

SH ALLIN ELECTRONICS CO., LTD.

產品禁用物質測試一覽表 Confirmation of Prohibited/Controlled Report List

D			÷ 0.450b			報告日期
客戶名稱			產品編號 B0830			DATE.
Customer			ITEM NO.			2025/02/18
管制編號	材質	對應	編號(實驗室報	告編號)	備記	ŧ
QA-0127	SUS 304		EKR24C0081	L3	METERIAI	_ 白鐵蓋
QA-0125	JIS C 2680		EKR2490009	64	METERIAL 排片/方 子M	
QA-0439	EZDA 3 Zinc	:	SZXEC2400103	3904	METERIA	AL 鎖殼
QA-0021	高碳鋼線(HIGH CARBON STEEL WIRE) SWB- 60C(Taiwan) SWC-80C(Taiwan)		ETR2460483	34	METERIAL 接點彈簧	
QA-0023	NYLON#66+G30 (301-G30)		ETR2470623	33	METERIAL 鎖	心/端子座
QA-0140	CARBON STEEL BALL(SAE 1015)		ETR24C0474	14	METERIA	AL 鋼珠
QA-0091	1008 / SPHC-PO,鍍三價鋅		ETR2450282	28	METERIAL/PLATED 螺母	
QA-0101	BRASS 銅		ETR24C0080)3	METERIAL 鎖匙	
QA-0466	鉻	А	224010833510	1002C	PLATED 鎖殼	
QA-0068	SUS 304		ETR2460132	24	METERIAL 排片彈簧/鋼珠彈針	
QA-0052	鍍銀(Ag)		ETR24C0502	24	PLATED 接點片/端子腳	
QA-0031	鎳		ETR24C0502	29	PLATED 方向片	
備註:						
核准人 APPRO	OVED: Linda		制表人 WRI	TER BY	: 唐	雯君
<u> </u>					IT O	A-051-1

JT-QA-051-1



报告编号 A2240108335101002C

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检测依据

测试项目	测试方法	测试仪器
铅(Pb)	IEC 62321-5:2013	ICP-0ES
镉 (Cd)	IEC 62321-5:2013	ICP-0ES
汞 (Hg)	IEC 62321-4:2013+AMD1:2017 CSV	ICP-0ES
六价铬(Cr(VI))	IEC 62321-7-1:2015	UV-Vis
多溴联苯(PBBs)	IEC 62321-6:2015	GC-MS
多溴二苯醚(PBDEs)	IEC 62321-6:2015	GC-MS
邻苯二甲酸酯(DBP, BBP, DEHP, DIBP)	IEC 62321-8:2017	GC-MS
氟(F)	参考EN 14582:2016	IC
氯(C1)	参考EN 14582:2016	IC
溴(Br)	参考EN 14582:2016	IC
碘(I)	参考EN 14582:2016	IC

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检测结果		
测试项目	结果	方法检出限
 铅(Pb)	002 16 mg/kg	2 mg/kg
镉 (Cd)	N. D.	2 mg/kg
汞(Hg)	N. D.	2 mg/kg
六价铬(Cr(VI))	N. D. ▼	0.10 μg/cm ² (LOQ)
ハ川 柏 (CI (VI))		0.10 μg/Clii (LOQ)
测试项目	结果	方法检出限
夕泊	002	
多溴联苯(PBBs) 一溴联苯	N.D.	5 mg/kg
	N. D.	
二溴联苯	N. D.	5 mg/kg
三溴联苯	N. D.	5 mg/kg
四溴联苯	N. D.	5 mg/kg
五溴联苯	N. D.	5 mg/kg
六溴联苯	N. D.	5 mg/kg
七溴联苯	N. D.	5 mg/kg
八溴联苯	N. D.	5 mg/kg
九溴联苯	N. D.	5 mg/kg
十溴联苯	N. D.	5 mg/kg
	结果	方法检出限
	002	刀径型的
多溴二苯醚(PBDEs)		
一溴二苯醚	N. D.	5 mg/kg
二溴二苯醚	N. D.	5 mg/kg
三溴二苯醚	N. D.	5 mg/kg
四溴二苯醚	N. D.	5 mg/kg
五溴二苯醚	N. D.	5 mg/kg
六溴二苯醚	N. D.	5 mg/kg
七溴二苯醚	N. D.	5 mg/kg
八溴二苯醚	N. D.	5 mg/kg
九溴二苯醚	N. D.	5 mg/kg
十溴二苯醚	N. D.	5 mg/kg



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检测结果

测试项目	结果 002	方法检出限
邻苯二甲酸酯(DBP, BBP, DEHP, DIB		
邻苯二甲酸二丁酯(DBP) CAS#:84-74-2	N. D.	50 mg/kg
邻苯二甲酸丁基苄基酯(BBP) CAS#:85-68-7	N. D.	50 mg/kg
邻苯二甲酸二(2-乙基)己酯(DEHP) CAS#:117-81-7	N. D.	50 mg/kg
邻苯二甲酸二异丁酯(DIBP) CAS#:84-69-5	N. D.	50 mg/kg

测试项目	结果	方法检出限
	002	77 12 12 12 17 12
氟(F)	N. D.	10 mg/kg
氯(C1)	N. D.	10 mg/kg
溴(Br)	N. D.	10 mg/kg
碘(I)	N. D.	10 mg/kg

样品/部位描述

序号 CT

CTI样品ID 描述

1 002

有银色镀层的金属

备注: 对于检测铅,镉,汞之样品已消解完全。

-客户样品多信息说明:样品为多种物质的混合物。

- -N.D. = 未检出 (小于方法检出限或定量限)
- -mg/kg = ppm = 百万分之一
- -LOQ = 定量限, 六价铬的定量限为0.10 μg/cm²
- * 六价铬浓度小于0.10 μg/cm², 样品未检出六价铬。由于未获知样品的存储条件和生产日期,样品的六价铬测试结果仅能代表测试时样品含六价铬的状态。

注释: 本报告中的数据结果供科研、教学、企业内部质量控制、企业产品研发等目的用。

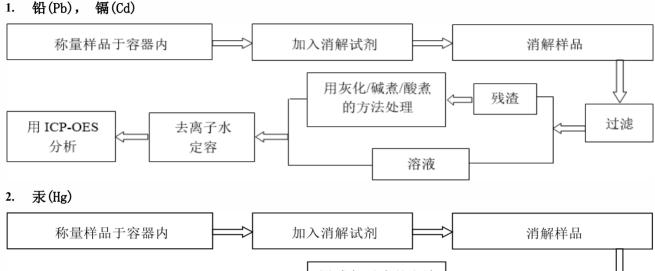


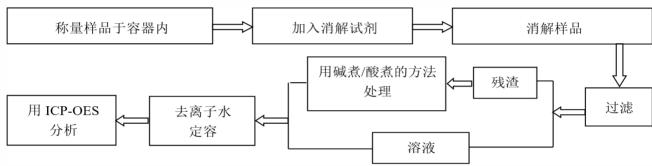
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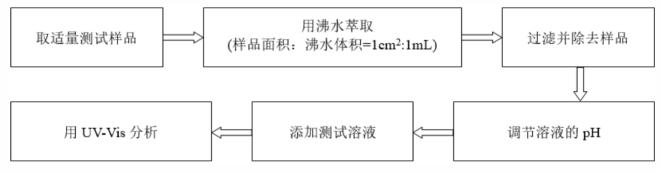
检测流程

铅(Pb),





六价铬(Cr(VI))



多溴联苯(PBBs), 多溴二苯醚(PBDEs)



CTI华测检测

检测报告



CTI华测检测

检测报告

报告编号 A2240108335101002C

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样品图片



声明:

- 检测报告无批准人签字、"专用章"及报告骑缝章无效;
 报告抬头公司名称及地址、样品及样品信息由申请者提供,申请者应对其真实性负责,CTI未核实其真实性;
- 3. 本报告检测结果仅对受测样品负责;
- 4. 除非另有说明,报告参照ILAC-G8:09/2019/CNAS-GL015:2022使用简单接受(w=0)二元判定规则进行符合性判定;
- 5. 未经CTI书面同意,不得部分复制本报告。

*** 报告结束 ***



检测报告 编号: SZXEC24001033904 日期: 2024年04月15日 第1页,共8页

客户名称: 东莞市海隆五金制品有限公司 客户地址: 东莞市大朗镇美景西路 175-1 号

样品名称: 锌合金锭

型号: 3#

客户参考信息: 2#、5#、7#、8#、12#、18#、27#

以上样品及信息由客户提供。

SGS 工作编号: SZP24-014417

样品接收时间: 2024年04月09日

检测周期: 2024年04月09日~2024年04月15日

检测要求: 根据客户要求检测

检测方法: 见后续页。 检测结果: 见后续页。

欧盟 RoHS 指令 2011/65/EU 附录 II 的修正指令(EU) 2015/863 - 铅、汞、镉、 六价铬、多溴联苯 (PBB)、多溴二苯醚 (PBDE)、邻苯二甲酸二(2-乙基已基)酯 (DEHP)、邻苯二甲酸丁苄酯 (BBP)、邻苯二甲酸二丁酯 (DBP)和邻苯二甲酸二	仑
异丁酯 (DIBP)	,

通标标准技术服务有限公司深圳分公司 授权签名

了石石

Andy Ni 倪磊 批准签署人





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编号: SZXEC24001033904

日期: 2024年04月15日

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检测结果:

检测部件外观描述:

样品序号	样品编号	SGS 样品 ID	样品描述
SN1	A2	SZX24-0010339-0001.C002	银色金属

备注:

- (1) 1 mg/kg = 1 ppm = 0.0001%
- (2) MDL= 方法检测限
- (3) ND = 未检出(< MDL)
- (4) "-" = 未规定

欧盟 RoHS 指令 2011/65/EU 附录 II 的修正指令(EU) 2015/863 - 铅、汞、镉、六价铬、多溴联苯 (PBB)、多 溴二苯醚 (PBDE)、邻苯二甲酸二(2-乙基已基)酯 (DEHP)、邻苯二甲酸丁苄酯 (BBP)、邻苯二甲酸二丁酯 (DBP)和邻苯二甲酸二异丁酯 (DIBP)

检测方法: 参考 IEC 62321-4:2013+AMD1:2017, IEC 62321-5:2013, IEC 62321-7-1:2015, IEC 62321-6:2015 和 IEC 62321-8:2017, 采用 ICP-OES/AAS, UV-Vis 和 GC-MS 进行分析。

检测项目	限值	单位	MDL	A2
铅 (Pb)	1000	mg/kg	2	20
汞 (Hg)	1000	mg/kg	2	ND
镉 (Cd)	100	mg/kg	2	ND
六价铬 (Cr(VI))▼	-	μg/cm²	0.10	ND
多溴联苯之和 (PBB)	1000	mg/kg	-	ND
一溴联苯 (MonoBB)	-	mg/kg	5	ND
二溴联苯 (DiBB)	-	mg/kg	5	ND
三溴联苯 (TriBB)	-	mg/kg	5	ND
四溴联苯 (TetraBB)	-	mg/kg	5	ND
五溴联苯 (PentaBB)	-	mg/kg	5	ND
六溴联苯 (HexaBB)	-	mg/kg	5	ND
七溴联苯 (HeptaBB)	-	mg/kg	5	ND
八溴联苯 (OctaBB)	-	mg/kg	5	ND
九溴联苯 (NonaBB)	-	mg/kg	5	ND
十溴联苯 (DecaBB)	-	mg/kg	5	ND
多溴二苯醚之和 (PBDE)	1000	mg/kg	-	ND
一溴二苯醚 (MonoBDE)	-	mg/kg	5	ND
二溴二苯醚 (DiBDE)	-	mg/kg	5	ND
三溴二苯醚 (TriBDE)	-	mg/kg	5	ND
四溴二苯醚 (TetraBDE)	-	mg/kg	5	ND
五溴二苯醚 (PentaBDE)	-	mg/kg	5	ND
六溴二苯醚 (HexaBDE)	-	mg/kg	5	ND
七溴二苯醚 (HeptaBDE)	-	mg/kg	5	ND
八溴二苯醚 (OctaBDE)	-	mg/kg	5	ND



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检测项目	限值	单位	MDL	A2
九溴二苯醚 (NonaBDE)	-	mg/kg	5	ND
十溴二苯醚 (DecaBDE)	-	mg/kg	5	ND
邻苯二甲酸二(2-乙基己基)酯 (DEHP)	1000	mg/kg	50	ND
邻苯二甲酸丁苄酯 (BBP)	1000	mg/kg	50	ND
邻苯二甲酸二丁酯 (DBP)	1000	mg/kg	50	ND
邻苯二甲酸二异丁酯 (DIBP)	1000	mg/kg	50	ND

备注:

- (1) 最大允许极限值引用自RoHS指令(EU) 2015/863。
- (2) IEC 62321系列等同于 EN 62321系列。
- (3) ▼ = a. 当六价铬的浓度高于0.13 µg/cm²时,样品为阳性,即含有六价铬;
 - b. 当六价铬的浓度为ND (低于0.10 μg/cm²) 时,样品为阴性,即未检测到六价铬;
 - c. 当六价铬的浓度介于0.10 μg/cm²与0.13 μg/cm²之间时,无法直接判定是否检测到六价铬,因不同个体的样品表面差异可能会影响测定结果。

由于未获知样品的存储条件和生产日期,样品的六价铬检测结果仅能代表检测时样品含六价铬的状态。

除非另有说明,参照 ILAC-G8:09/2019,使用简单接受(w=0)的二元判定规则进行符合性判定。除非另有说明,此报告结果仅对检测的样品负责。本报告未经本公司书面许可,不可部分复制。检测报告仅用于客户科研、教学、内部质量控制、产品研发等目的,仅供内部参考。



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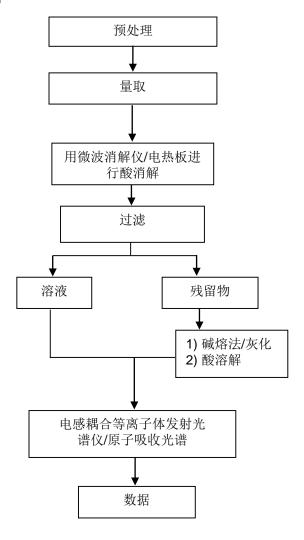
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附件

元素检测流程图

样品按照下述流程被完全消解





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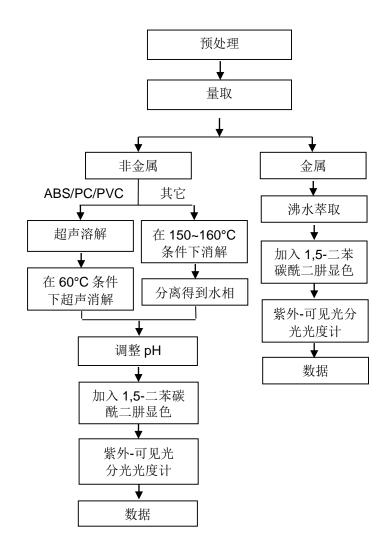
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六价铬检测流程图





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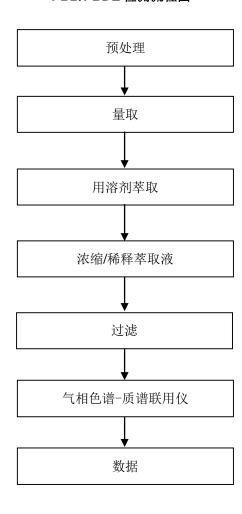
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PBB/PBDE 检测流程图





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Room 101-911, Plant L4 & Room 101, Plant L2 & Room 101, Plant L3 & Room 301-501, Plant L4 & Room 101, Plant L4 & Room 101, Plant L3 & Room 301-501, Plant L3 & Room 301-501 中国・广东・深圳市龙岗区坂田街道坂田社区吉华路430号江源(坂田)工业厂区厂房4号101-901、2号101、3号101、3号301-501 邮编:518129 t (86-755) 25328888 sgs.china@sgs.com



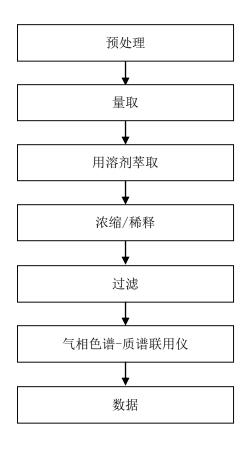
编号: SZXEC24001033904

日期: 2024年04月15日

第7页,共8页

附件

Phthalates 检测流程图





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Room 101-901, Plant 4 & Room 101, Plant 2 & Room 101, Plant 3 & Room 301-501, 中国・广东・深圳市龙岗区坂田街道坂田社区吉华路430号江源(坂田)工业厂区厂房4号101-901、2号101、3号101、3号301-501 邮编:518129 t (86-755) 25328888 sgs.china@sgs.com

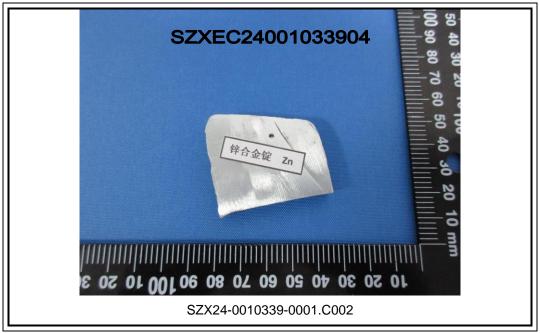


编号: SZXEC24001033904

日期: 2024年04月15日

第8页,共8页

样品照片:



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Rown (101-04), Plant 4 Rown (101, Plant 2 Rown (101, Plant 3 Rown (101, Pla



Test Report

號碼(No.): ETR24C04744 日期(Date): 30-Dec-2024 頁數(Page): 1 of 5

生原企業有限公司 (SHENG YUAN HARNG ENTERPRISES CO., LTD.) 新北市三重區重陽路一段113巷11號1樓 (NO. 11, LANE 113, SEC. 1, CHUNG YANG RD., SAN CHUNG DIST., NEW TAIPEI CITY, TAIWAN, R. O. C.)

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

送樣廠商(Sample Submitted By)

: 生原企業有限公司 (SHENG YUAN HARNG ENTERPRISES CO., LTD.)

樣品名稱(Sample Name)

: CARBON STEEL BALL

收件日(Sample Receiving Date)

: 23-Dec-2024

測試期間(Testing Period)

23-Dec-2024 to 30-Dec-2024

測試需求(Test Requested)

依據客戶指定,參考RoHS指令2011/65/EU Annex II測試鎘、鉛、汞、六價鉻。 (As specified by client, with reference to RoHS Directive 2011/65/EU Annex II to determine Cadmium, Lead, Mercury, Cr(VI) contents in the submitted

sample(s).)

測試結果(Test Results)

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

結 論(Conclusion)

根據客戶所選擇的部位測試,其編、鉛、汞、六價鉻的測試結果符合RoHS 2011/65/EU Annex II之限值要求。 (Based on the performed tests on selected part of submitted sample(s), the test results of Cadmium, Lead, Mercury, Cr(VI)

comply with the limits as set by RoHS Directive 2011/65/EU Annex II.)

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



PIN CODE: E4EE2B3



Test Report

號碼(No.): ETR24601324 頁數(Page): 1 of 6 日期(Date): 17-Jun-2024

祥弘通商股份有限公司 (SHINE-WORLD COMMERCE LTD.) 台北市松江路101號5樓之2 (5TH-2 FL., 101, SUNG KIANG ROAD, TAIPEI)

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) 祥弘通商股份有限公司 (SHINE-WORLD COMMERCE LTD.)

樣品名稱(Sample Name) STAINLESS STEEL WIRE

樣品型號(Style/Item No.) SUS304

收件日(Sample Receiving Date)

07-Jun-2024

測試期間(Testing Period)

07-Jun-2024 to 17-Jun-2024

測試需求(Test Requested)

依據客戶指定,參考RoHS指令2011/65/EU Annex Ⅱ測試鎘、鉛、汞、六價鉻。 (1)(As specified by client, with reference to RoHS Directive 2011/65/EU Annex II to determine Cadmium, Lead, Mercury, Cr(VI) 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)

論(Conclusion)

(1) 根據客戶所提供的樣品,其編、鉛、汞、六價鉻的測試結果符合RoHS 2011/65/EU Annex II之限值要求。 (Based on the performed tests on submitted sample(s),

the test results of Cadmium, Lead, Mercury, Cr(VI) comply with the limits as set

by RoHS Directive 2011/65/EU Annex II.)

