Description)

No.1 : 灰色金屬 (GRAY METAL)

測試結果 (Test Results)

測試項目 (Test Items)	測試方法 (Method)	單位 (Unit)	MDL	結果 (Result)	限值 (Limit)
				No.1	
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))	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.	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/cm ²	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

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com.tw/terms-of-service> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com.tw/terms-of-service>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

測試報告

Test Report

號碼(No.): ETR23A03343

日期(Date): 26-Oct-2023

頁數(Page): 3 of 45

MAGNETICS DIVISION OF SPANG & COMPANY
110 DELTA DRIVE PITTSBURGH, PENNSYLVANIA USA 15238

測試項目 (Test Items)	測試方法 (Method)	單位 (Unit)	MDL	結果 (Result)	限值 (Limit)
				No.1	
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
鄰苯二甲酸二(2-乙基己基)酯 (DEHP) (Di-(2-ethylhexyl) phthalate (DEHP))	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
鄰苯二甲酸二異丁酯 (DIBP) (Diisobutyl phthalate (DIBP))		mg/kg	50	n.d.	1000
鄰苯二甲酸二丁酯 (DBP) (Dibutyl phthalate (DBP))		mg/kg	50	n.d.	1000
鄰苯二甲酸丁苯甲酯 (BBP) (Butyl benzyl phthalate (BBP))		mg/kg	50	n.d.	1000
鄰苯二甲酸二異癸酯 (DIDP) (Diisodecyl phthalate (DIDP)) (CAS No.: 26761-40-0, 68515-49-1)		mg/kg	50	n.d.	-
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.	-
鄰苯二甲酸二正辛酯 (DNOP) (Di-n-octyl phthalate (DNOP)) (CAS No.: 117-84-0)		mg/kg	50	n.d.	-

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com.tw/terms-of-service> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com.tw/terms-of-service>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

測試報告

Test Report

號碼(No.): ETR23A03343

日期(Date): 26-Oct-2023

頁數(Page): 4 of 45

MAGNETICS DIVISION OF SPANG & COMPANY
110 DELTA DRIVE PITTSBURGH, PENNSYLVANIA USA 15238

測試項目 (Test Items)	測試方法 (Method)	單位 (Unit)	MDL	結果 (Result)	限值 (Limit)
				No.1	
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.	-
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	64.4	-
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.	-
全氟辛烷磺酸及其鹽類 (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.	-
全氟辛酸及其鹽類 (PFOA and its salts) (CAS No.: 335-67-1 and its salts)		mg/kg	0.01	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.	-
多氯萘 (PCNs) (Polychlorinated naphthalene (PCNs))	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	5	n.d.	-
多氯三聯苯 (PCTs) (Polychlorinated terphenyls (PCTs))	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.	-
富馬酸二甲酯 (DMFu) (Dimethyl fumarate (DMFu)) (CAS No.: 624-49-7)	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	0.1	n.d.	-

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com.tw/terms-of-service> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com.tw/terms-of-service>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

測試報告

Test Report

號碼(No.): ETR23A03343

日期(Date): 26-Oct-2023

頁數(Page): 5 of 45

MAGNETICS DIVISION OF SPANG & COMPANY
110 DELTA DRIVE PITTSBURGH, PENNSYLVANIA USA 15238

測試項目 (Test Items)	測試方法 (Method)	單位 (Unit)	MDL	結果 (Result)	限值 (Limit)
				No.1	
石棉 (Asbestos)					
陽起石綿 (Actinolite) (CAS No.: 77536-66-4)	參考EPA 600/R-93/116: 1993 · 以立體顯微鏡(SM)與分散染色式偏光顯微鏡(DS-PLM)及X光繞射光譜分析法(XRD)分析。 (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	-
褐石綿/鐵石綿 (Amosite) (CAS No.: 12172-73-5)		-	-	Negative	-
斜方角閃石綿 (Anthophyllite) (CAS No.: 77536-67-5)		-	-	Negative	-
白石綿/溫石綿 (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	-
偶氮染料 (AZO Dyes)					
4-氨基二苯 (4-aminodiphenyl) (CAS No.: 92-67-1)	參考EN ISO 14362-1: 2017 · 以氣相層析質譜儀及高效液相層析儀/二極體陣列偵測器分析。(With reference to EN ISO 14362-1: 2017, analysis was performed by GC/MS and HPLC/DAD.)	mg/kg	3	n.d.	-
聯苯胺 (Benzidine) (CAS No.: 92-87-5)	參考EN ISO 14362-1: 2017 · 以氣相層析質譜儀及高效液相層析儀/二極體陣列偵測器分析。(With reference to EN ISO 14362-1: 2017, analysis was performed by GC/MS and HPLC/DAD.)	mg/kg	3	n.d.	-
4-氯鄰甲苯胺 (4-chloro-o-toluidine) (CAS No.: 95-69-2)	參考EN ISO 14362-1: 2017 · 以氣相層析質譜儀及高效液相層析儀/二極體陣列偵測器分析。(With reference to EN ISO 14362-1: 2017, analysis was performed by GC/MS and HPLC/DAD.)	mg/kg	3	n.d.	-

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com.tw/terms-of-service> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com.tw/terms-of-service>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

測試報告

Test Report

號碼(No.): ETR23A03343

日期(Date): 26-Oct-2023

頁數(Page): 6 of 45

MAGNETICS DIVISION OF SPANG & COMPANY

110 DELTA DRIVE PITTSBURGH, PENNSYLVANIA USA 15238

測試項目 (Test Items)	測試方法 (Method)	單位 (Unit)	MDL	結果 (Result)	限值 (Limit)
				No.1	
2-萘胺 (2-naphthylamine) (CAS No.: 91-59-8)	參考EN ISO 14362-1: 2017 · 以氣相層析質譜儀及高效液相層析儀/二極體陣列偵測器分析。(With reference to EN ISO 14362-1: 2017, analysis was performed by GC/MS and HPLC/DAD.)	mg/kg	3	n.d.	-
鄰-胺基偶氮甲苯 (o-aminoazotoluene) (CAS No.: 97-56-3)	參考EN ISO 14362-1: 2017 · 以氣相層析質譜儀及高效液相層析儀/二極體陣列偵測器分析。(With reference to EN ISO 14362-1: 2017, analysis was performed by GC/MS and HPLC/DAD.)	mg/kg	3	n.d.	-
2-胺基-4-硝基甲苯 (5-nitro-o-toluidine) (CAS No.: 99-55-8)	參考EN ISO 14362-1: 2017 · 以氣相層析質譜儀及高效液相層析儀/二極體陣列偵測器分析。(With reference to EN ISO 14362-1: 2017, analysis was performed by GC/MS and HPLC/DAD.)	mg/kg	3	n.d.	-
4-氯苯胺 (4-chloroaniline) (CAS No.: 106-47-8)	參考EN ISO 14362-1: 2017 · 以氣相層析質譜儀及高效液相層析儀/二極體陣列偵測器分析。(With reference to EN ISO 14362-1: 2017, analysis was performed by GC/MS and HPLC/DAD.)	mg/kg	3	n.d.	-
2,4-二氨基苯甲醚 (2,4-diaminoanisole) (CAS No.: 615-05-4)	參考EN ISO 14362-1: 2017 · 以氣相層析質譜儀及高效液相層析儀/二極體陣列偵測器分析。(With reference to EN ISO 14362-1: 2017, analysis was performed by GC/MS and HPLC/DAD.)	mg/kg	3	n.d.	-
4,4'-二胺基二苯甲烷 (4,4'-diaminodiphenylmethane (MDA)) (CAS No.: 101-77-9)	參考EN ISO 14362-1: 2017 · 以氣相層析質譜儀及高效液相層析儀/二極體陣列偵測器分析。(With reference to EN ISO 14362-1: 2017, analysis was performed by GC/MS and HPLC/DAD.)	mg/kg	3	n.d.	-

