

測試報告

號碼(No.) : CE/2017/72008E

日期(Date) : 2018/03/09

頁數(Page): 1 of 56

Test Report

薩摩亞商史巴克電子有限公司台灣分公司

SPARKTEK TECHNOLOGY CO., LTD. TAIWAN BRANCH

新北市中和區建康路79號2F

2F., NO. 79, JIANKANG RD., ZHONGHE DIST., NEW TAIPEI CITY 23587, TAIWAN



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

樣品名稱(Sample Description) : DIODES
樣品型號(Style/Item No.) : DO-41, DO-15, DO-201, DO-27, R6
收件日期(Sample Receiving Date) : 2017/07/10
測試期間(Testing Period) : 2017/07/10 TO 2017/07/24

=====
測試結果(Test Results) : 請參閱下一頁 (Please refer to following pages).


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



This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Termse-Documents.aspx>. 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

號碼(No.) : CE/2017/72008E

日期(Date) : 2018/03/09

頁數(Page): 2 of 56

Test Report

薩摩亞商史巴克電子有限公司台灣分公司

SPARKTEK TECHNOLOGY CO., LTD. TAIWAN BRANCH

新北市中和區建康路79號2F

2F., NO. 79, JIANKANG RD., ZHONGHE DIST., NEW TAIPEI CITY 23587, TAIWAN



測試結果(Test Results)

測試部位(PART NAME)No.1 : 整體混測 (MIXED ALL PARTS)

測試項目 (Test Items)	單位 (Unit)	測試方法 (Method)	方法偵測 極限值 (MDL)	結果 (Result)
				No. 1
鎘 / Cadmium (Cd)	mg/kg	參考IEC 62321-5 (2013), 以感應耦合電漿原子發射光譜儀檢測. / With reference to IEC 62321-5 (2013) and performed by ICP-AES.	2	n. d.
鉛 / Lead (Pb)	mg/kg		2	7190
汞 / Mercury (Hg)	mg/kg	參考IEC 62321-4 (2013), 以感應耦合電漿原子發射光譜儀檢測. / With reference to IEC 62321-4 (2013) and performed by ICP-AES.	2	n. d.
六價鉻 / Hexavalent Chromium Cr(VI) (◆)	mg/kg	參考IEC 62321-7-2 (2017), 以UV-VIS 檢測; 參考IEC 62321-5 (2013), 以 ICP-AES 檢測. / With reference to IEC 62321-7-2 (2017) and performed by UV-VIS. ; With reference to IEC 62321-5 (2013) and performed by ICP-AES.	8	n. d.
多溴聯苯總和 / Sum of PBBs	mg/kg	參考IEC 62321-6 (2015), 以氣相層析 / 質譜儀檢測. / With reference to IEC 62321-6 (2015) and performed by GC/MS.	-	n. d.
一溴聯苯 / Monobromobiphenyl	mg/kg		5	n. d.
二溴聯苯 / Dibromobiphenyl	mg/kg		5	n. d.
三溴聯苯 / Tribromobiphenyl	mg/kg		5	n. d.
四溴聯苯 / Tetrabromobiphenyl	mg/kg		5	n. d.
五溴聯苯 / Pentabromobiphenyl	mg/kg		5	n. d.
六溴聯苯 / Hexabromobiphenyl	mg/kg		5	n. d.
七溴聯苯 / Heptabromobiphenyl	mg/kg		5	n. d.
八溴聯苯 / Octabromobiphenyl	mg/kg		5	n. d.
九溴聯苯 / Nonabromobiphenyl	mg/kg		5	n. d.
十溴聯苯 / Decabromobiphenyl	mg/kg	5	n. d.	

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Termse-Document.aspx>. 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

號碼(No.) : CE/2017/72008E

日期(Date) : 2018/03/09

頁數(Page): 3 of 56

Test Report

薩摩亞商史巴克電子有限公司台灣分公司

SPARKTEK TECHNOLOGY CO., LTD. TAIWAN BRANCH

新北市中和區建康路79號2F

2F., NO. 79, JIANKANG RD., ZHONGHE DIST., NEW TAIPEI CITY 23587, TAIWAN



測試項目 (Test Items)	單位 (Unit)	測試方法 (Method)	方法偵測 極限值 (MDL)	結果 (Result)
				No. 1
多溴聯苯醚總和 / Sum of PBDEs	mg/kg	參考IEC 62321-6 (2015), 以氣相層析/質譜儀檢測. / With reference to IEC 62321-6 (2015) and performed by GC/MS.	-	n. d.
一溴聯苯醚 / Monobromodiphenyl ether	mg/kg		5	n. d.
二溴聯苯醚 / Dibromodiphenyl ether	mg/kg		5	n. d.
三溴聯苯醚 / Tribromodiphenyl ether	mg/kg		5	n. d.
四溴聯苯醚 / Tetrabromodiphenyl ether	mg/kg		5	n. d.
五溴聯苯醚 / Pentabromodiphenyl ether	mg/kg		5	n. d.
六溴聯苯醚 / Hexabromodiphenyl ether	mg/kg		5	n. d.
七溴聯苯醚 / Heptabromodiphenyl ether	mg/kg		5	n. d.
八溴聯苯醚 / Octabromodiphenyl ether	mg/kg		5	n. d.
九溴聯苯醚 / Nonabromodiphenyl ether	mg/kg		5	n. d.
十溴聯苯醚 / Decabromodiphenyl ether	mg/kg	5	n. d.	
多氯聯苯 / Polychlorinated Biphenyls (PCBs) (CAS No. : 1336-36-3)	mg/kg	參考US EPA 3550C (2007), 以氣相層析/質譜儀檢測. / With reference to US EPA 3550C (2007). Analysis was performed by GC/MS.	0.5	n. d.
多氯萘 / Polychlorinated Naphthalene (PCNs)	mg/kg	參考US EPA 3550C (2007), 以氣相層析/質譜儀檢測. / With reference to US EPA 3550C (2007). Analysis was performed by GC/MS.	5	n. d.
多氯三聯苯 / Polychlorinated Terphenyls (PCTs)	mg/kg	參考US EPA 3550C (2007), 以氣相層析/質譜儀檢測. / With reference to US EPA 3550C (2007). Analysis was performed by GC/MS.	0.5	n. d.
短鏈氯化石蠟 / Alkanes, C10-13, chloro (Short Chain Chlorinated Paraffins) (CAS No. : 85535-84-8)	mg/kg	參考US EPA 3550C (2007), 以氣相層析/質譜儀檢測. / With reference to US EPA 3550C (2007). Analysis was performed by GC/MS.	100	n. d.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Termse-Document.aspx>. 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

號碼(No.) : CE/2017/72008E

日期(Date) : 2018/03/09

頁數(Page): 4 of 56

Test Report

薩摩亞商史巴克電子有限公司台灣分公司

SPARKTEK TECHNOLOGY CO., LTD. TAIWAN BRANCH

新北市中和區建康路79號2F

2F., NO. 79, JIANKANG RD., ZHONGHE DIST., NEW TAIPEI CITY 23587, TAIWAN



測試項目 (Test Items)	單位 (Unit)	測試方法 (Method)	方法偵測 極限值 (MDL)	結果 (Result)
				No. 1
甲醛 / Formaldehyde (CAS No. : 50-00-0)	mg/kg	參考ISO 17226-1(2008), 以高效液相層析儀/二極體陣列偵測器檢測. / With reference to ISO 17226-1(2008). Analysis was performed by HPLC/DAD.	3	n. d.
聚氯乙烯 / PVC	**	以紅外光譜分析及焰色法檢測. / Analysis was performed by FTIR and FLAME Test.	-	Negative
鈹 / Beryllium (Be)	mg/kg	參考US EPA 3052 (1996), 以感應耦合電漿原子發射光譜儀檢測. / With reference to US EPA 3052 (1996). Analysis was performed by ICP-AES.	2	n. d.
氧化鈹 / Beryllium oxide (BeO)**	mg/kg	參考US EPA 3052 (1996), 以感應耦合電漿原子發射光譜儀檢測. / With reference to US EPA 3052 (1996). Analysis was performed by ICP-AES. **	-	n. d.
銻 / Antimony (Sb)	mg/kg	參考US EPA 3052 (1996), 以感應耦合電漿原子發射光譜儀檢測. / With reference to US EPA 3052 (1996). Analysis was performed by ICP-AES.	2	n. d.
砷 / Arsenic (As)	mg/kg	參考US EPA 3052 (1996), 以感應耦合電漿原子發射光譜儀檢測. / With reference to US EPA 3052 (1996). Analysis was performed by ICP-AES.	2	n. d.
五氧化二砷 / Diarsenic pentoxide** (CAS No. : 1303-28-2)	mg/kg	參考US EPA 3052 (1996), 以感應耦合電漿原子發射光譜儀檢測. / With reference to US EPA 3052 (1996). Analyzed by ICP-AES. **	-	n. d.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Termse-Documents.aspx>. 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

號碼(No.) : CE/2017/72008E

日期(Date) : 2018/03/09

頁數(Page): 5 of 56

Test Report

薩摩亞商史巴克電子有限公司台灣分公司

SPARKTEK TECHNOLOGY CO., LTD. TAIWAN BRANCH

新北市中和區建康路79號2F

2F., NO. 79, JIANKANG RD., ZHONGHE DIST., NEW TAIPEI CITY 23587, TAIWAN



測試項目 (Test Items)	單位 (Unit)	測試方法 (Method)	方法偵測 極限值 (MDL)	結果 (Result)
				No. 1
三氧化二砷 / Diarsenic trioxide*** (CAS No. : 1327-53-3)	mg/kg	參考US EPA 3052 (1996), 以感應耦合 電漿原子發射光譜儀檢測. / With reference to US EPA 3052 (1996). Analyzed by ICP-AES.***	-	n. d.
全氟辛烷磺酸 / Perfluorooctane sulfonates (PFOS-Acid, Metal Salt, Amide)	mg/kg	參考US EPA 3550C (2007), 以液相層 析/質譜儀檢測. / With reference to US EPA 3550C (2007). Analysis was performed by LC/MS.	10	n. d.
全氟辛酸 / PFOA (CAS No. : 335-67-1)	mg/kg	參考US EPA 3550C (2007), 以液相層 析/質譜儀檢測. / With reference to US EPA 3550C (2007). Analysis was performed by LC/MS.	10	n. d.
二氯化鈷 / Cobalt dichloride (CAS No. : 7646-79-9)	mg/kg	參考SGS內部方法RSTS-EE-SVHC-007, 以感應耦合電漿原子發射光譜儀檢測. / SGS In-House method-RSTS-EE- SVHC-007. Analyzed by ICP-AES.	50	n. d.
2-[2-羥基-3',5'-二叔丁基苯基]-苯並 三唑 (紫外線吸收劑320) / 2- benzotriazol-2-yl-4,6-di-tert- butylphenol (UV-320) (CAS No. : 3846- 71-7)	mg/kg	參考US EPA 3550C (2007), 以氣相層 析/質譜儀檢測. / With reference to US EPA 3550C (2007). Analysis was performed by GC/MS.	5	n. d.
六氟化硫 / Sulfur Hexafluoride (SF6) (CAS No. : 2551-62-4)	mg/kg	參考US EPA 5021A (2014), 以氣相層 析/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.
富馬酸二甲酯 / Dimethyl Fumarate (CAS No. : 624-49-7)	mg/kg	參考US EPA 3550C (2007), 以氣相層 析/質譜儀檢測. / With reference to US EPA 3550C (2007). Analysis was performed by GC/MS.	0.1	n. d.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Termse-Documents.aspx>. 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