Troy Chand / Department Maka Signed for and on behalf 💸 SĞS TAIWAN LTD. Chemical Laboratory - Taipei





Test Report

號碼(No.): ETR24601324 日期(Date): 17-Jun-2024 頁數(Page): 2 of 6

祥弘通商股份有限公司 (SHINE-WORLD COMMERCE LTD.) 台北市松江路101號5樓之2 (5TH-2 FL., 101, SUNG KIANG ROAD, TAIPEI)

測試部位敘述 (Test Part Description)

No.1 : 銀色金屬線 (SILVER COLORED METAL WIRE)

測試結果 (Test Results)

測試項目 (Test Items)	測試方法 (Method)	單位 (Unit)	MDL	結果 (Result) No.1	限值 (Limit)
鎘 (Cd) (Cadmium (Cd))	參考IEC 62321-5: 2013 · 以感應耦合電漿 發射光譜儀分析。(With reference to IEC 62321-5: 2013, analysis was performed by ICP-OES.)	mg/kg	2	n.d.	100
鉛 (Pb) (Lead (Pb))	參考IEC 62321-5: 2013·以感應耦合電漿 發射光譜儀分析。(With reference to IEC 62321-5: 2013, analysis was performed by ICP-OES.)	mg/kg	2	n.d.	1000
汞 (Hg) (Mercury (Hg))	參考IEC 62321-4: 2013 + AMD1: 2017 · 以感應耦合電漿發射光譜儀分析。(With reference to IEC 62321-4: 2013 + AMD1: 2017, analysis was performed by ICP-OES.)	mg/kg	2	n.d.	1000
六價鉻 (Hexavalent Chromium) Cr(VI) (#2)	參考IEC 62321-7-1: 2015·以紫外光-可見 光分光光度計分析。(With reference to IEC 62321-7-1: 2015, analysis was performed by UV-VIS.)	μg/cm²	0.1	n.d.	-
鈹 (Be) (Beryllium (Be)) (CAS No.: 7440-41-7)	參考US EPA 3050B: 1996‧以感應耦合電 漿發射光譜儀分析。(With reference to US EPA 3050B: 1996, analysis was performed by ICP-OES.)	mg/kg	2	n.d.	-



Test Report

號碼(No.): ETR24601324 日期(Date): 17-Jun-2024 頁數(Page): 3 of 6

祥弘通商股份有限公司 (SHINE-WORLD COMMERCE LTD.) 台北市松江路101號5樓之2 (5TH-2 FL., 101, SUNG KIANG ROAD, TAIPEI)

備註(Note):

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



Test Report

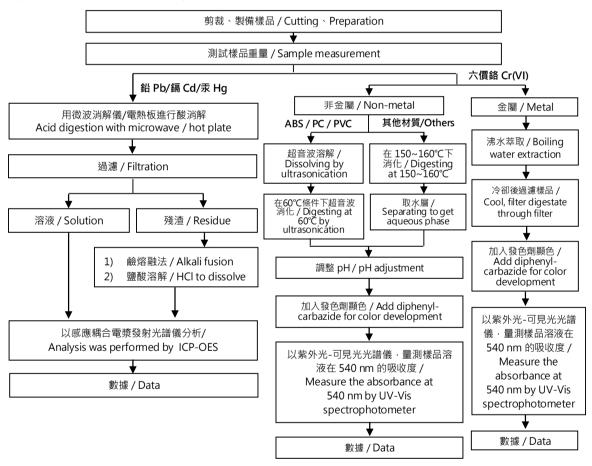
號碼(No.): ETR24601324 日期(Date): 17-Jun-2024 頁數(Page): 4 of 6

祥弘通商股份有限公司 (SHINE-WORLD COMMERCE LTD.) 台北市松江路101號5樓之2 (5TH-2 FL., 101, SUNG KIANG ROAD, TAIPEI)

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)





Test Report

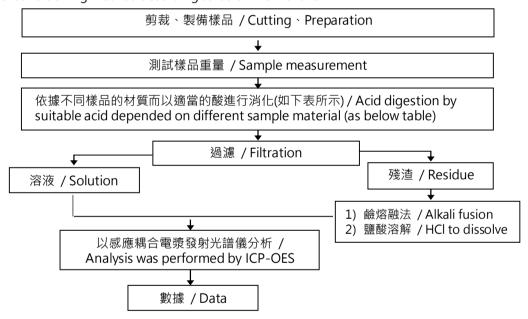
號碼(No.): ETR24601324 日期(Date): 17-Jun-2024

祥弘通商股份有限公司 (SHINE-WORLD COMMERCE LTD.) 台北市松江路101號5樓之2 (5TH-2 FL., 101, SUNG KIANG ROAD, TAIPEI)

元素以 ICP-OES 分析的消化流程圖

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

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



鋼,銅,鋁,焊錫 / Steel, copper, aluminum, solder	王水,硝酸,鹽酸,氫氟酸,雙氧水 / Aqua regia, HNO ₃ , HCl, HF, H ₂ O ₂
玻璃 / Glass	硝酸,氫氟酸 / HNO₃,HF
金,鉑,鈀,陶瓷 / Gold, platinum, palladium, ceramic	王水 / Aqua regia
銀 / Silver	硝酸 / HNO₃
塑膠 / Plastic	硫酸,雙氧水,硝酸,鹽酸 / H ₂ SO ₄ , H ₂ O ₂ , HNO ₃ , HCI
其他 / Others	加入適當的試劑至完全溶解 / Added appropriate reagent to total digestion

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頁數(Page): 5 of 6



Test Report

號碼(No.): ETR24601324 日期(Date): 17-Jun-2024

頁數(Page): 6 of 6

祥弘通商股份有限公司 (SHINE-WORLD COMMERCE LTD.) 台北市松江路101號5樓之2 (5TH-2 FL., 101, SUNG KIANG ROAD, TAIPEI)

* 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.)

ETR24601324



** 報告結尾 (End of Report) **



Test Report

號碼(No.): ETR24C04744

日期(Date): 30-Dec-2024

頁數(Page): 2 of 5

生原企業有限公司 (SHENG YUAN HARNG ENTERPRISES CO., LTD.) 新北市三重區重陽路一段113巷11號1樓 (NO. 11, LANE 113, SEC. 1, CHUNG YANG RD., SAN CHUNG DIST., NEW TAIPEI CITY, TAIWAN, R. O. C.)

測試部位敘述 (Test Part Description)

No.1 : 銀色金屬底材 (BASE MATERIAL OF SILVER COLORED METAL)

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))	参考IEC 62321-5: 2013·以感應耦合電漿發射 光譜儀分析。(With reference to IEC 62321-5:	mg/kg	2	n.d.	100
鉛 (Pb) (Lead (Pb))	2013, analysis was performed by ICP-OES.)	mg/kg	2	n.d.	1000
汞 (Hg) (Mercury (Hg))	參考IEC 62321-4: 2013+ AMD1: 2017 · 以感應 耦合電漿發射光譜儀分析。(With reference to IEC 62321-4: 2013+ AMD1: 2017, analysis was performed by ICP-OES.)	mg/kg	2	n.d.	1000
六價鉻 (Hexavalent Chromium) Cr(VI) (#2)	參考IEC 62321-7-1: 2015 · 以紫外光-可見光分光光度計分析。(With reference to IEC 62321-7-1: 2015, analysis was performed by UV-VIS.)	μg/cm²	0.1	n.d.	-



Test Report

號碼(No.): ETR24C04744 日期(Date): 30-Dec-2024 頁數(Page): 3 of 5

生原企業有限公司 (SHENG YUAN HARNG ENTERPRISES CO., LTD.) 新北市三重區重陽路一段113巷11號1樓 (NO. 11, LANE 113, SEC. 1, CHUNG YANG RD., SAN CHUNG DIST., NEW TAIPEI CITY, TAIWAN, R. O. C.)

備註(Note):

- 1. mg/kg = ppm; 0.1wt% = 0.1% = 1000ppm
- 2. MDL = Method Detection Limit (方法偵測極限值)
- 3. n.d. = Not Detected (未檢出); 小於MDL / Less than MDL
- 4. "-" = Not Regulated (無規格值)
- 5. (#2) =
 - a. 當六價鉻結果大於 $0.13~\mu g/cm^2 \cdot$ 表示樣品表層含有六價鉻。(The sample is positive for Cr(VI) if the Cr(VI) concentration is greater than $0.13~\mu g/cm^2$. The sample coating is considered to contain Cr(VI).) b. 當六價鉻結果為n.d. (濃度小於 $0.10~\mu g/cm^2$) · 表示表層不含六價鉻。(The sample is negative for Cr(VI) if Cr(VI) is n.d. (concentration less than $0.10~\mu g/cm^2$). The coating is considered a non-Cr(VI) based coating) c. 當六價鉻結果介於 $0.10~\mu g/cm^2$ 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.)
- 6. 除非另有說明·參照ILAC-G8:09/2019決定規則·採用簡單允收規則之二分法(w=0)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.)



Test Report

號碼(No.): ETR24C04744 日期(Date): 30-Dec-2024

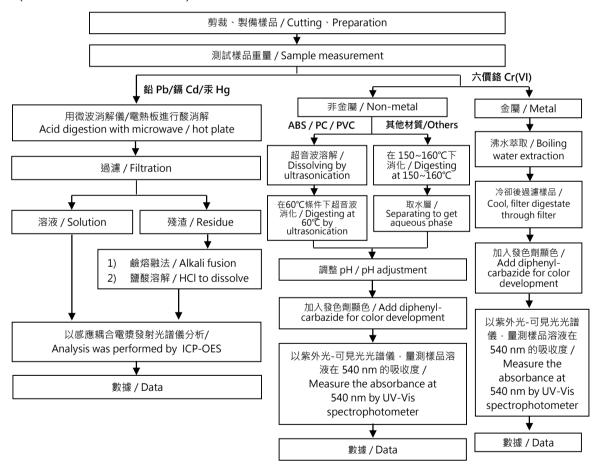
頁數(Page): 4 of 5

生原企業有限公司 (SHENG YUAN HARNG ENTERPRISES CO., LTD.) 新北市三重區重陽路一段113巷11號1樓 (NO. 11, LANE 113, SEC. 1, CHUNG YANG RD., SAN CHUNG DIST., NEW TAIPEI CITY, TAIWAN, R. O. C.)

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)





Test Report

號碼(No.): ETR24C04744

日期(Date): 30-Dec-2024

頁數(Page): 5 of 5

生原企業有限公司 (SHENG YUAN HARNG ENTERPRISES CO., LTD.) 新北市三重區重陽路一段113巷11號1樓 (NO. 11, LANE 113, SEC. 1, CHUNG YANG RD., SAN CHUNG DIST., NEW TAIPEI CITY, TAIWAN, R. O. C.)

* 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.)

ETR24C04744



** 報告結尾 (End of Report) **



Test Report

號碼(No.): EKR24C00813 日期(Date): 02-Jan-2025 頁數(Page): 1 of 8

嘉發實業工廠股份有限公司 (CHIA FAR INDUSTRIAL FACTORY CO., LTD.) 台北市太原路83號 (NO. 83, TAIYUAN RD., TAIPEI, 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 the applicant as):

送樣廠商(Sample Submitted By) : 嘉發實業工廠股份有限公司 (CHIA FAR INDUSTRIAL FACTORY CO., LTD.)

樣品名稱(Sample Name) : COLD ROLLED STAINLESS STEEL STRIP(冷軋不銹鋼材)

樣品型號(Style/Item No.) : SUS304

收件日(Sample Receiving Date) : 09-Dec-2024

測試期間(Testing Period) : 09-Dec-2024 to 02-Jan-2025

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).)

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

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, 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/現伯會 博士/部 摩 **写 G S** Ray Chang, Ph.D./ Department Manager Signed for and on behality A J WAN SGS TAIWAN LTD.

化學實驗室-高雄/Chemical Laboratory-Kaohsiung



PIN CODE: E415FA86



Test Report

號碼(No.): ETR24C05024 日期(Date): 03-Jan-2025 頁數(Page): 1 of 14

浔剴工業有限公司 (DER KAE INDUSTRIAL CO. LTD.)

新北市土城區忠承路11號 (NO. 11, ZHONGCHENG RD., TUCHENG DIST., NEW TAIPEI CITY 236, TAIWAN (R. O. C.))

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

樣品名稱(Sample Name) : FINISH:Aq (電子零件鍍銀)

收件日(Sample Receiving Date)

24-Dec-2024

測試期間(Testing Period)

: 24-Dec-2024 to 03-Jan-2025

測試需求(Test Requested)

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

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

測試結果(Test Results)

結 論(Conclusion)

(1) 根據客戶所提供的樣品,其編、鉛、汞、六價鉻、多溴聯苯、多溴聯苯醚, DBP, BBP, DEHP, DIBP的測試結果符合RoHS 2011/65/EU Annex II暨其修訂指令(EU)

2015/863之限值要求。 (Based on the performed tests on submitted sample(s), the test results of Cadmium, Lead, Mercury, Cr(VI), PBBs, PBDEs, DBP, BBP, DEHP, DIBP comply with the limits as set by RoHS Directive (EU)

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

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



PIN CODE: 64ECC8AA



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浔剴工業有限公司 (DER KAE INDUSTRIAL CO. LTD.)

新北市土城區忠承路11號 (NO. 11, ZHONGCHENG RD., TUCHENG DIST., NEW TAIPEI CITY 236, TAIWAN (R. O. C.))

測試部位敘述 (Test Part Description)

No.1 : 銀白色碎片 (SILVER-WHITE COLORED FLINDERS)

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				
	by ICP-OES.)				
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				
	by ICP-OES.)				
汞 (Hg) (Mercury (Hg))	參考IEC 62321-4: 2013+ AMD1: 2017	mg/kg	2	n.d.	1000
	以感應耦合電漿發射光譜儀分析。(With				
	reference to IEC 62321-4: 2013+ AMD1:				
	2017, analysis was performed by ICP-				
一一一一一一一一一一一一一一一一一一一一一一一一一一一一一一一一一一一一一	OES.)		0.1	ام ما	
六價鉻 (Hexavalent Chromium) Cr(VI)	參考IEC 62321-7-1: 2015 · 以紫外光-可見 光分光光度計分析。(With reference to	μg/cm²	0.1	n.d.	-
(#2)	IEC 62321-7-1: 2015, analysis was				
	performed by UV-VIS.)				
	performed by 6 v - vis.)	mg/kg	5	n.d.	
二溴聯苯 (Dibromobiphenyl)	1	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· 譜儀分析。(With reference to IEC 62321- 6: 2015, analysis was performed by GC/MS.)	mg/kg	5	n.d.	-
五溴聯苯 (Pentabromobiphenyl)		mg/kg	5	n.d.	-
六溴聯苯 (Hexabromobiphenyl)		mg/kg	5	n.d.	-
七溴聯苯 (Heptabromobiphenyl)		mg/kg	5	n.d.	-
八溴聯苯 (Octabromobiphenyl)		mg/kg	5	n.d.	-
九溴聯苯 (Nonabromobiphenyl)		mg/kg	5	n.d.	-
十溴聯苯 (Decabromobiphenyl)		mg/kg	5	n.d.	-
多溴聯苯總和 (Sum of PBBs)		mg/kg	-	n.d.	1000



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浔剴工業有限公司 (DER KAE INDUSTRIAL CO. LTD.)

新北市土城區忠承路11號 (NO. 11, ZHONGCHENG RD., TUCHENG DIST., NEW TAIPEI CITY 236, TAIWAN (R. O. C.))

(Method) (Unit)	測試項目	測試方法	單位	MDL	結果	限值
一演聯苯醚 (Monobromodiphenyl ether) 「演聯苯醚 (Dibromodiphenyl ether) 「演聯苯醚 (Tibromodiphenyl ether) 「演聯苯醚 (Tibromodiphenyl ether) 「演聯苯醚 (Pentabromodiphenyl ether) 「演聯苯醚 (Hexabromodiphenyl ether) 「大漢聯苯醚 (Hexabromodiphenyl ether) 「大漢聯苯醚 (Hexabromodiphenyl ether) 「大漢聯苯醚 (Heytabromodiphenyl ether) 「大漢聯苯醚 (Decabromodiphenyl ether) 「大漢聯苯醚 (BBP) (Butyl benzyl phthalate (BBP)) 「「「中華 (BBP) (Dibutyl phthalate (DBP)) 「「「「中華 (DEHP) (Di-(2-ethylhexyl) phthalate (DEHP)) 「「「「Fluorine (F)) (CAS No.: 14762-94-8) 「「「Fluorine (F)) (CAS No.: 14762-94-8) 「「「「Fluorine (CI)) (CAS No.: 22537-15-1) 「「「「(CAS No.: 14762-94-8) 「「「(CAS No.: 14762-94-8) 「「(CI) (Chlorine (CI)) (CAS No.: 22537-15-1) 「「(CAS No.: 14762-94-8) 「「(CI) (Chlorine (CI)) (CAS No.: 10097-8*8 SEN 14582: 2016 - 以離子層析儀分析。(With reference to BS EN 14582: 2016, analysis was performed by IC.) 「「(CI) (Chlorine (CI)) (CAS No.: 10097-8*8 SEN 14582: 2016 - 以離子層析儀分析。(With reference to BS EN	(Test Items)	(Method)	(Unit)			(Limit)
一 演聯苯醚 (Dibromodiphenyl ether)						
三溴聯苯醚 (Tribromodiphenyl ether) 一次្事業 (Pentabromodiphenyl ether) 参考IEC 62321-6: 2015・以氣相層析儀/質)			-
四溴聯苯醚 (Tetrabromodiphenyl ether) 五溴聯苯醚 (Pentabromodiphenyl ether) 七溴聯苯醚 (Hexabromodiphenyl ether) 七溴聯苯醚 (Hexabromodiphenyl ether) 九溴聯苯醚 (Notabromodiphenyl ether) 十溴聯苯醚 (Notabromodiphenyl ether) 十溴聯苯醚 (Notabromodiphenyl ether) 十溴聯苯醚 (Decabromodiphenyl ether) 为澳聯苯醚 (Decabromodiphenyl ether) 为澳聯苯醚 (Bespi) 第本二甲酸丁苯甲酯 (BBP) (Butyl benzyl phthalate (BBP)) 第本二甲酸丁酯 (DBP) (Dibutyl phthalate (DBP)) 第本二甲酸 (2-乙基己基)酯 (DEHP) (Di-2-ethylhexyl) phthalate (DBP)) 第本二甲酸 (DEBP) (Diisobutyl phthalate (DIBP)) 第本二甲酸 (DESP) (Disobutyl phthalate (DIBP)) 第 (F) (Fluorine (F)) (CAS No.: 14762-94-8) 8) 第 (CI) (Chlorine (CI)) (CAS No.: 22537-15-1) ② (With reference to BS EN 14582: 2016 · 以離子層析儀分析。(With reference to BS EN 14582: 2016 · 以離子層析像分析。(With re			mg/kg			=
大浪聯苯醚 (Pentabromodiphenyl ether)			mg/kg		n.d.	- .
通機分析。(With reference to IEC 62321-			mg/kg		n.d.	-
八溴聯苯醚 (Heptabromodiphenyl ether) 6: 2015, analysis was performed by CZ/MS.) mg/kg 5 n.d. - 八溴聯苯醚 (Octabromodiphenyl ether) 九溴聯苯醚 (Nonabromodiphenyl ether) mg/kg 5 n.d. - 九溴聯苯醚 (Decabromodiphenyl ether) mg/kg 5 n.d. - 多溴聯苯醚 (Decabromodiphenyl ether) mg/kg 5 n.d. - 多溴聯苯醚 (Decabromodiphenyl ether) mg/kg 5 n.d. - 多溴聯苯醚 (Decabromodiphenyl ether) mg/kg 5 n.d. - 少月 (Diama (BBP)) mg/kg 5 n.d. - 咖啡/kg 5 n.d. - - 加速 (BBP) mg/kg 5 n.d. 1000 脚苯二甲酸 (DBP) mg/kg 50 n.d. 1000 加速 (Z-ethylhexyl) phthalate (DIBP) mg/kg 50 n.d. 1000 加速 (F) (Fluorine (F)) (CAS No.: 14762-94-8) 参考BS EN 14582: 2016 · 以離子屬析儀分析。(With reference to BS EN 14582: 2016 · 以離子屬析儀分析。(With		I	mg/kg	5	n.d.	-
大溴聯苯酸 (Octabromodiphenyl ether) 大溴聯苯酸 (Nonabromodiphenyl ether) 大溴聯苯酸 (Nonabromodiphenyl ether) 大溴聯苯酸 (Decabromodiphenyl ether) 大溴酸 (Dec	六溴聯苯醚 (Hexabromodiphenyl ether)	•	mg/kg		n.d.	-
九溴聯苯醚 (Nonabromodiphenyl ether) 十溴聯苯醚 (Decabromodiphenyl ether) 十溴聯苯醚 (Decabromodiphenyl ether) 一多溴聯苯醚總和 (Sum of PBDEs) 一	七溴聯苯醚 (Heptabromodiphenyl ether)	' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' '	mg/kg	5	n.d.	-
十溴聯苯醚 (Decabromodiphenyl ether) 一方	八溴聯苯醚 (Octabromodiphenyl ether)	GC/1VI3.)	mg/kg		n.d.	=
多漢字 一方 1000 一方 100	九溴聯苯醚 (Nonabromodiphenyl ether)		mg/kg	5	n.d.	=
郷苯二甲酸丁苯甲酯 (BBP) (Butyl benzyl phthalate (BBP))参考IEC 62321-8: 2017 · 以氣相層析儀/質 mg/kg50n.d.1000郷苯二甲酸二丁酯 (DBP) (Dibutyl phthalate (DBP))夢考IEC 62321-8: 2017 · 以氣相層析儀/質 譜儀分析。(With reference to IEC 62321-8: 2017, analysis was performed by (2-ethylhexyl) phthalate (DEHP))mg/kg50n.d.1000郷苯二甲酸二異丁酯 (DIBP) (Diisobutyl phthalate (DIBP))Ø考BS EN 14582: 2016 · 以離子層析儀分析。(With reference to BS EN 14582: 2016, analysis was performed by IC.)mg/kg50n.d.1000氯 (CI) (Chlorine (CI)) (CAS No.: 14762-94-8)参考BS EN 14582: 2016 · 以離子層析儀分析。(With reference to BS EN 14582: 2016, analysis was performed by IC.)mg/kg50n.d氯 (CI) (Chlorine (Br)) (CAS No.: 10097-32-2)参考BS EN 14582: 2016 · 以離子層析儀分析。(With reference to BS EN 14582: 2016 · 以離子層析儀分析。(Wit			mg/kg	5	n.d.	=.
phthalate (BBP)) 鄰苯二甲酸二丁酯 (DBP) (Dibutyl	多溴聯苯醚總和 (Sum of PBDEs)		mg/kg	-	n.d.	1000
郷苯二甲酸二丁酯 (DBP) (Dibutyl phthalate (DBP))参考IEC 62321-8: 2017、以氣相層析儀/質 譜儀分析。(With reference to IEC 62321-	鄰苯二甲酸丁苯甲酯 (BBP) (Butyl benzyl		mg/kg	50	n.d.	1000
Phthalate (DBP)	phthalate (BBP))					
W本工甲酸二(2-乙基己基)酯 (DEHP) (Di- (2-ethylhexyl) phthalate (DEHP))	鄰苯二甲酸二丁酯 (DBP) (Dibutyl	參考IEC 62321-8: 2017,以氣相層析儀/質	mg/kg	50	n.d.	1000
(2-ethylhexyl) phthalate (DEHP)) 郷苯二甲酸二異丁酯 (DIBP) (Diisobutyl phthalate (DIBP)) 氟 (F) (Fluorine (F)) (CAS No.: 14762-94-8	phthalate (DBP))	譜儀分析。(With reference to IEC 62321-				
本文字 本文	鄰苯二甲酸二(2-乙基己基)酯 (DEHP) (Di-	8: 2017, analysis was performed by	mg/kg	50	n.d.	1000
phthalate (DIBP)) 氟 (F) (Fluorine (F)) (CAS No.: 14762-94- 参考BS EN 14582: 2016 · 以離子層析儀分 析。(With reference to BS EN 14582: 2016, analysis was performed by IC.) 氯 (CI) (Chlorine (CI)) (CAS No.: 22537- 参考BS EN 14582: 2016 · 以離子層析儀分 析。(With reference to BS EN 14582: 2016, analysis was performed by IC.) 溴 (Br) (Bromine (Br)) (CAS No.: 10097- 参考BS EN 14582: 2016 · 以離子層析儀分 析。(With reference to BS EN 14582: 2016 · 以離子層析儀分 析為 如	(2-ethylhexyl) phthalate (DEHP))	GC/MS.)				
無 (F) (Fluorine (F)) (CAS No.: 14762-94- 参考BS EN 14582: 2016・以離子層析儀分 析。(With reference to BS EN 14582: 2016, analysis was performed by IC.) 氯 (Cl) (Chlorine (Cl)) (CAS No.: 22537- 参考BS EN 14582: 2016・以離子層析儀分 析。(With reference to BS EN 14582: 2016, analysis was performed by IC.) 溴 (Br) (Bromine (Br)) (CAS No.: 10097- 参考BS EN 14582: 2016・以離子層析儀分 mg/kg 50 n.d 数考BS EN 14582: 2016・以離子層析儀分 mg/kg 50 n.d 数考BS EN 14582: 2016・以離子層析儀分 mg/kg 50 n.d	鄰苯二甲酸二異丁酯 (DIBP) (Diisobutyl		mg/kg	50	n.d.	1000
8) 析。(With reference to BS EN 14582: 2016, analysis was performed by IC.)	phthalate (DIBP))					
2016, analysis was performed by IC.) 氯 (Cl) (Chlorine (Cl)) (CAS No.: 22537- 参考BS EN 14582: 2016 · 以離子層析儀分 析。(With reference to BS EN 14582: 2016, analysis was performed by IC.) 溴 (Br) (Bromine (Br)) (CAS No.: 10097- 参考BS EN 14582: 2016 · 以離子層析儀分 析。(With reference to BS EN 14582: 2016 · 以離子層析儀分 析為 如	氟 (F) (Fluorine (F)) (CAS No.: 14762-94-	參考BS EN 14582: 2016 · 以離子層析儀分	mg/kg	50	n.d.	-
氯 (CI) (Chlorine (CI)) (CAS No.: 22537- 参考BS EN 14582: 2016 · 以離子層析儀分 析。(With reference to BS EN 14582: 2016, analysis was performed by IC.) 溴 (Br) (Bromine (Br)) (CAS No.: 10097- 参考BS EN 14582: 2016 · 以離子層析儀分 mg/kg 50 n.d 32-2)	8)	析。(With reference to BS EN 14582:				
## ## ## ## ## ## ## ## ## #		2016, analysis was performed by IC.)				
2016, analysis was performed by IC.)	氯 (Cl) (Chlorine (Cl)) (CAS No.: 22537-	參考BS EN 14582: 2016 · 以離子層析儀分	mg/kg	50	n.d.	-
溴 (Br) (Bromine (Br)) (CAS No.: 10097- 参考BS EN 14582: 2016·以離子層析儀分 mg/kg 50 n.d 32-2)	15-1)	析。(With reference to BS EN 14582:				
新。(With reference to BS EN 14582:		2016, analysis was performed by IC.)				
32-2) 析。(With reference to BS EN 14582:	溴 (Br) (Bromine (Br)) (CAS No.: 10097-	參考BS EN 14582: 2016,以離子層析儀分	mg/kg	50	n.d.	=
2016, analysis was performed by IC.)	32-2)	析。(With reference to BS EN 14582:				
1, ,		2016, analysis was performed by IC.)				
碘 (I) (Iodine (I)) (CAS No.: 14362-44-8) 参考BS EN 14582: 2016·以離子層析儀分 mg/kg 50 n.d	碘 (I) (Iodine (I)) (CAS No.: 14362-44-8)	, ,	mg/kg	50	n.d.	-
析。(With reference to BS EN 14582:	,,,,	析。(With reference to BS EN 14582:				
2016, analysis was performed by IC.)		•				