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com.tw/terms-of-service> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com.tw/terms-of-service>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

測試報告

Test Report

號碼(No.): ETR23A03343

日期(Date): 26-Oct-2023

頁數(Page): 7 of 45

MAGNETICS DIVISION OF SPANG & COMPANY
110 DELTA DRIVE PITTSBURGH, PENNSYLVANIA USA 15238

測試項目 (Test Items)	測試方法 (Method)	單位 (Unit)	MDL	結果 (Result)	限值 (Limit)
				No.1	
3,3'-二氯聯苯胺 (3,3'-dichlorobenzidine) (CAS No.: 91-94-1)	參考EN ISO 14362-1: 2017 · 以氣相層析 質譜儀及高效液相層析儀/二極體陣列偵測 器分析。(With reference to EN ISO 14362-1: 2017, analysis was performed by GC/MS and HPLC/DAD.)	mg/kg	3	n.d.	-
3,3'-二甲氧基聯苯胺 (3,3'- dimethoxybenzidine) (CAS No.: 119- 90-4)	參考EN ISO 14362-1: 2017 · 以氣相層析 質譜儀及高效液相層析儀/二極體陣列偵測 器分析。(With reference to EN ISO 14362-1: 2017, analysis was performed by GC/MS and HPLC/DAD.)	mg/kg	3	n.d.	-
3,3'-二甲基聯苯胺 (3,3'- dimethylbenzidine) (CAS No.: 119-93- 7)	參考EN ISO 14362-1: 2017 · 以氣相層析 質譜儀及高效液相層析儀/二極體陣列偵測 器分析。(With reference to EN ISO 14362-1: 2017, analysis was performed by GC/MS and HPLC/DAD.)	mg/kg	3	n.d.	-
3,3'-二甲基-4,4'-二胺基二苯甲烷 (3,3'- dimethyl-4,4'- diaminodiphenylmethane) (CAS No.: 838-88-0)	參考EN ISO 14362-1: 2017 · 以氣相層析 質譜儀及高效液相層析儀/二極體陣列偵測 器分析。(With reference to EN ISO 14362-1: 2017, analysis was performed by GC/MS and HPLC/DAD.)	mg/kg	3	n.d.	-
2-甲氧基-5-甲基苯胺 (2-methoxy-5- methylaniline) (CAS No.: 120-71-8)	參考EN ISO 14362-1: 2017 · 以氣相層析 質譜儀及高效液相層析儀/二極體陣列偵測 器分析。(With reference to EN ISO 14362-1: 2017, analysis was performed by GC/MS and HPLC/DAD.)	mg/kg	3	n.d.	-
4,4'-亞甲雙(2-氯苯胺) (4,4'-methylene- bis-(2-chloroaniline)) (CAS No.: 101-14- 4)	參考EN ISO 14362-1: 2017 · 以氣相層析 質譜儀及高效液相層析儀/二極體陣列偵測 器分析。(With reference to EN ISO 14362-1: 2017, analysis was performed by GC/MS and HPLC/DAD.)	mg/kg	3	n.d.	-

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com.tw/terms-of-service> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com.tw/terms-of-service>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

測試報告

Test Report

號碼(No.): ETR23A03343

日期(Date): 26-Oct-2023

頁數(Page): 8 of 45

MAGNETICS DIVISION OF SPANG & COMPANY
110 DELTA DRIVE PITTSBURGH, PENNSYLVANIA USA 15238

測試項目 (Test Items)	測試方法 (Method)	單位 (Unit)	MDL	結果 (Result)	限值 (Limit)
				No.1	
4,4'-二胺基二苯醚 (4,4'-oxydianiline) (CAS No.: 101-80-4)	參考EN ISO 14362-1: 2017 · 以氣相層析質譜儀及高效液相層析儀/二極體陣列偵測器分析。(With reference to EN ISO 14362-1: 2017, analysis was performed by GC/MS and HPLC/DAD.)	mg/kg	3	n.d.	-
4,4'-硫二苯胺 (4,4'-thiodianiline) (CAS No.: 139-65-1)	參考EN ISO 14362-1: 2017 · 以氣相層析質譜儀及高效液相層析儀/二極體陣列偵測器分析。(With reference to EN ISO 14362-1: 2017, analysis was performed by GC/MS and HPLC/DAD.)	mg/kg	3	n.d.	-
鄰-甲苯胺 (o-toluidine) (CAS No.: 95-53-4)	參考EN ISO 14362-1: 2017 · 以氣相層析質譜儀及高效液相層析儀/二極體陣列偵測器分析。(With reference to EN ISO 14362-1: 2017, analysis was performed by GC/MS and HPLC/DAD.)	mg/kg	3	n.d.	-
2,4-甲苯二胺 (2,4-diaminotoluene) (CAS No.: 95-80-7)	參考EN ISO 14362-1: 2017 · 以氣相層析質譜儀及高效液相層析儀/二極體陣列偵測器分析。(With reference to EN ISO 14362-1: 2017, analysis was performed by GC/MS and HPLC/DAD.)	mg/kg	3	n.d.	-
2,4,5-三甲苯胺 (2,4,5-trimethylaniline) (CAS No.: 137-17-7)	參考EN ISO 14362-1: 2017 · 以氣相層析質譜儀及高效液相層析儀/二極體陣列偵測器分析。(With reference to EN ISO 14362-1: 2017, analysis was performed by GC/MS and HPLC/DAD.)	mg/kg	3	n.d.	-
鄰-甲氧基苯胺 (o-anisidine) (CAS No.: 90-04-0)	參考EN ISO 14362-1: 2017 · 以氣相層析質譜儀及高效液相層析儀/二極體陣列偵測器分析。(With reference to EN ISO 14362-1: 2017, analysis was performed by GC/MS and HPLC/DAD.)	mg/kg	3	n.d.	-

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com.tw/terms-of-service> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com.tw/terms-of-service>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.



測試報告

Test Report

號碼(No.): ETR23A03343

日期(Date): 26-Oct-2023

頁數(Page): 9 of 45

MAGNETICS DIVISION OF SPANG & COMPANY

110 DELTA DRIVE PITTSBURGH, PENNSYLVANIA USA 15238

測試項目 (Test Items)	測試方法 (Method)	單位 (Unit)	MDL	結果 (Result)	限值 (Limit)
				No.1	
4-苯基偶氮基苯胺 (4-aminoazobenzene) (CAS No.: 60-09-3)	參考EN ISO 14362-1: 2017 or/and EN ISO 14362-3: 2017 · 以氣相層析質譜儀及高效液相層析儀/二極體陣列偵測器分析。(With reference to EN ISO 14362-1: 2017 or/and EN ISO 14362-3: 2017, analysis was performed by GC/MS & HPLC/DAD.)	mg/kg	3	n.d.	-
2,4-二甲基苯胺 (2,4-xylydine) (CAS No.: 95-68-1)	參考EN ISO 14362-1: 2017 · 以氣相層析質譜儀及高效液相層析儀/二極體陣列偵測器分析。(With reference to EN ISO 14362-1: 2017, analysis was performed by GC/MS and HPLC/DAD.)	mg/kg	3	n.d.	-
2,6-二甲基苯胺 (2,6-xylydine) (CAS No.: 87-62-7)	參考EN ISO 14362-1: 2017 · 以氣相層析質譜儀及高效液相層析儀/二極體陣列偵測器分析。(With reference to EN ISO 14362-1: 2017, analysis was performed by GC/MS and HPLC/DAD.)	mg/kg	3	n.d.	-
聚氯乙烯 (Polyvinyl chloride) (PVC)	參考ASTM E1252: 2021 · 以傅立葉轉換紅外線光譜儀及焰色法分析。(With reference to ASTM E1252: 2021, analysis was performed by FT-IR and Flame Test.)	**	-	Negative	-
紅磷 (Red Phosphorus)	以熱裂解-氣相層析儀/質譜儀分析。(Analysis was performed by Pyrolyzer-GC/MS.)	**	-	Negative	-
氟氯碳化物 (Chlorofluorocarbons) (CFCs)					
CFC-13 (CAS No.: 75-72-9)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com.tw/terms-of-service> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com.tw/terms-of-service>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