號碼(No.) : CE/2017/72008E

日期(Date) : 2018/03/09

頁數(Page): 6 of 56

Test Report

薩摩亞商史巴克電子有限公司台灣分公司

SPARKTEK TECHNOLOGY CO., LTD. TAIWAN BRANCH

新北市中和區建康路79號2F

2F., NO. 79, JIANKANG RD., ZHONGHE DIST., NEW TAIPEI CITY 23587, TAIWAN



測試項目 (Test Items)	單位 (Unit)	測試方法 (Method)	方法偵測 極限值 (MDL)	結果 (Result)
				No. 1
磷酸三(2-氯乙基)酯 / Tris (2-chloroethyl) phosphate (TCEP) (CAS No. : 115-96-8)	mg/kg	參考US EPA 3550C (2007), 以氣相層析/質譜儀檢測. / With reference to US EPA 3550C (2007). Analysis was performed by GC/MS.	5	n. d.
磷酸三(1-氯-2-丙基)酯 / Tris(1-chloro-2-propyl) phosphate (TCPP) (CAS No. : 13674-84-5)	mg/kg	參考US EPA 3550C (2007), 以氣相層析/質譜儀檢測. / With reference to US EPA 3550C (2007). Analysis was performed by GC/MS.	5	n. d.
磷酸三(1,3-二氯異丙基)酯 / Tris(1,3-dichloro-2-propyl)phosphate (TDCPP) (CAS No. : 13674-87-8)	mg/kg	參考US EPA 3550C (2007), 以氣相層析/質譜儀檢測. / With reference to US EPA 3550C (2007). Analysis was performed by GC/MS.	5	n. d.
六溴環十二烷及所有主要被辨別出的異構物 / Hexabromocyclododecane (HBCDD) and all major diastereoisomers identified (α -HBCDD, β -HBCDD, γ -HBCDD) (CAS No. : 25637-99-4 and 3194-55-6 (134237-51-7, 134237-50-6, 134237-52-8))	mg/kg	參考IEC 62321 (2008), 以氣相層析/質譜儀檢測. / With reference to IEC 62321 (2008). Analysis was performed by GC/MS.	5	n. d.
鹵素(溴) / Halogen-Bromine (Br) (CAS No. : 10097-32-2)	mg/kg	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.	50	n. d.
鹵素(氯) / Halogen-Chlorine (Cl) (CAS No. : 22537-15-1)	mg/kg		50	65.9
過氯酸鹽 / Perchlorate (CAS No. : 14797-73-0)	mg/kg	以離子層析儀檢測. / Analysis was performed by IC.	0.006	n. d.
N-苯基苯胺與苯乙烯和2,4,4-三甲基戊烯的反應物 / Benzenamine, N-phenyl-, reaction products with styrene and 2,4,4-trimethylpentene (BNST) (CAS No. : 68921-45-9)	mg/kg	參考US EPA 3550C (2007), 以氣相層析/質譜儀檢測. / With reference to US EPA 3550C (2007). Analysis was performed by GC/MS.	100	n. d.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Termse-Document.aspx>. 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

號碼(No.) : CE/2017/72008E

日期(Date) : 2018/03/09

頁數(Page): 7 of 56

Test Report

薩摩亞商史巴克電子有限公司台灣分公司

SPARKTEK TECHNOLOGY CO., LTD. TAIWAN BRANCH

新北市中和區建康路79號2F

2F., NO. 79, JIANKANG RD., ZHONGHE DIST., NEW TAIPEI CITY 23587, TAIWAN



測試項目 (Test Items)	單位 (Unit)	測試方法 (Method)	方法偵測 極限值 (MDL)	結果 (Result)
				No. 1
鄰苯二甲酸丁苯甲酯 / BBP (Butyl Benzyl phthalate) (CAS No. : 85-68-7)	mg/kg	參考IEC 62321-8 (2017), 以氣相層析儀/質譜儀檢測. / With reference to IEC 62321-8 (2017). Analysis was performed by GC/MS.	50	n. d.
鄰苯二甲酸二丁酯 / DBP (Dibutyl phthalate) (CAS No. : 84-74-2)	mg/kg		50	n. d.
鄰苯二甲酸二(2-乙基己基)酯 / DEHP (Di-(2-ethylhexyl) phthalate) (CAS No. : 117-81-7)	mg/kg		50	n. d.
鄰苯二甲酸二異丁酯 / DIBP (Di-isobutyl phthalate) (CAS No. : 84-69-5)	mg/kg		50	n. d.
鄰苯二甲酸二異癸酯 / DIDP (Di-isodecyl phthalate) (CAS No. : 26761-40-0; 68515-49-1)	mg/kg		50	n. d.
鄰苯二甲酸二異壬酯 / DINP (Di-isononyl phthalate) (CAS No. : 28553-12-0; 68515-48-0)	mg/kg		50	n. d.
鄰苯二甲酸二正辛酯 / DNOP (Di-n-octyl phthalate) (CAS No. : 117-84-0)	mg/kg		50	n. d.
鄰苯二甲酸二正己酯 / DNHP (Di-n-hexyl phthalate) (CAS No. : 84-75-3)	mg/kg		50	n. d.
放射性物質 / Radioactive Substances	μSv/hour		蓋革計數器 (Geiger counter)	-
紅磷 / Red phosphorus	**	以熱裂解-氣相層析/質譜儀分析. / Analysis was performed by Pyrolyzer-GC/MS.	-	Negative
釋出鎳 / Nickel release	μg/cm ² /week	參考EN 12472:2005+A1:2009 / EN 1811:2011+ A1:2015, 以感應耦合電漿原子發射光譜儀分析. / With reference to EN 12472:2005+A1:2009 / EN 1811:2011+ A1:2015. Analysis was performed by ICP-AES.	0.1	n. d.
			0.1	n. d.
			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 <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Termse-Documents.aspx>. 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

號碼(No.) : CE/2017/72008E

日期(Date) : 2018/03/09

頁數(Page): 8 of 56

Test Report

薩摩亞商史巴克電子有限公司台灣分公司

SPARKTEK TECHNOLOGY CO., LTD. TAIWAN BRANCH

新北市中和區建康路79號2F

2F., NO. 79, JIANKANG RD., ZHONGHE DIST., NEW TAIPEI CITY 23587, TAIWAN



測試項目 (Test Items)	單位 (Unit)	測試方法 (Method)	方法偵測 極限值 (MDL)	結果 (Result)
				No. 1
三丁基錫 / Tributyl Tin (TBT)	mg/kg	參考ISO 17353 (2004), 以氣相層析儀 / 火焰光度偵測器檢測. / With reference to ISO 17353 (2004). Analysis was performed by GC/FPD.	0.03	n. d.
三苯基錫 / Triphenyl Tin (TphT)	mg/kg		0.03	n. d.
二丁基錫 / Dibutyl Tin (DBT)	mg/kg		0.03	n. d.
二辛基錫 / Dioctyl Tin (DOT)	mg/kg		0.03	n. d.
石棉 / Asbestos				
溫石棉(白石綿) / Chrysotile (CAS No. : 12001-29-5)	%	參考EPA 600/R-93/116 (1993) / 立體顯微鏡 (SM), 分散染色式偏光顯微鏡 (DS-PLM)及X光繞射光譜分析法 (XRD) / With reference to EPA 600/R-93/116 (1993). Analysis was performed by Stereo Microscope (SM), Dispersion Staining Polarized Light Microscope (DS-PLM) and X-ray Diffraction Spectrometer (XRD).	-	Negative
鐵石棉(褐石綿) / Amosite (CAS No. : 12172-73-5)	%		-	Negative
青石棉 / Crocidolite (CAS No. : 12001-28-4)	%		-	Negative
斜方角閃石綿 / Anthophyllite (CAS No. : 77536-67-5)	%		-	Negative
透閃石綿 / Tremolite (CAS No. : 77536-68-6)	%		-	Negative
陽起石綿 / Actinolite (CAS No. : 77536-66-4)	%	-	Negative	
偶氮 (AZO)				
1): 4-氨基二苯 / 4-AMINODIPHENYL (CAS No. : 92-67-1)	mg/kg	參考LFGB 82.02-2 (2013), 以氣相層析/質譜儀檢測. / With reference to LFGB 82.02-2 (2013). Analysis was performed by GC/MS.	3	n. d.
2): 聯苯胺 / BENZIDINE (CAS No. : 92-87-5)	mg/kg		3	n. d.
3): 4-氯鄰甲苯胺 / 4-CHLORO-O-TOLUIDINE (CAS No. : 95-69-2)	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 <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Termse-Documents.aspx>. 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

號碼(No.) : CE/2017/72008E

日期(Date) : 2018/03/09

頁數(Page): 9 of 56

Test Report

薩摩亞商史巴克電子有限公司台灣分公司

SPARKTEK TECHNOLOGY CO., LTD. TAIWAN BRANCH

新北市中和區建康路79號2F

2F., NO. 79, JIANKANG RD., ZHONGHE DIST., NEW TAIPEI CITY 23587, TAIWAN



測試項目 (Test Items)	單位 (Unit)	測試方法 (Method)	方法偵測 極限值 (MDL)	結果 (Result)
				No. 1
4): 2-萘胺 / 2-NAPHTHYLAMINE (CAS No. : 91-59-8)	mg/kg	參考LFGB 82.02-2 (2013), 以氣相層析/質譜儀檢測. / With reference to LFGB 82.02-2 (2013). Analysis was performed by GC/MS.	3	n. d.
5): 鄰氨基二甲基偶氮 / 0-AMINOAZOTOLUENE (CAS No. : 97-56-3)	mg/kg	參考LFGB 82.02-2 (2013), 以氣相層析/質譜儀檢測. / With reference to LFGB 82.02-2 (2013). Analysis was performed by GC/MS.	3	n. d.
6): 對硝基鄰甲苯胺 / 2-AMINO-4-NITROTOLUENE (CAS No. : 99-55-8)	mg/kg	參考LFGB 82.02-2 (2013), 以氣相層析/質譜儀檢測. / With reference to LFGB 82.02-2 (2013). Analysis was performed by GC/MS.	3	n. d.
7): 對氯苯胺 / P-CHLOROANILINE (CAS No. : 106-47-8)	mg/kg	參考LFGB 82.02-2 (2013), 以氣相層析/質譜儀檢測. / With reference to LFGB 82.02-2 (2013). Analysis was performed by GC/MS.	3	n. d.
8): 4-甲氧基-間苯二胺 / 2,4-DIAMINOANISOLE (CAS No. : 615-05-4)	mg/kg	參考LFGB 82.02-2 (2013), 以氣相層析/質譜儀檢測. / With reference to LFGB 82.02-2 (2013). Analysis was performed by GC/MS.	3	n. d.
9): 4,4'-二氨基二苯甲烷 / 4,4'-DIAMINODIPHENYLMETHANE (CAS No. : 101-77-9)	mg/kg	參考LFGB 82.02-2 (2013), 以氣相層析/質譜儀檢測. / With reference to LFGB 82.02-2 (2013). Analysis was performed by GC/MS.	3	n. d.
10): 3,3'-二氯聯苯胺 / 3,3'-DICHLOROBENZIDINE (CAS No. : 91-94-1)	mg/kg	參考LFGB 82.02-2 (2013), 以氣相層析/質譜儀檢測. / With reference to LFGB 82.02-2 (2013). Analysis was performed by GC/MS.	3	n. d.
11): 3,3'-二甲氧基聯苯胺 / 3,3'-DIMETHOXYBENZIDINE (CAS No. : 119-90-4)	mg/kg	參考LFGB 82.02-2 (2013), 以氣相層析/質譜儀檢測. / With reference to LFGB 82.02-2 (2013). Analysis was performed by GC/MS.	3	n. d.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Termse-Document.aspx>. 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

號碼(No.) : CE/2017/72008E

日期(Date) : 2018/03/09

頁數(Page): 10 of 56

Test Report

薩摩亞商史巴克電子有限公司台灣分公司

SPARKTEK TECHNOLOGY CO., LTD. TAIWAN BRANCH

新北市中和區建康路79號2F

2F., NO. 79, JIANKANG RD., ZHONGHE DIST., NEW TAIPEI CITY 23587, TAIWAN



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

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Termse-Documents.aspx>. 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

