

Test Report

頁數(Page): 1 of 22 號碼(No.): EKR23200760 日期(Date): 14-Feb-2023

MITSUI HIGH-TEC INC.

10-1, KOMINE 2-CHOME, YAHATANISHI-KU KITAKYUSHU, 807-8588, JAPAN

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

送樣廠商(Sample Submitted By)

MITSUI HIGH-TEC INC.

樣品名稱(Sample Name)

C7025 MATERIAL

收件日(Sample Receiving Date)

07-Feb-2023

測試期間(Testing Period)

07-Feb-2023 to 14-Feb-2023

測試需求(Test Requested)

依據客戶指定,參考RoHS 2011/65/EU Annex II及其修訂指令(EU) 2015/863測 (1)試鎘、鉛、汞、六價鉻、多溴聯苯、多溴聯苯醚, DBP, BBP, DEHP, DIBP。 (As specified by client, with reference to RoHS 2011/65/EU Annex II and amending Directive (EU) 2015/863 to determine Cadmium, Lead, Mercury, Cr(VI), PBBs, PBDEs, DBP, BBP, DEHP, DIBP contents in the submitted

sample(s).)

(2) 其他測試項目請見下一頁。 (Please refer to next pages for the other item(s).)

請參閱下一頁 (Please refer to following pages.)

測試結果(Test Results) 結 論(Conclusion)

根據客戶所提供的樣品,其鎘、鉛、汞、六價鉻、多溴聯苯、多溴聯苯醚, DBP, (1)BBP, DEHP, DIBP的測試結果符合RoHS 2011/65/EU Annex II暨其修訂指令(EU) 2015/863之限值要求。 (Based on the performed tests on submitted sample(s), the test results of Cadmium, Lead, Mercury, Cr(VI), PBBs, PBDEs, DBP, BBP, DEHP, DIBP comply with the limits as set by RoHS Directive (EU)

2015/863 amending Annex II to Directive 2011/65/EU.)

報告簽署人/張伯睿 博士/部區理 Ray Chang, Ph.D./ Department Manager Signed for and on behalf SĞS TAIWAN LTD. 化學實驗室-高雄/Chemical Laboratory-Kaohsiung





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測試部位敘述 (Test Part Description)

No.1 : 銅色 C7025 MATERIAL (COPPER COLORED C7025 MATERIAL)

測試結果 (Test Results)

測試項目	測試方法	單位	MDL	結果	限值
(Test Items)	(Method)	(Unit)		(Result)	(Limit)
				No.1	
鎘 (Cd) (Cadmium (Cd))	參考IEC 62321-5: 2013,以感應耦合電漿	mg/kg	2	n.d.	100
	發射光譜儀分析。(With reference to IEC				
	62321-5: 2013, analysis was performed				
All (DI) (I I DI))	by ICP-OES.)				1000
鉛 (Pb) (Lead (Pb))	參考IEC 62321-5: 2013 · 以感應耦合電漿	mg/kg	2	n.d.	1000
	發射光譜儀分析。(With reference to IEC				
	62321-5: 2013, analysis was performed				
工 (11g) (Mayayını (11g))	by ICP-OES.) 参考IEC 62321-4: 2013+ AMD1: 2017·以		2	اء ما	1000
汞 (Hg) (Mercury (Hg))		mg/kg	2	n.d.	1000
	reference to IEC 62321-4: 2013+ AMD1:				
	2017, analysis was performed by ICP-OES.)				
六價鉻 (Hexavalent Chromium) Cr(VI)	參考IEC 62321-7-1: 2015,以紫外光-可見	μg/cm²	0.1	n.d.	-
(#2)	光分光光度計分析。(With reference to	. 3			
	IEC 62321-7-1: 2015, analysis was				
	performed by UV-VIS.)				
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)	┃ ★参考IEC 62321-6: 2015、以氣相層析儀/質	mg/kg	5	n.d.	-
五溴聯苯 (Pentabromobiphenyl)	iii 儀分析。(With reference to IEC 62321-	mg/kg	5	n.d.	-
六溴聯苯 (Hexabromobiphenyl)	6: 2015, analysis was performed by	mg/kg	5	n.d.	-
七溴聯苯 (Heptabromobiphenyl)	GC/MS.)	mg/kg	5	n.d.	-
八溴聯苯 (Octabromobiphenyl)	(C), (113.)	mg/kg	5	n.d.	-
九溴聯苯 (Nonabromobiphenyl)		mg/kg	5	n.d.	-
十溴聯苯 (Decabromobiphenyl)		mg/kg	5	n.d.	-
多溴聯苯總和 (Sum of PBBs)		mg/kg	ı	n.d.	1000