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浔剴工業有限公司 (DER KAE INDUSTRIAL CO. LTD.)

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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	
全氟辛烷磺酸及其鹽類 (PFOS and its	修改EN 17681-1: 2022 & EN 17681-2:	mg/kg	0.01	n.d.	-
salts) (Perfluorooctane sulfonates and	2022,以液相層析串聯質譜儀分析。				
its salts (PFOS and its salts)) (CAS No.:	(Modified EN 17681-1: 2022 & EN				
1763-23-1 and its salts)	17681-2: 2022, analysis was performed				
	by LC/MS/MS.)				
全氟辛酸及其鹽類 (PFOA and its salts)	修改EN 17681-1: 2022 & EN 17681-2:	mg/kg	0.01	n.d.	-
(Perfluorooctanoic acid and its salts	2022,以液相層析串聯質譜儀分析。				
(PFOA and its salts)) (CAS No.: 335-67-1	(Modified EN 17681-1: 2022 & EN				
and its salts)	17681-2: 2022, analysis was performed				
	by LC/MS/MS.)				

備註(Note):

- 1. mg/kg = ppm; 0.1wt% = 0.1% = 1000ppm
- 2. MDL = Method Detection Limit (方法偵測極限值)
- 3. n.d. = Not Detected (未檢出); 小於MDL / Less than MDL
- 4. "-" = Not Regulated (無規格值)
- 5. (#2) =
 - a. 當六價鉻結果大於0.13 μg/cm²,表示樣品表層含有六價鉻。(The sample is positive for Cr(VI) if the Cr(VI) concentration is greater than 0.13 μg/cm². The sample coating is considered to contain Cr(VI).)
 - b. 當六價鉻結果為n.d. (濃度小於 $0.10~\mu g/cm^2$),表示表層不含六價鉻。(The sample is negative for Cr(VI) if Cr(VI) is n.d. (concentration less than $0.10~\mu g/cm^2$). The coating is considered a non-Cr(VI) based coating)
 - c. 當六價鉻結果介於 0.10 及 0.13 $\mu g/cm^2$ 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.)
- 6. 除非另有說明,參照ILAC-G8:09/2019決定規則,採用簡單允收規則之二分法(w=0)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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PFAS Remark:

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

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

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

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Test Report

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浔剴工業有限公司 (DER KAE INDUSTRIAL CO. LTD.)

新北市土城區忠承路11號 (NO. 11, ZHONGCHENG RD., TUCHENG DIST., NEW TAIPEI CITY 236, TAIWAN (R. O. C.))

群組名稱	物質名稱 (Substance Name)	CAS No.
(Group Name)	•	
	全氟辛烷磺酸鹽 Perfluorooctanesulfonate (anion)	45298-90-6
	全氟辛烷磺酸與 N,N-二乙基乙胺 $(1:1)$ (PFOS-N(C_2H_5) ₃) 1-Octanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-, compd. with N,N-diethylethanamine $(1:1)$ (PFOS-N(C_2H_5) ₃)	54439-46-2
	N,N,N-三甲基-1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-十七氟-1-辛烷磺酸甲銨(1:1) (PFOS-N(CH ₃) ₄) Methanaminium, N,N,N-trimethyl-, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-1- octanesulfonate (1:1) (PFOS-N(CH ₃) ₄)	56773-44-5
	1 -五胺·N,N,N-三丙基-, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-十七氟-1 -辛烷磺酸鹽(1:1) (PFOS-N(C_3H_7) $_3$ (C_5H_{11})) 1 -Pentanaminium, N,N,N-tripropyl-, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-1-octanesulfonate (1:1) (PFOS-N(C_3H_7) $_3$ (C_5H_{11}))	56773-56-9
PFOS, 及其鹽&衍生物 (PFOS, its salts & derivatives)	1-丁銨·N,N-二丁基-N-甲基-·1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8- 十七氟-1-辛烷磺酸鹽 (1:1) (PFOS-N(C ₄ H ₉) ₃ (CH ₃)) 1-Butanaminium, N,N-dibutyl-N-methyl-, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-1- octanesulfonate (1:1) (PFOS-N(C ₄ H ₉) ₃ (CH ₃))	124472-68-0
	碘鎓·雙[4-(1,1-二甲基乙基)苯基]-·1,1,2,2,3,3,4,4,5,5,6,6,7,7 ,8,8,8 -十七氟-1-辛烷磺酸鹽 (1:1) lodonium, bis[4-(1,1-dimethylethyl)phenyl]-, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-1- octanesulfonate (1:1)	213740-80-8
	二苯基鍺(2,4,6-三甲基苯基)-, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-十七 氟- 1-辛烷磺酸鹽 (1:1) Sulfonium, diphenyl(2,4,6-trimethylphenyl)-, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-1- octanesulfonate (1:1)	258341-99-0
	吡啶鎓 · 1-十六烷基- · 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-十七氟-1 - 辛烷磺酸鹽 (1:1) Pyridinium, 1-hexadecyl-, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8- heptadecafluoro-1-octanesulfonate (1:1)	334529-63-4
	1-癸胺·N,N,N-三乙基-·1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-十七氟-1-辛 烷磺酸鹽(1:1) 1-Decanaminium, N,N,N-triethyl-, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8- heptadecafluoro-1-octanesulfonate (1:1)	773895-92-4

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浔剴工業有限公司 (DER KAE INDUSTRIAL CO. LTD.)

新北市土城區忠承路11號 (NO. 11, ZHONGCHENG RD., TUCHENG DIST., NEW TAIPEI CITY 236, TAIWAN (R. O. C.))

群組名稱	物質名稱	CAS No.
(Group Name)	(Substance Name)	
PFOS, 及其鹽&衍生物 (PFOS, its salts & derivatives)	全氟辛烷磺酸四丁基鏻 (PFOS-P(C ₄ H ₉) ₄)) Tetrabutylphosphonium perfluorooctane sulfonate (PFOS-P(C ₄ H ₉) ₄))	2185049-59-4
	全氟辛烷磺酸二乙胺鹽 (PFOS-C ₄ H ₁₁ N) Perfluorooctanesulfonic acid diethylamine salt (PFOS-C ₄ H ₁₁ N)	2205029-08-7
	庚基二甲基 $\{2-[(2-甲基丙-2-烯酰基)氧基]乙基\}全氟辛烷磺酸氮紮鹽 (PFOS-C15H30NO2) Heptyldimethyl\{2-[(2-methylprop-2-enoyl)oxy]ethyl\}azanium perfluorooctanesulfonate (PFOS-C15H30NO2)$	1203998-97-3
	1-辛烷磺酸 · 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-十七氟-,1,1' -酸酐 (PFOSAN) 1-Octanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8- heptadecafluoro-, 1,1'-anhydride (PFOSAN)	423-92-7
	全氟辛酸 (Perfluorooctanoic acid) (PFOA)	335-67-1
	全氟辛酸鈉 (PFOA-Na) Sodium perfluorooctanoate (PFOA-Na)	335-95-5
	全氟辛酸鉀 (PFOA-K) Potassium perfluorooctanoate (PFOA-K)	2395-00-8
	全氟辛酸銀 (PFOA-Ag) Silver perfluorooctanote (PFOA-Ag)	335-93-3
	全氟辛氟 (PFOA-F) Perfluorooctanoyl fluoride (PFOA-F)	335-66-0
	全氟辛酸銨 (APFO) Ammonium pentadecafluorooctanoate (APFO)	3825-26-1
PFOA, 及其鹽&衍生物	全氟辛酸鋰 (PFOA-Li) Lithium perfluorooctanoate (PFOA-Li)	17125-58-5
(PFOA, its salts & derivatives)	全氟辛酸鈷 (PFOA-Co) Cobalt perfluorooctanoate (PFOA-Co)	35965-01-6
	全氟辛酸銫 (PFOA-Cs) Cesium perfluorooctanoate (PFOA-Cs)	17125-60-9
	全氟辛酸鉻 (PFOA-Cr(3^+)) Octanoic acid, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-pentadecafluoro-, chromium($3+$) (PFOA-Cr(3^+))	68141-02-6
	全氟辛酸-哌嗪(2:1) PFOA-NH($C_4H_{10}N$) Pentadecafluorooctanoic acidpiperazine (2/1)PFOA-NH($C_4H_{10}N$)	423-52-9
	全氟辛酸鹽 Pentadecafluorooctanoate (anion)	45285-51-6
	全氟辛酸酐 Perfluorooctanoic Anhydride	33496-48-9

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浔剴工業有限公司 (DER KAE INDUSTRIAL CO. LTD.)

新北市土城區忠承路11號 (NO. 11, ZHONGCHENG RD., TUCHENG DIST., NEW TAIPEI CITY 236, TAIWAN (R. O. C.))

群組名稱 (Group Name)	物質名稱 (Substance Name)	CAS No.
	乙銨・N,N,N-三乙基-, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-十五氟辛酸(1:1) Ethanaminium, N,N,N-triethyl-, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,8- pentadecafluorooctanoate (1:1)	98241-25-9
	全氟辛酸四甲銨鹽 Tetramethylammoniumperfluoroctanoat	32609-65-7
	1-丙銨·N,N,N-三丙基-, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-十五氟辛酸 (1:1) 1-Propanaminium, N,N,N-tripropyl-, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-pentadecafluorooctanoate (1:1)	277749-00-5
	辛酸·2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-十五氟-鉀鹽·水合物 (1:1:2) (PFOA-K(H ₂ O) ₂) Octanoic acid, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-pentadecafluoro-, potassium salt, hydrate (1:1:2) (PFOA-K(H ₂ O) ₂)	98065-31-7
PFOA, 及其鹽&衍生物 (PFOA, its salts & derivatives)	辛酸·2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-十五氟-·化合物。與乙胺 (1:1) (PFOA-C ₂ H ₇ N) Octanoic acid, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-pentadecafluoro-, compd. with ethanamine (1:1) (PFOA-C ₂ H ₇ N)	1376936-03-6
	十五氟辛酸化合物與吡啶 (1:1) (9CI) (PFOA- C_5H_5N) Octanoic acid, pentadecafluoro-, compd. with pyridine (1:1) (9CI) (PFOA- C_5H_5N)	95658-47-2
	十五氟辛酸-1-苯基哌嗪(1:1) (PFOA- $C_{10}H_{14}N_2$) Pentadecafluorooctanoic acid- 1-phenylpiperazine(1:1) (PFOA- $C_{10}H_{14}N_2$)	1514-68-7
	1-辛胺·N,N,N-三甲基-·2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-十五氟辛酸 (1:1) (PFOA- C ₁₁ H ₂₆ N) 1-Octanaminium, N,N,N-trimethyl-, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-pentadecafluorooctanoate (1:1) (PFOA- C ₁₁ H ₂₆ N)	927835-01-6



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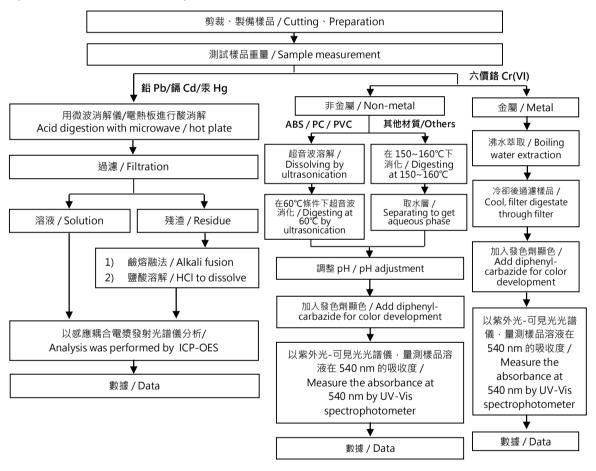
浔剴工業有限公司 (DER KAE INDUSTRIAL CO. LTD.)

新北市土城區忠承路11號 (NO. 11, ZHONGCHENG RD., TUCHENG DIST., NEW TAIPEI CITY 236, TAIWAN (R. O. C.))

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)





Test Report

號碼(No.): ETR24C05024 日期

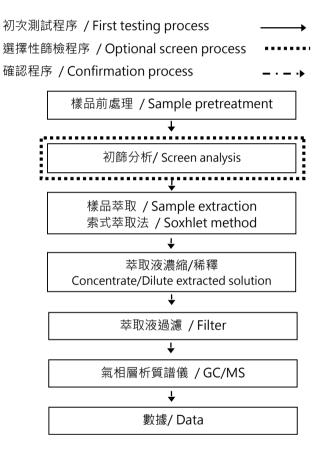
日期(Date): 03-Jan-2025

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





Test Report

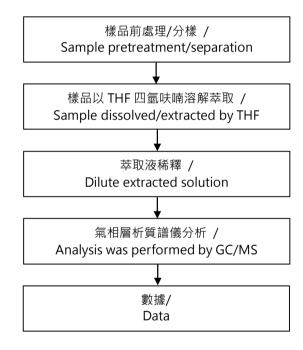
號碼(No.): ETR24C05024 日期(Date): 03-Jan-2025

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

【測試方法/Test method: IEC 62321-8】



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Test Report

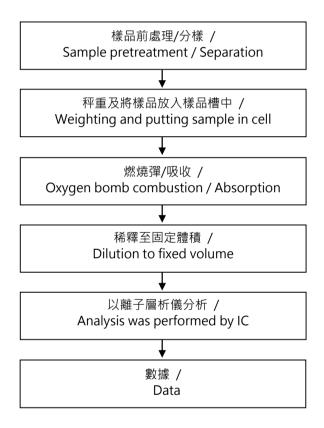
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新北市土城區忠承路11號 (NO. 11, ZHONGCHENG RD., TUCHENG DIST., NEW TAIPEI CITY 236, TAIWAN (R. O. C.))

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





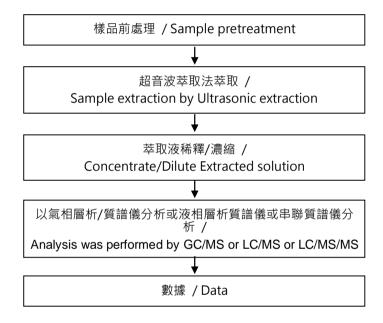
Test Report

號碼(No.): ETR24C05024 日期(Date): 03-Jan-2025

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新北市土城區忠承路11號 (NO. 11, ZHONGCHENG RD., TUCHENG DIST., NEW TAIPEI CITY 236, TAIWAN (R. O. C.))

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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浔剴工業有限公司 (DER KAE INDUSTRIAL CO. LTD.)

新北市土城區忠承路11號 (NO. 11, ZHONGCHENG RD., TUCHENG DIST., NEW TAIPEI CITY 236, TAIWAN (R. O. C.))

* 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.)

ETR24C05024



** 報告結尾 (End of Report) **



Test Report

號碼(No.): EKR24C00813 日期(Date): 02-Jan-2025 頁數(Page): 2 of 8

嘉發實業工廠股份有限公司 (CHIA FAR INDUSTRIAL FACTORY CO., LTD.) 台北市太原路83號 (NO. 83, TAIYUAN RD., TAIPEI, TAIWAN)

測試部位敘述 (Test Part Description)

No.1 : 銀色金屬 (SILVER COLORED METAL)

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))	参考IEC 62321-5: 2013·以感應耦合電漿發射 光譜儀分析。(With reference to IEC 62321-5:	mg/kg	2	n.d.	100
鉛 (Pb) (Lead (Pb))	2013, analysis was performed by ICP-OES.)	mg/kg	2	n.d.	1000
汞 (Hg) (Mercury (Hg))	參考IEC 62321-4: 2013+ AMD1: 2017 · 以感應 耦合電漿發射光譜儀分析。(With reference to IEC 62321-4: 2013+ AMD1: 2017, analysis was performed by ICP-OES.)	mg/kg	2	n.d.	1000
六價鉻 (Hexavalent Chromium) Cr(VI) (#2)	參考IEC 62321-7-1: 2015 · 以紫外光-可見光分 光光度計分析。(With reference to IEC 62321- 7-1: 2015, analysis was performed by UV- VIS.)	μg/cm²	0.1	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)	參考IEC 62321-6: 2015 · 以氣相層析儀/質譜儀	mg/kg	5	n.d.	-
六溴聯苯 (Hexabromobiphenyl)	分析。(With reference to IEC 62321-6: 2015,	mg/kg	5	n.d.	-
七溴聯苯 (Heptabromobiphenyl)	analysis was performed by GC/MS.)	mg/kg	5	n.d.	-
八溴聯苯 (Octabromobiphenyl)		mg/kg	5	n.d.	-
九溴聯苯 (Nonabromobiphenyl)		mg/kg	5	n.d.	-
十溴聯苯 (Decabromobiphenyl)		mg/kg	5	n.d.	-
多溴聯苯總和 (Sum of PBBs)		mg/kg	-	n.d.	1000



Test Report

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嘉發實業工廠股份有限公司 (CHIA FAR INDUSTRIAL FACTORY CO., LTD.) 台北市太原路83號 (NO. 83, TAIYUAN RD., TAIPEI, TAIWAN)

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.	ı
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)	參考IEC 62321-6: 2015·以氣相層析儀/質譜儀	mg/kg	5	n.d.	-
六溴聯苯醚 (Hexabromodiphenyl ether)	分析。(With reference to IEC 62321-6: 2015,	mg/kg	5	n.d.	=-
七溴聯苯醚 (Heptabromodiphenyl ether)] [mg/kg	5	n.d.	-
八溴聯苯醚 (Octabromodiphenyl ether)		mg/kg	5	n.d.	-
九溴聯苯醚 (Nonabromodiphenyl ether)		mg/kg	5	n.d.	-
十溴聯苯醚 (Decabromodiphenyl ether)		mg/kg	5	n.d.	-
多溴聯苯醚總和 (Sum of PBDEs)		mg/kg	ı	n.d.	1000
鄰苯二甲酸丁苯甲酯 (BBP) (Butyl benzyl		mg/kg	50	n.d.	1000
phthalate (BBP))					
鄰苯二甲酸二丁酯 (DBP) (Dibutyl	& ≠IFC C2221 0. 2017 - 以气相展长 <i>性质</i> 锑度	mg/kg	50	n.d.	1000
phthalate (DBP))	参考IEC 62321-8: 2017 · 以氣相層析儀/質譜儀 分析。(With reference to IEC 62321-8: 2017, analysis was performed by GC/MS.)				
鄰苯二甲酸二異丁酯 (DIBP) (Diisobutyl		mg/kg	50	n.d.	1000
phthalate (DIBP))					
鄰苯二甲酸二(2-乙基己基)酯 (DEHP) (Di-		mg/kg	50	n.d.	1000
(2-ethylhexyl) phthalate (DEHP))					



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嘉發實業工廠股份有限公司 (CHIA FAR INDUSTRIAL FACTORY CO., LTD.) 台北市太原路83號 (NO. 83, TAIYUAN RD., TAIPEI, TAIWAN)

備註(Note):

- 1. mg/kg = ppm; 0.1wt% = 0.1% = 1000ppm
- 2. MDL = Method Detection Limit (方法偵測極限值)
- 3. n.d. = Not Detected (未檢出); 小於MDL / Less than MDL
- 4. "-" = Not Regulated (無規格值)
- 5. (#2) =
 - a. 當六價鉻結果大於0.13 μg/cm²·表示樣品表層含有六價鉻。(The sample is positive for Cr(VI) if the Cr(VI) concentration is greater than 0.13 μg/cm². The sample coating is considered to contain Cr(VI).)
 - b. 當六價鉻結果為n.d. (濃度小於 $0.10~\mu g/cm^2$),表示表層不含六價鉻。(The sample is negative for Cr(VI) if Cr(VI) is n.d. (concentration less than $0.10~\mu g/cm^2$). The coating is considered a non-Cr(VI) based coating)
 - c. 當六價鉻結果介於 0.10 及 0.13 μg/cm² 時,無法確定塗層是否含有六價鉻。(The result between 0.10 μg/cm² and 0.13 μg/cm² is considered to be inconclusive unavoidable coating variations may influence the determination.)
- 6. 除非另有說明,參照ILAC-G8:09/2019決定規則,採用簡單允收規則之二分法(w=0)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.)