號碼(No.) : CE/2017/72008E

日期(Date) : 2018/03/09

頁數(Page): 11 of 56

Test Report

薩摩亞商史巴克電子有限公司台灣分公司

SPARKTEK TECHNOLOGY CO., LTD. TAIWAN BRANCH

新北市中和區建康路79號2F

2F., NO. 79, JIANKANG RD., ZHONGHE DIST., NEW TAIPEI CITY 23587, TAIWAN



測試項目 (Test Items)	單位 (Unit)	測試方法 (Method)	方法偵測 極限值 (MDL)	結果 (Result)
				No. 1
19): 2,4-二氨基甲苯 / 2,4-TOLUYLENEDIAMINE (CAS No. : 95-80-7)	mg/kg	參考LFGB 82.02-2 (2013), 以氣相層析/質譜儀檢測. / With reference to LFGB 82.02-2 (2013). Analysis was performed by GC/MS.	3	n. d.
20): 2,4,5-三甲基苯胺 / 2,4,5-TRIMETHYLANILINE (CAS No. : 137-17-7)	mg/kg	參考LFGB 82.02-2 (2013), 以氣相層析/質譜儀檢測. / With reference to LFGB 82.02-2 (2013). Analysis was performed by GC/MS.	3	n. d.
21): 鄰位甲氧基苯胺 / O-ANISIDINE (CAS No. : 90-04-0)	mg/kg	參考LFGB 82.02-2 (2013), 以氣相層析/質譜儀檢測. / With reference to LFGB 82.02-2 (2013). Analysis was performed by GC/MS.	3	n. d.
22): 對氨基偶氮苯 / 4-AMINOAZOBENZENE (CAS No. : 60-09-3)	mg/kg	參考LFGB 82.02-2 (2013), 以氣相層析/質譜儀檢測. / With reference to LFGB 82.02-2 (2013). Analysis was performed by GC/MS.	3	n. d.
23): 2,4-二甲基苯胺 / 2,4-XYLIDINE (CAS No. : 95-68-1)	mg/kg	參考LFGB 82.02-2 (2013), 以氣相層析/質譜儀檢測. / With reference to LFGB 82.02-2 (2013). Analysis was performed by GC/MS.	3	n. d.
24): 2,6-二甲基苯胺 / 2,6-XYLIDINE (CAS No. : 87-62-7)	mg/kg	參考LFGB 82.02-2 (2013), 以氣相層析/質譜儀檢測. / With reference to LFGB 82.02-2 (2013). Analysis was performed by GC/MS.	3	n. d.
氫氟碳化物 / HFCs (Hydrofluorocarbon)				
氫氟碳化物 (HFC)-23 (CHF ₃) (CAS No. : 75-46-7)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Termse-Documents.aspx>. 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

號碼(No.) : CE/2017/72008E

日期(Date) : 2018/03/09

頁數(Page): 12 of 56

Test Report

薩摩亞商史巴克電子有限公司台灣分公司

SPARKTEK TECHNOLOGY CO., LTD. TAIWAN BRANCH

新北市中和區建康路79號2F

2F., NO. 79, JIANKANG RD., ZHONGHE DIST., NEW TAIPEI CITY 23587, TAIWAN



測試項目 (Test Items)	單位 (Unit)	測試方法 (Method)	方法偵測 極限值 (MDL)	結果 (Result)
				No. 1
氫氟碳化物 (HFC)-32 (CH ₂ F ₂) (CAS No.: 75-10-5)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.
氫氟碳化物 (HFC)-41 (CH ₃ F) (CAS No.: 593-53-3)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.
氫氟碳化物 (HFC)-43-10mee (C ₅ H ₂ F ₁₀)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.
氫氟碳化物 (HFC)-125 (C ₂ H ₂ F ₅)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.
氫氟碳化物 (HFC)-134 (C ₂ H ₂ F ₄)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.
氫氟碳化物 (HFC)-134a (CH ₂ FCF ₃) (CAS No.: 811-97-2)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.
氫氟碳化物 (HFC)-143 (CH ₃ F ₃)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Termse-Documents.aspx>. 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

號碼(No.) : CE/2017/72008E

日期(Date) : 2018/03/09

頁數(Page): 13 of 56

Test Report

薩摩亞商史巴克電子有限公司台灣分公司

SPARKTEK TECHNOLOGY CO., LTD. TAIWAN BRANCH

新北市中和區建康路79號2F

2F., NO. 79, JIANKANG RD., ZHONGHE DIST., NEW TAIPEI CITY 23587, TAIWAN



測試項目 (Test Items)	單位 (Unit)	測試方法 (Method)	方法偵測 極限值 (MDL)	結果 (Result)
				No. 1
氫氟碳化物 (HFC)-143a (CH3F3)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.
氫氟碳化物 (HFC)-152a (C2H4F2) (CAS No.: 75-37-6)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.
氫氟碳化物 (HFC)-227ea (C3HF7) (CAS No.: 431-89-0)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.
氫氟碳化物 (HFC)-236fa (C3H2F6)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.
氫氟碳化物 (HFC)-236ea (C3H2F6) (CAS No.: 431-63-0)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.
氫氟碳化物 (HFC)-245ca (C3H3F5)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.
氫氟碳化物 (HFC)-245fa (C3H3F5)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Termse-Documents.aspx>. 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

號碼(No.) : CE/2017/72008E

日期(Date) : 2018/03/09

頁數(Page): 14 of 56

Test Report

薩摩亞商史巴克電子有限公司台灣分公司

SPARKTEK TECHNOLOGY CO., LTD. TAIWAN BRANCH

新北市中和區建康路79號2F

2F., NO. 79, JIANKANG RD., ZHONGHE DIST., NEW TAIPEI CITY 23587, TAIWAN



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

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Termse-Documents.aspx>. 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

號碼(No.) : CE/2017/72008E

日期(Date) : 2018/03/09

頁數(Page): 15 of 56

Test Report

薩摩亞商史巴克電子有限公司台灣分公司

SPARKTEK TECHNOLOGY CO., LTD. TAIWAN BRANCH

新北市中和區建康路79號2F

2F., NO. 79, JIANKANG RD., ZHONGHE DIST., NEW TAIPEI CITY 23587, TAIWAN



測試項目 (Test Items)	單位 (Unit)	測試方法 (Method)	方法偵測 極限值 (MDL)	結果 (Result)
				No. 1
全氟異丁烯 / perfluorisobutene (CAS No. : 382-21-8)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.
1,4-二氫八氟丁烷 / 1,4-dihydrooctafluorobutane (CAS No. : 377-36-6)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.
2-全氟甲基丁烷 / nonafluor-2-(trifluoromethyl)butane (CAS No. : 594-91-2)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.
全氟戊烷 / perfluoro-n-pentane (CAS No. : 678-26-2)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.
2-全氟甲基戊烷 / 2-perfluoromethylpentane (CAS No. : 355-04-4)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.
全氟己烷 / perfluorohexane (CAS No. : 355-42-0)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Termse-Documents.aspx>. 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

號碼(No.) : CE/2017/72008E

日期(Date) : 2018/03/09

頁數(Page): 16 of 56

Test Report

薩摩亞商史巴克電子有限公司台灣分公司

SPARKTEK TECHNOLOGY CO., LTD. TAIWAN BRANCH

新北市中和區建康路79號2F

2F., NO. 79, JIANKANG RD., ZHONGHE DIST., NEW TAIPEI CITY 23587, TAIWAN



測試項目 (Test Items)	單位 (Unit)	測試方法 (Method)	方法偵測 極限值 (MDL)	結果 (Result)
				No. 1
氟氯碳化物 / CFCs (Chlorofluorocarbons)				
Group I				
氟氯碳化物 (Chlorofluorocarbon)-11 (CAS No. : 75-69-4)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.
氟氯碳化物 (Chlorofluorocarbon)-12 (CAS No. : 75-71-8)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.
氟氯碳化物 (Chlorofluorocarbon)-113 (CAS No. : 76-13-1)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.
氟氯碳化物 (Chlorofluorocarbon)-114 (CAS No. : 76-14-2)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.
氟氯碳化物 (Chlorofluorocarbon)-115 (CAS No. : 76-15-3)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.
Group III				
氟氯碳化物 (Chlorofluorocarbon)-13 (CAS No. : 75-72-9)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Termse-Document.aspx>. 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

號碼(No.) : CE/2017/72008E

日期(Date) : 2018/03/09

頁數(Page): 17 of 56

Test Report

薩摩亞商史巴克電子有限公司台灣分公司

SPARKTEK TECHNOLOGY CO., LTD. TAIWAN BRANCH

新北市中和區建康路79號2F

2F., NO. 79, JIANKANG RD., ZHONGHE DIST., NEW TAIPEI CITY 23587, TAIWAN



測試項目 (Test Items)	單位 (Unit)	測試方法 (Method)	方法偵測 極限值 (MDL)	結果 (Result)
				No. 1
氟氯碳化物 (Chlorofluorocarbon)-111 (CAS No. : 354-56-3)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.
氟氯碳化物 (Chlorofluorocarbon)-112 (CAS No. : 76-12-0)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.
氟氯碳化物 (Chlorofluorocarbon)-211 (CAS No. : 422-78-6)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.
氟氯碳化物 (Chlorofluorocarbon)-212 (CAS No. : 3182-26-1)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.
氟氯碳化物 (Chlorofluorocarbon)-213 (CAS No. : 2354-06-5)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.
氟氯碳化物 (Chlorofluorocarbon)-214 (CAS No. : 29255-31-0)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.
氟氯碳化物 (Chlorofluorocarbon)-215 (CAS No. : 4259-43-2)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Termse-Documents.aspx>. 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

號碼(No.) : CE/2017/72008E

日期(Date) : 2018/03/09

頁數(Page): 18 of 56

Test Report

薩摩亞商史巴克電子有限公司台灣分公司

SPARKTEK TECHNOLOGY CO., LTD. TAIWAN BRANCH

新北市中和區建康路79號2F

2F., NO. 79, JIANKANG RD., ZHONGHE DIST., NEW TAIPEI CITY 23587, TAIWAN



測試項目 (Test Items)	單位 (Unit)	測試方法 (Method)	方法偵測 極限值 (MDL)	結果 (Result)
				No. 1
氟氯碳化物 (Chlorofluorocarbon)-216 (CAS No. : 661-97-2)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.
氟氯碳化物 (Chlorofluorocarbon)-217 (CAS No. : 422-86-6)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.
氟氯氫碳化物 / HCFCs (Hydrochlorofluorocarbons)				
氟氯氫碳化物 (HCFC)-21 (CAS No. : 75-43-4)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.
氟氯氫碳化物 (HCFC)-22 (CAS No. : 75-45-6)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.
氟氯氫碳化物 (HCFC)-31 (CAS No. : 593-70-4)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.
氟氯氫碳化物 (HCFC)-121 (CAS No. : 354-14-3)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.
氟氯氫碳化物 (HCFC)-122 (CAS No. : 354-21-2)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Termse-Documents.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained herein 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

號碼(No.) : CE/2017/72008E

日期(Date) : 2018/03/09

頁數(Page): 19 of 56

Test Report

薩摩亞商史巴克電子有限公司台灣分公司

SPARKTEK TECHNOLOGY CO., LTD. TAIWAN BRANCH

新北市中和區建康路79號2F

2F., NO. 79, JIANKANG RD., ZHONGHE DIST., NEW TAIPEI CITY 23587, TAIWAN



測試項目 (Test Items)	單位 (Unit)	測試方法 (Method)	方法偵測 極限值 (MDL)	結果 (Result)
				No. 1
氟氯氫碳化物 (HCFC)-123 (CAS No. : 306-83-2)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.
氟氯氫碳化物 (HCFC)-124 (CAS No. : 2837-89-0)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.
氟氯氫碳化物 (HCFC)-131 (CAS No. : 359-28-4)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.
氟氯氫碳化物 (HCFC)-132b (CAS No. : 1649-08-7)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.
氟氯氫碳化物 (HCFC)-133a (CAS No. : 75-88-7)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.
氟氯氫碳化物 (HCFC)-141b (CAS No. : 1717-00-6)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.
氟氯氫碳化物 (HCFC)-142b (CAS No. : 75-68-3)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-Document.aspx>. 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

號碼(No.) : CE/2017/72008E

日期(Date) : 2018/03/09

頁數(Page): 20 of 56

Test Report

薩摩亞商史巴克電子有限公司台灣分公司

SPARKTEK TECHNOLOGY CO., LTD. TAIWAN BRANCH

新北市中和區建康路79號2F

2F., NO. 79, JIANKANG RD., ZHONGHE DIST., NEW TAIPEI CITY 23587, TAIWAN



測試項目 (Test Items)	單位 (Unit)	測試方法 (Method)	方法偵測 極限值 (MDL)	結果 (Result)
				No. 1
氟氯氫碳化物 (HCFC)-221 (CAS No. : 422-26-4)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.
氟氯氫碳化物 (HCFC)-222 (CAS No. : 422-49-1)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.
氟氯氫碳化物 (HCFC)-223 (CAS No. : 422-52-6)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.
氟氯氫碳化物 (HCFC)-224 (CAS No. : 422-54-8)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.
氟氯氫碳化物 (HCFC)-225ca (CAS No. : 422-56-0)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.
氟氯氫碳化物 (HCFC)-225cb (CAS No. : 507-55-1)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.
氟氯氫碳化物 (HCFC)-226 (CAS No. : 431-87-8)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Termse-Documents.aspx>. 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