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測試項目	測試方法	單位	MDL	結果	限值
(Test Items)	(Method)	(Unit)		(Result)	(Limit)
				No.1	
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)	】 ◆參考IEC 62321-6: 2015·以氣相層析儀/質	mg/kg	5	n.d.	-
五溴聯苯醚 (Pentabromodiphenyl ether)	善議分析。(With reference to IEC 62321-	mg/kg	5	n.d.	-
六溴聯苯醚 (Hexabromodiphenyl ether)	6: 2015, analysis was performed by	mg/kg	5	n.d.	-
七溴聯苯醚 (Heptabromodiphenyl ether)	GC/MS.)	mg/kg	5	n.d.	-
八溴聯苯醚 (Octabromodiphenyl ether)	GC/1W13.)	mg/kg	5	n.d.	-
九溴聯苯醚 (Nonabromodiphenyl ether)		mg/kg	5	n.d.	-
十溴聯苯醚 (Decabromodiphenyl ether)		mg/kg	5	n.d.	-
多溴聯苯醚總和 (Sum of PBDEs)		mg/kg	1	n.d.	1000
多氯聯苯 (PCBs) (Polychlorinated biphenyls (PCBs))	參考US EPA 3550C: 2007 · 以氣相層析儀/ 質譜儀分析。(With reference to US EPA 3550C: 2007, analysis was performed by GC/MS.)	mg/kg	0.5	n.d.	-
多氯奈 (PCNs) (Polychlorinated naphthalene (PCNs))	參考US EPA 3550C: 2007·以氣相層析儀/ 質譜儀分析。(With reference to US EPA 3550C: 2007, analysis was performed by GC/MS.)	mg/kg	5	n.d.	-
多氯三聯苯 (PCTs) (Polychlorinated terphenyls (PCTs))	參考US EPA 3550C: 2007·以氣相層析儀/ 質譜儀分析。(With reference to US EPA 3550C: 2007, analysis was performed by GC/MS.)	mg/kg	0.5	n.d.	-
短鏈氯化石蠟(C10-C13) (SCCP) (Short Chain Chlorinated Paraffins(C10-C13) (SCCP)) (CAS No.: 85535-84-8)	參考ISO 18219-1: 2021·以氣相層析儀/ 質譜儀分析。(With reference to ISO 18219-1: 2021, analysis was performed by GC/MS.)	mg/kg	50	n.d.	-



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測試項目	測試方法	單位	MDL	結果	限值
(Test Items)	(Method)	(Unit)		(Result)	(Limit)
				No.1	
氟 (F) (Fluorine (F)) (CAS No.: 14762-94-		mg/kg	50	n.d.	-
8)					
氯 (Cl) (Chlorine (Cl)) (CAS No.: 22537-	参考BS EN 14582: 2016,以離子層析儀分	mg/kg	50	n.d.	-
15-1)	析。(With reference to BS EN 14582:				
溴 (Br) (Bromine (Br)) (CAS No.: 10097-	2016, analysis was performed by IC.)	mg/kg	50	n.d.	-
32-2)					
碘 (I) (Iodine (I)) (CAS No.: 14362-44-8)		mg/kg	50	n.d.	-
三丁基錫 (TBT) (Tributyl tin (TBT))	參考ISO 17353: 2004 · 以氣相層析儀/火	mg/kg	0.03	n.d.	-
三苯基錫 (TPT) (Triphenyl tin (TPT))	焰光度偵測器分析。(With reference to	mg/kg	0.03	n.d.	-
二丁基錫 (DBT) (Dibutyl tin (DBT))	ISO 17353: 2004, analysis was	mg/kg	0.03	n.d.	-
二辛基錫 (DOT) (Dioctyl tin (DOT))	performed by GC/FPD.)	mg/kg	0.03	n.d.	-
氧化雙三丁基錫 (TBTO) (Bis(tributyltin)	由三丁基錫測試結果計算得之。	mg/kg	0.03 🛦	n.d.	-
oxide (TBTO)) (CAS No.: 56-35-9)	(Calculated from the result of Tributyl				
	Tin (TBT).)				
六溴環十二烷及所有主要被辨別出的異構物	参考IEC 62321: 2008 · 以氣相層析儀/質譜	mg/kg	5	n.d.	-
(HBCDD) (α- HBCDD, β- HBCDD, γ-	儀分析。(With reference to IEC 62321:				
HBCDD) (Hexabromocyclododecane	2008, analysis was performed by				
(HBCDD) and all major diastereoisomers identified (α - HBCDD, β - HBCDD, γ -	GC/MS.)				
HBCDD)) (CAS No.: 25637-99-4, 3194-55-					
6 (134237-51-7, 134237-50-6, 134237-					
52-8))					
聚氯乙烯 (Polyvinyl chloride) (PVC)	參考ASTM E1252: 2021·以傅立葉轉換紅外	**	-	Negative	_
	線光譜儀及焰色法分析。(With reference to				
	ASTM E1252: 2021, analysis was				
	performed by FT-IR and Flame Test.)				
銻 (Sb) (Antimony (Sb)) (CAS No.: 7440-	參考US EPA 3052: 1996·以感應耦合電漿	mg/kg	2	n.d.	-
36-0)	發射光譜儀分析。(With reference to US				
	EPA 3052: 1996, analysis was performed				
	by ICP-OES.)				