測試報告

Test Report

號碼(No.): ETR23A03343

日期(Date): 26-Oct-2023

頁數(Page): 10 of 45

MAGNETICS DIVISION OF SPANG & COMPANY
110 DELTA DRIVE PITTSBURGH, PENNSYLVANIA USA 15238

測試項目 (Test Items)	測試方法 (Method)	單位 (Unit)	MDL	結果 (Result)	限值 (Limit)
				No.1	
CFC-111 (CAS No.: 354-56-3)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
CFC-112 (CAS No.: 76-12-0)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
CFC-211 (CAS No.: 422-78-6)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
CFC-212 (CAS No.: 3182-26-1)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
CFC-213 (CAS No.: 2354-06-5)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
CFC-214 (CAS No.: 29255-31-0)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
CFC-215 (CAS No.: 4259-43-2)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
CFC-216 (CAS No.: 661-97-2)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com.tw/terms-of-service> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com.tw/terms-of-service>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.



測試報告

Test Report

號碼(No.): ETR23A03343

日期(Date): 26-Oct-2023

頁數(Page): 11 of 45

MAGNETICS DIVISION OF SPANG & COMPANY

110 DELTA DRIVE PITTSBURGH, PENNSYLVANIA USA 15238

測試項目 (Test Items)	測試方法 (Method)	單位 (Unit)	MDL	結果 (Result)	限值 (Limit)
				No.1	
CFC-217 (CAS No.: 422-86-6)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
CFC-12 (CAS No.: 75-71-8)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
CFC-11 (CAS No.: 75-69-4)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
CFC-115 (CAS No.: 76-15-3)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
CFC-114 (CAS No.: 76-14-2)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
CFC-113 (CAS No.: 76-13-1)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
氟氯氫烷碳化物 (Hydrochlorofluorocarbons) (HCFCs)					
HCFC-21 (CAS No.: 75-43-4)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com.tw/terms-of-service> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com.tw/terms-of-service>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

測試報告

Test Report

號碼(No.): ETR23A03343

日期(Date): 26-Oct-2023

頁數(Page): 12 of 45

MAGNETICS DIVISION OF SPANG & COMPANY
110 DELTA DRIVE PITTSBURGH, PENNSYLVANIA USA 15238

測試項目 (Test Items)	測試方法 (Method)	單位 (Unit)	MDL	結果 (Result)	限值 (Limit)
				No.1	
HCFC-22 (CAS No.: 75-45-6)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
HCFC-31 (CAS No.: 593-70-4)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
HCFC-121 (CAS No.: 354-14-3)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
HCFC-122 (CAS No.: 354-21-2)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
HCFC-123 (CAS No.: 306-83-2)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
HCFC-124 (CAS No.: 2837-89-0)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
HCFC-131 (CAS No.: 359-28-4)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
HCFC-132b (CAS No.: 1649-08-7)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com.tw/terms-of-service> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com.tw/terms-of-service>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

測試報告

Test Report

號碼(No.): ETR23A03343

日期(Date): 26-Oct-2023

頁數(Page): 13 of 45

MAGNETICS DIVISION OF SPANG & COMPANY
110 DELTA DRIVE PITTSBURGH, PENNSYLVANIA USA 15238

測試項目 (Test Items)	測試方法 (Method)	單位 (Unit)	MDL	結果 (Result)	限值 (Limit)
				No.1	
HCFC-133a (CAS No.: 75-88-7)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
HCFC-142b (CAS No.: 75-68-3)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
HCFC-221 (CAS No.: 422-26-4)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
HCFC-222 (CAS No.: 422-49-1)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
HCFC-223 (CAS No.: 422-52-6)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
HCFC-224 (CAS No.: 422-54-8)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
HCFC-225ca (CAS No.: 422-56-0)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
HCFC-225cb (CAS No.: 507-55-1)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com.tw/terms-of-service> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com.tw/terms-of-service>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

測試報告

Test Report

號碼(No.): ETR23A03343

日期(Date): 26-Oct-2023

頁數(Page): 14 of 45

MAGNETICS DIVISION OF SPANG & COMPANY
110 DELTA DRIVE PITTSBURGH, PENNSYLVANIA USA 15238

測試項目 (Test Items)	測試方法 (Method)	單位 (Unit)	MDL	結果 (Result)	限值 (Limit)
				No.1	
HCFC-226 (CAS No.: 431-87-8)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
HCFC-231 (CAS No.: 421-94-3)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
HCFC-232 (CAS No.: 460-89-9)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
HCFC-233 (CAS No.: 7125-84-0)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
HCFC-234 (CAS No.: 425-94-5)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
HCFC-235 (CAS No.: 460-92-4)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
HCFC-241 (CAS No.: 666-27-3)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
HCFC-242 (CAS No.: 460-63-9)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com.tw/terms-of-service> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com.tw/terms-of-service>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

測試報告

Test Report

號碼(No.): ETR23A03343

日期(Date): 26-Oct-2023

頁數(Page): 15 of 45

MAGNETICS DIVISION OF SPANG & COMPANY
110 DELTA DRIVE PITTSBURGH, PENNSYLVANIA USA 15238

測試項目 (Test Items)	測試方法 (Method)	單位 (Unit)	MDL	結果 (Result)	限值 (Limit)
				No.1	
HCFC-244	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
HCFC-251 (CAS No.: 421-41-0)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
HCFC-252 (CAS No.: 819-00-1)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
HCFC-261 (CAS No.: 420-97-3)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
HCFC-262 (CAS No.: 421-02-03)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
HCFC-271 (CAS No.: 430-55-7)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
HCFC-141b (CAS No.: 1717-00-6)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
HCFC-243 (CAS No.: 460-69-5)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com.tw/terms-of-service> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com.tw/terms-of-service>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

測試報告

Test Report

號碼(No.): ETR23A03343

日期(Date): 26-Oct-2023

頁數(Page): 16 of 45

MAGNETICS DIVISION OF SPANG & COMPANY
110 DELTA DRIVE PITTSBURGH, PENNSYLVANIA USA 15238

測試項目 (Test Items)	測試方法 (Method)	單位 (Unit)	MDL	結果 (Result)	限值 (Limit)
				No.1	
HCFC-253 (CAS No.: 460-35-5)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
HCFC-141	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
HCFC-142	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
HCFC-151	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
HCFC-225	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
海龍 (Halons)					
Halon-1211 (CAS No.: 353-59-3)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
Halon-1301 (CAS No.: 75-63-8)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com.tw/terms-of-service> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com.tw/terms-of-service>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

測試報告

Test Report

號碼(No.): ETR23A03343

日期(Date): 26-Oct-2023

頁數(Page): 17 of 45

MAGNETICS DIVISION OF SPANG & COMPANY
110 DELTA DRIVE PITTSBURGH, PENNSYLVANIA USA 15238

測試項目 (Test Items)	測試方法 (Method)	單位 (Unit)	MDL	結果 (Result)	限值 (Limit)
				No.1	
海龍-2402 (Halon-2402) (CAS No.: 124-73-2)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
溴甲烷 (Methyl Bromide) (CAS No.: 74-83-9)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
不完全鹵化氟溴化物 (Hydrobromofluorocarbons) (HBFCs)					
HBFC-271B1 (C3H6FBr)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
HBFC-262B1 (C3H5F2Br)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
HBFC-261B2 (C3H5FBr2)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
HBFC-253B1 (C3H4F3Br)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
HBFC-252B2 (C3H4F2Br2)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com.tw/terms-of-service> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com.tw/terms-of-service>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