號碼(No.) : CE/2017/72008E

日期(Date) : 2018/03/09

頁數(Page): 21 of 56

Test Report

薩摩亞商史巴克電子有限公司台灣分公司

SPARKTEK TECHNOLOGY CO., LTD. TAIWAN BRANCH

新北市中和區建康路79號2F

2F., NO. 79, JIANKANG RD., ZHONGHE DIST., NEW TAIPEI CITY 23587, TAIWAN



測試項目 (Test Items)	單位 (Unit)	測試方法 (Method)	方法偵測 極限值 (MDL)	結果 (Result)
				No. 1
氟氯氫碳化物 (HCFC)-231 (CAS No. : 421-94-3)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.
氟氯氫碳化物 (HCFC)-232 (CAS No. : 460-89-9)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.
氟氯氫碳化物 (HCFC)-233 (CAS No. : 7125-84-0)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.
氟氯氫碳化物 (HCFC)-234 (CAS No. : 425-94-5)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.
氟氯氫碳化物 (HCFC)-235 (CAS No. : 460-92-4)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.
氟氯氫碳化物 (HCFC)-241 (CAS No. : 666-27-3)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.
氟氯氫碳化物 (HCFC)-242 (CAS No. : 460-63-9)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Termse-Documents.aspx>. 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

號碼(No.) : CE/2017/72008E

日期(Date) : 2018/03/09

頁數(Page): 22 of 56

Test Report

薩摩亞商史巴克電子有限公司台灣分公司

SPARKTEK TECHNOLOGY CO., LTD. TAIWAN BRANCH

新北市中和區建康路79號2F

2F., NO. 79, JIANKANG RD., ZHONGHE DIST., NEW TAIPEI CITY 23587, TAIWAN



測試項目 (Test Items)	單位 (Unit)	測試方法 (Method)	方法偵測 極限值 (MDL)	結果 (Result)
				No. 1
氟氯氫碳化物 (HCFC)-243 (CAS No. : 460-69-5)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.
氟氯氫碳化物 (HCFC)-244	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.
氟氯氫碳化物 (HCFC)-251 (CAS No. : 421-41-0)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.
氟氯氫碳化物 (HCFC)-252 (CAS No. : 819-00-1)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.
氟氯氫碳化物 (HCFC)-253 (CAS No. : 460-35-5)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.
氟氯氫碳化物 (HCFC)-261 (CAS No. : 420-97-3)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.
氟氯氫碳化物 (HCFC)-262 (CAS No. : 421-02-03)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Termse-Documents.aspx>. 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

號碼(No.) : CE/2017/72008E

日期(Date) : 2018/03/09

頁數(Page): 23 of 56

Test Report

薩摩亞商史巴克電子有限公司台灣分公司

SPARKTEK TECHNOLOGY CO., LTD. TAIWAN BRANCH

新北市中和區建康路79號2F

2F., NO. 79, JIANKANG RD., ZHONGHE DIST., NEW TAIPEI CITY 23587, TAIWAN



測試項目 (Test Items)	單位 (Unit)	測試方法 (Method)	方法偵測 極限值 (MDL)	結果 (Result)
				No. 1
氟氯氫碳化物 (HCFC)-271 (CAS No. : 430-55-7)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.
海龍 (Halons)				
海龍 (Halon)-1211 (CAS No. : 353-59-3)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.
海龍 (Halon)-1301 (CAS No. : 75-63-8)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.
海龍 (Halon)-2402 (CAS No. : 124-73-2)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.
溴甲烷 / Bromomethane (CAS No. : 74-83-9)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.
不完全鹵化氟溴化物 / HBFCs (Hydrobromofluorocarbons)				
不完全鹵化氟溴化物 (HBFC)-21B2 (CHFB ₂) (CAS No. : 1868-53-7)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Termse-Documents.aspx>. 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

號碼(No.) : CE/2017/72008E

日期(Date) : 2018/03/09

頁數(Page): 24 of 56

Test Report

薩摩亞商史巴克電子有限公司台灣分公司

SPARKTEK TECHNOLOGY CO., LTD. TAIWAN BRANCH

新北市中和區建康路79號2F

2F., NO. 79, JIANKANG RD., ZHONGHE DIST., NEW TAIPEI CITY 23587, TAIWAN



測試項目 (Test Items)	單位 (Unit)	測試方法 (Method)	方法偵測 極限值 (MDL)	結果 (Result)
				No. 1
不完全鹵化氟溴化物 (HBFC)-22B1 (CHF ₂ Br) (CAS No. : 1511-62-2)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.
不完全鹵化氟溴化物 (HBFC)-31B1 (CH ₂ FBr) (CAS No. : 373-52-4)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.
不完全鹵化氟溴化物 (HBFC)-121B4 (C ₂ HFBr ₄)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.
不完全鹵化氟溴化物 (HBFC)-122B3 (C ₂ HF ₂ Br ₃)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.
不完全鹵化氟溴化物 (HBFC)-123B2 (C ₂ HF ₃ Br ₂)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.
不完全鹵化氟溴化物 (HBFC)-124B1 (C ₂ HF ₄ Br)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.
不完全鹵化氟溴化物 (HBFC)-131B3 (C ₂ H ₂ FBr ₃)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-Document.aspx>. 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

號碼(No.) : CE/2017/72008E

日期(Date) : 2018/03/09

頁數(Page): 25 of 56

Test Report

薩摩亞商史巴克電子有限公司台灣分公司

SPARKTEK TECHNOLOGY CO., LTD. TAIWAN BRANCH

新北市中和區建康路79號2F

2F., NO. 79, JIANKANG RD., ZHONGHE DIST., NEW TAIPEI CITY 23587, TAIWAN



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

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Termse-Documents.aspx>. 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

號碼(No.) : CE/2017/72008E

日期(Date) : 2018/03/09

頁數(Page): 26 of 56

Test Report

薩摩亞商史巴克電子有限公司台灣分公司

SPARKTEK TECHNOLOGY CO., LTD. TAIWAN BRANCH

新北市中和區建康路79號2F

2F., NO. 79, JIANKANG RD., ZHONGHE DIST., NEW TAIPEI CITY 23587, TAIWAN



測試項目 (Test Items)	單位 (Unit)	測試方法 (Method)	方法偵測 極限值 (MDL)	結果 (Result)
				No. 1
不完全鹵化氟溴化物 (HBFC)-223B4 (C3HF3Br4)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.
不完全鹵化氟溴化物 (HBFC)-224B3 (C3HF4Br3)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.
不完全鹵化氟溴化物 (HBFC)-225B2 (C3HF5Br2)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.
不完全鹵化氟溴化物 (HBFC)-226B1 (C3HF6Br)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.
不完全鹵化氟溴化物 (HBFC)-231B5 (C3H2FBr5)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.
不完全鹵化氟溴化物 (HBFC)-232B4 (C3H2F2Br4)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.
不完全鹵化氟溴化物 (HBFC)-233B3 (C3H2F3Br3)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Termse-Documents.aspx>. 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

號碼(No.) : CE/2017/72008E

日期(Date) : 2018/03/09

頁數(Page): 27 of 56

Test Report

薩摩亞商史巴克電子有限公司台灣分公司

SPARKTEK TECHNOLOGY CO., LTD. TAIWAN BRANCH

新北市中和區建康路79號2F

2F., NO. 79, JIANKANG RD., ZHONGHE DIST., NEW TAIPEI CITY 23587, TAIWAN



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

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Termse-Documents.aspx>. 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

號碼(No.) : CE/2017/72008E

日期(Date) : 2018/03/09

頁數(Page): 28 of 56

Test Report

薩摩亞商史巴克電子有限公司台灣分公司

SPARKTEK TECHNOLOGY CO., LTD. TAIWAN BRANCH

新北市中和區建康路79號2F

2F., NO. 79, JIANKANG RD., ZHONGHE DIST., NEW TAIPEI CITY 23587, TAIWAN



測試項目 (Test Items)	單位 (Unit)	測試方法 (Method)	方法偵測 極限值 (MDL)	結果 (Result)
				No. 1
不完全鹵化氟溴化物 (HBFC)-252B2 (C3H4F2Br2)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.
不完全鹵化氟溴化物 (HBFC)-253B1 (C3H4F3Br)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.
不完全鹵化氟溴化物 (HBFC)-261B2 (C3H5FBr2)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.
不完全鹵化氟溴化物 (HBFC)-262B1 (C3H5F2Br)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.
不完全鹵化氟溴化物 (HBFC)-271B1 (C3H6FBr)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.
氯化碳氫化物 / CHCs (Chlorinate hydrocarbon)				
1, 1, 1, 2-四氯乙烷 / 1, 1, 1, 2-Tetrachloroethane (CAS No.: 630-20-6)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.
1, 1, 1-三氯乙烷 / 1, 1, 1-Trichloroethane (CAS No.: 71-55-6)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Termse-Documents.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained herein 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

號碼(No.) : CE/2017/72008E

日期(Date) : 2018/03/09

頁數(Page): 29 of 56

Test Report

薩摩亞商史巴克電子有限公司台灣分公司

SPARKTEK TECHNOLOGY CO., LTD. TAIWAN BRANCH

新北市中和區建康路79號2F

2F., NO. 79, JIANKANG RD., ZHONGHE DIST., NEW TAIPEI CITY 23587, TAIWAN



測試項目 (Test Items)	單位 (Unit)	測試方法 (Method)	方法偵測 極限值 (MDL)	結果 (Result)
				No. 1
1, 1, 2, 2-四氯乙烷 / 1, 1, 2, 2- Tetrachloroethane (CAS No. : 79-34-5)	mg/kg	參考US EPA 5021A (2014), 以氣相層 析/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.
1, 1, 2-三氯乙烷 / 1, 1, 2- Trichloroethane (CAS No. : 79-00-5)	mg/kg	參考US EPA 5021A (2014), 以氣相層 析/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.
1, 1-二氯乙烷 / 1, 1-Dichloroethane (CAS No. : 75-34-3)	mg/kg	參考US EPA 5021A (2014), 以氣相層 析/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.
1, 1-二氯乙烯 / 1, 1-Dichloroethene (CAS No. : 75-35-4)	mg/kg	參考US EPA 5021A (2014), 以氣相層 析/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.
1, 1-二氯丙烯 / 1, 1-Dichloropropene (CAS No. : 563-58-6)	mg/kg	參考US EPA 5021A (2014), 以氣相層 析/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.
1, 2, 3-三氯丙烷 / 1, 2, 3- Trichloropropane (CAS No. : 96-18-4)	mg/kg	參考US EPA 5021A (2014), 以氣相層 析/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.
1, 2-二氯乙烷 / 1, 2-Dichloroethane (CAS No. : 107-06-2)	mg/kg	參考US EPA 5021A (2014), 以氣相層 析/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Termse-Documents.aspx>. 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

號碼(No.) : CE/2017/72008E

日期(Date) : 2018/03/09

頁數(Page): 30 of 56

Test Report

薩摩亞商史巴克電子有限公司台灣分公司

SPARKTEK TECHNOLOGY CO., LTD. TAIWAN BRANCH

新北市中和區建康路79號2F

2F., NO. 79, JIANKANG RD., ZHONGHE DIST., NEW TAIPEI CITY 23587, TAIWAN



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

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Termse-Documents.aspx>. 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

號碼(No.) : CE/2017/72008E

日期(Date) : 2018/03/09

頁數(Page): 31 of 56

Test Report

薩摩亞商史巴克電子有限公司台灣分公司

SPARKTEK TECHNOLOGY CO., LTD. TAIWAN BRANCH

新北市中和區建康路79號2F

2F., NO. 79, JIANKANG RD., ZHONGHE DIST., NEW TAIPEI CITY 23587, TAIWAN



測試項目 (Test Items)	單位 (Unit)	測試方法 (Method)	方法偵測 極限值 (MDL)	結果 (Result)
				No. 1
順-1,2-二氯乙烯 / cis-1,2-Dichloroethene (CAS No.: 156-59-2)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.
順-1,3-二氯丙烯 / cis-1,3-Dichloropropene (CAS No.: 10061-01-5)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.
六氯丁二烯 / Hexachlorobutadiene (CAS No.: 87-68-3)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.
二氯甲烷 / Dichloromethane (CAS No.: 75-09-2)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.
四氯乙烯 / Tetrachloroethene (CAS No.: 127-18-4)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.
反-1,2-二氯乙烯 / trans-1,2-Dichloroethene (CAS No.: 156-60-5)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.
反-1,3-二氯丙烯 / trans-1,3-Dichloropropene (CAS No.: 10061-02-6)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.
三氯乙烯 / Trichloroethylene (CAS No.: 79-01-6)	mg/kg	參考US EPA 5021A (2014), 以氣相層析/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	1	n. d.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Termse-Documents.aspx>. 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