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測試項目	測試方法	單位	MDL	結果	限值
(Test Items)	(Method)	(Unit)		(Result)	(Limit)
				No.1	
鈹 (Be) (Beryllium (Be)) (CAS No.: 7440-	參考US EPA 3052: 1996,以感應耦合電漿	mg/kg	2	n.d.	-
41-7)	發射光譜儀分析。(With reference to US				
	EPA 3052: 1996, analysis was performed				
	by ICP-OES.)				
磷 (P) (Phosphorus (P)) (CAS No.: 7723-	參考US EPA 3052: 1996·以感應耦合電漿	mg/kg	2	6.30	-
14-0)	發射光譜儀分析。(With reference to US				
	EPA 3052: 1996, analysis was performed				
	by ICP-OES.)				
砷 (As) (Arsenic (As)) (CAS No.: 7440-	參考US EPA 3052: 1996 · 以感應耦合電漿	mg/kg	2	n.d.	-
38-2)	發射光譜儀分析。(With reference to US				
	EPA 3052: 1996, analysis was performed				
4TT# (Pad Phaepharus)	by ICP-OES.) 以熱裂解-氣相層析儀/質譜儀分析。	**		Negative	
紅磷 (Red Phosphorus)	•		-	ivegative	-
	(Analysis was performed by Pyrolyzer-GC/MS.)				
脚苯二甲酸二丁酯 (DBP) (Dibutyl	GC/1813.)	ma/ka	50	n.d.	1000
柳本二十酸二		mg/kg	30	n.a.	1000
脚苯二甲酸丁苯甲酯 (BBP) (Butyl benzyl		ma /lea	50	n d	1000
		mg/kg	50	n.d.	1000
phthalate (BBP))			Ε0	ام ما	1000
郷苯二甲酸二異丁酯 (DIBP) (Diisobutyl		mg/kg	50	n.d.	1000
phthalate (DIBP))	# */IFC CO201 0 2017 N/E-17E-1/E//E/	/1			1000
	參考IEC 62321-8: 2017 · 以氣相層析儀/質	mg/kg	50	n.d.	1000
(2-ethylhexyl) phthalate (DEHP))	譜儀分析。(With reference to IEC 62321-	/1	F0		
鄰苯二甲酸二異癸酯 (DIDP) (Diisodecyl	8: 2017, analysis was performed by	mg/kg	50	n.d.	-
phthalate (DIDP)) (CAS No.: 26761-40-	GC/MS.)				
0, 68515-49-1)					
鄰苯二甲酸二異壬酯 (DINP) (Diisononyl		mg/kg	50	n.d.	-
phthalate (DINP)) (CAS No.: 28553-12-0,					
68515-48-0)					
郷苯二甲酸二正辛酯 (DNOP) (Di-n-octyl		mg/kg	50	n.d.	-
phthalate (DNOP)) (CAS No.: 117-84-0)					,