測試報告

Test Report

號碼(No.): ETR23A03343

日期(Date): 26-Oct-2023

頁數(Page): 18 of 45

MAGNETICS DIVISION OF SPANG & COMPANY
110 DELTA DRIVE PITTSBURGH, PENNSYLVANIA USA 15238

測試項目 (Test Items)	測試方法 (Method)	單位 (Unit)	MDL	結果 (Result)	限值 (Limit)
				No.1	
HBFC-251B3 (C3H4FBr3)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
HBFC-244B1 (C3H3F4Br)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
HBFC-243B2 (C3H3F3Br2)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
HBFC-242B3 (C3H3F2Br3)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
HBFC-241B4 (C3H3FBr4)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
HBFC-235B1 (C3H2F5Br)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
HBFC-234B2 (C3H2F4Br2)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
HBFC-233B3 (C3H2F3Br3)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com.tw/terms-of-service> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com.tw/terms-of-service>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

測試報告

Test Report

號碼(No.): ETR23A03343

日期(Date): 26-Oct-2023

頁數(Page): 19 of 45

MAGNETICS DIVISION OF SPANG & COMPANY
110 DELTA DRIVE PITTSBURGH, PENNSYLVANIA USA 15238

測試項目 (Test Items)	測試方法 (Method)	單位 (Unit)	MDL	結果 (Result)	限值 (Limit)
				No.1	
HBFC-232B4 (C3H2F2Br4)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
HBFC-231B5 (C3H2FBr5)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
HBFC-226B1 (C3HF6Br)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
HBFC-225B2 (C3HF5Br2)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
HBFC-224B3 (C3HF4Br3)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
HBFC-223B4 (C3HF3Br4)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
HBFC-222B5 (C3HF2Br5)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
HBFC-221B6 (C3HFBr6)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com.tw/terms-of-service> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com.tw/terms-of-service>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

測試報告

Test Report

號碼(No.): ETR23A03343

日期(Date): 26-Oct-2023

頁數(Page): 20 of 45

MAGNETICS DIVISION OF SPANG & COMPANY
110 DELTA DRIVE PITTSBURGH, PENNSYLVANIA USA 15238

測試項目 (Test Items)	測試方法 (Method)	單位 (Unit)	MDL	結果 (Result)	限值 (Limit)
				No.1	
HBFC-151B1 (C2H4FBr)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
HBFC-142B1 (C2H3F2Br)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
HBFC-141B2 (C2H3FBr2)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
HBFC-133B1 (C2H2F3Br)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
HBFC-132B2 (C2H2F2Br2)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
HBFC-131B3 (C2H2FBr3)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
HBFC-124B1 (C2HF4Br)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
HBFC-123B2 (C2HF3Br2)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com.tw/terms-of-service> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com.tw/terms-of-service>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

測試報告

Test Report

號碼(No.): ETR23A03343

日期(Date): 26-Oct-2023

頁數(Page): 21 of 45

MAGNETICS DIVISION OF SPANG & COMPANY
110 DELTA DRIVE PITTSBURGH, PENNSYLVANIA USA 15238

測試項目 (Test Items)	測試方法 (Method)	單位 (Unit)	MDL	結果 (Result)	限值 (Limit)
				No.1	
HBFC-122B3 (C2HF2Br3)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
HBFC-121B4 (C2HFBr4)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
HBFC-31B1 (CH2FBr) (CAS No.: 373-52-4)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
HBFC-22B1 (CHF2Br) (CAS No.: 1511-62-2)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
HBFC-21B2 (CHFBr2) (CAS No.: 1868-53-7)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
氫氟碳化合物 (Hydrofluorocarbon) (HFCs)					
HFC-23 (CHF3) (CAS No.: 75-46-7)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
HFC-32 (CH2F2) (CAS No.: 75-10-5)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com.tw/terms-of-service> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com.tw/terms-of-service>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

測試報告

Test Report

號碼(No.): ETR23A03343

日期(Date): 26-Oct-2023

頁數(Page): 22 of 45

MAGNETICS DIVISION OF SPANG & COMPANY
110 DELTA DRIVE PITTSBURGH, PENNSYLVANIA USA 15238

測試項目 (Test Items)	測試方法 (Method)	單位 (Unit)	MDL	結果 (Result)	限值 (Limit)
				No.1	
HFC-41 (CH3F) (CAS No.: 593-53-3)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
HFC-43-10mee (C5H2F10)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
HFC-125 (C2HF5)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
HFC-134 (C2H2F4)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
HFC-134a (CH2FCF3) (CAS No.: 811-97-2)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
HFC-143 (CH3F3)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
HFC-143a (CH3F3)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
HFC-152a (C2H4F2) (CAS No.: 75-37-6)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com.tw/terms-of-service> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com.tw/terms-of-service>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

測試報告

Test Report

號碼(No.): ETR23A03343

日期(Date): 26-Oct-2023

頁數(Page): 23 of 45

MAGNETICS DIVISION OF SPANG & COMPANY
110 DELTA DRIVE PITTSBURGH, PENNSYLVANIA USA 15238

測試項目 (Test Items)	測試方法 (Method)	單位 (Unit)	MDL	結果 (Result)	限值 (Limit)
				No.1	
HFC-227ea (C3HF7) (CAS No.: 431-89-0)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
HFC-236fa (CAS No.: 431-63-0)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
HFC-245ca (C3H3F5)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
HFC-245fa (C3H3F5)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
HFC-365mfc (C4H5F5)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
HFC-236ea (C3H2F6) (CAS No.: 431-63-0)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
全氟化碳 (Perfluorocarbon) (PFCs)					
1,4-二氫八氟丁烷 (1,4-dihydrooctafluorobutane) (CAS No.: 377-36-6)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com.tw/terms-of-service> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com.tw/terms-of-service>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

測試報告

Test Report

號碼(No.): ETR23A03343

日期(Date): 26-Oct-2023

頁數(Page): 24 of 45

MAGNETICS DIVISION OF SPANG & COMPANY
110 DELTA DRIVE PITTSBURGH, PENNSYLVANIA USA 15238

測試項目 (Test Items)	測試方法 (Method)	單位 (Unit)	MDL	結果 (Result)	限值 (Limit)
				No.1	
2-全氟甲基戊烷 (2-Perfluoromethylpentane) (CAS No.: 355-04-4)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
十氟丁烷 (Decafluorobutane) (CAS No.: 355-25-9)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
四氟甲烷 (F14) (CAS No.: 75-73-0)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
六氟乙烷 (Fluorocarbon 116) (CAS No.: 76-16-4)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
八氟丙烷 (Freon 218) (CAS No.: 76-19-7)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
八氟環丁烷 (Freon C318) (CAS No.: 115-25-3)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
2-全氟甲基丁烷 (Nonafluor-2-(trifluoromethyl)butane) (CAS No.: 594-91-2)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
全氟異丁烯 (Perfluorisobutene) (CAS No.: 382-21-8)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com.tw/terms-of-service> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com.tw/terms-of-service>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

測試報告

Test Report

號碼(No.): ETR23A03343

日期(Date): 26-Oct-2023

頁數(Page): 25 of 45

MAGNETICS DIVISION OF SPANG & COMPANY
110 DELTA DRIVE PITTSBURGH, PENNSYLVANIA USA 15238

測試項目 (Test Items)	測試方法 (Method)	單位 (Unit)	MDL	結果 (Result)	限值 (Limit)
				No.1	
全氟己烷 (Perfluorohexane) (CAS No.: 355-42-0)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
全氟戊烷 (Perfluoro-n-pentane) (CAS No.: 678-26-2)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
全氟-1-丁烯 (Perfluor-1-butene) (CAS No.: 357-26-6)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
氯碳氫化物 (Chlorinate hydrocarbon) (CHCs)					
1,1-二氯丙烯 (1,1-Dichloropropene) (CAS No.: 563-58-6)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
1,2-二氯乙烷 (1,2-Dichloroethane) (CAS No.: 107-06-2)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
2,2-二氯丙烷 (2,2-Dichloropropane) (CAS No.: 594-20-7)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
四氯甲烷 (四氯化碳) (Carbon tetrachloride) (CAS No.: 56-23-5)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com.tw/terms-of-service> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com.tw/terms-of-service>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