號碼(No.) : CE/2017/72008E

日期(Date) : 2018/03/09

頁數(Page): 32 of 56

Test Report

薩摩亞商史巴克電子有限公司台灣分公司

SPARKTEK TECHNOLOGY CO., LTD. TAIWAN BRANCH

新北市中和區建康路79號2F

2F., NO. 79, JIANKANG RD., ZHONGHE DIST., NEW TAIPEI CITY 23587, TAIWAN



測試項目 (Test Items)	單位 (Unit)	測試方法 (Method)	方法偵測 極限值 (MDL)	結果 (Result)
				No. 1
多環芳香烴 / Polycyclic Aromatic Hydrocarbons (PAHs)				
芘 / Acenaphthene (CAS No. : 83-32-9)	mg/kg	參考AfPS GS 2014:01 PAK, 以氣相層析/質譜儀檢測. / With reference to AfPS GS 2014:01 PAK. Analysis was performed by GC/MS.	0.2	n. d.
芴 / Acenaphthylene (CAS No. : 208-96-8)	mg/kg		0.2	n. d.
蒽 / Anthracene (CAS No. : 120-12-7)	mg/kg		0.2	n. d.
苯駢蒽 / Benzo[a]anthracene (CAS No. : 56-55-3)	mg/kg		0.2	n. d.
苯駢(a)芘 / Benzo[a]pyrene (CAS No. : 50-32-8)	mg/kg		0.2	n. d.
苯(b)苯駢芴 / Benzo[b]fluoranthene (CAS No. : 205-99-2)	mg/kg		0.2	n. d.
苯駢芘 / Benzo[g, h, i]perylene (CAS No. : 191-24-2)	mg/kg		0.2	n. d.
苯(k)苯駢芴 / Benzo[k]fluoranthene (CAS No. : 207-08-9)	mg/kg		0.2	n. d.
Chrysene (CAS No. : 218-01-9)	mg/kg		0.2	n. d.
二苯駢蒽 / Dibenzo[a, h]anthracene (CAS No. : 53-70-3)	mg/kg		0.2	n. d.
苯駢芴 / Fluoranthene (CAS No. : 206-44-0)	mg/kg		0.2	n. d.
芴 / Fluorene (CAS No. : 86-73-7)	mg/kg		0.2	n. d.
茚酮芘 / Indeno[1, 2, 3-c, d] pyrene (CAS No. : 193-39-5)	mg/kg		0.2	n. d.
萘 / Naphthalene (CAS No. : 91-20-3)	mg/kg		0.2	n. d.
菲 / Phenanthrene (CAS No. : 85-01-8)	mg/kg		0.2	n. d.
芘 / Pyrene (CAS No. : 129-00-0)	mg/kg		0.2	n. d.
苯(j)苯駢芴 / Benzo[j]fluoranthene (CAS No. : 205-82-3)	mg/kg		0.2	n. d.
苯駢(e)芘 / Benzo[e]pyrene (CAS No. : 192-97-2)	mg/kg		0.2	n. d.
多環芳香烴18項總和 / Sum of 18 PAHs	mg/kg		-	n. d.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Termse-Documents.aspx>. 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

號碼(No.) : CE/2017/72008E

日期(Date) : 2018/03/09

頁數(Page): 33 of 56

Test Report

薩摩亞商史巴克電子有限公司台灣分公司

SPARKTEK TECHNOLOGY CO., LTD. TAIWAN BRANCH

新北市中和區建康路79號2F

2F., NO. 79, JIANKANG RD., ZHONGHE DIST., NEW TAIPEI CITY 23587, TAIWAN



備註(Note) :

1. mg/kg = ppm ; 0.1wt% = 1000ppm
2. n. d. = Not Detected (未檢出)
3. MDL = Method Detection Limit (方法偵測極限值)
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. (◆) :
若鉻含量小於六價鉻之方法偵測極限值, 則六價鉻為n. d. , 不須再測試六價鉻。
The result of Cr(VI) is "n.d." as the result of Chromium (Cr) is less than the MDL of Cr(VI), and confirmation test of Cr(VI) is not required.
若鉻含量未小於六價鉻之方法偵測極限值, 需進行六價鉻測試。
If the Chromium (Cr) content is not less than the MDL of Cr(VI), confirmation test of Cr(VI) is required.
9. Negative*/Positive*: 蓋革計數器偵測放射性物質的檢測結果係利用檢測值與環境背景值相比較的結果, 一般天然環境下都存在微量的輻射劑量(一般環境背景的輻射劑量約小於等於0.2μSv/hr)。如果檢測值低於環境背景值時, 表示正常或無異常(Negative*); 相反地, 檢測值高於環境背景值時, 表示異常(Positive*)。
(The test result of Geiger counter is from comparison between test outcome and environment background. In general, there is little radiation dose existing in environment. (Radiation dose from environment background usually less than or equal to 0.2μSv/hr)
The test result less than environment background was shown as Negative*; the result greater than environment background was shown as Positive*.)
10. ***: 該物質是由砷、鉍之測試結果計算得知。其MDL是針對砷、鉍之評估。(The substance was calculated by the test results of Arsenic, Beryllium respectively. The MDL was evaluated for Arsenic, Beryllium.)
11. 參數換算表 / Parameter Conversion Table : http://twap.sgs.com/sgrsts/chn/download-REACH_tw.asp

測試報告

號碼(No.) : CE/2017/72008E

日期(Date) : 2018/03/09

頁數(Page): 34 of 56

Test Report

薩摩亞商史巴克電子有限公司台灣分公司

SPARKTEK TECHNOLOGY CO., LTD. TAIWAN BRANCH

新北市中和區建康路79號2F

2F., NO. 79, JIANKANG RD., ZHONGHE DIST., NEW TAIPEI CITY 23587, TAIWAN



12. $\mu\text{g}/\text{cm}^2/\text{week}$ = microgram per square centimeter per week

No.	樣品表面積 (Sample Area) (cm^2)	測試溶液體積 (Volume of Test Solution) (ml)
1	8.72	10

14. 樣品的測試是基於申請人要求混合測試，報告中的混合測試結果不代表其中個別單一材質的含量。(The samples was/were analyzed on behalf of the applicant as mixing sample in one testing. The above results was/were only given as the informality value.)

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

PFOS濃度在物質或製備中不得超過0.001%(10ppm)，在半成品、成品或零部件中不得超過0.1%(1000ppm)，在紡織品或塗層材料中不得超過 $1\mu\text{g}/\text{m}^2$ 。

(Outlawing PFOS as substances or preparations in concentrations above 0.001% (10ppm), in semi-finished products or articles or parts at a level above 0.1%(1000ppm), in textiles or other coated materials above $1\mu\text{g}/\text{m}^2$.)

測試報告

號碼(No.) : CE/2017/72008E

日期(Date) : 2018/03/09

頁數(Page): 35 of 56

Test Report

薩摩亞商史巴克電子有限公司台灣分公司

SPARKTEK TECHNOLOGY CO., LTD. TAIWAN BRANCH

新北市中和區建康路79號2F

2F., NO. 79, JIANKANG RD., ZHONGHE DIST., NEW TAIPEI CITY 23587, TAIWAN

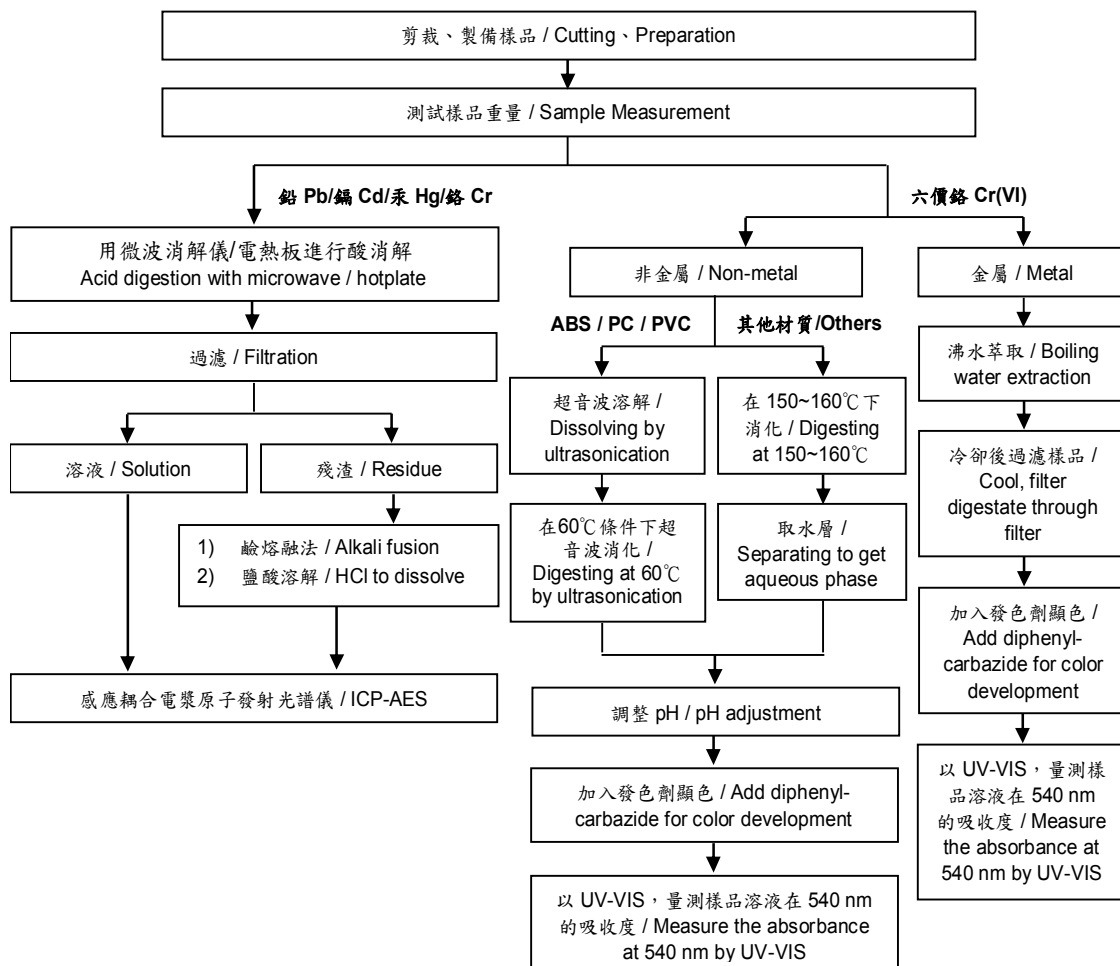


重金屬流程圖 / Analytical flow chart of Heavy Metal

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)