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測試項目	測試方法	單位	MDL	結果	限值
(Test Items)	(Method)	(Unit)		(Result)	(Limit)
				No.1	
鄰苯二甲酸二正戊酯 (DNPP) (Di-n-pentyl phthalate (DNPP)) (CAS No.: 131-18-0)		mg/kg	50	n.d.	-
鄰苯二甲酸二正己酯 (DNHP) (Di-n-hexyl phthalate (DNHP)) (CAS No.: 84-75-3)		mg/kg	50	n.d.	-
鄰苯二甲酸二(2-甲氧基乙基)酯 (DMEP) (Bis-(2-methoxyethyl) phthalate (DMEP)) (CAS No.: 117-82-8)	參考IEC 62321-8: 2017,以氣相層析儀/質 譜儀分析。(With reference to IEC 62321-	mg/kg	50	n.d.	-
鄰苯二甲酸二(C7-11支鏈與直鏈)烷基酯 (DHNUP) (1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters (DHNUP)) (CAS No.: 68515-42-4)	8: 2017, analysis was performed by GC/MS.)	mg/kg	50	n.d.	-
1,2-苯二酸-二(C6-8支鏈)烷基酯(富C7) (DIHP) (1,2-Benzenedicarboxylic acid, di- C6-8-branched alkyl esters, C7-rich (DIHP)) (CAS No.: 71888-89-6)		mg/kg	50	n.d.	-
全氟辛烷磺酸 (PFOS) (Perfluorooctane sulfonate (PFOS)) (CAS No.: 1763-23-1)	參考CEN/TS 15968: 2010 · 以液相層析串 聯質譜儀分析。(With reference to CEN/TS 15968: 2010, analysis was performed by LC/MS/MS.)	mg/kg	0.01	n.d.	-
全氟辛基磺酸鉀 (PFOS-K) (Potassium Perfluorooctanesulfonate (PFOS-K)) (CAS No.: 2795-39-3)	由全氟辛烷磺酸測試結果計算得之。 (Calculated from the result of PFOS.)	mg/kg	0.01▲	n.d.	-
全氟辛基磺酸鋰 (PFOS-Li) (Perfluorooctanesulfonic acid, lithium salt (PFOS-Li)) (CAS No.: 29457-72-5)	由全氟辛烷磺酸測試結果計算得之。 (Calculated from the result of PFOS.)	mg/kg	0.01▲	n.d.	-
全氟辛基磺酸銨 (PFOS-NH4) (Perfluorooctanesulfonic acid, ammonium salt (PFOS-NH4)) (CAS No.: 29081-56-9)	由全氟辛烷磺酸測試結果計算得之。 (Calculated from the result of PFOS.)	mg/kg	0.01▲	n.d.	-
全氟辛基磺酸二乙醇銨 (PFOS-NH(OH)2) (Perfluorooctane sulfonate diethanolamine salt (PFOS-NH(OH)2)) (CAS No.: 70225-14-8)	由全氟辛烷磺酸測試結果計算得之。 (Calculated from the result of PFOS.)	mg/kg	0.01 🛦	n.d.	-



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(Test Items)	(Method)	(Unit)		(Result)	(Limit)
				No.1	
全氟辛基磺酸四乙基銨 (PFOS-N(C2H5)4)	由全氟辛烷磺酸測試結果計算得之。	mg/kg	0.01 🛦	n.d.	-
(Perfluorooctanesulfonic	(Calculated from the result of PFOS.)				
acid,tetraethylammonium salt (PFOS-					
N(C2H5)4)) (CAS No.: 56773-42-3)					
全氟辛基磺酸二癸二甲基銨 (PFOS-DDA)	由全氟辛烷磺酸測試結果計算得之。	mg/kg	0.01▲	n.d.	-
	(Calculated from the result of PFOS.)				
1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-					
heptadecafluorooctane-1-sulfonate					
(PFOS-DDA)) (CAS No.: 251099-16-8)					
全氟辛基磺醯氟 (POSF) (Perfluorooctane		mg/kg	0.01▲	n.d.	-
	(Calculated from the result of PFOS.)				
35-7)					
全氟辛基磺酸鎂 (PFOS-Mg)	由全氟辛烷磺酸測試結果計算得之。	mg/kg	0.01▲	n.d.	-
(Perfluorooctanesulfonic acid,	(Calculated from the result of PFOS.)				
magnesium salt (PFOS-Mg)) (CAS No.:					
91036-71-4)					
全氟辛基磺酸鈉 (PFOS-Na)	由全氟辛烷磺酸測試結果計算得之。	mg/kg	0.01▲	n.d.	-
(Perfluorooctanesulfonic acid, sodium	(Calculated from the result of PFOS.)				
salt (PFOS-Na)) (CAS No.: 4021-47-0)					
N-乙基全氟正辛磺醯胺 (EtFOSA) (N-	參考CEN/TS 15968: 2010 · 以液相層析串	mg/kg	0.01	n.d.	-
ethylperfluoro-1-octanesulfonamide	聯質譜儀分析。(With reference to				
(EtFOSA)) (CAS No.: 4151-50-2)	CEN/TS 15968: 2010, analysis was				
	performed by LC/MS/MS.)				
N-甲基全氟正辛磺醯胺 (N-Me-FOSA)	參考CEN/TS 15968: 2010,以液相層析串	mg/kg	0.01	n.d.	-
(N-Methyl-Perfluoroctanesulfonamide	聯質譜儀分析。(With reference to				
(N-Me-FOSA)) (CAS No.: 31506-32-8)	CEN/TS 15968: 2010, analysis was				
7 + 7 + 7 + 7 + 7 + 7 + 7 + 7 + 7 + 7 +	performed by LC/MS/MS.)				
N-乙基全氟辛基磺醯胺乙醇 (N-Et-FOSE	參考CEN/TS 15968: 2010 · 以液相層析串	mg/kg	0.01	n.d.	-
alcohol) (N-Ethyl-	聯質譜儀分析。(With reference to				
Perfluoroctanesulfonamidoethanol (N-Et-	CEN/TS 15968: 2010, analysis was				
FOSE alcohol)) (CAS No.: 1691-99-2)	performed by LC/MS/MS.)				