測試報告

Test Report

號碼(No.): ETR23A03343

日期(Date): 26-Oct-2023

頁數(Page): 26 of 45

MAGNETICS DIVISION OF SPANG & COMPANY
110 DELTA DRIVE PITTSBURGH, PENNSYLVANIA USA 15238

測試項目 (Test Items)	測試方法 (Method)	單位 (Unit)	MDL	結果 (Result)	限值 (Limit)
				No.1	
氯甲烷 (Chloromethane) (CAS No.: 74-87-3)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
順-1,2-二氯乙烯 (cis-1,2-Dichloroethene) (CAS No.: 156-59-2)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
順-1,3-二氯丙烯 (cis-1,3-Dichloropropene) (CAS No.: 10061-01-5)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
六氯丁二烯 (Hexachlorobutadiene) (CAS No.: 87-68-3)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
反-1,2-二氯乙烯 (trans-1,2-Dichloroethene) (CAS No.: 156-60-5)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
反-1,3-二氯丙烯 (trans-1,3-Dichloropropene) (CAS No.: 10061-02-6)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
二氯甲烷 (Dichloromethane, Methylene chloride) (CAS No.: 75-09-2)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
1,2-二氯丙烷 (1,2-Dichloropropane) (CAS No.: 78-87-5)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com.tw/terms-of-service> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com.tw/terms-of-service>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

測試報告

Test Report

號碼(No.): ETR23A03343

日期(Date): 26-Oct-2023

頁數(Page): 27 of 45

MAGNETICS DIVISION OF SPANG & COMPANY
110 DELTA DRIVE PITTSBURGH, PENNSYLVANIA USA 15238

測試項目 (Test Items)	測試方法 (Method)	單位 (Unit)	MDL	結果 (Result)	限值 (Limit)
				No.1	
1,1,1,2-四氯乙烷 (1,1,1,2-Tetrachloroethane) (CAS No.: 630-20-6)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
1,1,1-三氯乙烷 (1,1,1-Trichloroethane) (CAS No.: 71-55-6)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
1,1,2-三氯乙烷 (1,1,2-Trichloroethane) (CAS No.: 79-00-5)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
1,1,2,2-四氯乙烷 (1,1,2,2-Tetrachloroethane) (CAS No.: 79-34-5)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
1,1-二氯乙烯 (1,1-Dichloroethylene) (CAS No.: 75-35-4)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
1,1-二氯乙烷 (1,1-Dichloroethane) (CAS No.: 75-34-3)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
氯乙烷 (Chloroethane) (CAS No.: 75-00-3)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
四氯乙烯 (Tetrachloroethene) (CAS No.: 127-18-4)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com.tw/terms-of-service> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com.tw/terms-of-service>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.



測試報告

Test Report

號碼(No.): ETR23A03343

日期(Date): 26-Oct-2023

頁數(Page): 28 of 45

MAGNETICS DIVISION OF SPANG & COMPANY

110 DELTA DRIVE PITTSBURGH, PENNSYLVANIA USA 15238

測試項目 (Test Items)	測試方法 (Method)	單位 (Unit)	MDL	結果 (Result)	限值 (Limit)
				No.1	
三氯乙烷 (Trichloroethylene) (CAS No.: 79-01-6)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
1,3-二氯丙烷 (1,3-Dichloropropane) (CAS No.: 142-28-9)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
氯仿 (Chloroform) (CAS No.: 67-66-3)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
1,2,3-三氯丙烷 (1,2,3-Trichloropropane) (CAS No.: 96-18-4)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
溴氯甲烷 (Bromochloromethan) (CAS No.: 74-97-5)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	n.d.	-
六氟化硫 (Sulfur hexafluoride) (CAS No.: 2551-62-4)	參考US EPA 5021A: 2014 · 以氣相層析儀/質譜儀分析。(With reference to US EPA 5021A: 2014, analysis was performed by GC/MS.)	mg/kg	1	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.	-

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com.tw/terms-of-service> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com.tw/terms-of-service>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

測試報告

Test Report

號碼(No.): ETR23A03343

日期(Date): 26-Oct-2023

頁數(Page): 29 of 45

MAGNETICS DIVISION OF SPANG & COMPANY
110 DELTA DRIVE PITTSBURGH, PENNSYLVANIA USA 15238

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. **= 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. (#2) =
 - a. 當六價鉻結果大於0.13 $\mu\text{g}/\text{cm}^2$ · 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 $\mu\text{g}/\text{cm}^2$. 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 $\mu\text{g}/\text{cm}^2$) · 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 $\mu\text{g}/\text{cm}^2$). The coating is considered a non-Cr(VI) based coating)
 - c. 當六價鉻結果介於 0.10 及 0.13 $\mu\text{g}/\text{cm}^2$ 時 · 無法確定塗層是否含有六價鉻。(The result between 0.10 $\mu\text{g}/\text{cm}^2$ and 0.13 $\mu\text{g}/\text{cm}^2$ is considered to be inconclusive - unavoidable coating variations may influence the determination.)
9. 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.)

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com.tw/terms-of-service> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com.tw/terms-of-service>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

測試報告

Test Report

號碼(No.): ETR23A03343

日期(Date): 26-Oct-2023

頁數(Page): 30 of 45

MAGNETICS DIVISION OF SPANG & COMPANY
110 DELTA DRIVE PITTSBURGH, PENNSYLVANIA USA 15238

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.))

物質濃度分類 (Classification of Substance Concentration)	物質名稱 (Substance Name)	CAS No.
全氟辛烷磺酸及其鹽類 Perfluorooctane sulfonates and its salts (PFOS and its salts) (CAS No.: 1763-23-1 and its salts)	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 ₂ H ₅) ₄) Perfluorooctanesulfonic acid, tetraethylammonium salt (PFOS-N(C ₂ H ₅) ₄)	56773-42-3
	全氟辛基磺酸二癸二甲基銨 (PFOS-DDA) N-decyl-N,N-dimethyldecyl-1-aminium 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptafluorooctane-1-sulfonate (PFOS-DDA)	251099-16-8
	全氟辛基磺酰氟 (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

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com.tw/terms-of-service> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com.tw/terms-of-service>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

測試報告

Test Report

號碼(No.): ETR23A03343

日期(Date): 26-Oct-2023

頁數(Page): 31 of 45

MAGNETICS DIVISION OF SPANG & COMPANY

110 DELTA DRIVE PITTSBURGH, PENNSYLVANIA USA 15238

物質濃度分類 (Classification of Substance Concentration)	物質名稱 (Substance Name)	CAS No.
全氟辛酸及其鹽類 Perfluorooctanoic acid and its salts (PFOA and its salts) (CAS No.: 335-67-1 and its salts)	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 perfluorooctanoate (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

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com.tw/terms-of-service> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com.tw/terms-of-service>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