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



測試報告

號碼(No.) : CE/2017/72008E

日期(Date) : 2018/03/09

頁數(Page): 36 of 56

Test Report

薩摩亞商史巴克電子有限公司台灣分公司

SPARKTEK TECHNOLOGY CO., LTD. TAIWAN BRANCH

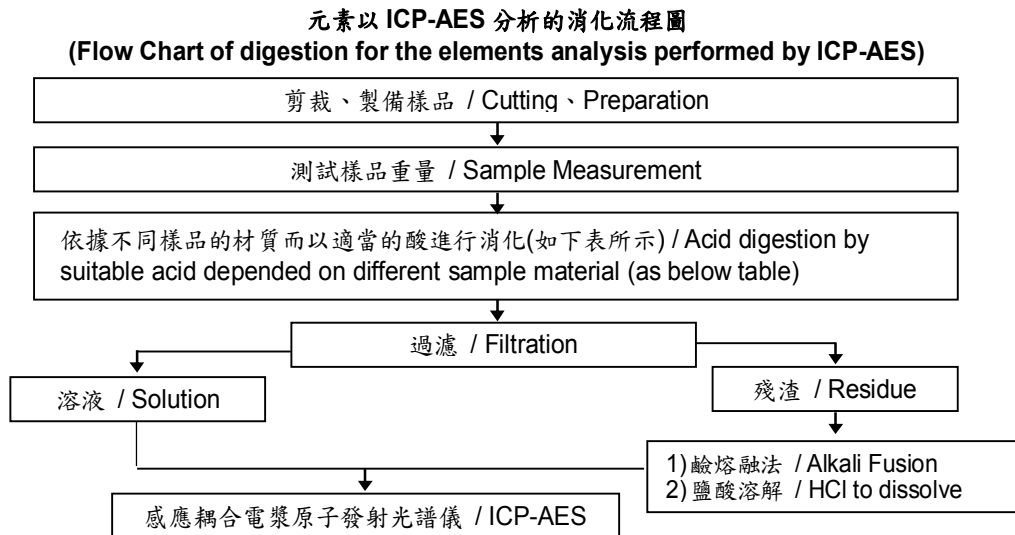
新北市中和區建康路79號2F

2F., NO. 79, JIANKANG RD., ZHONGHE DIST., NEW TAIPEI CITY 23587, TAIWAN



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

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



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

測試報告

Test Report

號碼(No.) : CE/2017/72008E

日期(Date) : 2018/03/09

頁數(Page): 37 of 56

薩摩亞商史巴克電子有限公司台灣分公司

SPARKTEK TECHNOLOGY CO., LTD. TAIWAN BRANCH

新北市中和區建康路79號2F

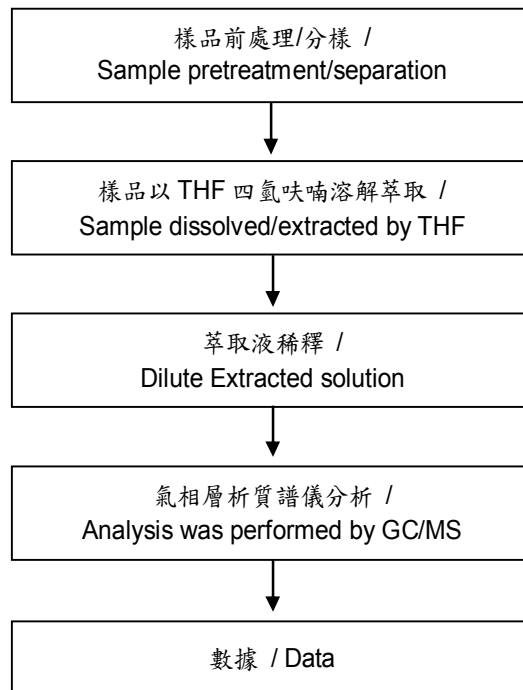
2F., NO. 79, JIANKANG RD., ZHONGHE DIST., NEW TAIPEI CITY 23587, TAIWAN



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

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

【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 <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Termse-Document.aspx>. 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.) : CE/2017/72008E

日期(Date) : 2018/03/09

頁數(Page): 38 of 56

薩摩亞商史巴克電子有限公司台灣分公司

SPARKTEK TECHNOLOGY CO., LTD. TAIWAN BRANCH

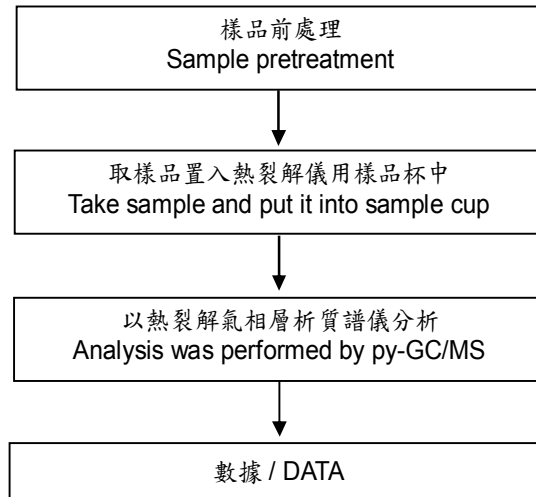
新北市中和區建康路79號2F

2F., NO. 79, JIANKANG RD., ZHONGHE DIST., NEW TAIPEI CITY 23587, TAIWAN



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

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



測試報告

Test Report

號碼(No.) : CE/2017/72008E

日期(Date) : 2018/03/09

頁數(Page): 39 of 56

薩摩亞商史巴克電子有限公司台灣分公司

SPARKTEK TECHNOLOGY CO., LTD. TAIWAN BRANCH

新北市中和區建康路79號2F

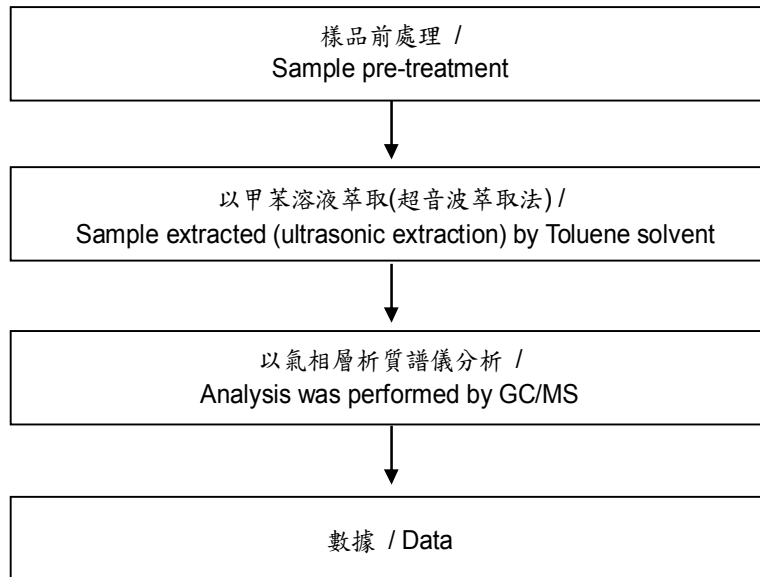
2F., NO. 79, JIANKANG RD., ZHONGHE DIST., NEW TAIPEI CITY 23587, TAIWAN



多環芳香煙分析流程圖 /

Analytical flow chart - PAHs (Polycyclic Aromatic Hydrocarbons)

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



This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Termse-Document.aspx>. 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.) : CE/2017/72008E

日期(Date) : 2018/03/09

頁數(Page): 40 of 56

薩摩亞商史巴克電子有限公司台灣分公司

SPARKTEK TECHNOLOGY CO., LTD. TAIWAN BRANCH

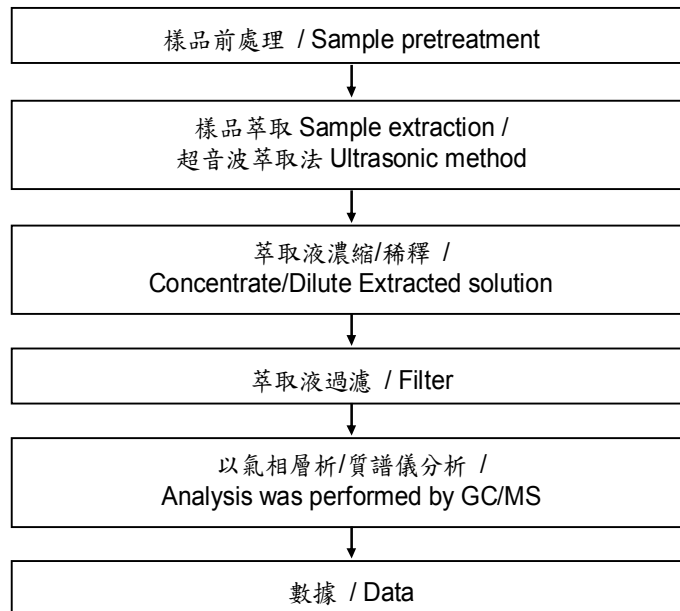
新北市中和區建康路79號2F

2F., NO. 79, JIANKANG RD., ZHONGHE DIST., NEW TAIPEI CITY 23587, TAIWAN



六溴環十二烷分析流程圖 / Analytical flow chart - HBCDD

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



This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Termse-Documents.aspx>. 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.) : CE/2017/72008E

日期(Date) : 2018/03/09

頁數(Page): 41 of 56

薩摩亞商史巴克電子有限公司台灣分公司

SPARKTEK TECHNOLOGY CO., LTD. TAIWAN BRANCH

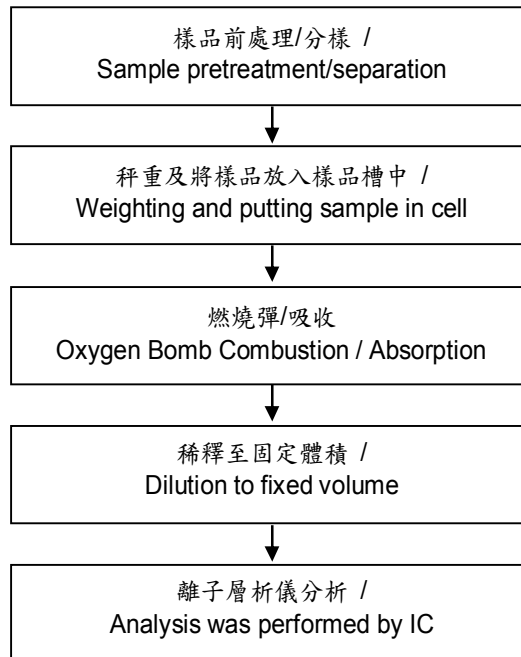
新北市中和區建康路79號2F

2F., NO. 79, JIANKANG RD., ZHONGHE DIST., NEW TAIPEI CITY 23587, TAIWAN



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

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



測試報告

Test Report

號碼(No.) : CE/2017/72008E

日期(Date) : 2018/03/09

頁數(Page): 42 of 56

薩摩亞商史巴克電子有限公司台灣分公司

SPARKTEK TECHNOLOGY CO., LTD. TAIWAN BRANCH

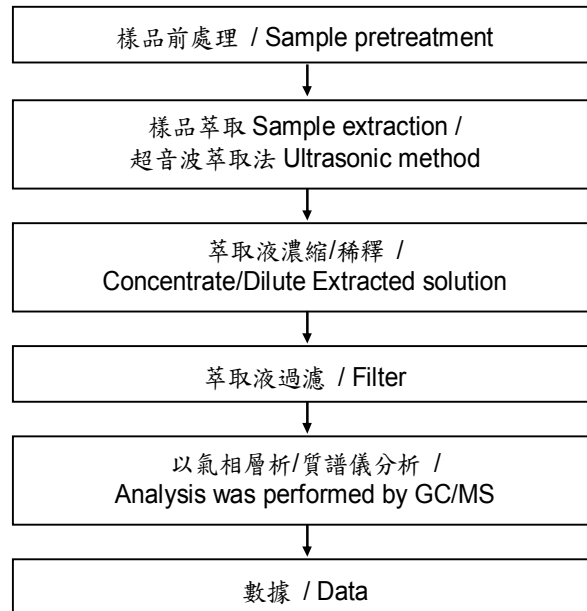
新北市中和區建康路79號2F

2F., NO. 79, JIANKANG RD., ZHONGHE DIST., NEW TAIPEI CITY 23587, TAIWAN



BNST分析流程圖 / Analytical flow chart - BNST

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



This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Termse-Document.aspx>. 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.) : CE/2017/72008E

日期(Date) : 2018/03/09

頁數(Page): 43 of 56

薩摩亞商史巴克電子有限公司台灣分公司

SPARKTEK TECHNOLOGY CO., LTD. TAIWAN BRANCH

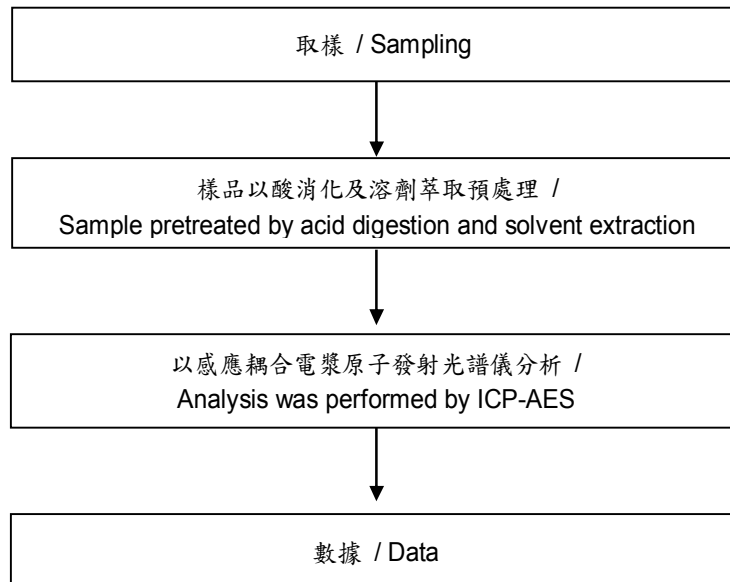
新北市中和區建康路79號2F

2F., NO. 79, JIANKANG RD., ZHONGHE DIST., NEW TAIPEI CITY 23587, TAIWAN



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

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



This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Termse-Document.aspx>. 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.) : CE/2017/72008E