Test Report

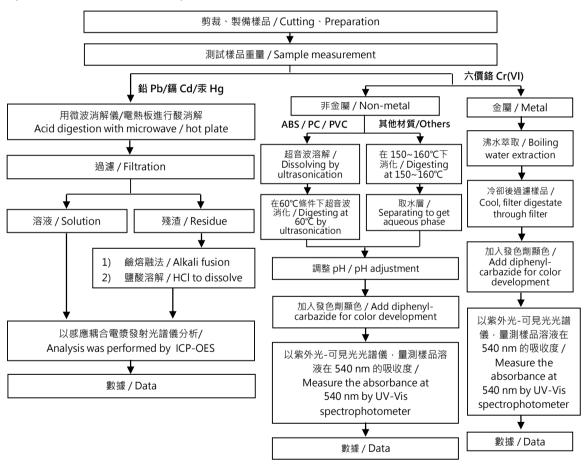
號碼(No.): EKR24C00813 日期(Date): 02-Jan-2025 頁數(Page): 5 of 8

嘉發實業工廠股份有限公司 (CHIA FAR INDUSTRIAL FACTORY CO., LTD.) 台北市太原路83號 (NO. 83, TAIYUAN RD., TAIPEI, 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. (Cr^{6+} test method excluded)



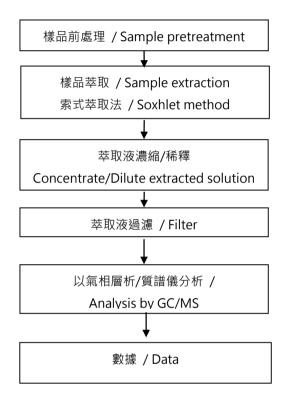


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嘉發實業工廠股份有限公司 (CHIA FAR INDUSTRIAL FACTORY CO., LTD.) 台北市太原路83號 (NO. 83, TAIYUAN RD., TAIPEI, TAIWAN)

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





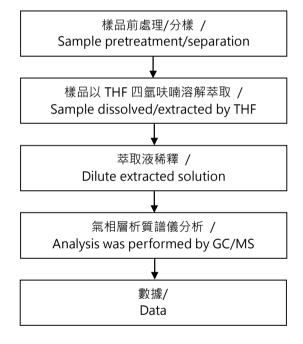
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嘉發實業工廠股份有限公司 (CHIA FAR INDUSTRIAL FACTORY CO., LTD.) 台北市太原路83號 (NO. 83, TAIYUAN RD., TAIPEI, TAIWAN)

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

【測試方法/Test method: IEC 62321-8】





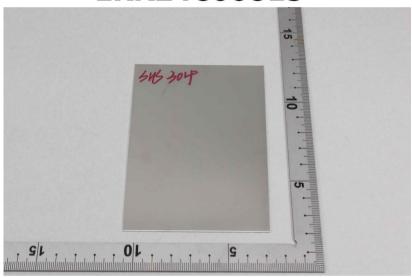
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嘉發實業工廠股份有限公司 (CHIA FAR INDUSTRIAL FACTORY CO., LTD.) 台北市太原路83號 (NO. 83, TAIYUAN RD., TAIPEI, TAIWAN)

* 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.)

EKR24C00813



** 報告結尾 (End of Report) **



Test Report

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東弘金屬工業股份有限公司 (TONG HORNG METAL INDUSTRIAL CO., LTD.) 臺南市新市區三舍里三舍153號 (NO.153, SANSHE, XINSHI DIST., TAINAN CITY 744, TAIWAN (R.O.C.))

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)

東弘金屬工業股份有限公司 (TONG HORNG METAL INDUSTRIAL CO., LTD.)

樣品名稱(Sample Name)

黃銅板 (BRASS STRIP)

樣品型號(Style/Item No.)

C2680

收件日(Sample Receiving Date)

18-Sep-2024

測試期間(Testing Period)

18-Sep-2024 to 24-Sep-2024

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測試 (1)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,其編、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.)

Ray Chang, Ph.D./ Department Manage Signed for and on behalf SĞS TAIWAN LTD. 化學實驗室-高雄/Chemical Laboratory-Kaohsiung



PIN CODE: BC954E13



Test Report

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東弘金屬工業股份有限公司 (TONG HORNG METAL INDUSTRIAL CO., LTD.) 臺南市新市區三舍里三舍153號 (NO.153, SANSHE, XINSHI DIST., TAINAN CITY 744, TAIWAN (R.O.C.))

測試部位敘述 (Test Part Description)

No.1 : 黃色金屬片 (YELLOW METAL SHEET)

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				
	by ICP-OES.)				
鉛 (Pb) (Lead (Pb))	參考IEC 62321-5: 2013 · 以感應耦合電漿	mg/kg	2	8.46	1000
	發射光譜儀分析。(With reference to IEC				
	62321-5: 2013, analysis was performed				
	by ICP-OES.)				
汞 (Hg) (Mercury (Hg))	參考IEC 62321-4: 2013+ AMD1: 2017·以	mg/kg	2	n.d.	1000
	感應耦合電漿發射光譜儀分析。(With reference to IEC 62321-4: 2013+ AMD1:				
	2017, analysis was performed by ICP-OES.)				
 六價鉻 (Hexavalent Chromium) Cr(VI)	参考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	ду/стт	0.1	n.a.	
("2)	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)	4 +/150 00004 0 0045 N/5/105/105/105/105	mg/kg	5	n.d.	-
五溴聯苯 (Pentabromobiphenyl)	参考IEC 62321-6: 2015・以氣相層析儀/質	mg/kg	5	n.d.	-
六溴聯苯 (Hexabromobiphenyl)	譜儀分析。(With reference to IEC 62321-6: 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)		mg/kg	5	n.d.	=
九溴聯苯 (Nonabromobiphenyl)		mg/kg	5	n.d.	-
十溴聯苯 (Decabromobiphenyl)		mg/kg	5	n.d.	-
多溴聯苯總和 (Sum of PBBs)		mg/kg	-	n.d.	1000



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東弘金屬工業股份有限公司 (TONG HORNG METAL INDUSTRIAL CO., LTD.) 臺南市新市區三舍里三舍153號 (NO.153, SANSHE, XINSHI DIST., TAINAN CITY 744, TAIWAN (R.O.C.))

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)	<u> </u>	mg/kg	5	n.d.	-
五溴聯苯醚 (Pentabromodiphenyl ether)	參考IEC 62321-6: 2015 · 以氣相層析儀/質譜儀分析。(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)	(C) (VIS.)	mg/kg	5	n.d.	=
九溴聯苯醚 (Nonabromodiphenyl ether)		mg/kg	5	n.d.	-
十溴聯苯醚 (Decabromodiphenyl ether)	+ ⊨	mg/kg	5	n.d.	=
多溴聯苯醚總和 (Sum of PBDEs)		mg/kg	-	n.d.	1000
鄰苯二甲酸丁苯甲酯 (BBP) (Butyl benzyl		mg/kg	50	n.d.	1000
phthalate (BBP))					
鄰苯二甲酸二丁酯 (DBP) (Dibutyl	參考IEC 62321-8: 2017,以氣相層析儀/質	mg/kg	50	n.d.	1000
phthalate (DBP))	譜儀分析。(With reference to IEC 62321-				
鄰苯二甲酸二異丁酯 (DIBP) (Diisobutyl	8: 2017, analysis was performed by	mg/kg	50	n.d.	1000
phthalate (DIBP))	GC/MS.)				
鄰苯二甲酸二(2-乙基己基)酯 (DEHP) (Di-		mg/kg	50	n.d.	1000
(2-ethylhexyl) phthalate (DEHP))					
氟 (F) (Fluorine (F)) (CAS No.: 14762-94-		mg/kg	50	n.d.	-
8)					
氯 (Cl) (Chlorine (Cl)) (CAS No.: 22537-	參考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.	=
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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東弘金屬工業股份有限公司 (TONG HORNG METAL INDUSTRIAL CO., LTD.) 臺南市新市區三舍里三舍153號 (NO.153, SANSHE, XINSHI DIST., TAINAN CITY 744, TAIWAN (R.O.C.))

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-	参考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.)				
全氟辛烷磺酸及其鹽類 (PFOS and its	參考CEN/TS 15968: 2010,以液相層析串	mg/kg	0.01	n.d.	-
salts) (Perfluorooctane sulfonates and	聯質譜儀分析。(With reference to				
its salts (PFOS and its salts)) (CAS No.:	CEN/TS 15968: 2010, analysis was				
1763-23-1 and its salts)	performed by LC/MS/MS.)				
全氟辛酸及其鹽類 (PFOA and its salts)	參考CEN/TS 15968: 2010 · 以液相層析串	mg/kg	0.01	n.d.	-
(Perfluorooctanoic acid and its salts	聯質譜儀分析。(With reference to				
(PFOA and its salts)) (CAS No.: 335-67-1	CEN/TS 15968: 2010, analysis was				
and its salts)	performed by LC/MS/MS.)				

備註(Note):

- 1. mg/kg = ppm; 0.1wt% = 0.1% = 1000ppm
- 2. MDL = Method Detection Limit (方法偵測極限值)
- 3. n.d. = Not Detected (未檢出); 小於MDL / Less than MDL
- 4. "-" = Not Regulated (無規格值)
- 5. (#2) =
 - a. 當六價鉻結果大於 $0.13~\mu g/cm^2$ ·表示樣品表層含有六價鉻。(The sample is positive for Cr(VI) if the Cr(VI) concentration is greater than $0.13~\mu g/cm^2$. The sample coating is considered to contain Cr(VI).)
 - b. 當六價鉻結果為n.d. (濃度小於0.10 μg/cm²)·表示表層不含六價鉻。(The sample is negative for Cr(VI) if Cr(VI) is n.d. (concentration less than 0.10 μg/cm²). The coating is considered a non-Cr(VI) based coating)
 - c. 當六價鉻結果介於 0.10 及 0.13 $\mu g/cm^2$ 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.)
- 6. 除非另有說明·參照ILAC-G8:09/2019決定規則·採用簡單允收規則之二分法(w=0)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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東弘金屬工業股份有限公司 (TONG HORNG METAL INDUSTRIAL CO., LTD.) 臺南市新市區三舍里三舍153號 (NO.153, SANSHE, XINSHI DIST., TAINAN CITY 744, TAIWAN (R.O.C.))

PFAS Remark:

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

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

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



Test Report

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東弘金屬工業股份有限公司 (TONG HORNG METAL INDUSTRIAL CO., LTD.) 臺南市新市區三舍里三舍153號 (NO.153, SANSHE, XINSHI DIST., TAINAN CITY 744, TAIWAN (R.O.C.))

群組名稱 (Group Name)	物質名稱 (Substance Name)	CAS No.
	全氟辛基磺酸鈉 (PFOS-Na) Perfluorooctanesulfonic acid, sodium salt (PFOS-Na)	4021-47-0
	全氟辛烷磺酸哌啶 Piperidine 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8- heptadecafluorooctanesulfonate	71463-74-6
	全氟辛烷磺酸鹽 Perfluorooctanesulfonate (anion)	45298-90-6
	全氟辛烷磺酸與 N,N-二乙基乙胺 (1:1) (PFOS-N(C_2H_5) ₃) 1-Octanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-, compd. with N,N-diethylethanamine (1:1) (PFOS-N(C_2H_5) ₃)	54439-46-2
PFOS, 及其鹽&衍生物 (PFOS, its salts & derivatives)	N,N,N-三甲基-1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-十七氟-1-辛烷磺酸甲銨(1:1) (PFOS-N(CH ₃) ₄) Methanaminium, N,N,N-trimethyl-, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-1- octanesulfonate (1:1) (PFOS-N(CH ₃) ₄)	56773-44-5
	1-五胺·N,N,N-三丙基-, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-十七氟-1-辛烷磺酸鹽(1:1) (PFOS-N(C ₃ H ₇) ₃ (C ₅ H ₁₁)) 1-Pentanaminium, N,N,N-tripropyl-, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-1-octanesulfonate (1:1) (PFOS-N(C ₃ H ₇) ₃ (C ₅ H ₁₁))	56773-56-9
	1-丁銨·N,N-二丁基-N-甲基-·1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8- 十七氟-1-辛烷磺酸鹽 (1:1) (PFOS-N(C ₄ H ₉) ₃ (CH ₃)) 1-Butanaminium, N,N-dibutyl-N-methyl-, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-1- octanesulfonate (1:1) (PFOS-N(C ₄ H ₉) ₃ (CH ₃))	124472-68-0
	碘鎓·雙[4-(1,1-二甲基乙基)苯基]-·1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8- 十七氟-1-辛烷磺酸鹽 (1:1) lodonium, bis[4-(1,1-dimethylethyl)phenyl]-, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-1-octanesulfonate (1:1)	213740-80-8
	二苯基鍺(2,4,6-三甲基苯基)-, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-十七氟- 1-辛烷磺酸鹽 (1:1) Sulfonium, diphenyl(2,4,6-trimethylphenyl)-, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-1-octanesulfonate (1:1)	258341-99-0



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東弘金屬工業股份有限公司 (TONG HORNG METAL INDUSTRIAL CO., LTD.) 臺南市新市區三舍里三舍153號 (NO.153, SANSHE, XINSHI DIST., TAINAN CITY 744, TAIWAN (R.O.C.))

群組名稱 (Group Name)	物質名稱 (Substance Name)	CAS No.
	吡啶鎓 · 1-十六烷基- · 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-十七氟-1 - 辛烷磺酸鹽 (1:1) Pyridinium, 1-hexadecyl-, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-1-octanesulfonate (1:1)	334529-63-4
	1-癸胺·N,N,N-三乙基-·1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-十七氟-1-辛 烷磺酸鹽(1:1) 1-Decanaminium, N,N,N-triethyl-, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8- heptadecafluoro-1-octanesulfonate (1:1)	773895-92-4
PFOS, 及其鹽&衍生物	全氟辛烷磺酸四丁基磷 (PFOS-P(C_4H_9) ₄)) Tetrabutylphosphonium perfluorooctane sulfonate (PFOS-P(C_4H_9) ₄))	2185049-59-4
(PFOS, its salts & derivatives)	全氟辛烷磺酸二乙胺鹽 (PFOS- $C_4H_{11}N$) Perfluorooctanesulfonic acid diethylamine salt (PFOS- $C_4H_{11}N$)	2205029-08-7
	庚基二甲基 $\{2-[(2-甲基丙-2-烯酰基)氧基]乙基\}$ 全氟辛烷磺酸氮紮鹽 (PFOS- $C_{15}H_{30}NO_2$) Heptyldimethyl $\{2-[(2-methylprop-2-enoyl)oxy]ethyl\}$ azanium perfluorooctanesulfonate (PFOS- $C_{15}H_{30}NO_2$)	1203998-97-3
	1-辛烷磺酸·1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-十七氟-,1,1'-酸酐 (PFOSAN) 1-Octanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8- heptadecafluoro-, 1,1'-anhydride (PFOSAN)	423-92-7
	全氟辛酸 (Perfluorooctanoic acid) (PFOA)	335-67-1
	全氟辛酸鈉 (PFOA-Na) Sodium perfluorooctanoate (PFOA-Na)	335-95-5
	全氟辛酸鉀 (PFOA-K) Potassium perfluorooctanoate (PFOA-K)	2395-00-8
PFOA, 及其鹽&衍生物 (PFOA, its salts & derivatives)	全氟辛酸銀 (PFOA-Ag) Silver perfluorooctanote (PFOA-Ag)	335-93-3
	全氟辛氟 (PFOA-F) Perfluorooctanoyl fluoride (PFOA-F)	335-66-0
	全氟辛酸銨 (APFO) Ammonium pentadecafluorooctanoate (APFO)	3825-26-1
	全氟辛酸鋰 (PFOA-Li) Lithium perfluorooctanoate (PFOA-Li)	17125-58-5



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東弘金屬工業股份有限公司 (TONG HORNG METAL INDUSTRIAL CO., LTD.) 臺南市新市區三舍里三舍153號 (NO.153, SANSHE, XINSHI DIST., TAINAN CITY 744, TAIWAN (R.O.C.))

群組名稱 (Group Name)	物質名稱 (Substance Name)	CAS No.
	全氟辛酸鈷 (PFOA-Co) Cobalt perfluorooctanoate (PFOA-Co)	35965-01-6
	全氟辛酸銫 (PFOA-Cs) Cesium perfluorooctanoate (PFOA-Cs)	17125-60-9
	全氟辛酸鉻 (PFOA-Cr(3^+)) Octanoic acid, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-pentadecafluoro-, chromium($3+$) (PFOA-Cr(3^+))	68141-02-6
	全氟辛酸-哌嗪(2:1) PFOA-NH($C_4H_{10}N$) Pentadecafluorooctanoic acidpiperazine (2/1)PFOA-NH($C_4H_{10}N$)	423-52-9
	全氟辛酸鹽 Pentadecafluorooctanoate (anion)	45285-51-6
	全氟辛酸酐 Perfluorooctanoic Anhydride	33496-48-9
	乙銨·N,N,N-三乙基-, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-十五氟辛酸 (1:1) Ethanaminium, N,N,N-triethyl-, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,8- pentadecafluorooctanoate (1:1)	98241-25-9
PFOA, 及其鹽&衍生物	全氟辛酸四甲銨鹽 Tetramethylammoniumperfluoroctanoat	32609-65-7
(PFOA, its salts & derivatives)	1-丙銨·N,N,N-三丙基-, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-十五氟辛酸 (1:1) 1-Propanaminium, N,N,N-tripropyl-, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-pentadecafluorooctanoate (1:1)	277749-00-5
	辛酸 · 2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-十五氟-鉀鹽 · 水合物 (1:1:2) (PFOA-K(H ₂ O) ₂) Octanoic acid, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-pentadecafluoro-, potassium salt, hydrate (1:1:2) (PFOA-K(H ₂ O) ₂)	98065-31-7
	辛酸·2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-十五氟-·化合物。與乙胺 (1:1) (PFOA-C ₂ H ₇ N) Octanoic acid, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-pentadecafluoro-, compd. with ethanamine (1:1) (PFOA-C ₂ H ₇ N)	1376936-03-6
	十五氟辛酸化合物與吡啶 (1:1) (9CI) (PFOA- C_5H_5N) Octanoic acid, pentadecafluoro-, compd. with pyridine (1:1) (9CI) (PFOA- C_5H_5N)	95658-47-2
	十五氟辛酸-1-苯基哌嗪(1:1) (PFOA- $C_{10}H_{14}N_2$) Pentadecafluorooctanoic acid- 1-phenylpiperazine(1:1) (PFOA- $C_{10}H_{14}N_2$)	1514-68-7



Test Report

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東弘金屬工業股份有限公司 (TONG HORNG METAL INDUSTRIAL CO., LTD.) 臺南市新市區三舍里三舍153號 (NO.153, SANSHE, XINSHI DIST., TAINAN CITY 744, TAIWAN (R.O.C.))

群組名稱 (Group Name)	物質名稱 (Substance Name)	CAS No.
PFOA, 及其鹽及衍生物 (PFOA, its salts & derivatives)	1 -辛胺·N,N,N-三甲基-·2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-十五氟辛酸 (1:1) (PFOA- $C_{11}H_{26}N$) 1-Octanaminium, N,N,N-trimethyl-, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-pentadecafluorooctanoate (1:1) (PFOA- $C_{11}H_{26}N$)	



Test Report

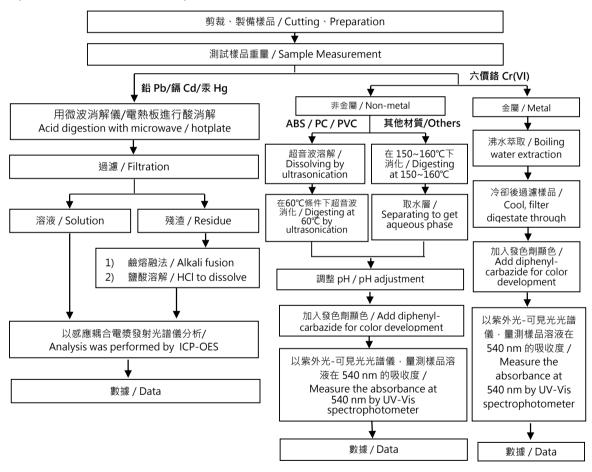
號碼(No.): EKR24900964 日期(Date): 24-Sep-2024 頁數(Page): 10 of 16

東弘金屬工業股份有限公司 (TONG HORNG METAL INDUSTRIAL CO., LTD.) 臺南市新市區三舍里三舍153號 (NO.153, SANSHE, XINSHI DIST., TAINAN CITY 744, TAIWAN (R.O.C.))