測試報告

Test Report

號碼(No.): ETR23A03343

日期(Date): 26-Oct-2023

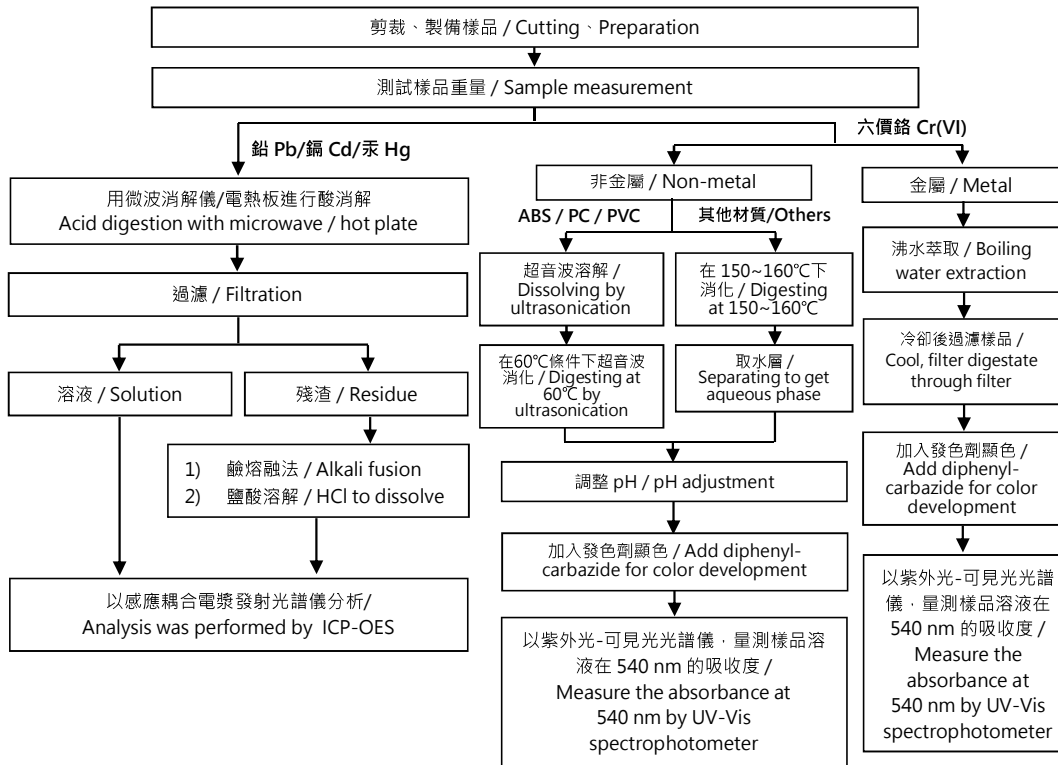
頁數(Page): 32 of 45

MAGNETICS DIVISION OF SPANG & COMPANY
110 DELTA DRIVE PITTSBURGH, PENNSYLVANIA USA 15238

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.
(Cr⁶⁺ test method excluded)



This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com.tw/terms-of-service> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com.tw/terms-of-service>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

測試報告

Test Report

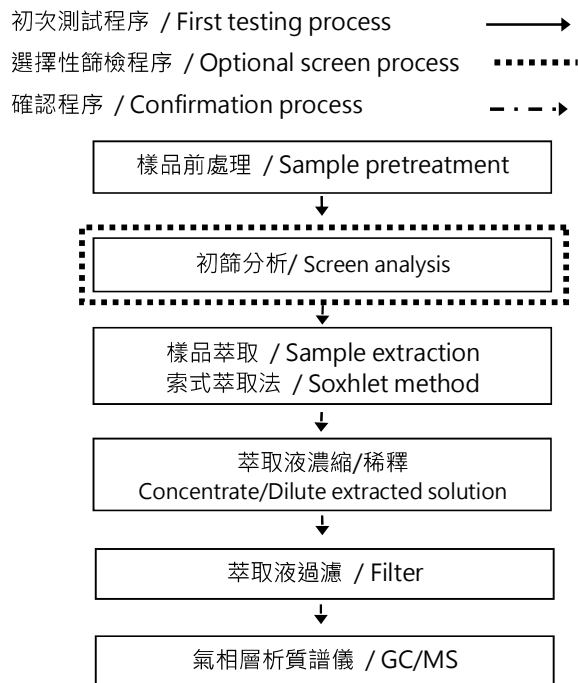
號碼(No.): ETR23A03343

日期(Date): 26-Oct-2023

頁數(Page): 33 of 45

MAGNETICS DIVISION OF SPANG & COMPANY
110 DELTA DRIVE PITTSBURGH, PENNSYLVANIA USA 15238

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



This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com.tw/terms-of-service> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com.tw/terms-of-service>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

測試報告

Test Report

號碼(No.): ETR23A03343

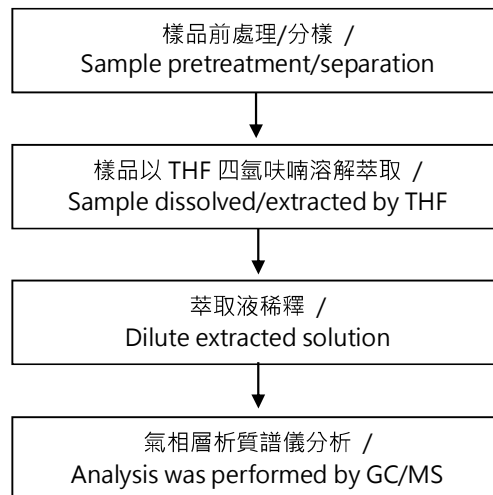
日期(Date): 26-Oct-2023

頁數(Page): 34 of 45

MAGNETICS DIVISION OF SPANG & COMPANY
110 DELTA DRIVE PITTSBURGH, PENNSYLVANIA USA 15238

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

【測試方法/Test method: IEC 62321-8】



This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com.tw/terms-of-service> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com.tw/terms-of-service>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

測試報告

Test Report

號碼(No.): ETR23A03343

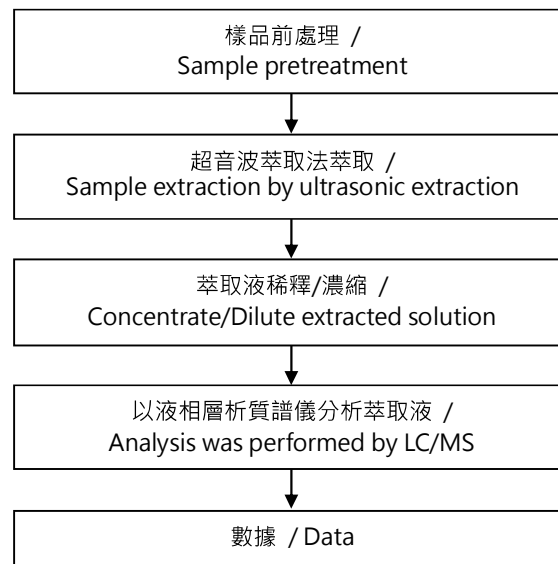
日期(Date): 26-Oct-2023

頁數(Page): 35 of 45

MAGNETICS DIVISION OF SPANG & COMPANY

110 DELTA DRIVE PITTSBURGH, PENNSYLVANIA USA 15238

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



This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com.tw/terms-of-service> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com.tw/terms-of-service>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

測試報告

Test Report

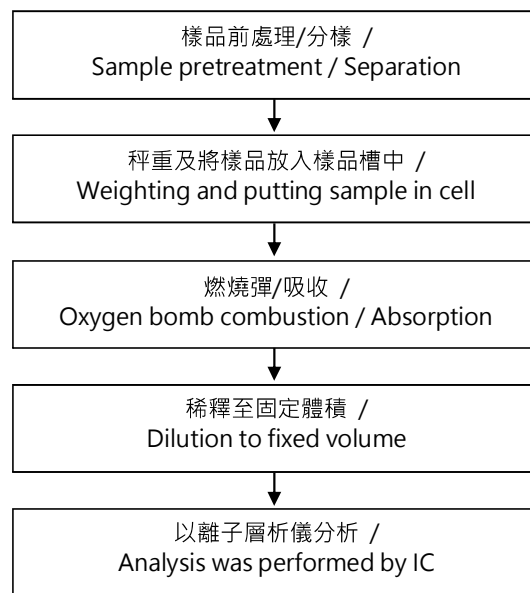
號碼(No.): ETR23A03343

日期(Date): 26-Oct-2023

頁數(Page): 36 of 45

MAGNETICS DIVISION OF SPANG & COMPANY
110 DELTA DRIVE PITTSBURGH, PENNSYLVANIA USA 15238

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



This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com.tw/terms-of-service> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com.tw/terms-of-service>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