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測試項目 (Test Items)	測試方法 (Method)	單位 (Unit)	MDL	結果 (Result) No.1	限值 (Limit)
N-甲基全氟辛基磺醯胺乙醇 (N-Me-FOSE alcohol) (N-Methyl-Perfluoroctanesulfonamidoethanol (N-Me-FOSE alcohol)) (CAS No.: 24448-09-7)	參考CEN/TS 15968: 2010‧以液相層析串 聯質譜儀分析。(With reference to CEN/TS 15968: 2010, analysis was performed by LC/MS/MS.)	mg/kg	0.01	n.d.	-
全氟辛基磺醯胺 (PFOSA) (Perfluoroctanesulfonamide (PFOSA)) (CAS No.: 754-91-6)	參考CEN/TS 15968: 2010 · 以液相層析串 聯質譜儀分析。(With reference to CEN/TS 15968: 2010, analysis was performed by LC/MS/MS.)	mg/kg	0.01	n.d.	-
全氟辛酸 (PFOA) (Perfluorooctanoic acid (PFOA)) (CAS No.: 335-67-1)	參考CEN/TS 15968: 2010 · 以液相層析串 聯質譜儀分析。(With reference to CEN/TS 15968: 2010, analysis was performed by LC/MS/MS.)	mg/kg	0.01	n.d.	-
全氟辛酸鈉 (PFOA-Na) (Sodium perfluorooctanoate (PFOA-Na)) (CAS No.: 335-95-5)	由全氟辛酸測試結果計算得之。 (Calculated from the result of PFOA.)	mg/kg	0.01▲	n.d.	-
全氟辛酸鉀 (PFOA-K) (Potassium perfluorooctanoate (PFOA-K)) (CAS No.: 2395-00-8)	由全氟辛酸測試結果計算得之。 (Calculated from the result of PFOA.)	mg/kg	0.01▲	n.d.	-
全氟辛酸銀 (PFOA-Ag) (Silver perfluorooctanote (PFOA-Ag)) (CAS No.: 335-93-3)	由全氟辛酸測試結果計算得之。 (Calculated from the result of PFOA.)	mg/kg	0.01▲	n.d.	-
全氟辛氟 (PFOA-F) (Perfluorooctanoyl fluoride (PFOA-F)) (CAS No.: 335-66-0)	由全氟辛酸測試結果計算得之。 (Calculated from the result of PFOA.)	mg/kg	0.01▲	n.d.	-
全氟辛酸銨 (APFO) (Ammonium pentadecafluorooctanoate (APFO)) (CAS No.: 3825-26-1)	由全氟辛酸測試結果計算得之。 (Calculated from the result of PFOA.)	mg/kg	0.01▲	n.d.	-
1H,1H,2H,2H-全氟癸磺酸 (8:2 FTS) (1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)) (CAS No.: 39108-34-4)	參考CEN/TS 15968: 2010 · 以液相層析串 聯質譜儀分析。(With reference to CEN/TS 15968: 2010, analysis was performed by LC/MS/MS.)	mg/kg	0.01	n.d.	-



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MITSUI HIGH-TEC INC.