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)



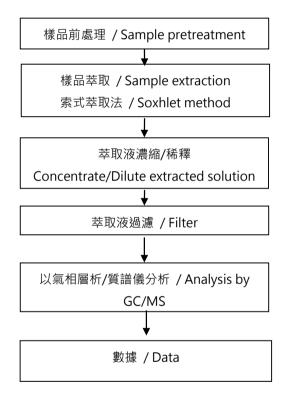


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東弘金屬工業股份有限公司 (TONG HORNG METAL INDUSTRIAL CO., LTD.) 臺南市新市區三舍里三舍153號 (NO.153, SANSHE, XINSHI DIST., TAINAN CITY 744, TAIWAN (R.O.C.))

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





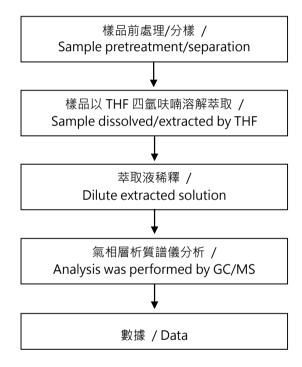
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東弘金屬工業股份有限公司 (TONG HORNG METAL INDUSTRIAL CO., LTD.) 臺南市新市區三舍里三舍153號 (NO.153, SANSHE, XINSHI DIST., TAINAN CITY 744, TAIWAN (R.O.C.))

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

【測試方法/Test method: IEC 62321-8】



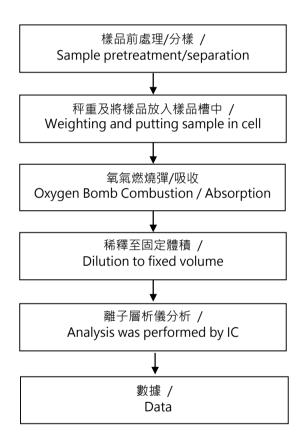


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東弘金屬工業股份有限公司 (TONG HORNG METAL INDUSTRIAL CO., LTD.) 臺南市新市區三舍里三舍153號 (NO.153, SANSHE, XINSHI DIST., TAINAN CITY 744, TAIWAN (R.O.C.))

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





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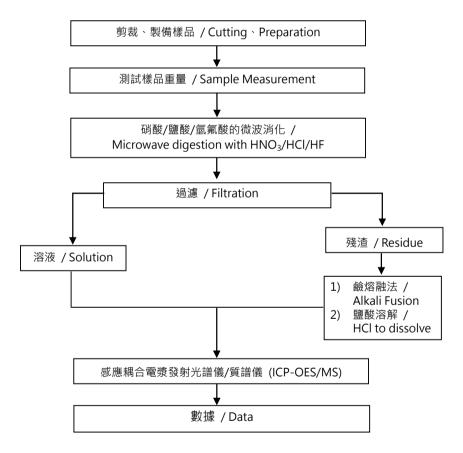
東弘金屬工業股份有限公司 (TONG HORNG METAL INDUSTRIAL CO., LTD.) 臺南市新市區三舍里三舍153號 (NO.153, SANSHE, XINSHI DIST., TAINAN CITY 744, TAIWAN (R.O.C.))

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.

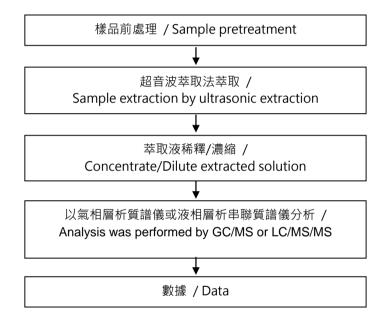


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東弘金屬工業股份有限公司 (TONG HORNG METAL INDUSTRIAL CO., LTD.) 臺南市新市區三舍里三舍153號 (NO.153, SANSHE, XINSHI DIST., TAINAN CITY 744, TAIWAN (R.O.C.))

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.)





Test Report

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東弘金屬工業股份有限公司 (TONG HORNG METAL INDUSTRIAL CO., LTD.) 臺南市新市區三舍里三舍153號 (NO.153, SANSHE, XINSHI DIST., TAINAN CITY 744, TAIWAN (R.O.C.))

* 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.)

EKR24900964



** 報告結尾 (End of Report) **



Test Report

頁數(Page): 1 of 5 號碼(No.): ETR24C00803 日期(Date): 11-Dec-2024

金泰工業有限公司 (JIN TAY INDUSTRIES CO., LTD.)

新北市泰山區明志路三段480號 (NO. 480, SEC. 3, MINGJHIH RD., TAISHAN DISTRICT, NEW TAIPEI CITY, 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 the applicant

as):

送樣廠商(Sample Submitted By) 金泰工業有限公司 (JIN TAY INDUSTRIES CO., LTD.)

樣品名稱(Sample Name) BRASS (銅材)

收件日(Sample Receiving Date) 04-Dec-2024

測試期間(Testing Period) 04-Dec-2024 to 11-Dec-2024

測試需求(Test Requested) 依據客戶指定,參考RoHS指令2011/65/EU Annex II測試鎘、鉛、汞、六價鉻。

> (As specified by client, with reference to RoHS Directive 2011/65/EU Annex II to determine Cadmium, Lead, Mercury, Cr(VI) contents in the submitted

sample(s).)

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

Signed for and on behalf SĞS TAIWAN LTD. Chemical Laboratory - Taipei



PIN CODE: 249689B3



Test Report

號碼(No.): ETR24C00803 日期(Date): 11-Dec-2024 頁數(Page): 2 of 5

金泰工業有限公司 (JIN TAY INDUSTRIES CO., LTD.)

新北市泰山區明志路三段480號 (NO. 480, SEC. 3, MINGJHIH RD., TAISHAN DISTRICT, NEW TAIPEI CITY, TAIWAN)

測試部位敘述 (Test Part Description)

No.1 : 銀色金屬底材 (SILVER COLORED METAL BASE)

測試結果 (Test Results)

測試項目	測試方法	單位	MDL	結果
(Test Items)	(Method)	(Unit)		(Result)
				No.1
鎘 (Cd) (Cadmium (Cd))	参考IEC 62321-5: 2013,以感應耦合電漿	mg/kg	2	2.50
	發射光譜儀分析。(With reference to IEC			
	62321-5: 2013, analysis was performed			
	by ICP-OES.)			
鉛 (Pb) (Lead (Pb))	參考IEC 62321-5: 2013,以感應耦合電漿	mg/kg	2	11200
	發射光譜儀分析。(With reference to IEC			
	62321-5: 2013, analysis was performed			
	by ICP-OES.)			
汞 (Hg) (Mercury (Hg))	參考IEC 62321-4: 2013+ AMD1: 2017,	mg/kg	2	n.d.
	以感應耦合電漿發射光譜儀分析。(With			
	reference to IEC 62321-4: 2013+ AMD1:			
	2017, analysis was performed by ICP-			
	OES.)			
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	-		
	IEC 62321-7-1: 2015, analysis was			
	performed by UV-VIS.)			



Test Report

號碼(No.): ETR24C00803 日期(Date): 11-Dec-2024 頁數(Page): 3 of 5

金泰工業有限公司 (JIN TAY INDUSTRIES CO., LTD.)

新北市泰山區明志路三段480號 (NO. 480, SEC. 3, MINGJHIH RD., TAISHAN DISTRICT, NEW TAIPEI CITY, TAIWAN)

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. (#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 $0.10~\mu g/cm^2$)·表示表層不含六價鉻。(The sample is negative for Cr(VI) if Cr(VI) is n.d. (concentration less than $0.10~\mu g/cm^2$). The coating is considered a non-Cr(VI) based coating)
 - c. 當六價鉻結果介於 0.10 及 0.13 $\mu g/cm^2$ 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.)



Test Report

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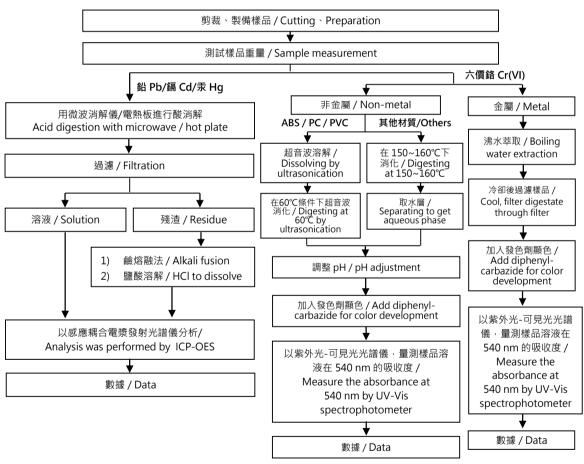
金泰工業有限公司 (JIN TAY INDUSTRIES CO., LTD.)

新北市泰山區明志路三段480號 (NO. 480, SEC. 3, MINGJHIH RD., TAISHAN DISTRICT, NEW TAIPEI CITY, 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. (Cr^{6+} test method excluded)





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金泰工業有限公司 (JIN TAY INDUSTRIES CO., LTD.)

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* 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.)

ETR24C00803



** 報告結尾 (End of Report) **



Test Report

號碼(No.): ETR24305648 日期(Date): 08-Apr-2024 頁數(Page): 1 of 47

長春人造樹脂廠股份有限公司新竹廠 (CHANG CHUN PLASTICS CO., LTD. (HSINCHU FACTORY)) 新竹縣湖口鄉新竹工業區中華路8號 (NO. 8, CHUNG HWA ROAD, HSINCHU INDUSTRIAL DISTRICT 303, 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 the applicant as):

送樣廠商(Sample Submitted By) : 長春人造樹脂廠股份有限公司新竹廠 (CHANG CHUN PLASTICS CO., LTD.

(HSINCHU FACTORY))

樣品名稱(Sample Name) : PHENOLIC MOLDING COMPOUND

樣品型號(Style/Item No.) : T373J / T385J / T385J IB / T385J I / T383J / T383JC01 / T33 / T33 I / T-365 /

T-365FA / T365FA H/ T614 / T-308J / T359J / T33J / T-377J / T377-JA / T-378J / T378JB / T378JB A / T375J / T375HF / T-376J / T376J A / T376J H / T376J G / T355J / T357 / T-310 / T399J / T391 / T651 / T651 J / T651 C / T655 / T655 J/T655 C/ T659 / T200HF / T200NA / T205HF / T215HF / T215NA / T220NA / T220NA S/ T225HF / T200HF G / T39 / T385JPL / T308 / T383JF / T383J B / T385J B / T575J / T576J / T578J / T350J / T320J / T375HF M / T375HF G / T330J / T355HF / T391C / T373J P

收件日(Sample Receiving Date) : 28-Mar-2024

測試期間(Testing Period) : 28-Mar-2024 to 08-Apr-2024

測試需求(Test Requested) :

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

- (2) 依據客戶指定‧測試 PAHs 及其他測項。 (As specified by client, to test PAHs and other item(s).)
- (3) 客戶指定·依據長春人造樹脂廠股份有限公司要求進行紅磷測試。 (The test is compliant with Chang Chun Plastics Co., Ltd.'s test condition, specified by client to test Red Phosphorus.)
- (4) 依據客戶要求,參考美國毒管法(TSCA) 第 6(h) 章節,進行5項持久性生物累積毒性物質 (PBTs) 測試,測試項目請參閱測試結果表格。 (As specified by client, the sample(s) was/were tested for 5 PBTs with reference to Regulation of Persistent, Bioaccumulative, Toxic (PBT) Chemicals under Toxic Substances Control Act (TSCA) Section 6(h). Please refer to result table for testing item(s).)
- (5) 依據客戶要求·評估所選樣品中特定PFAS的風險。被評估的PFAS總項目數量為235項·包括92項檢測項和143項列表項 (see PFAS Remark)。 (As requested by the client, the risk of specific PFAS in the selected sample is evaluated. The total amounts of evaluated PFAS are 235 items, concluding 92 tested items and 143 listed items (see PFAS Remark).)

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

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

IN CODE: 9FB0EBB0



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長春人造樹脂廠股份有限公司新竹廠 (CHANG CHUN PLASTICS CO., LTD. (HSINCHU FACTORY))
新竹縣湖口鄉新竹工業區中華路8號 (NO. 8, CHUNG HWA ROAD, HSINCHU INDUSTRIAL DISTRICT 303, TAIWAN)

結 論(Conclusion)

- (1) 根據客戶所提供的樣品,其編、鉛、汞、六價鉻、多溴聯苯、多溴聯苯醚, DBP, BBP, DEHP, DIBP的測試結果符合 RoHS 2011/65/EU Annex II暨其修訂指令(EU) 2015/863之限值要求。 (Based on the performed tests on submitted sample(s), the test results of Cadmium, Lead, Mercury, Cr(VI), PBBs, PBDEs, DBP, BBP, DEHP, DIBP comply with the limits as set by RoHS Directive (EU) 2015/863 amending Annex II to Directive 2011/65/EU.)
- (2) 根據客戶所提供的樣品·多環芳香烴測試結果符合德國產品安全委員會(AfPS) GS PAHs第 3 類「其它產品」之限值要求。(Based upon the performed tests on the submitted sample(s), the test results of PAHs (15 items) comply with the limits of PAHs requirement (Category 3)「Other consumer products」 as set by German Committee on Product Safety (AfPS) GS PAHs.)
- (4) 根據客戶所提供的樣品·其測試結果符合美國毒管法(TSCA) 第 6(h) 章節·持久性生物累積毒性物質 (PBTs)之限值要求。 (Based on the performed tests on submitted sample(s), the test result(s) comply with the limits as set by Persistent, Bioaccumulative, Toxic (PBT) Chemicals under Toxic Substances Control Act (TSCA) Section 6(h).)

測試部位敘述 (Test Part Description)

No.1 : 黑色細粒 (BLACK GRAIN)

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				
鉛 (Pb) (Lead (Pb))	62321-5: 2013, analysis was performed	mg/kg	2	2.27	1000
	by ICP-OES.)				
汞 (Hg) (Mercury (Hg))	參考IEC 62321-4: 2013+ AMD1: 2017 ·	mg/kg	2	n.d.	1000
	以感應耦合電漿發射光譜儀分析。(With				
	reference to IEC 62321-4: 2013+ AMD1:				
	2017, analysis was performed by ICP-				
	OES.)				
六價鉻 Cr(VI) (Hexavalent Chromium	參考IEC 62321-7-2: 2017,以紫外光-可見	mg/kg	8	n.d.	1000
Cr(VI))	光分光光度計分析。(With reference to				
	IEC 62321-7-2: 2017, analysis was				
	performed by UV-VIS.)				



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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	ı
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)	參考IEC 62321-6: 2015,以氣相層析儀/質	mg/kg	5	n.d.	-
多溴聯苯總和 (Sum of PBBs)	譜儀分析。(With reference to IEC 62321-	mg/kg	-	n.d.	1000
一溴聯苯醚 (Monobromodiphenyl ether)	6: 2015, analysis was performed by	mg/kg	5	n.d.	-
二溴聯苯醚 (Dibromodiphenyl ether)	GC/MS.)	mg/kg	5	n.d.	-
三溴聯苯醚 (Tribromodiphenyl ether)		mg/kg	5	n.d.	-
四溴聯苯醚 (Tetrabromodiphenyl ether)		mg/kg	5	n.d.	-
五溴聯苯醚 (Pentabromodiphenyl ether)		mg/kg	5	n.d.	-
六溴聯苯醚 (Hexabromodiphenyl ether)		mg/kg	5	n.d.	-
七溴聯苯醚 (Heptabromodiphenyl ether)		mg/kg	5	n.d.	-
八溴聯苯醚 (Octabromodiphenyl ether)		mg/kg	5	n.d.	-
九溴聯苯醚 (Nonabromodiphenyl ether)		mg/kg	5	n.d.	-
十溴聯苯醚 (Decabromodiphenyl ether)		mg/kg	5	n.d.	-
多溴聯苯醚總和 (Sum of PBDEs)		mg/kg	-	n.d.	1000
鄰苯二甲酸丁苯甲酯 (BBP) (Butyl benzyl		mg/kg	50	n.d.	1000
phthalate (BBP))					ı
鄰苯二甲酸二丁酯 (DBP) (Dibutyl		mg/kg	50	n.d.	1000
phthalate (DBP))	⇔ 老IFC C2221 0: 2017 以与担屈长崖 <i>I</i> 所				1
鄰苯二甲酸二(2-乙基己基)酯 (DEHP) (Di-	参考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-				ı
鄰苯二甲酸二異丁酯 (DIBP) (Diisobutyl	8: 2017, analysis was performed by GC/MS.)	mg/kg	50	n.d.	1000
phthalate (DIBP))	(GC/1VI3.)	- 0			,
鄰苯二甲酸二異癸酯 (DIDP) (Diisodecyl	1	mg/kg	50	n.d.	-
phthalate (DIDP)) (CAS No.: 26761-40-					,
0, 68515-49-1)					



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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	
鄰苯二甲酸二異壬酯 (DINP) (Diisononyl		mg/kg	50	n.d.	-
phthalate (DINP)) (CAS No.: 28553-12-	 参考IEC 62321-8: 2017,以氣相層析儀/質				
0, 68515-48-0)	iii 儀分析。(With reference to IEC 62321-				
鄰苯二甲酸二正辛酯 (DNOP) (Di-n-octyl	8: 2017, analysis was performed by	mg/kg	50	n.d.	-
phthalate (DNOP)) (CAS No.: 117-84-0)	GC/MS.)				
鄰苯二甲酸二正己酯 (DNHP) (Di-n-hexyl		mg/kg	50	n.d.	-
phthalate (DNHP)) (CAS No.: 84-75-3)					
四溴雙酚-A (TBBP-A)	參考RSTS-E&E-121,以液相層析儀/質譜	mg/kg	10	n.d.	-
(Tetrabromobisphenol A (TBBP-A))	儀分析。(With reference to RSTS-E&E-				
(CAS No.: 79-94-7)	121, analysis was performed by LC/MS.)				
中鏈氯化石蠟(C14-C17) (MCCP)	參考ISO 18219-2: 2021,以氣相層析儀/	mg/kg	50	n.d.	-
(Medium Chain Chlorinated	質譜儀分析。(With reference to ISO				
Paraffins(C14-C17) (MCCP)) (CAS No.:	18219-2: 2021, analysis was performed				
85535-85-9) 六溴環十二烷及所有主要被辨別出的異構	by GC/MS.)	100 or /1 co	5	اء ما	
	參考IEC 62321: 2008 · 以氣相層析儀/質譜 儀分析。(With reference to IEC 62321:	mg/kg	5	n.d.	_
物(HBCDD) (α- HBCDD, β- HBCDD, γ- HBCDD) (Hexabromocyclododecane	l '				
(HBCDD) (Hexabiomocyclododecane	2008, analysis was performed by GC/MS.)				
diastereoisomers identified (α - HBCDD,	GC/1013.)				
β- HBCDD, γ- HBCDD)) (CAS No.:					
25637-99-4, 3194-55-6 (134237-51-7,					
134237-50-6, 134237-52-8))					
石綿 (Asbestos)					
陽起石綿 (Actinolite) (CAS No.: 77536-		-	_	Negative	_
66-4)	# */ FDA COO /D OO /41C 1000 N -> P# FF			3	
褐石綿/鐵石綿 (Amosite) (CAS No.:	參考EPA 600/R-93/116: 1993,以立體顯	-	-	Negative	-
12172-73-5)	微鏡(SM)與分散染色式偏光顯微鏡(DS-				
斜方角閃石綿 (Anthophyllite) (CAS No.:	PLM)及X光繞射光譜分析法(XRD)分析。	-	-	Negative	-
77536-67-5)	(With reference to EPA 600/R-93/116:				
白石綿/溫石綿 (Chrysotile) (CAS No.:	1993, analysis was performed by Stereo Microscope (SM), Dispersion Staining	_	-	Negative	-
12001-29-5)	Polarized Light Microscope (DS-PLM)				
青石綿 (Crocidolite) (CAS No.: 12001-	and X-ray Diffraction Spectrometer	-	-	Negative	-
28-4)	(XRD).)				
透閃石綿 (Tremolite) (CAS No.: 77536-	((()))	-	-	Negative	-
68-6)					

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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	
多環芳香烴 (Polycyclic Aromatic					
Hydrocarbons) (PAHs)					
苯駢(a)芘 (Benzo[a]pyrene) (CAS No.:		mg/kg	0.2	n.d.	Δ
50-32-8)					
苯駢(e)芘 (Benzo[e]pyrene) (CAS No.:		mg/kg	0.2	n.d.	Δ
192-97-2)					
苯駢蒽 (Benzo[a]anthracene) (CAS No.:		mg/kg	0.2	n.d.	Δ
56-55-3)					
苯(b)苯駢芴 (Benzo[b]fluoranthene)		mg/kg	0.2	n.d.	Δ
(CAS No.: 205-99-2)					
苯(j)苯駢芴 (Benzo[j]fluoranthene) (CAS		mg/kg	0.2	n.d.	Δ
No.: 205-82-3)					
苯(k)苯駢芴 (Benzo[k]fluoranthene)		mg/kg	0.2	n.d.	Δ
(CAS No.: 207-08-9)	參考AfPS GS 2019:01 PAK · 以氣相層析儀				
菌 (Chrysene) (CAS No.: 218-01-9)	/質譜儀分析。(With reference to AfPS GS	mg/kg	0.2	n.d.	Δ
二苯駢蒽 (Dibenzo[a,h]anthracene)	2019:01 PAK, analysis was performed by	mg/kg	0.2	n.d.	Δ
(CAS No.: 53-70-3)	GC/MS.)				
苯駢菲 (Benzo[g,h,i]perylene) (CAS No.:		mg/kg	0.2	n.d.	Δ
191-24-2)					
茚酮芘 (Indeno[1,2,3-c,d]pyrene) (CAS		mg/kg	0.2	n.d.	Δ
No.: 193-39-5)			0.0		
蒽 (Anthracene) (CAS No.: 120-12-7)		mg/kg	0.2	n.d.	Δ
苯駢芴 (Fluoranthene) (CAS No.: 206-		mg/kg	0.2	n.d.	Δ
44-0)			0.0		
菲 (Phenanthrene) (CAS No.: 85-01-8)		mg/kg	0.2	n.d.	Δ
芘 (Pyrene) (CAS No.: 129-00-0)		mg/kg	0.2	n.d.	Δ
萘 (Naphthalene) (CAS No.: 91-20-3)		mg/kg	0.2	n.d.	Δ
多環芳香烴15項總和 (Sum of 15 PAHs)		mg/kg	-	n.d.	Δ
紅磷 (Red phosphorus)	以熱裂解-氣相層析/質譜儀分析。(Analysis	mg/kg	500	n.d.	-
	was performed by Pyrolyzer-GC/MS.)			10 d	Prohibited
十溴聯苯醚 (DecaBDE)	参考US EPA 3550C: 2007・以氣相層析儀/ (質) (第4) (対策) (15) (15) (15) (15) (15) (15) (15) (15	mg/kg	5	n.d.	/ N/A(*3)
(Decabromodiphenyl ether (DecaBDE))	質譜儀分析。(With reference to US EPA				. , (- /
(CAS No.: 1163-19-5)	3550C: 2007, analysis was performed by GC/MS.)				
	GC/IVI3.)				