測試報告

Test Report

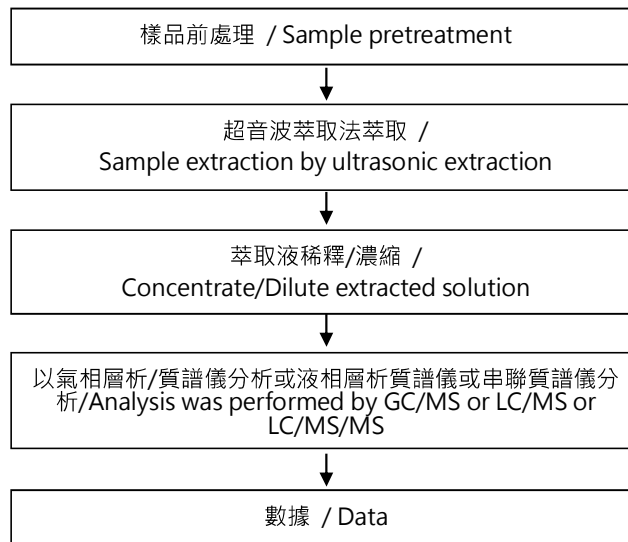
號碼(No.): ETR23A03343

日期(Date): 26-Oct-2023

頁數(Page): 37 of 45

MAGNETICS DIVISION OF SPANG & COMPANY
110 DELTA DRIVE PITTSBURGH, PENNSYLVANIA USA 15238

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.)



This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com.tw/terms-of-service> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com.tw/terms-of-service>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

測試報告

Test Report

號碼(No.): ETR23A03343

日期(Date): 26-Oct-2023

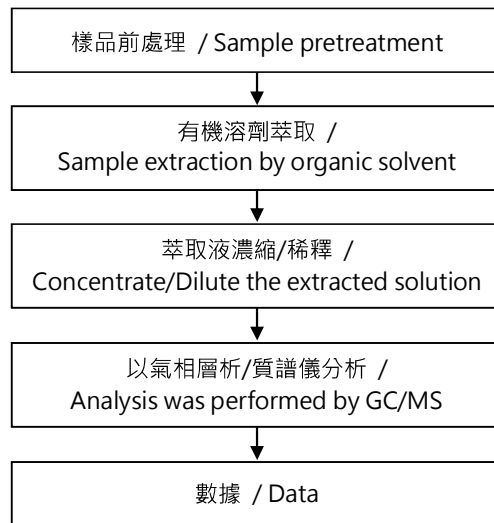
頁數(Page): 38 of 45

MAGNETICS DIVISION OF SPANG & COMPANY
110 DELTA DRIVE PITTSBURGH, PENNSYLVANIA USA 15238

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



This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com.tw/terms-of-service> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com.tw/terms-of-service>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

測試報告

Test Report

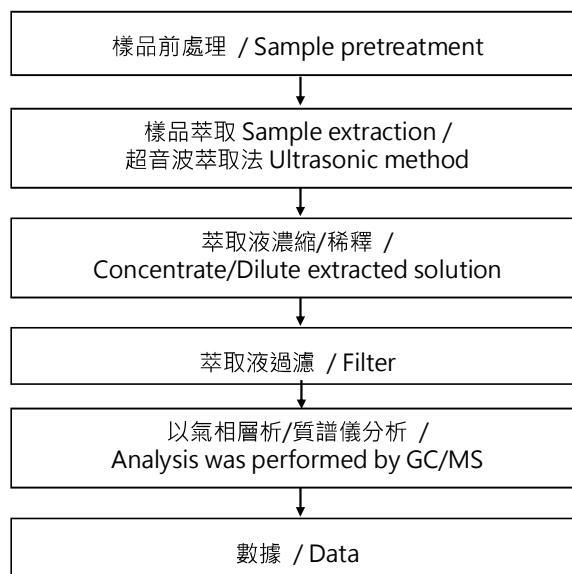
號碼(No.): ETR23A03343

日期(Date): 26-Oct-2023

頁數(Page): 39 of 45

MAGNETICS DIVISION OF SPANG & COMPANY
110 DELTA DRIVE PITTSBURGH, PENNSYLVANIA USA 15238

富馬酸二甲酯分析流程圖 / Analytical flow chart - Dimethyl Fumarate



This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com.tw/terms-of-service> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com.tw/terms-of-service>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

測試報告

Test Report

號碼(No.): ETR23A03343

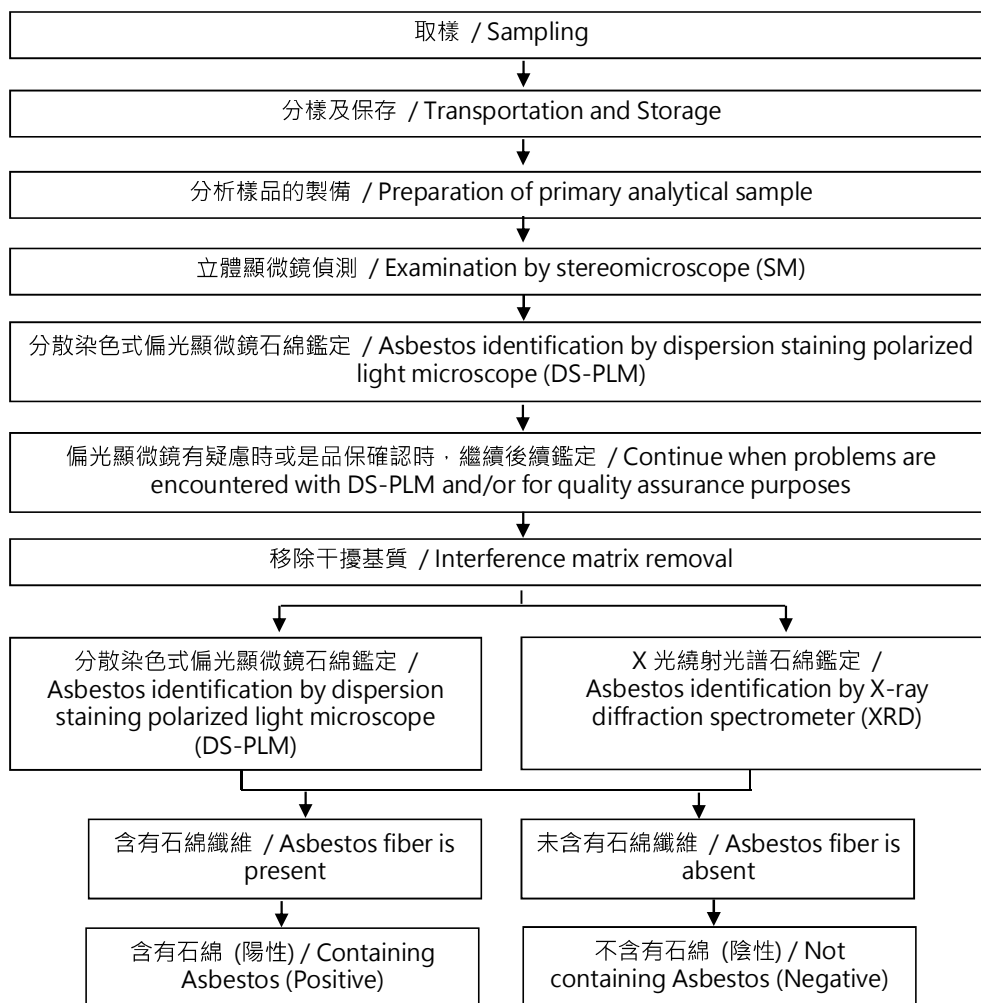
日期(Date): 26-Oct-2023

頁數(Page): 40 of 45

MAGNETICS DIVISION OF SPANG & COMPANY
110 DELTA DRIVE PITTSBURGH, PENNSYLVANIA USA 15238

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

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



This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com.tw/terms-of-service> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com.tw/terms-of-service>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