日期(Date) : 2018/03/09

頁數(Page): 44 of 56

薩摩亞商史巴克電子有限公司台灣分公司

SPARKTEK TECHNOLOGY CO., LTD. TAIWAN BRANCH

新北市中和區建康路79號2F

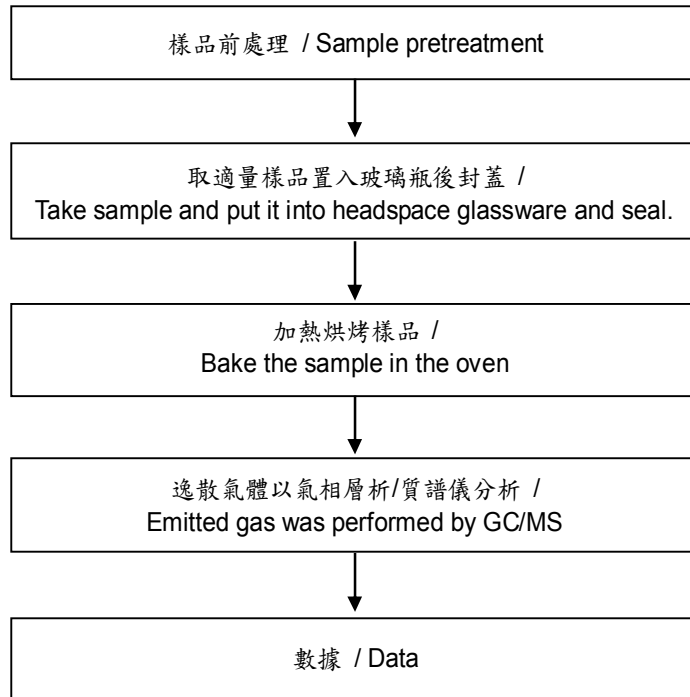
2F., NO. 79, JIANKANG RD., ZHONGHE DIST., NEW TAIPEI CITY 23587, TAIWAN



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

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

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



This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Termse-Documents.aspx>. 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.) : CE/2017/72008E

日期(Date) : 2018/03/09

頁數(Page): 45 of 56

薩摩亞商史巴克電子有限公司台灣分公司

SPARKTEK TECHNOLOGY CO., LTD. TAIWAN BRANCH

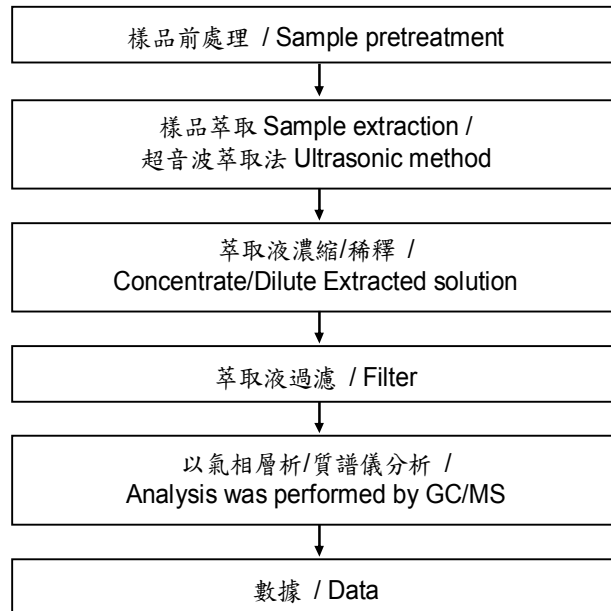
新北市中和區建康路79號2F

2F., NO. 79, JIANKANG RD., ZHONGHE DIST., NEW TAIPEI CITY 23587, TAIWAN



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

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



測試報告

Test Report

號碼(No.) : CE/2017/72008E

日期(Date) : 2018/03/09

頁數(Page): 46 of 56

薩摩亞商史巴克電子有限公司台灣分公司

SPARKTEK TECHNOLOGY CO., LTD. TAIWAN BRANCH

新北市中和區建康路79號2F

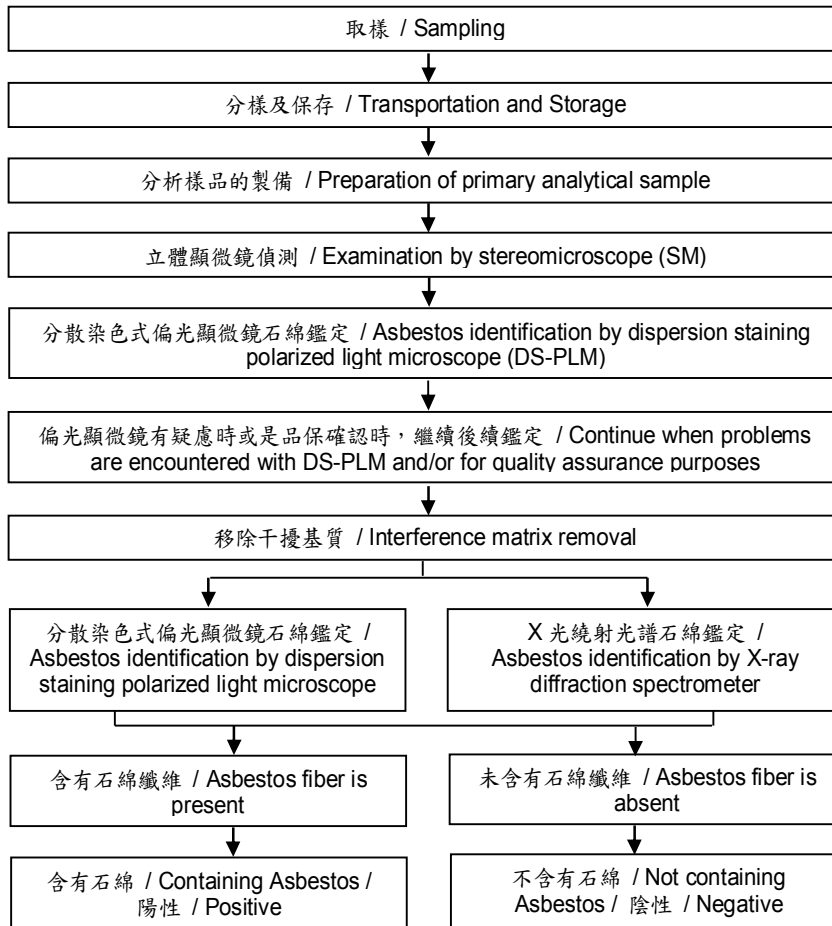
2F., NO. 79, JIANKANG RD., ZHONGHE DIST., NEW TAIPEI CITY 23587, TAIWAN



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

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

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



This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Termse-Document.aspx>. 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.) : CE/2017/72008E

日期(Date) : 2018/03/09

頁數(Page): 47 of 56

薩摩亞商史巴克電子有限公司台灣分公司

SPARKTEK TECHNOLOGY CO., LTD. TAIWAN BRANCH

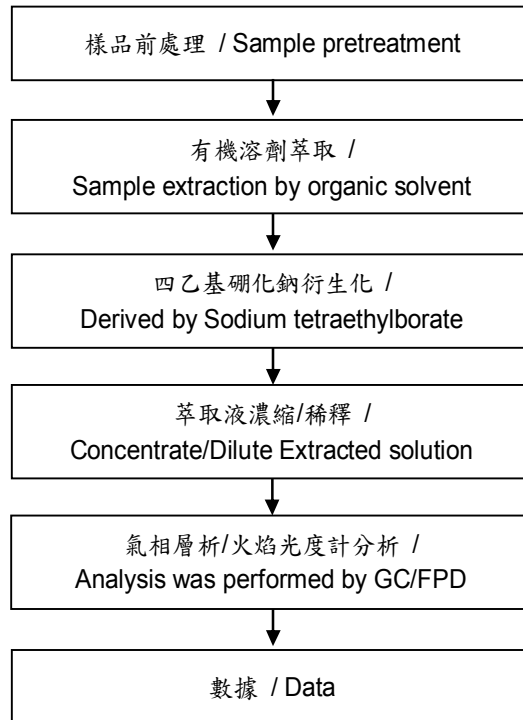
新北市中和區建康路79號2F

2F., NO. 79, JIANKANG RD., ZHONGHE DIST., NEW TAIPEI CITY 23587, TAIWAN



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

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



This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Termse-Document.aspx>. 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.) : CE/2017/72008E