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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	
異丙基化磷酸三苯酯 (PIP 3:1) (Phenol,	參考US EPA 3550C: 2007,以氣相層析儀/	mg/kg	5	n.d.	Prohibited
isopropylated, phosphate (3:1) (PIP	質譜儀分析。(With reference to US EPA				/ N/A(*1)
3:1)) (CAS No.: 68937-41-7)	3550C: 2007, analysis was performed by				
	GC/MS.)				
2,4,6-三叔丁基酚 (2,4,6-TTBP) (2,4,6-	参考US EPA 3550C: 2007 · 以氣相層析儀/	mg/kg	5	n.d.	3000 /
Tris(tert-butyl)phenol (2,4,6-TTBP))	質譜儀分析。(With reference to US EPA				N/A(*2)
(CAS No.: 732-26-3)	3550C: 2007, analysis was performed by				
	GC/MS.)				
五氯苯硫酚 (PCTP)	参考US EPA 3550C: 2007,以氣相層析儀/	mg/kg	5	n.d.	10000
(Pentachlorothiophenol (PCTP)) (CAS	質譜儀分析。(With reference to US EPA				
No.: 133-49-3)	3550C: 2007, analysis was performed by				
	GC/MS.)				B 131 % 1
六氯丁二烯 (HCBD)	參考US EPA 3550C: 2007 · 以氣相層析儀/	mg/kg	5	n.d.	Prohibited
(Hexachlorobutadiene (HCBD)) (CAS	質譜儀分析。(With reference to US EPA				
No.: 87-68-3)	3550C: 2007, analysis was performed by				
入气 /女气岭甘椒纸 (DEAC)	GC/MS.)				
全氟/多氟烷基物質 (PFAS)	A * CENTIC 15000 2010 NATIONAL		0.01		
全氟丁酸及其鹽類 (PFBA and its salts)	參考CEN/TS 15968: 2010 · 以液相層析串	mg/kg	0.01	n.d.	-
(Perfluorobutane acid and its salts	聯質譜儀分析。(With reference to				
(PFBA and its salts)) (CAS No.: 375-22-4	CEN/TS 15968: 2010, analysis was				
and its salts)	performed by LC/MS/MS.)		0.01	l	
全氟丁磺酸及其鹽類 (PFBS and its salts)	参考CEN/TS 15968: 2010 · 以液相層析串	mg/kg	0.01	n.d.	-
(Perfluorobutane sulfonate and its salts	聯質譜儀分析。(With reference to				
(PFBS and its salts)) (CAS No.: 375-73-5 and its salts)	CEN/TS 15968: 2010, analysis was performed by LC/MS/MS.)				
全氟丁磺醯胺 (Perfluorobutane sulfon	參考CEN/TS 15968: 2010 · 以液相層析串	mg/kg	0.1	n.d.	
amides) (CAS No.: 30334-69-1)	野質譜儀分析。(With reference to	mg/kg	0.1	n.u.	_
arrides) (CAS No.: 30334-09-1)	CEN/TS 15968: 2010, analysis was				
	performed by LC/MS/MS.)				
N-(2-羥乙基)-N-甲基全氟丁烷磺醯胺	参考CEN/TS 15968: 2010 · 以液相層析串	mg/kg	0.01	n.d.	_
(PFBS-NC3H8O) (1,1,2,2,3,3,4,4,4-	勝質譜儀分析。(With reference to	, , , , , , , , , , , , , , , , , , ,	0.01	11.0.	
nonafluoro-N-(2-hydroxyethyl)-N-	CEN/TS 15968: 2010, analysis was				
methylbutane-1-sulphonamide (PFBS-	performed by LC/MS/MS.)				
NC3H8O)) (CAS No.: 34454-97-2)					



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測試項目 (Test Items)	測試方法 (Method)	單位 (Unit)	MDL	結果 (Result)	限值 (Limit)
				No.1	
1H,1H,2H,2H-甲基丙烯酸全氟己酯 (4:2	參考CEN/TS 15968: 2010 · 以氣相層析儀/	mg/kg	0.1	n.d.	-
FTMA) (1H,1H,2H,2H-Perfluorohexyl	質譜儀分析。(With reference to CEN/TS				
methacrylate (4:2 FTMA)) (CAS No.:	15968: 2010, analysis was performed by				
1799-84-4)	GC/MS.)				
全氟戊酸及其鹽類 (PFPA and its salts)	參考CEN/TS 15968: 2010 · 以液相層析串	mg/kg	0.01	n.d.	-
(Perfluoropentane acid and its salts	聯質譜儀分析。(With reference to				
(PFPA and its salts)) (CAS No.: 2706-90-	CEN/TS 15968: 2010, analysis was				
3 and its salts)	performed by LC/MS/MS.)				
全氟已酸及其鹽類 (PFHxA and its salts)	參考CEN/TS 15968: 2010 · 以液相層析串	mg/kg	0.01	n.d.	-
(Perfluorohexane acid and its salts	聯質譜儀分析。(With reference to				
(PFHxA and its salts)) (CAS No.: 307-24-	CEN/TS 15968: 2010, analysis was				
4 and its salts)	performed by LC/MS/MS.)				
1H,1H,2H,2H-全氟-1-辛醇 (6:2 FTOH)	參考CEN/TS 15968: 2010 · 以氣相層析儀/	mg/kg	0.1	n.d.	-
(1H,1H,2H,2H-Perfluoro-1-octanol	質譜儀分析。(With reference to CEN/TS				
(6:2FTOH)) (CAS No.: 647-42-7)	15968: 2010, analysis was performed by				
	GC/MS.)				
1H,1H,2H,2H-全氟辛基丙烯酸酯 (6:2	参考CEN/TS 15968: 2010 · 以氣相層析儀/	mg/kg	0.1	n.d.	-
FTA) (1H,1H,2H,2H-	質譜儀分析。(With reference to CEN/TS				
Perfluorooctylacrylate (6:2FTA)) (CAS	15968: 2010, analysis was performed by				
No.: 17527-29-6)	GC/MS.)				
1H,1H,2H,2H-全氟辛基甲基丙烯酸酯(6_2	參考CEN/TS 15968: 2010,以氣相層析儀/	mg/kg	0.1	n.d.	-
FTMAC) (1H,1H,2H,2H-Perfluorooctyl	質譜儀分析。(With reference to CEN/TS				
methacrylate (6:2 FTMAC)) (CAS No.:	15968: 2010, analysis was performed by				
2144-53-8)	GC/MS.)				
1H,1H,2H,2H-全氟辛磺酸及其鹽類 (6:2	參考CEN/TS 15968: 2010 · 以液相層析串	mg/kg	0.01	n.d.	-
FTS and its salts) (1H,1H,2H,2H-	聯質譜儀分析。(With reference to				
Perfluorooctanesulphonic acid and its	CEN/TS 15968: 2010, analysis was				
salts (6:2 FTS and its salts)) (CAS No.:	performed by LC/MS/MS.)				
27619-97-2 and its salts)					
1-碘-1H,1H,2H,2H-全氟辛烷 (6:2 FTI)	參考CEN/TS 15968: 2010 · 以氣相層析儀/	mg/kg	0.1	n.d.	-
(1,1,1,2,2,3,3,4,4,5,5,6,6-tridecafluoro-	質譜儀分析。(With reference to CEN/TS				
8-iodooctane (6:2 FTI)) (CAS No.: 2043-	15968: 2010, analysis was performed by				
57-4)	GC/MS.)				



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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	
全氟己基磺酸及其鹽類 (PFHxS and its	參考CEN/TS 15968: 2010,以液相層析串	mg/kg	0.01	n.d.	-
salts) (Perfluorohexane sulfonate and	聯質譜儀分析。(With reference to				
its salts (PFHxS and its salts)) (CAS No.:	CEN/TS 15968: 2010, analysis was				
355-46-4 and its salts)	performed by LC/MS/MS.)				
N-甲基全氟-1-己烷磺醯胺 (N-MeFHxSA)	參考CEN/TS 15968: 2010,以液相層析串	mg/kg	0.01	n.d.	-
(N-Methylperfluoro-1-	聯質譜儀分析。(With reference to				
hexanesulfonamide (N-Me-FHxSA))	CEN/TS 15968: 2010, analysis was				
(CAS No.: 68259-15-4)	performed by LC/MS/MS.)				
全氟己烷磺醯胺 (PFHxSA)	參考CEN/TS 15968: 2010,以液相層析串	mg/kg	0.01	n.d.	-
(Perfluorohexane sulfonamide	聯質譜儀分析。(With reference to				
(PFHxSA)) (CAS No.: 41997-13-1)	CEN/TS 15968: 2010, analysis was				
	performed by LC/MS/MS.)				
N-[3-(二甲基氨基)丙基]十三氟己烷磺醯胺	參考CEN/TS 15968: 2010 · 以液相層析串	mg/kg	0.01	n.d.	
(N-AP-FHxSA) (N-[3-	聯質譜儀分析。(With reference to				
(dimethylamino)propyl]tridecafluorohe	,				
xanesulphonamide (N-AP-FHxSA))	performed by LC/MS/MS.)				
(CAS No.: 50598-28-2)					
2-[甲基[(十三氟己基)磺醯基]氨基]丙烯酸	參考CEN/TS 15968: 2010,以氣相層析儀/	mg/kg	0.5	n.d.	-
乙酯 (N-MeFHSEA) (2-	質譜儀分析。(With reference to CEN/TS				
	15968: 2010, analysis was performed by				
mino]ethyl acrylate (N-MeFHSEA)) (CAS	GC/MS.)				
No.: 67584-57-0)					
2-[甲基[(十三氟己基)磺醯基]氨基]乙基甲	參考CEN/TS 15968: 2010 · 以氣相層析儀/	mg/kg	0.1	n.d.	-
基丙烯酸酯 (2-Propenoic acid, 2-	質譜儀分析。(With reference to CEN/TS				
methyl-, 2-	15968: 2010, analysis was performed by				
[methyl[(1,1,2,2,3,3,4,4,5,5,6,6,6-	GC/MS.)				
tridecafluorohexyl)sulfonyl]amino]ethyl					
ester) (CAS No.: 67584-61-6)					
2-[乙基[(十三氟己基)磺醯基]氨基]乙基甲	參考CEN/TS 15968: 2010,以氣相層析儀/	mg/kg	0.1	n.d.	-
基丙烯酸酯 (2-Propenoic acid, 2-	質譜儀分析。(With reference to CEN/TS				
methyl-, 2-	15968: 2010, analysis was performed by				
[ethyl[(1,1,2,2,3,3,4,4,5,5,6,6,6-	GC/MS.)				
tridecafluorohexyl)sulfonyl]amino]ethyl					
ester) (CAS No.: 67906-70-1)				<u> </u>	



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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)
十三氟-N-(2-羥基乙基)-N-甲基己烷磺醯胺 (MeFHxSE) (1-Hexanesulfonamide, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-N-(2-hydroxyethyl)-N-methyl-(MeFHxSE)) (CAS No.: 68555-75-9)	參考CEN/TS 15968: 2010 · 以液相層析串 聯質譜儀分析。(With reference to CEN/TS 15968: 2010, analysis was performed by LC/MS/MS.)	mg/kg	0.01	n.d.	-
N-乙基-N-[(十三氟己基)磺醯基]甘氨酸 (Glycine, N-ethyl-N- [(1,1,2,2,3,3,4,4,5,5,6,6,6- tridecafluorohexyl)sulfonyl]-) (CAS No.: 68957-32-4)	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.	-
全氟庚酸及其鹽類 (PFHpA and its salts) (Perfluoroheptane acid and its salts (PFHpA and its salts)) (CAS No.: 375-85- 9 and its salts)	參考CEN/TS 15968: 2010 · 以液相層析串 聯質譜儀分析。(With reference to CEN/TS 15968: 2010, analysis was performed by LC/MS/MS.)	mg/kg	0.01	n.d.	-
7H-十二氟庚酸及其鹽類 (HPFHpA and its salts) (7H-Dodecanefluoroheptane acid and its salts (HPFHpA and its salts)) (CAS No.: 1546-95-8 and its salts)	參考CEN/TS 15968: 2010 · 以液相層析串 聯質譜儀分析。(With reference to CEN/TS 15968: 2010, analysis was performed by LC/MS/MS.)	mg/kg	0.01	n.d.	
全氟庚基磺酸及其鹽類 (PFHpS and its salts) (Perfluoroheptane sulfonate and its salts (PFHpS and its salts)) (CAS No.: 375-92-8 and its salts)	參考CEN/TS 15968: 2010 · 以液相層析串 聯質譜儀分析。(With reference to CEN/TS 15968: 2010, analysis was performed by LC/MS/MS.)	mg/kg	0.01	n.d.	-
全氟辛烷磺酸及其鹽類 (PFOS and its salts) (Perfluorooctane sulfonates and its salts (PFOS and its salts)) (CAS No.: 1763-23-1 and its salts)	參考CEN/TS 15968: 2010 · 以液相層析串 聯質譜儀分析。(With reference to CEN/TS 15968: 2010, analysis was performed by LC/MS/MS.)	mg/kg	0.01	n.d.	-
N-乙基全氟正辛磺醯胺 (EtFOSA) (N-ethylperfluoro-1-octanesulfonamide (EtFOSA)) (CAS No.: 4151-50-2)	參考CEN/TS 15968: 2010 · 以液相層析串 聯質譜儀分析。(With reference to CEN/TS 15968: 2010, analysis was performed by LC/MS/MS.)	mg/kg	0.01	n.d.	-
N-甲基全氟正辛磺醯胺 (N-Me-FOSA) (N-Methyl-Perfluoroctanesulfonamide (N-Me-FOSA)) (CAS No.: 31506-32-8)	參考CEN/TS 15968: 2010 · 以液相層析串 聯質譜儀分析。(With reference to CEN/TS 15968: 2010, analysis was performed by LC/MS/MS.)	mg/kg	0.01	n.d.	-



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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	
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-	CEN/TS 15968: 2010, analysis was				
Et-FOSE alcohol)) (CAS No.: 1691-99-2)	performed by LC/MS/MS.)				
N-甲基全氟辛基磺醯胺乙醇 (N-Me-FOSE	參考CEN/TS 15968: 2010,以液相層析串	mg/kg	0.01	n.d.	-
alcohol) (N-Methyl-	聯質譜儀分析。(With reference to				
Perfluoroctanesulfonamidoethanol (N-	CEN/TS 15968: 2010, analysis was				
Me-FOSE alcohol)) (CAS No.: 24448-	performed by LC/MS/MS.)				
09-7)					
全氟辛基磺醯胺及其鹽類 (PFOSA and its	參考CEN/TS 15968: 2010,以液相層析串	mg/kg	0.01	n.d.	-
salts) (Perfluoroctanesulfonamide and	聯質譜儀分析。(With reference to				
its salts (PFOSA and its salts)) (CAS No.:	CEN/TS 15968: 2010, analysis was				
754-91-6 and its salts)	performed by LC/MS/MS.)				
全氟辛酸及其鹽類 (PFOA and its salts)	參考CEN/TS 15968: 2010,以液相層析串	mg/kg	0.01	n.d.	-
(Perfluorooctanoic acid and its salts	聯質譜儀分析。(With reference to				
(PFOA and its salts)) (CAS No.: 335-67-1	CEN/TS 15968: 2010, analysis was				
and its salts)	performed by LC/MS/MS.)				
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	參考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.)				
全氟辛基碘烷 (PFOI) (Perfluoro-1-	參考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.)				
3-全氟庚基丙酸 (7:3 FTCA) (3-	參考CEN/TS 15968: 2010 · 以液相層析串	mg/kg	0.01	n.d.	-
Perfluoroheptyl propanoic acid (7:3	聯質譜儀分析。(With reference to				
FTCA)) (CAS No.: 812-70-4)	CEN/TS 15968: 2010, analysis was				
	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)	限值 (Limit)
1H,1H,2H,2H-全氟癸磺酸及其鹽類 (8:2 FTS and its salts) (1H,1H,2H,2H-Perfluorodecanesulfonic acid and its salts (8:2 FTS and its salts)) (CAS No.: 39108-34-4 and its salts)	參考CEN/TS 15968: 2010 · 以液相層析串 聯質譜儀分析。(With reference to CEN/TS 15968: 2010, analysis was performed by LC/MS/MS.)	mg/kg	0.01	No.1 n.d.	-
1H,1H,2H,2H-全氟-1-癸醇 (8:2 FTOH) (1H,1H,2H,2H-Perfluoro-1-decanol (8:2 FTOH)) (CAS No.: 678-39-7)	參考CEN/TS 15968: 2010 · 以氣相層析儀/ 質譜儀分析。(With reference to CEN/TS 15968: 2010, analysis was performed by GC/MS.)	mg/kg	0.1	n.d.	-
1H,1H,2H,2H-全氟癸基丙烯酸酯 (8:2 FTA) (1H,1H,2H,2H-Perfluorodecyl acrylate (8:2 FTA)) (CAS No.: 27905-45- 9)	參考CEN/TS 15968: 2010 · 以氣相層析儀/ 質譜儀分析。(With reference to CEN/TS 15968: 2010, analysis was performed by GC/MS.)	mg/kg	0.1	n.d.	-
1H,1H,2H,2H-全氟癸基甲基丙烯酸酯 (8:2 FTMA) (1H,1H,2H,2H-Perfluorodecyl methacrylate (8:2 FTMA)) (CAS No.: 1996-88-9)	參考CEN/TS 15968: 2010 · 以氣相層析儀/ 質譜儀分析。(With reference to CEN/TS 15968: 2010, analysis was performed by GC/MS.)	mg/kg	0.1	n.d.	-
2H,2H-全氟癸酸及其鹽類 (H2PFDA and its salts) (2H,2H-Perfluorodecane acid and its salts (H2PFDA and its salts)) (CAS No.: 27854-31-5 and its salts)	參考CEN/TS 15968: 2010 · 以液相層析串 聯質譜儀分析。(With reference to CEN/TS 15968: 2010, analysis was performed by LC/MS/MS.)	mg/kg	0.01	n.d.	-
1H,1H,2H,2H-全氟癸基碘 (8_2 FTI) (1H,1H,2H,2H-Perfluorodecyl iodide (8_2 FTI)) (CAS No.: 2043-53-0)	參考CEN/TS 15968: 2010 · 以氣相層析儀/ 質譜儀分析。(With reference to CEN/TS 15968: 2010, analysis was performed by GC/MS.)	mg/kg	0.1	n.d.	-
1H,1H,2H,2H-全氟十七烷三甲基氧矽烷 (8:2 FTSi(OC2H5)3) (1H,1H,2H,2H- Perfluorodecyltriethoxysilane (8:2 FTSi(OC2H5)3)) (CAS No.: 101947-16-4)	參考CEN/TS 15968: 2010 · 以氣相層析儀/ 質譜儀分析。(With reference to CEN/TS 15968: 2010, analysis was performed by GC/MS.)	mg/kg	0.1	n.d.	-
2H,2H,3H,3H-全氟癸酸及其鹽類 (4HPFUnA and its salts) (2H,2H,3H,3H- Perfluoroundecanoic Acid and its salts (4HPFUnA and its salts)) (CAS No.: 34598-33-9 and its salts)	參考CEN/TS 15968: 2010‧以液相層析串 聯質譜儀分析。(With reference to CEN/TS 15968: 2010, analysis was performed by LC/MS/MS.)	mg/kg	0.01	n.d.	-



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新竹縣湖口鄉新竹工業區中華路8號 (NO. 8, CHUNG HWA ROAD, HSINCHU INDUSTRIAL DISTRICT 303, TAIWAN)

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測試項目 (Test Items)	測試方法 (Method)	單位 (Unit)	MDL	結果 (Result)	限值 (Limit)
(Test items)	(Method)	(Onit)		No.1	(LIIIIII)
 1H,1H,2H-全氟-1-癸烯 (PFDE)		mg/kg	0.1	n.d.	_
(1H,1H,2H-Heptadecafluoro-1-decene	質譜儀分析。(With reference to CEN/TS	9,9	0	11,61	
(PFDE)) (CAS No.: 21652-58-4)	15968: 2010, analysis was performed by				
(GC/MS.)				
雙(1H,1H,2H,2H-全氟癸基)磷酸酯及其鹽	参考CEN/TS 15968: 2010,以液相層析串	mg/kg	0.01	n.d.	-
類 (8_2diPAP and its salts)	聯質譜儀分析。(With reference to	3 3			
(Bis(1H,1H,2H,2H-	CEN/TS 15968: 2010, analysis was				
Perfluorodecyl)phosphate and its salts	performed by LC/MS/MS.)				
(8_2diPAP and its salts)) (CAS No.: 678-					
41-1 and its salts)					
全氟壬酸及其鹽類 (PFNA and its salts)	參考CEN/TS 15968: 2010,以液相層析串	mg/kg	0.01	n.d.	-
(Perfluorononan-1-oic acid and its salts	聯質譜儀分析。(With reference to	3. 3			
(PFNA and its salts)) (CAS No.: 375-95-1	•				
and its salts)	performed by LC/MS/MS.)				
全氟-3,7-二甲基辛酸 (PF-3,7-DMOA)	參考CEN/TS 15968: 2010,以液相層析串	mg/kg	0.01	n.d.	-
(Perfluoro-3,7-dimethyloctanoic Acid	聯質譜儀分析。(With reference to				
(PF-3,7-DMOA)) (CAS No.: 172155-07-	CEN/TS 15968: 2010, analysis was				
6)	performed by LC/MS/MS.)				
全氟癸酸及其鹽類 (PFDA and its salts)	參考CEN/TS 15968: 2010 · 以液相層析串	mg/kg	0.01	n.d.	-
(Perfluorodecane acid and its salts	聯質譜儀分析。(With reference to				
(PFDA and its salts)) (CAS No.: 335-76-2	CEN/TS 15968: 2010, analysis was				
and its salts)	performed by LC/MS/MS.)				
全氟十一烷酸及其鹽類 (PFUnDA and its	參考CEN/TS 15968: 2010,以液相層析串	mg/kg	0.01	n.d.	-
salts) (Perfluoroundecanoic acid and	聯質譜儀分析。(With reference to				
its salts (PFUnDA and its salts)) (CAS	CEN/TS 15968: 2010, analysis was				
No.: 2058-94-8 and its salts)	performed by LC/MS/MS.)				
全氟十二烷酸及其鹽類 (PFDoDA and its	參考CEN/TS 15968: 2010,以液相層析串	mg/kg	0.01	n.d.	-
salts) (Perfluorododecanoic acid and its	聯質譜儀分析。(With reference to				
salts (PFDoDA and its salts)) (CAS No.:	CEN/TS 15968: 2010, analysis was				
307-55-1 and its salts)	performed by LC/MS/MS.)				
全氟癸烷磺酸及其鹽類 (PFDS and its	參考CEN/TS 15968: 2010 · 以液相層析串	mg/kg	0.01	n.d.	-
salts) (Perfluorodecane sulfonate and	聯質譜儀分析。(With reference to				
its salts (PFDS and its salts)) (CAS No.:	CEN/TS 15968: 2010, analysis was				
335-77-3 and its salts)	performed by LC/MS/MS.)				