測試報告

Test Report

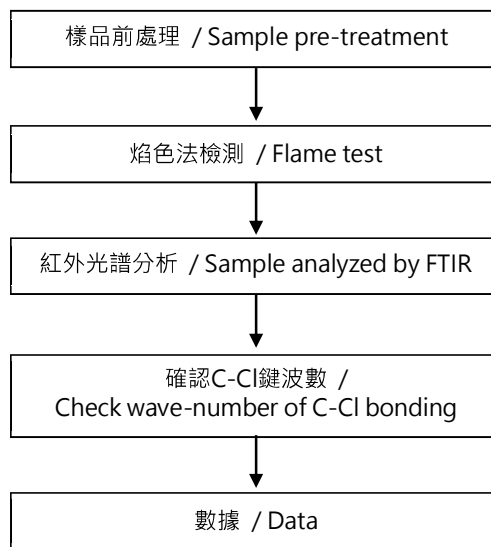
號碼(No.): ETR23A03343

日期(Date): 26-Oct-2023

頁數(Page): 41 of 45

MAGNETICS DIVISION OF SPANG & COMPANY
110 DELTA DRIVE PITTSBURGH, PENNSYLVANIA USA 15238

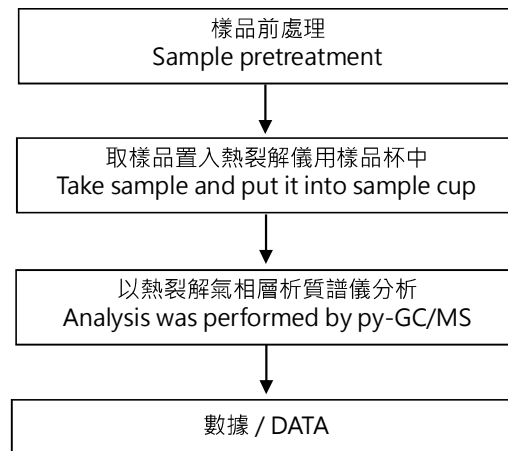
聚氯乙烯物質判定分析流程圖 / Analysis flow chart - PVC



This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com.tw/terms-of-service> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com.tw/terms-of-service>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

MAGNETICS DIVISION OF SPANG & COMPANY
110 DELTA DRIVE PITTSBURGH, PENNSYLVANIA USA 15238

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



This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com.tw/terms-of-service> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com.tw/terms-of-service>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

測試報告

Test Report

號碼(No.): ETR23A03343

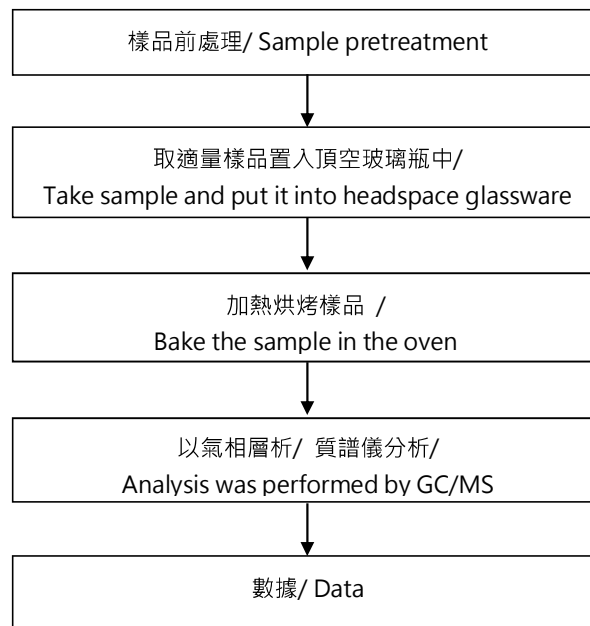
日期(Date): 26-Oct-2023

頁數(Page): 43 of 45

MAGNETICS DIVISION OF SPANG & COMPANY
110 DELTA DRIVE PITTSBURGH, PENNSYLVANIA USA 15238

揮發性有機化合物分析流程圖/ Analytical flow chart of volatile organic compounds (VOCs)

【參考方法/ Reference method : US EPA 5021A】



This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com.tw/terms-of-service> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com.tw/terms-of-service>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

測試報告

Test Report

號碼(No.): ETR23A03343

日期(Date): 26-Oct-2023

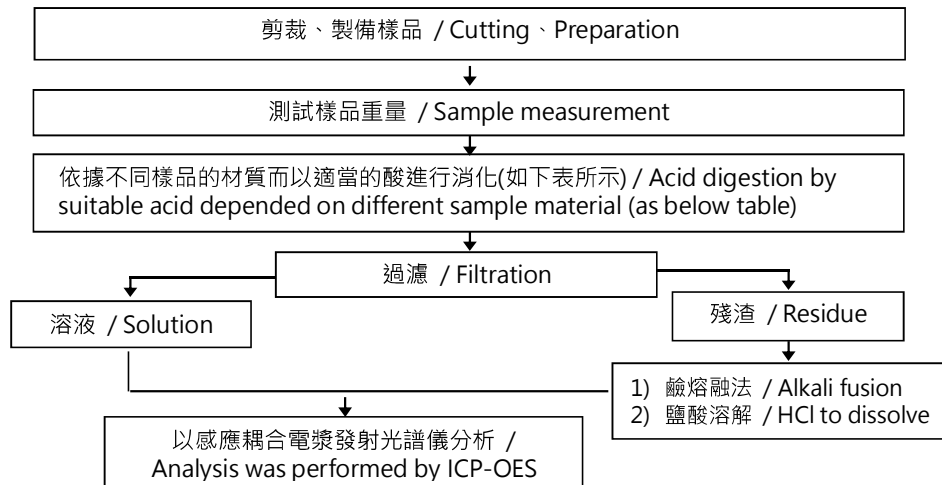
頁數(Page): 44 of 45

MAGNETICS DIVISION OF SPANG & COMPANY
110 DELTA DRIVE PITTSBURGH, PENNSYLVANIA USA 15238

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 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

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com.tw/terms-of-service> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com.tw/terms-of-service>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

測試報告

Test Report

號碼(No.): ETR23A03343

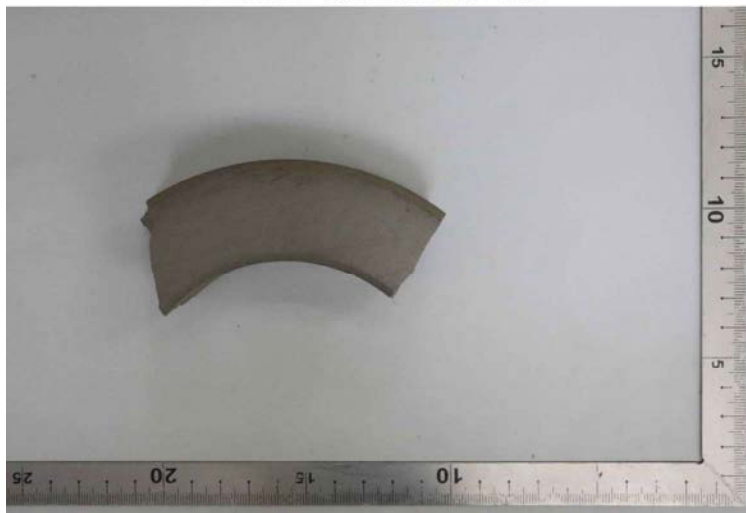
日期(Date): 26-Oct-2023

頁數(Page): 45 of 45

MAGNETICS DIVISION OF SPANG & COMPANY
110 DELTA DRIVE PITTSBURGH, PENNSYLVANIA USA 15238

* 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.)

ETR23A03343



** 報告結尾 (End of Report) **

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com.tw/terms-of-service> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <https://www.sgs.com.tw/terms-of-service>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.