10-1, KOMINE 2-CHOME, YAHATANISHI-KU KITAKYUSHU, 807-8588, JAPAN

測試項目	測試方法	單位	MDL	結果	限值
(Test Items)	(Method)	(Unit)		(Result)	(Limit)
				No.1	
全氟辛酸甲酯 (Me-PFOA) (Methyl	參考CEN/TS 15968: 2010,以氣相層析儀/	mg/kg	0.1	n.d.	-
perfluorooctanoate (Me-PFOA)) (CAS	質譜儀分析。(With reference to CEN/TS				
No.: 376-27-2)	15968: 2010, analysis was performed by				
	GC/MS.)				
全氟辛酸乙酯 (Et-PFOA) (Ethyl	参考CEN/TS 15968: 2010,以氣相層析儀/	mg/kg	0.1	n.d.	-
perfluorooctanoate (Et-PFOA)) (CAS	質譜儀分析。(With reference to CEN/TS				
No.: 3108-24-5)	15968: 2010, analysis was performed by				
	GC/MS.)				
1H,1H,2H,2H-全氟-1-癸醇 (8:2 FTOH)	参考CEN/TS 15968: 2010 · 以氣相層析儀/	mg/kg	0.1	n.d.	-
	質譜儀分析。(With reference to CEN/TS				
FTOH)) (CAS No.: 678-39-7)	15968: 2010, analysis was performed by				
	GC/MS.)				
1H,1H,2H,2H-全氟癸基丙烯酸酯 (8:2	參考CEN/TS 15968: 2010 · 以氣相層析儀/	mg/kg	0.1	n.d.	-
FTA) (1H,1H,2H,2H-Perfluorodecyl	質譜儀分析。(With reference to CEN/TS				
acrylate (8:2 FTA)) (CAS No.: 27905-45-	15968: 2010, analysis was performed by				
9)	GC/MS.)				
,	參考CEN/TS 15968: 2010 · 以氣相層析儀/	mg/kg	0.1	n.d.	-
FTMA) (1H,1H,2H,2H-Perfluorodecyl	質譜儀分析。(With reference to CEN/TS				
methacrylate (8:2 FTMA)) (CAS No.:	15968: 2010, analysis was performed by				
1996-88-9)	GC/MS.)				
全氟辛基碘烷 (PFOI) (Perfluoro-1-	参考CEN/TS 15968: 2010 · 以氣相層析儀/	mg/kg	0.1	n.d.	-
iodooctane (PFOI)) (CAS No.: 507-63-1)	質譜儀分析。(With reference to CEN/TS				
	15968: 2010, analysis was performed by				
	GC/MS.)				



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MITSUI HIGH-TEC INC.

10-1, KOMINE 2-CHOME, YAHATANISHI-KU KITAKYUSHU, 807-8588, JAPAN

備註(Note):

- 1. mg/kg = ppm; 0.1wt% = 0.1% = 1000ppm
- 2. MDL = Method Detection Limit (方法偵測極限值)
- 3. n.d. = Not Detected (未檢出); 小於MDL / Less than MDL
- 4. "-" = Not Regulated (無規格值)
- 5. **= Qualitative analysis (No Unit) 定性分析(無單位)
- 6. Negative = Undetectable 陰性(未偵測到); Positive = Detectable 陽性(已偵測到)
- 7. (#2) =
 - a. 當六價鉻結果大於0.13 μg/cm²,表示樣品表層含有六價鉻。(The sample is positive for Cr(VI) if the Cr(VI) concentration is greater than 0.13 μg/cm². The sample coating is considered to contain Cr(VI).)
 - b. 當六價鉻結果為n.d. (濃度小於0.10 μ g/cm²) · 表示表層不含六價鉻。(The sample is negative for Cr(VI) if Cr(VI) is n.d. (concentration less than 0.10 μ g/cm²). The coating is considered a non-Cr(VI) based coating)
 - c. 當六價鉻結果介於 0.10 及 0.13 $\mu g/cm^2$ 時,無法確定塗層是否含有六價鉻。(The result between 0.10 $\mu g/cm^2$ and 0.13 $\mu g/cm^2$ is considered to be inconclusive unavoidable coating variations may influence the determination.)
- 8. 全氟辛烷磺酸及其鹽類包含等物質 (PFOS and its salts including):

CAS No.: 1763-23-1, 2795-39-3, 29457-72-5, 29081-56-9, 70225-14-8, 56773-42-3, 251099-16-8, 307-35-7, 91036-71-4, 4021-47-0 and others.

9. 全氟辛酸及其鹽類包含等物質 (PFOA and its salts including):

CAS No.: 335-67-1, 335-95-5, 2395-00-8, 335-93-3, 335-66-0, 3825-26-1 and others.