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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	
全氟十三烷酸及其鹽類 (PFTrDA and its	參考CEN/TS 15968: 2010,以液相層析串	mg/kg	0.01	n.d.	-
salts) (Pentacosafluorotridecanoic acid	聯質譜儀分析。(With reference to				
and its salts (PFTrDA and its salts)) (CAS	CEN/TS 15968: 2010, analysis was				
No.: 72629-94-8 and its salts)	performed by LC/MS/MS.)				
全氟十四烷酸及其鹽類 (PFTDA and its	參考CEN/TS 15968: 2010 · 以液相層析串	mg/kg	0.01	n.d.	-
salts) (Perfluorotetradecanoic acid and	聯質譜儀分析。(With reference to				
its salts (PFTDA and its salts)) (CAS No.:	CEN/TS 15968: 2010, analysis was				
376-06-7 and its salts)	performed by LC/MS/MS.)				
1H,1H,2H,2H-全氟-1-十二醇 (10:2	參考CEN/TS 15968: 2010,以氣相層析儀/	mg/kg	0.1	n.d.	-
FTOH) (1H,1H,2H,2H-Perfluoro-1-	質譜儀分析。(With reference to CEN/TS				
dodecanol (10:2FTOH)) (CAS No.: 865-	15968: 2010, analysis was performed by				
86-1)	GC/MS.)				
1H,1H,2H,2H-全氟十二烷基丙烯酸酯	參考CEN/TS 15968: 2010 · 以氣相層析儀/	mg/kg	0.1	n.d.	-
(10:2 FTA) (1H,1H,2H,2H-	質譜儀分析。(With reference to CEN/TS				
Perfluorododecylacrylate (10:2FTA))	15968: 2010, analysis was performed by				
(CAS No.: 17741-60-5)	GC/MS.)				
1H,1H,2H,2H-全氟十二烷基甲基丙烯酸酯	參考CEN/TS 15968: 2010,以氣相層析儀/	mg/kg	0.1	n.d.	-
(10:2 FTMA) (1H,1H,2H,2H-	質譜儀分析。(With reference to CEN/TS				
Perfluorododecyl methacrylate (10:2	15968: 2010, analysis was performed by				
FTMA)) (CAS No.: 2144-54-9)	GC/MS.)				
1H,1H,2H,2H-全氟十四烷基醇 (12:2	參考CEN/TS 15968: 2010,以氣相層析儀/	mg/kg	0.1	n.d.	-
FTOH) (1H,1H,2H,2H-	質譜儀分析。(With reference to CEN/TS				
perfluorotetradecan-1-ol (12:2 FTOH))	15968: 2010, analysis was performed by				
(CAS No.: 39239-77-5)	GC/MS.)				
,	參考CEN/TS 15968: 2010,以液相層析串	mg/kg	0.01	n.d.	-
(1H,1H,2H,2H-Perfluorododecane	聯質譜儀分析。(With reference to				
sulfonic acid (10:2 FTS)) (CAS No.:	CEN/TS 15968: 2010, analysis was				
120226-60-0)	performed by LC/MS/MS.)				
1H,1H,2H,2H-全氟十二烷基碘 (10:2 FTI)	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				
(10:2 FTI)) (CAS No.: 2043-54-1)	15968: 2010, analysis was performed by				
	GC/MS.)				
1H,1H,2H,2H-全氟十四烷基碘 (12:2 FTI)	參考CEN/TS 15968: 2010 · 以氣相層析儀/	mg/kg	0.1	n.d.	-
(1H,1H,2H,2H-Perfluorotetradecyl	質譜儀分析。(With reference to CEN/TS				
iodide (12:2 FTI)) (CAS No.: 30046-31-2)	15968: 2010, analysis was performed by				
	GC/MS.)				

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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	
全氟壬烷磺酸及其鹽類 (PFNS and its	參考CEN/TS 15968: 2010 · 以液相層析串	mg/kg	0.01	n.d.	-
salts) (Perfluorononane sulfonic acid	聯質譜儀分析。(With reference to				
and its salts (PFNS and its salts)) (CAS	CEN/TS 15968: 2010, analysis was				
No.: 68259-12-1 and its salts)	performed by LC/MS/MS.)				
全氟十一烷磺酸及其鹽類 (PFUnDS and	參考CEN/TS 15968: 2010 · 以液相層析串	mg/kg	0.01	n.d.	-
its salts) (Perfluoroundecane sulfonic	聯質譜儀分析。(With reference to				
acid and its salts (PFUnDS and its salts))	CEN/TS 15968: 2010, analysis was				
(CAS No.: 749786-16-1, 441296-91-9	performed by LC/MS/MS.)				
and its salts)					
全氟十二烷磺酸及其鹽類 (PFDoDS and	參考CEN/TS 15968: 2010,以液相層析串	mg/kg	0.01	n.d.	=
its salts) (Perfluorododecane sulfonic	聯質譜儀分析。(With reference to				
	CEN/TS 15968: 2010, analysis was				
(CAS No.: 79780-39-5 and its salts)	performed by LC/MS/MS.)				
全氟十三烷磺酸及其鹽類 (PFTrDS and its	參考CEN/TS 15968: 2010,以液相層析串	mg/kg	0.01	n.d.	-
salts) (Perfluorotridecane sulfonic acid	聯質譜儀分析。(With reference to				
and its salts (PFTrDS and its salts)) (CAS	CEN/TS 15968: 2010, analysis was				
No.: 791563-89-8 and its salts)	performed by LC/MS/MS.)				
雙[2-(全氟癸基)乙基]磷酸鹽 (10:2 diPAP)	參考CEN/TS 15968: 2010 · 以液相層析串	mg/kg	0.1	n.d.	-
(10:2 Fluortelomerphosphatediester	聯質譜儀分析。(With reference to				
(10:2 diPAP)) (CAS No.: 1895-26-7)	CEN/TS 15968: 2010, analysis was				
入与:::::(DED - DI)	performed by LC/MS/MS.)	/1	0.1	!	
全氟碘代十二烷 (PFDoDI)	参考CEN/TS 15968: 2010 · 以氣相層析儀/	mg/kg	0.1	n.d.	-
(Perfluorododecyl iodide (PFDoDI))	質譜儀分析。(With reference to CEN/TS				
(CAS No.: 307-60-8)	15968: 2010, analysis was performed by				
1-碘全氟癸烷 (PFDI) (Perfluorodecyl	GC/MS.) 参考CEN/TS 15968: 2010 · 以氣相層析儀/	mg/kg	0.1	n.d.	
iodide (PFDI)) (CAS No.: 423-62-1)	質譜儀分析。(With reference to CEN/TS	mg/kg	0.1	11.0.	_
lodide (F1 D1)) (CAS No.: 423-02-1)	15968: 2010, analysis was performed by				
	GC/MS.)				
全氟十五烷酸及其鹽類 (PFPeDA and its	GC/M3. 参考CEN/TS 15968: 2010・以液相層析串	mg/kg	0.01	n.d.	
salts, C15) (Perfluoropentadecanoic	聯質譜儀分析。(With reference to	,,,g,,kg	0.01	11.0.	
acid and its salts (PFPeDA and its salts,	CEN/TS 15968: 2010, analysis was				
C15)) (CAS No.: 141074-63-7 and its	performed by LC/MS/MS.)				
salts)					
341(3)					



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測試項目 (Test Items)	測試方法 (Method)	單位 (Unit)	MDL	結果 (Result)	限值 (Limit)
(cost items,	(Metheu)	(Omit)		No.1	(=
全氟十六烷酸及其鹽類 (PFHxDA and its salts, C16) (Perfluorohexadecanoic acid and its salts (PFHxDA and its salts, C16))	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	mg/kg	0.01	n.d.	-
(CAS No.: 67905-19-5 and its salts)	performed by LC/MS/MS.)				
全氟十八烷酸及其鹽類 (PFODA and its salts, C18) (Perfluorooctadecanoic acid and its salts (PFODA and its salts, C18)) (CAS No.: 16517-11-6 and its salts)	參考CEN/TS 15968: 2010 · 以液相層析串 聯質譜儀分析。(With reference to CEN/TS 15968: 2010, analysis was performed by LC/MS/MS.)	mg/kg	0.01	n.d.	-
全氟-3-甲氧基丙酸 (PFMPA) (Perfluoro- 3-methoxypropanoic acid (PFMPA)) (CAS No.: 377-73-1)	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 4-甲氧基丁酸 (PFMBA) (Perfluoro-4-methoxybutanoic acid (PFMBA)) (CAS No.: 863090-89-5)	参考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-3,6-二氧雜庚酸 (NFDHA) (Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)) (CAS No.: 151772-58-6)	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.	-
4,8-二氧雜-3H-全氟壬酸 (ADONA) (4,8-Dioxa-3H-perfluorononanoic acid (ADONA)) (CAS No.: 919005-14-4)	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.	-
1H,1H,2H,2H-全氟-1-己醇 (4:2 FTOH) (1H,1H,2H,2H-Perfluoro-1-hexanol (4:2FTOH)) (CAS No.: 2043-47-2)	參考CEN/TS 15968: 2010 · 以氣相層析儀/ 質譜儀分析。(With reference to CEN/TS 15968: 2010, analysis was performed by GC/MS.)	mg/kg	0.1	n.d.	-
2,3,3,3-四氟-2-(七氟丙氧基)丙酸及其鹽類 (HFPO-DA and its salts) (2,3,3,3-tetrafluoro-2-(heptafluoropropoxy)propionic acide and its salts (HFPO-DA and its salts)) (CAS No.: 13252-13-6 and its salts)	參考CEN/TS 15968: 2010 · 以液相層析串 聯質譜儀分析。(With reference to CEN/TS 15968: 2010, analysis was performed by LC/MS/MS.)	mg/kg	0.01	n.d.	-



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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	
1H,1H,2H,2H-全氟己磺酸及其鹽類 (4:2	參考CEN/TS 15968: 2010 · 以液相層析串	mg/kg	0.01	n.d.	-
FTS and its salts) (1H,1H,2H,2H-	聯質譜儀分析。(With reference to				
Perfluorohexanesulfonic acid and its	CEN/TS 15968: 2010, analysis was				
salts (4:2 FTS and its salts)) (CAS No.:	performed by LC/MS/MS.)				
757124-72-4 and its salts)					
全氟辛烷磺酰胺乙酸 (FOSAA)	參考CEN/TS 15968: 2010,以液相層析串	mg/kg	0.01	n.d.	-
(Perfluorooctane sulfonamidoacetic	聯質譜儀分析。(With reference to				
acid (FOSAA)) (CAS No.: 2806-24-8)	CEN/TS 15968: 2010, analysis was				
	performed by LC/MS/MS.)				
N-甲基全氟辛烷磺酰胺乙酸(N-	参考CEN/TS 15968: 2010,以液相層析串	mg/kg	0.01	n.d.	-
MeFOSAA) (N-methylperfluorooctane	聯質譜儀分析。(With reference to				
sulfonamidoacetic acid (N-MeFOSAA))	CEN/TS 15968: 2010, analysis was				
(CAS No.: 2355-31-9)	performed by LC/MS/MS.)				
,	參考CEN/TS 15968: 2010 · 以液相層析串	mg/kg	0.01	n.d.	-
(N-ethylperfluorooctane	聯質譜儀分析。(With reference to				
sulfonamidoacetic acid (N-EtFOSAA))	CEN/TS 15968: 2010, analysis was				
(CAS No.: 2991-50-6)	performed by LC/MS/MS.)				
·	參考CEN/TS 15968: 2010 · 以液相層析串	mg/kg	0.01	n.d.	-
(Perfluoropentane sulfonic acid and its	聯質譜儀分析。(With reference to				
salts (PFPeS and its salts)) (CAS No.:	CEN/TS 15968: 2010, analysis was				
2706-91-4 and its salts)	performed by LC/MS/MS.)				
3-全氟丙基丙酸 (3:3 FTCA) (3-	參考CEN/TS 15968: 2010,以液相層析串	mg/kg	0.01	n.d.	-
Perfluoropropyl propanoic acid (3:3	聯質譜儀分析。(With reference to				
FTCA)) (CAS No.: 356-02-5)	CEN/TS 15968: 2010, analysis was				
	performed by LC/MS/MS.)				
2-全氟己基乙酸 (6:2 FTCA) (2-	參考CEN/TS 15968: 2010,以液相層析串	mg/kg	0.01	n.d.	-
Perfluorohexyl ethanoic acid (6:2	聯質譜儀分析。(With reference to				
FTCA)) (CAS No.: 53826-12-3)	CEN/TS 15968: 2010, analysis was				
	performed by LC/MS/MS.)				
3-全氟戊基丙酸 (5:3 FTCA) (3-	参考CEN/TS 15968: 2010,以液相層析串	mg/kg	0.01	n.d.	-
Perfluoropentyl propanoic acid (5:3	聯質譜儀分析。(With reference to				
FTCA)) (CAS No.: 914637-49-3)	CEN/TS 15968: 2010, analysis was				
	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)	限值 (Limit)
				No.1	
全氟(2-乙氧基乙烷)磺酸 (PFEESA)	參考CEN/TS 15968: 2010 · 以液相層析串	mg/kg	0.01	n.d.	-
(Perfluoro(2-ethoxyethane)sulfonic	聯質譜儀分析。(With reference to				
acid (PFEESA)) (CAS No.: 113507-82-7)	CEN/TS 15968: 2010, analysis was				
	performed by LC/MS/MS.)				
9-氯十六氟-3-氧雜壬烷-1-磺酸 (9CI-	參考CEN/TS 15968: 2010,以液相層析串	mg/kg	0.01	n.d.	-
PF3ONS) (9-Chlorohexadecafluoro-3-	聯質譜儀分析。(With reference to				
oxanonane-1-sulfonic acid (9Cl-	CEN/TS 15968: 2010, analysis was				
PF3ONS)) (CAS No.: 756426-58-1)	performed by LC/MS/MS.)				
11-氯二十氟-3-氧雜十一烷-1-磺酸 (11CI-	參考CEN/TS 15968: 2010 · 以液相層析串	mg/kg	0.01	n.d.	-
PF3OUdS) (11-Chloroeicosafluoro-3-	聯質譜儀分析。(With reference to				
oxaundecane-1-sulfonic acid (11Cl-	CEN/TS 15968: 2010, analysis was				
PF3OUdS)) (CAS No.: 763051-92-9)	performed by LC/MS/MS.)				
2-(N-乙基全氟辛烷磺醯胺基)丙烯酸乙酯	參考CEN/TS 15968: 2010 · 以氣相層析儀/	mg/kg	0.1	n.d.	-
(EtFOSAC) (2-(N-	質譜儀分析。(With reference to CEN/TS				
ethylperfluorooctanesulfamido)ethyl	15968: 2010, analysis was performed by				
acrylate (EtFOSAC)) (CAS No.: 423-82-	GC/MS.)				
5)					
全氟辛基三乙氧基矽烷 (POTS)	參考CEN/TS 15968: 2010 · 以氣相層析儀/	mg/kg	0.1	n.d.	-
(Perfluorooctyl triethoxysilane (POTS))	質譜儀分析。(With reference to CEN/TS				
(CAS No.: 51851-37-7)	15968: 2010, analysis was performed by				
	GC/MS.)				
11H-全氟十一烷酸及其鹽類 (11H-	參考CEN/TS 15968: 2010,以液相層析串	mg/kg	0.01	n.d.	-
PFUnDA and its salts) (11H-	聯質譜儀分析。(With reference to				
Perfluoroundecanoic acid and its salts	CEN/TS 15968: 2010, analysis was				
(11H-PFUnDA and its salts)) (CAS No.:	performed by LC/MS/MS.)				
1765-48-6 and its salts)					
全氟己基碘 (PFHxl) (Perfluorohexyl	參考CEN/TS 15968: 2010,以氣相層析儀/	mg/kg	1	n.d.	-
iodide (PFHxI)) (CAS No.: 355-43-1)	質譜儀分析。(With reference to CEN/TS				
	15968: 2010, analysis was performed by				
	GC/MS.)				
全氟己基乙烯 (PFHxE) (Perfluorohexyl	參考CEN/TS 15968: 2010 · 以氣相層析儀/	mg/kg	1	n.d.	- 7
ethylene (PFHxE)) (CAS No.: 25291-17-	質譜儀分析。(With reference to CEN/TS				
2)	15968: 2010, analysis was performed by				
	GC/MS.)				



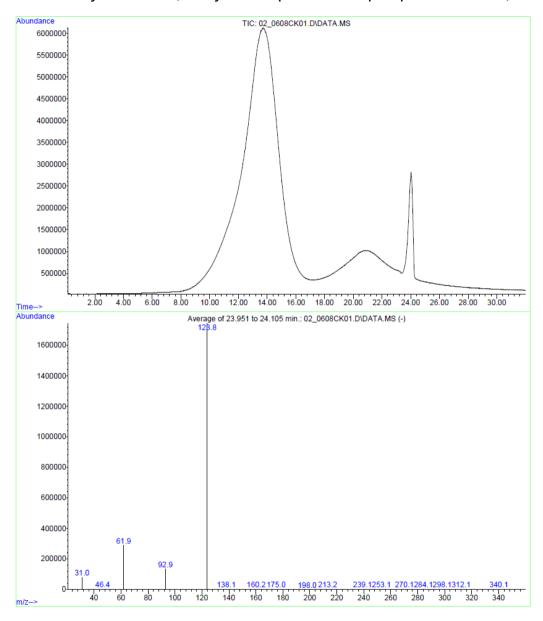
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長春人造樹脂廠股份有限公司新竹廠 (CHANG CHUN PLASTICS CO., LTD. (HSINCHU FACTORY)) 新竹縣湖口鄉新竹工業區中華路8號 (NO. 8, CHUNG HWA ROAD, HSINCHU INDUSTRIAL DISTRICT 303, TAIWAN)

紅磷標準品Py-GCMS圖譜 (The Py-GCMS spectra of Red phosphorus standard)





Test Report

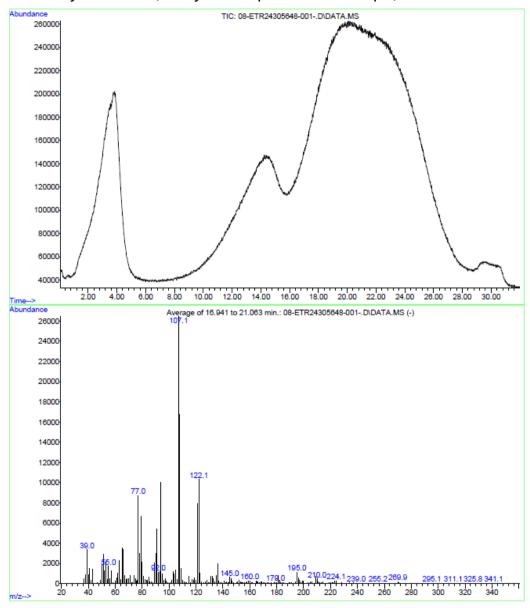
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新竹縣湖口鄉新竹工業區中華路8號 (NO. 8, CHUNG HWA ROAD, HSINCHU INDUSTRIAL DISTRICT 303, TAIWAN)

長春人造樹脂廠股份有限公司新竹廠 (CHANG CHUN PLASTICS CO., LTD. (HSINCHU FACTORY))

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檢測樣品Py-GCMS圖譜 (The Py-GCMS spectra of test sample)





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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/未檢出); Positive = Detectable 陽性(已偵測到/檢出)
- 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. 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.)
- 9. 詳細法規說明請點以下網址連結。(Detail explanation of the regulation is available at the following link.) https://www.epa.gov/assessing-and-managing-chemicals-under-tsca/persistent-bioaccumulative-and-toxic-pbt-chemicals-under
- 10. N/A(*1): 若產品/成品為以下‧則不適用 (The submitted sample is exempted from the regulated scope if it is anyone of the following):
 - 航空或軍事用液壓油 (Hydraulic fluids for aviation or military)
 - 潤滑劑和油脂 (Lubricants and grease)
 - 汽車和航空航天器的新零件和替換零件 (New and replacement parts for motor and aerospace vehicles)
 - 在封閉系統中製造氰基丙烯酸酯粘合劑 (Manufacture of cyanoacrylate adhesives in closed systems)
 - 火車和船舶應用的專用發動機空氣濾清器 (Specialized engine air filters for locomotive and marine applications)
 - 從含PIP(3:1)的產品或成品中回收的塑料 (Plastic for recycling from PIP (3:1)-containing products or articles)
 - 從包含PIP(3:1)的產品或成品中回收的塑料製成的成品或成品 (Finished products or articles made of plastic recycled from PIP (3:1)-containing products or articles)
 - 於2024/10/31前加工和分銷含PIP(3:1)的成品 (Processing and distribution in commerce of PIP (3:1)-containing articles, before October 31, 2024)
- 11. N/A(*2): 若產品為非作為潤滑油中添加劑,則不適用。(The submitted sample is exempted from the regulated scope if it is not oil and lubricant additives.)
- 12. N/A(*3): 若產品/成品為以下,則不適用 (The submitted sample is exempted from the regulated scope if it is anyone of the following):
 - 從產品或成品進行加工和分銷含十溴二苯醚回收的塑料或者由這種再生塑料製成的含十溴二苯醚的產品或成品。 (Exempts processing and distribution for recycling of DecaBDE-containing plastic from products or articles and DecaBDE-containing products or articles made from such recycled plastic.)