日期(Date) : 2018/03/09

頁數(Page): 48 of 56

薩摩亞商史巴克電子有限公司台灣分公司

SPARKTEK TECHNOLOGY CO., LTD. TAIWAN BRANCH

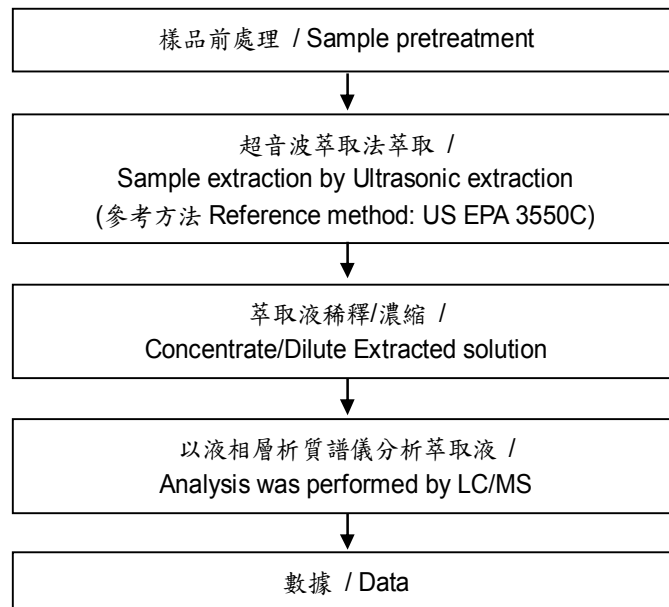
新北市中和區建康路79號2F

2F., NO. 79, JIANKANG RD., ZHONGHE DIST., NEW TAIPEI CITY 23587, TAIWAN



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

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



測試報告

Test Report

號碼(No.) : CE/2017/72008E

日期(Date) : 2018/03/09

頁數(Page): 49 of 56

薩摩亞商史巴克電子有限公司台灣分公司

SPARKTEK TECHNOLOGY CO., LTD. TAIWAN BRANCH

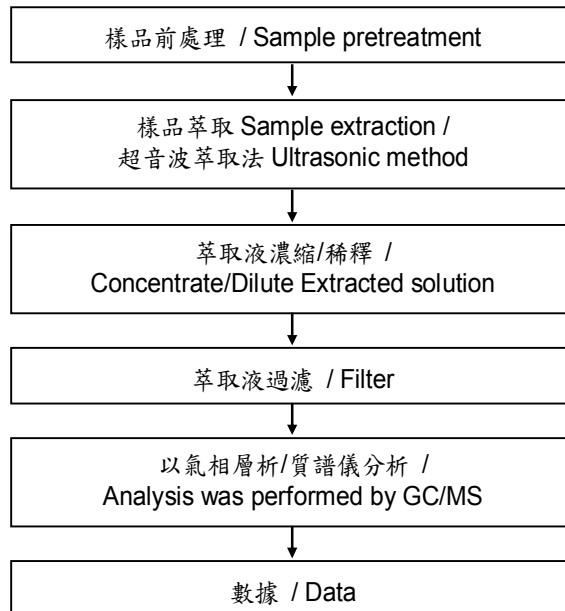
新北市中和區建康路79號2F

2F., NO. 79, JIANKANG RD., ZHONGHE DIST., NEW TAIPEI CITY 23587, TAIWAN



氯化石蠟分析流程圖 / Analytical flow chart - Chlorinated Paraffins

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



測試報告

Test Report

號碼(No.) : CE/2017/72008E

日期(Date) : 2018/03/09

頁數(Page): 50 of 56

薩摩亞商史巴克電子有限公司台灣分公司

SPARKTEK TECHNOLOGY CO., LTD. TAIWAN BRANCH

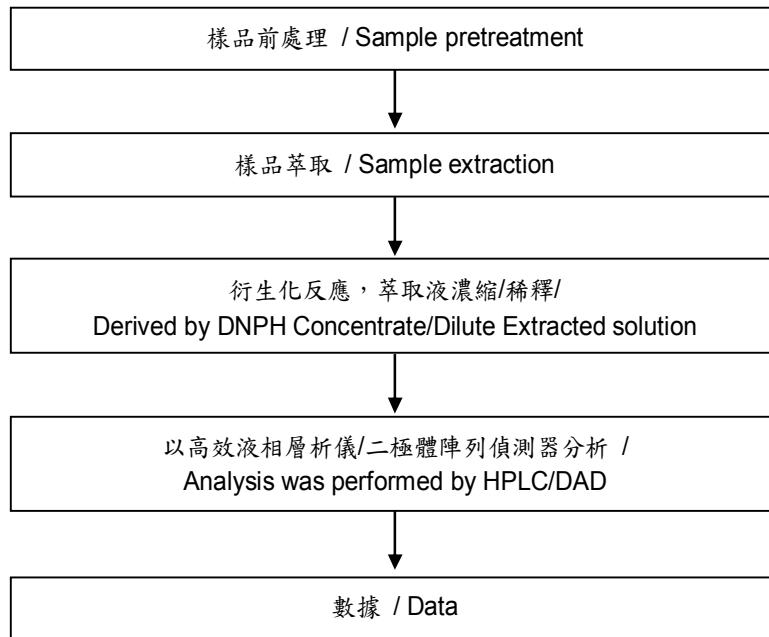
新北市中和區建康路79號2F

2F., NO. 79, JIANKANG RD., ZHONGHE DIST., NEW TAIPEI CITY 23587, TAIWAN



甲醛分析流程圖 / Analytical flow chart - Formaldehyde

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



This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Termse-Document.aspx>. 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.) : CE/2017/72008E

日期(Date) : 2018/03/09

頁數(Page): 51 of 56

薩摩亞商史巴克電子有限公司台灣分公司

SPARKTEK TECHNOLOGY CO., LTD. TAIWAN BRANCH

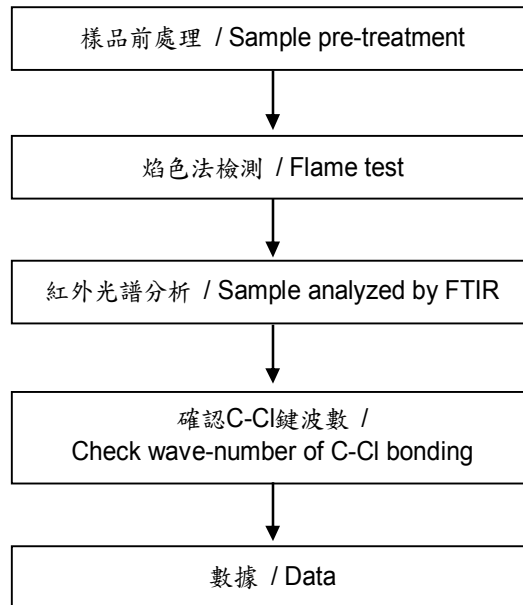
新北市中和區建康路79號2F

2F., NO. 79, JIANKANG RD., ZHONGHE DIST., NEW TAIPEI CITY 23587, TAIWAN



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

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



This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Termse-Document.aspx>. 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.) : CE/2017/72008E

日期(Date) : 2018/03/09

頁數(Page): 52 of 56

薩摩亞商史巴克電子有限公司台灣分公司

SPARKTEK TECHNOLOGY CO., LTD. TAIWAN BRANCH

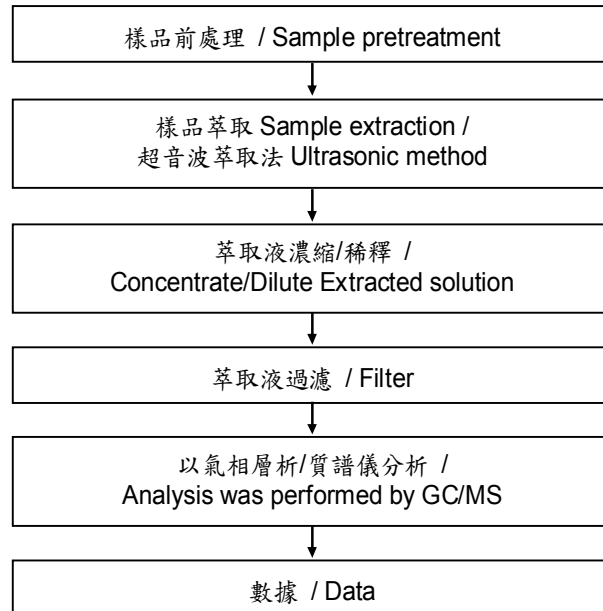
新北市中和區建康路79號2F

2F., NO. 79, JIANKANG RD., ZHONGHE DIST., NEW TAIPEI CITY 23587, TAIWAN



多氯聯苯分析流程圖 / Analytical flow chart - PCBs

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



This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Termse-Documents.aspx>. 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.) : CE/2017/72008E

日期(Date) : 2018/03/09

頁數(Page): 53 of 56

薩摩亞商史巴克電子有限公司台灣分公司

SPARKTEK TECHNOLOGY CO., LTD. TAIWAN BRANCH

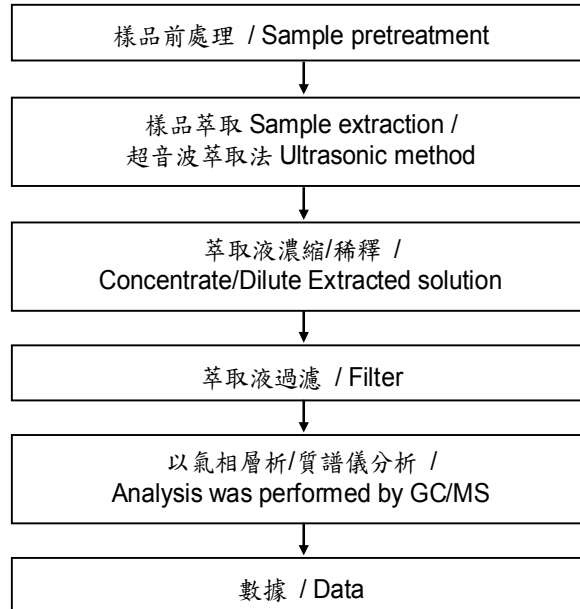
新北市中和區建康路79號2F

2F., NO. 79, JIANKANG RD., ZHONGHE DIST., NEW TAIPEI CITY 23587, TAIWAN



多氯奈分析流程圖 / Analytical flow chart - PCNs

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



This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Termse-Document.aspx>. 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.) : CE/2017/72008E

日期(Date) : 2018/03/09

頁數(Page): 54 of 56

薩摩亞商史巴克電子有限公司台灣分公司

SPARKTEK TECHNOLOGY CO., LTD. TAIWAN BRANCH

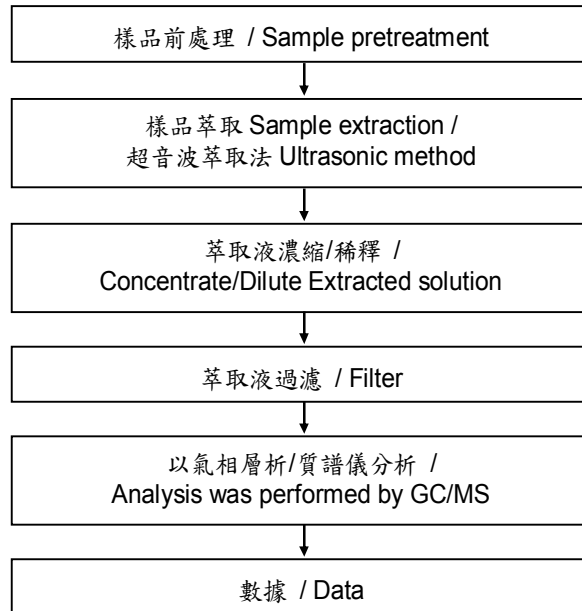
新北市中和區建康路79號2F

2F., NO. 79, JIANKANG RD., ZHONGHE DIST., NEW TAIPEI CITY 23587, TAIWAN



多氯三聯苯分析流程圖 / Analytical flow chart - PCTs

- 測試人員：曾勃鈞 / Technician : Barry Tseng
- 測試負責人：張啟興 / Supervisor: Troy Chang



This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Termse-Documents.aspx>. 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

號碼(No.) : CE/2017/72008E

日期(Date) : 2018/03/09

頁數(Page): 55 of 56

Test Report

薩摩亞商史巴克電子有限公司台灣分公司

SPARKTEK TECHNOLOGY CO., LTD. TAIWAN BRANCH

新北市中和區建康路79號2F

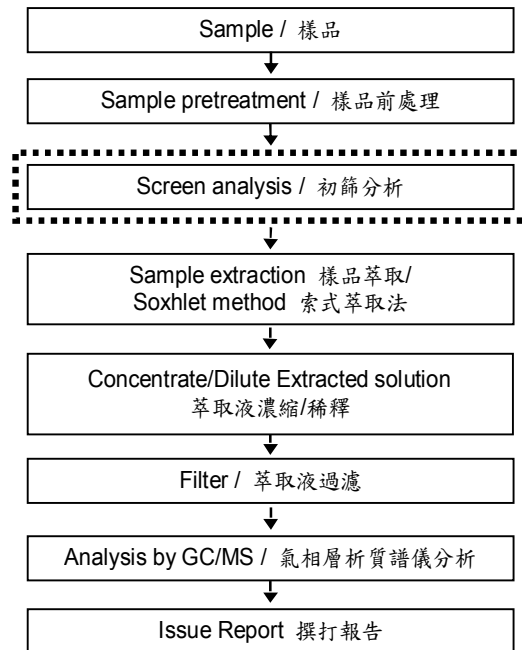
2F., NO. 79, JIANKANG RD., ZHONGHE DIST., NEW TAIPEI CITY 23587, TAIWAN



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

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

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



This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Termse-Document.aspx>. 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.) : CE/2017/72008E

日期(Date) : 2018/03/09

頁數(Page): 56 of 56

薩摩亞商史巴克電子有限公司台灣分公司

SPARKTEK TECHNOLOGY CO., LTD. TAIWAN BRANCH

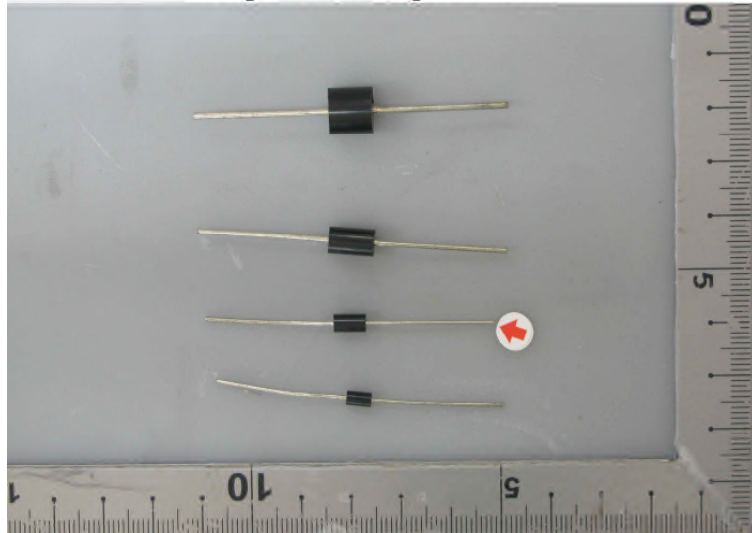
新北市中和區建康路79號2F

2F., NO. 79, JIANKANG RD., ZHONGHE DIST., NEW TAIPEI CITY 23587, TAIWAN



* 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.)

CE/2017/72008



** 報告結尾 (End of Report) **