10. ▲: MDL是針對元素/測試化合物之評估。(The MDL was evaluated for element / tested substance.)

換算公式 (Conversion Formula): AX = A × F

AX	Α	F
氧化雙三丁基錫 (Bis(tributyltin)oxide) (TBTO)	三丁基錫 (Tributyl Tin) (TBT)	1.0276

參數換算表 (Parameter Conversion Table):

https://eecloud.sgs.com/Region TW/DocDownload.aspx?name=Others

11. 除非另有說明·參照ILAC-G8:09/2019·採用簡單二元(w=0)允收規則進行符合性判定;根據此規則·符合性結果之判定係以測試結果與限值做比較。(Unless otherwise stated, the decision rule for conformity reporting is based on Binary Statement for Simple Acceptance Rule (w=0) stated in ILAC-G8:09/2019. According to this rule, the judgement of conformity is based on the comparing test results with limits.)



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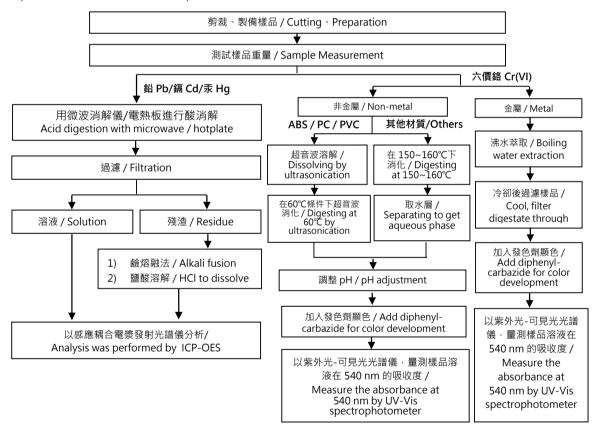
MITSUI HIGH-TEC INC.

10-1, KOMINE 2-CHOME, YAHATANISHI-KU KITAKYUSHU, 807-8588, JAPAN

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

根據以下的流程圖之條件,樣品已完全溶解。(六價鉻測試方法除外)

These samples were dissolved totally by pre-conditioning method according to below flow chart. (Cr^{6+} test method excluded)





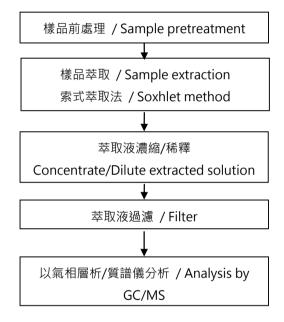
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MITSUI HIGH-TEC INC.

10-1, KOMINE 2-CHOME, YAHATANISHI-KU KITAKYUSHU, 807-8588, JAPAN

多溴聯苯/多溴聯苯醚 分析流程圖 / PBB/PBDE analytical FLOW CHART





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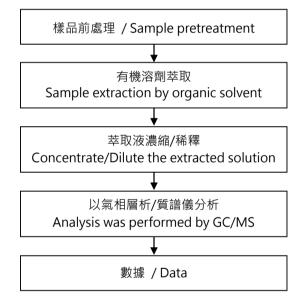
MITSUI HIGH-TEC INC.

10-1, KOMINE 2-CHOME, YAHATANISHI-KU KITAKYUSHU, 807-8588, JAPAN

分析流程圖 / Analytical flow chart

【適用於:多氯聯苯、多氯奈、多氯三聯苯、滅蟻靈、氯化石蠟、DBBT】

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





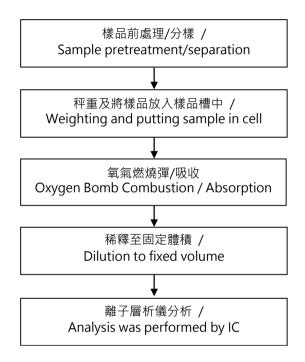
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MITSUI HIGH-TEC INC.

10-1, KOMINE 2-CHOME, YAHATANISHI-KU KITAKYUSHU, 807-8588, JAPAN

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





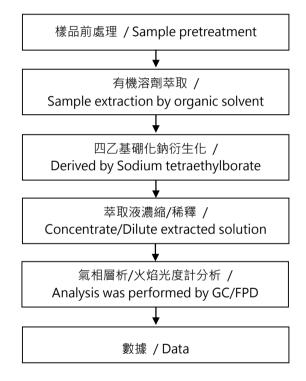
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MITSUI HIGH-TEC INC.

10-1, KOMINE 2-CHOME, YAHATANISHI-KU KITAKYUSHU, 807-8588, JAPAN

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





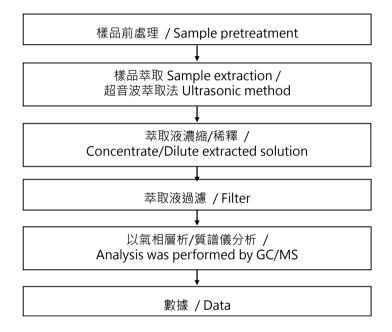
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MITSUI HIGH-TEC INC.

10-1, KOMINE 2-CHOME, YAHATANISHI-KU KITAKYUSHU, 807-8588, JAPAN

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





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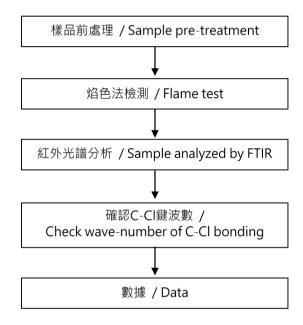
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MITSUI HIGH-TEC INC.

10-1, KOMINE 2-CHOME, YAHATANISHI-KU KITAKYUSHU, 807-8588, JAPAN

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





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MITSUI HIGH-TEC INC.

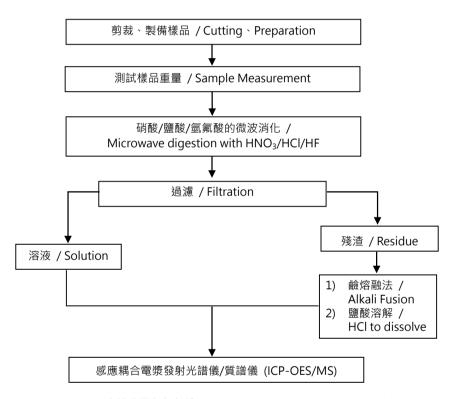
10-1, KOMINE 2-CHOME, YAHATANISHI-KU KITAKYUSHU, 807-8588, JAPAN

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

根據以下的流程圖之條件,樣品已完全溶解。

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

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



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



Test Report

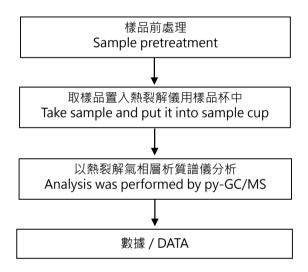
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MITSUI HIGH-TEC INC.

10-1, KOMINE 2-CHOME, YAHATANISHI-KU KITAKYUSHU, 807-8588, JAPAN

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





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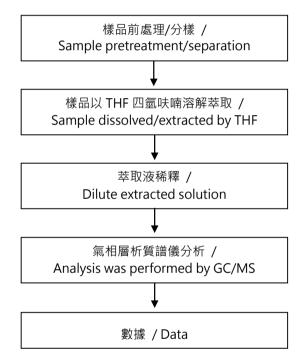
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MITSUI HIGH-TEC INC.

10-1, KOMINE 2-CHOME, YAHATANISHI-KU KITAKYUSHU, 807-8588, JAPAN

可塑劑分析流程圖 / Analytical flow chart of phthalate content

【測試方法/Test method: IEC 62321-8】





Test Report

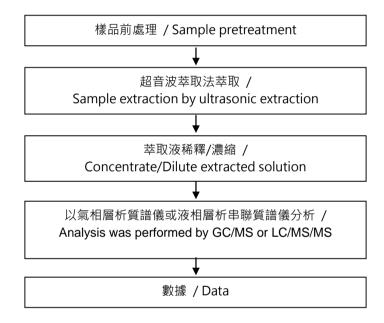
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MITSUI HIGH-TEC INC.

10-1, KOMINE 2-CHOME, YAHATANISHI-KU KITAKYUSHU, 807-8588, JAPAN

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





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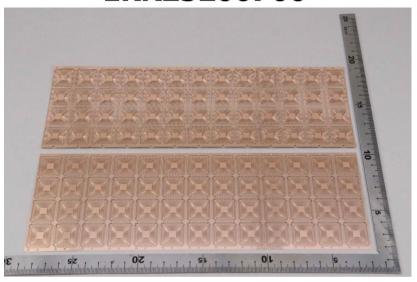
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MITSUI HIGH-TEC INC.

10-1, KOMINE 2-CHOME, YAHATANISHI-KU KITAKYUSHU, 807-8588, JAPAN

* 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.)

EKR23200760



** 報告結尾 (End of Report) **