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PAHs Remark:

△ 德國產品安全委員會(AfPS): GS PAHs 要求

AfPS (German commission for Product Safety): GS PAHs requirements

	第1類(Category 1)	第 2 類(Cate	egory 2)	第 3 類(Cate	egory 3)
項目 (Parameter)	觸皮膚(超過 30 秒)的 2009/48/EC 定義的玩具材料和 3 歲以下兒童使用的產品(Materials intended to be placed in the mouth, or materials in toys (Directive 2009/48/EC) or articles for children up to 3	見與皮膚接觸逾 30 或重複的短時間接觸 are not in Category	秒(長期皮膚接觸) d(Materials that v 1, with eable long-term seconds) or	不屬於第 1 類或第 2 圖或可預見與皮膚接 (短期皮膚接觸)(Mat covered by Catego intended or forese term skin contact (s	觸不超過 30 秒 erials not ry 1 or 2, with eable short-
	years of age with intended long-term skin contact (> 30 seconds))	a. 供 14 歲以下兒童使 用的產品(Use by children under 14)	consumer	a. 供 14 歲以下兒童使 用的產品(Use by children under 14)	consumer
Naphthalene	< 1	< 2	 -	< 10	Ď
Phenanthrene					
Anthracene	< 1 Sum	< 5 Sum	< 10 Sum	< 20 Sum	< 50 Sum
Fluoranthene	\ 1 3uiii	< 3 3um	< 10 3uiii	< 20 Julii	< 50 Suiti
Pyrene					
Benzo[a]anthracene	< 0.2	< 0.2	< 0.5	< 0.5	< 1
Chrysene	< 0.2	< 0.2	< 0.5	< 0.5	< 1
Benzo[b]fluoranthene	< 0.2	< 0.2	< 0.5	< 0.5	< 1
Benzo[j]fluoranthene	< 0.2	< 0.2	< 0.5	< 0.5	< 1
Benzo[k]fluoranthene	< 0.2	< 0.2	< 0.5	< 0.5	< 1
Benzo[a]pyrene	< 0.2	< 0.2	< 0.5	< 0.5	< 1
Benzo[e]pyrene	< 0.2	< 0.2	< 0.5	< 0.5	< 1
Indeno[1,2,3-c,d] pyrene	< 0.2	< 0.2	< 0.5	< 0.5	< 1
Dibenzo[a,h]anthracene	< 0.2	< 0.2	< 0.5	< 0.5	< 1
Benzo[g,h,i]perylene	< 0.2	< 0.2	< 0.5	< 0.5	< 1
15 項 PAH 總濃度 (Sum of 15 PAH)	< 1	< 5	< 10	< 20	< 50

單位(Unit):mg/kg



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PFAS Remark:

現有PFAS定量技術是分析PFAS物質的特定結構,但同碳數族群之PFAS酸及鹽類物質,其可被辨識的特定結構相同,因此無法區別所分析的特定結構是來自酸或者鹽類,故測試結果為同碳數族群之PFAS之酸及鹽類物質的濃度總合。下表PFAS物質濃度皆已包含在測試結果中,相關資訊請參見下表: (下表列舉PFAS物質僅為範例,並不包含所有同碳數族群之PFAS鹽類。) (The quantitative technology of PFAS is to analyze the specific structure of PFAS substances. However, PFAS acid and its salts with the same carbon number group have the same specific structure that can be identified. The tested results of the analyzed specific structure cannot be distinguished to identify the contribution from PFAS acid or its salts. Therefore, the tested results display the sum of concentrations of PFAS acids and its salts with the same carbon number group. The concentration of PFAS substances in the below table have been included in the tested results, please refer to the table for relevant information: (The listed PFAS substances are examples only, it do not include all PFAS salts with the same carbon number group.))

群組名稱	物質名稱	CAS No.
(Group Name)	(Substance Name)	
	全氟丁酸 (Perfluorobutane acid) (PFBA)	375-22-4
	全氟丁酸銨 (PFBA-NH ₄)	10495-86-0
	Ammonium perfluorobutanoate (PFBA-NH ₄)	
	全氟丁酸鈉 (PFBA-Na)	2218-54-4
5-5. 7 ± 7/2	Sodium perfluorobutanoate (PFBA-Na)	
PFBA, 及其鹽	全氟丁酸鉀 (PFBA-K)	2966-54-3
(PFBA, its salts)	Potassium heptafluorobutanoate (PFBA-K)	
	全氟丁酸銀 (PFBA-Ag)	3794-64-7
	Silver perfluorobutanoate (PFBA-Ag)	
	全氟丁酸鋰 (PFBA-Li)	4146-76-3
	Lithium perfluorobutanoate (PFBA-Li)	
	全氟丁磺酸 (Perfluorobutane sulfonate) (PFBS)	375-73-5
	全氟丁基磺酸鈉 (PFBS-Na)	60453-92-1
	1-Butanesulfonic acid, 1,1,2,2,3,3,4,4,4-nonafluoro-,	
	sodium salt (1:1) (PFBS-Na)	
	全氟丁基磺酸鋰 (PFBS-Li)	131651-65-5
PFBS, 及其鹽&衍生物	Lithium perfluorobutanesulfonate (PFBS-Li)	
(PFBS, its salts & derivatives)	全氟丁基磺酸鎂 (PFBS-Mg)	507453-86-3
	Magnesium perfluorobutanesulfonate (PFBS-Mg)	
	全氟丁基磺酸鉀 (PFBS-K)	29420-49-3
	Perfluorobutane Sulfonate K-salt (PFBS-K)	
	全氟丁基磺酸氟 (PFBS-F)	375-72-4
	Perfluorobutane sulfonyl fluoride (PFBS-F)	



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群組名稱 (Group Name)	物質名稱 (Substance Name)	CAS No.
	全氟丁基磺酸四乙基銨 (PFBS-N(CH ₃ CH ₂) ₄) Tetraethylammonium perfluorobutanesulfonate (PFBS-N(CH ₃ CH ₂) ₄)	25628-08-4
	全氟丁基磺酸三苯基鋶 (TPS-PFBS) Triphenylsulfanium perfluorobutane sulfonate (TPS-PFBS)	144317-44-2
	全氟丁基磺酸二甲基(苯基)硫 Dimethyl(phenyl)sulfanium perfluorobutane sulfonate	220133-51-7
	全氟丁基磺酸四丁基磷 Tetrabutyl-phosphonium nonafluoro-butane-1-sulfonate	220689-12-3
	全氟丁基磺酸嗎啉 Morpholinium perfluorobutanesulfonate	503155-89-3
	全氟丁基磺酸銨 (PFBS-NH ₄) Ammonium 1,1,2,2,3,3,4,4,4-nonafluorobutane-1- sulphonate (PFBS-NH ₄)	68259-10-9
PFBS, 及其鹽&衍生物 (PFBS, its salts & derivatives)	全氟丁基磺酸水合物 Nonafluorobutanesulfonic acidHydrate	59933-66-3
	全氟丁基磺酸氯 (PFBS-CI) Nonafluoro-1-butanesulfonyl chloride (PFBS-CI)	2991-84-6
	全氟-1-丁磺酸雙(4-叔丁基苯基)碘鎓 (PFBS-I(C_6H_4) $_2$ (C_4H_9) $_2$) Bis(4-tert-butylphenyl)iodonium perfluoro-1-butanesulfonate (PFBS-I(C_6H_4) $_2$ (C_4H_9) $_2$)	194999-85-4
	$1,1,2,2,3,4,4,4$ -一氟丁烷- 1 -磺酸與 $2,2$ '-亞氨基二乙醇的化合物 $(1:1)$ (PFBS-NH(C_2 H $_5$ O) $_2$) $1,1,2,2,3,3,4,4,4$ -nonafluorobutane- 1 -sulphonic acid, compound with $2,2$ '-iminodiethanol ($1:1$) (PFBS-NH(C_2 H $_5$ O) $_2$)	70225-18-2
	1-(4-丁氧基-1-萘基)四氫噻吩九氟丁烷-1-磺酸鹽 (PFBS-SC ₁₈ H ₂₃ O) 1-(4-butoxy-1-naphthyl)tetrahydrothiophenium nonafluorobutane-1-sulfonate (PFBS-SC ₁₈ H ₂₃ O)	209482-18-8
	全氟戊酸 (Perfluoropentane acid) (PFPA)	2706-90-3
PFPA, 及其鹽 (PFPA, its salts)	全氟戊酸鈉 (PFPA-Na) Sodium perfluoropentanoate (PFPA-Na)	2706-89-0
(PFPA, Its saits)	全氟戊酸鉀 (PFPA-K) Potasium perfluoropentanoate (PFPA-K)	336-23-2

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群組名稱 (Group Name)	物質名稱 (Substance Name)	CAS No.
	全氟戊酸銨 (PFPA-NH ₄) Ammonium perfluoropentanoate (PFPA-NH ₄)	68259-11-0
PFPA, 及其鹽 (PFPA, its salts)	全氟戊酸鋰 (PFPA-Li) Lithium perfluoropentanoate (PFPA-Li)	198482-22-3
	全氟戊酸銀 (PFPA-Ag) Silver perfluoropentanoate (PFPA-Ag)	2795-30-4
	全氟已酸 (Perfluorohexane acid) (PFHxA)	307-24-4
	全氟已酸銨 (PFHxA-NH ₄) Ammonium perfluorohexanoate (PFHxA-NH ₄)	21615-47-4
	全氟已酸鈉 (PFHxA-Na) Sodium perfluorohexanoate (PFHxA-Na)	2923-26-4
PFHxA, 及其鹽&衍生物	全氟已酸鉀 (PFHxA-K) Potassium perfluorohexanoate (PFHxA-K)	3109-94-2
(PFHxA, its salts & derivatives)	全氟己酸氟 (PFHxA-F) Perfluorohexanoyl fluoride (PFHxA-F)	355-38-4
	全氟己酸銀 (PFHxA-Ag) Silver perfluorohexanoate (PFHxA-Ag)	336-02-7
	全氟己酸鋰 (PFHxA-Li) Lithium perfluorohexanoate (PFHxA-Li)	90430-61-8
	1H,1H,2H,2H-全氟辛磺酸 (1H,1H,2H,2H- Perfluorooctanesulphonic acid) (6:2 FTS)	27619-97-2
6:2 FTS, 及其鹽 (6:2 FTS, its salts)	1H, 1H, 2H, 2H-全氟辛烷磺酸鈉 (6:2 FTS-Na) Sodium 1H,1H,2H,2H-Perfluorooctanesulfonate (6:2 FTS-Na)	27619-94-9
	1H, 1H, 2H, 2H-全氟辛烷磺酸鉀 (6:2 FTS-K) Potassium 1H,1H,2H,2H-Perfluorooctanesulfonate (6:2 FTS-K)	59587-38-1
	1H, 1H, 2H, 2H-全氟辛烷磺酸銨 (6:2 FTS-NH ₄) Ammonium 1H,1H,2H,2H-Perfluorooctanesulfonate (6:2 FTS-NH ₄)	59587-39-2
	1H, 1H, 2H, 2H-全氟辛烷磺酸銨鋇 (6:2 FTS-Ba) 1-Octanesulfonic acid, 3,3,4,4,5,5,6,6,7,7,8,8,8- tridecafluoro-, barium salt (2:1) (6:2 FTS-Ba)	1807944-82-6



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群組名稱 (Group Name)	物質名稱 (Substance Name)	CAS No.
•	全氟己基磺酸 (Perfluorohexane sulfonate) (PFHxS)	355-46-4
	全氟己基磺酸鈉 (PFHxS-Na) Perfluorohexanesulfonate Na-salt (PFHxS-Na)	82382-12-5
	全氟己基磺酸鉀 (PFHxS-K) Perfluorohexanesulfonate K-salt (PFHxS-K)	3871-99-6
	全氟己基磺酸銨 (PFHxS-NH ₄) Ammonium perfluorohexanesulfonate (PFHxS-NH ₄)	68259-08-5
	全氟己基磺酸鋰 (PFHxS-Li) Perfluorohexanesulfonate Li-salt (PFHxS-Li)	55120-77-9
	全氟己基磺酸鋅 (PFHxS-Zn) Perfluorohexanesulfonate Zn-salt (PFHxS-Zn)	70136-72-0
	全氟己基磺醯氟 (PFHxS-F) Perfluorohexanesulfonate sulfonyl fluoride (PFHxS-F)	423-50-7
PFHxS, 及其鹽&衍生物	三苯基(苯甲基)磷-, 1,1,2,2,3,3,4,4,5,5,6,6,6,6-十三氟-1-己烷磺酸鹽 (1:1) Phosphonium, triphenyl(phenylmethyl)-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1)	1000597-52-3
(PFHxS, its salts & derivatives)	N,N,N-三丁基-1-丁銨與十三氟-1-己烷磺酸的鹽 N,N,N-tributylbutan-1-aminium tridecafluorohexane-1- sulfonate	108427-54-9
	N,N,N-三乙基乙銨與十三氟-1-己烷磺酸的鹽 (1:1) N,N,N-triethylethanaminium tridecafluorohexane-1- sulfonate (1:1)	108427-55-0
	1,1,2,2,3,3,4,4,5,5,6,6,6-十三氟-1-己烷磺酸與吡咯烷的化合物 (1:1) 1-Hexanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,6- tridecafluoro-, compd. With pyrrolidine (1:1)	1187817-57-7
	N-[4-[[4-(二乙基氨基)苯基][4-(乙基氨基)-1-萘基]亞甲基]-2,5-環己二-1-基]-N-乙基乙銨,1,1,2,2,3,3,4,4,5,5,6,6,6-十三氟-1-己烷磺酸鹽 (1:1) Ethanaminium, N-[4-[[4-(diethylamino)phenyl][4-(ethylamino)-1-naphthalenyl]methylene]-2,5-cyclohexadien-1-ylidene]-N-ethyl-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1)	1310480-24-0



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群組名稱	物質名稱	CAS No.
(Group Name)	(Substance Name)	
	N-[4-[[4-(二甲基氨基)苯基][4-(乙基氨基)-1-萘基]亞甲基]-2,5- 環己二-1-基]-N-甲基甲銨,1,1,2,2,3,3,4,4,5,5,6,6,6-十三氟-1- 己烷磺酸鹽 (1:1) Methanaminium, N-[4-[[4-(dimethylamino)phenyl][4- (ethylamino)-1-naphthalenyl]methylene]-2,5- cyclohexadien-1-ylidene]-N-methyl-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1)	1310480-27-3
	N-[4-[[4-(二甲基氨基)苯基][4-(苯基氨基)-1-萘基]亞甲基]-2,5-環己二-1-基]-N-甲基甲銨,1,1,2,2,3,3,4,4,5,5,6,6,6-十三氟-1-己烷磺酸鹽 (1:1) Methanaminium, N-[4-[[4-(dimethylamino)phenyl][4-(phenylamino)-1-naphthalenyl]methylene]-2,5-cyclohexadien-1-ylidene]-N-methyl-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1)	1310480-28-4
PFHxS, 及其鹽&衍生物 (PFHxS, its salts & derivatives)	β-環糊精, 與1,1,2,2,3,3,4,4,5,5,6,6,6-十三氟-1-己烷磺酸離子 (1-)的化合物 (1:1) Beta-Cyclodextrin, compd. with 1,1,2,2,3,3,4,4,5,5,6,6,6- tridecafluoro-1-hexanesulfonic acid ion(1-) (1:1)	1329995-45-0
	γ-環糊精, 與1,1,2,2,3,3,4,4,5,5,6,6,6-十三氟-1-己烷磺酸離子 (1-)的化合物 (1:1) Gamma-Cyclodextrin, compd. with 1,1,2,2,3,3,4,4,5,5,6,6,6- tridecafluoro-1-hexanesulfonic acid ion(1-) (1:1)	1329995-69-8
	三苯基锍,1,1,2,2,3,3,4,4,5,5,6,6,6,6-十三氟-1-己烷磺酸鹽 (1:1) Sulfonium, triphenyl-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1)	144116-10-9
	喹啉鎓,1-(羧甲基)-4-[2-[4-[4-(2,2-二苯基乙烯基)苯基]-1,2,3,3a,4,8b-六氫環戊[b]吲哚-7-基]乙烯基]-,1,1,2,2,3,3,4,4,5,5,6,6,6-十三氟-1-己烷磺酸鹽 (1:1) Quinolinium, 1-(carboxymethyl)-4-[2-[4-[4-(2,2-diphenylethenyl)phenyl]-1,2,3,3a,4,8b-hexahydrocyclopent[b]indol-7-yl]ethenyl]-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1)	1462414-59-0



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群組名稱 (Group Name)	物質名稱 (Substance Name)	CAS No.
•	二苯基碘鎓,1,1,2,2,3,3,4,4,5,5,6,6,6-十三氟-1-己烷磺酸鹽 (1:1) lodonium, diphenyl-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1)	153443-35-7
	N,N,N-三甲基甲銨與1,1,2,2,3,3,4,4,5,5,6,6,6,6-十三氟-1-己烷 磺酸的鹽 (1:1) Methanaminium, N,N,N-trimethyl-, salt with 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonic acid (1:1)	189274-31-5
	1,1,2,2,3,3,4,4,5,5,6,6,6-十三氟-1-己烷磺酸與2-甲基-2-丙胺的 化合物 (1:1) 1-Hexanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,6- tridecafluoro-, compd.with 2-methyl-2-propanamine (1:1)	202189-84-2
PFHxS, 及其鹽&衍生物	雙[4-(1,1-二甲基乙基)苯基]碘鎓, 1,2,2,3,3,4,4,5,5,6,6,6 -十三 氟-1-己烷磺酸鹽 (1:1) lodonium, bis[4-(1,1-dimethylethyl)phenyl]-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1)	213740-81-9
(PFHxS, its salts & derivatives)	1,1,2,2,3,3,4,4,5,5,6,6,6-十三氟-1-己烷磺酸鎵鹽 (9CI) 1-Hexanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,6- tridecafluoro-, gallium salt (9CI)	341035-71-0
	雙(4-甲基苯基)苯基硫磺酸1,1,2,2,3,3,4,4,5,5,6,6,6-十三氟-1- 己烷磺酸鹽 (1:1) Sulfonium, bis(4-methylphenyl)phenyl-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1)	341548-85-4
	1,1,2,2,3,3,4,4,5,5,6,6,6-十三氟-1-己烷磺酸鈧(3+)鹽 (3:1) 1-Hexanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,6- tridecafluoro-, scandium(3+) salt (3:1) (PFHxS-Sc)	350836-93-0
	1,1,2,2,3,3,4,4,5,5,6,6,6-十三氟-1-己烷磺酸釹(3+)鹽 (3:1) 1-Hexanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,6- tridecafluoro-, neodymium(3+) salt (3:1) (PFHxS-Nd)	41184-65-0
	1,1,2,2,3,3,4,4,5,5,6,6,6-十三氟-1-己烷磺酸釔(3+)鹽 (3:1) 1-Hexanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,6- tridecafluoro-, yttrium(3+) salt (3:1) (PFHxS-Y)	41242-12-0



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群組名稱	物質名稱	CAS No.
(Group Name)	(Substance Name)	
	(硫代二-4,1-亞苯基)雙[二苯基硫鹽與1,1,2,2,3,3,4,4,5,5,6,6,6- 十三氟-1-己烷磺酸 (1:2) Sulfonium, (thiodi-4,1-phenylene)bis[diphenyl-, salt with 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonic acid (1:2)	421555-73-9
	雙[4-(1,1-二甲基丙基)苯基]碘鎓鹽與1,1,2,2,3,3,4,4,5,5,6,6,6-十三氟-1-己烷磺酸 lodonium, bis[4-(1,1-dimethylpropyl)phenyl]-, salt with 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonic acid	421555-74-0
	三[4-(1,1-二甲基乙基)苯基]锍-,1,1,2,2,3,3,4,4,5,5,6,6,6,6-十三 氟-1-己烷磺酸鹽 (1:1) Sulfonium, tris[4-(1,1-dimethylethyl)phenyl]-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1)	425670-70-8
	十三氟己烷磺酸與二乙醇胺的化合物 Tridecafluorohexanesulphonic acid, compound with 2,2'- iminodiethanol (1:1)	70225-16-0
PFHxS, 及其鹽&衍生物 (PFHxS, its salts & derivatives)	1,1,2,2,3,3,4,4,5,5,6,6,6-十三氟-1-己烷磺酸與N·N-二乙基乙 胺的化合物 (1:1) 1-Hexanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,6- tridecafluoro-, compd. with N,N-diethylethanamine (1:1)	72033-41-1
	雙[(1,1-二甲基乙基)苯基]碘鎓鹽-與1,1,2,2,3,3,4,4,5,5,6,6,6-十三氟-1-己烷磺酸 (1:1) (9Cl) lodonium, bis[(1,1-dimethylethyl)phenyl]-, salt with 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonic acid (1:1) (9Cl)	866621-50-3
	(4-甲基苯基)二苯基锍-,1,1,2,2,3,3,4,4,5,5,6,6,6,6-十三氟-1-己 烷磺酸鹽 (1:1) Sulfonium, (4-methylphenyl)diphenyl-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1)	910606-39-2
	[4-[(2-甲基-1-氧-2-丙烯-1-基)氧基]	911027-68-4

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群組名稱 (Group Name)	物質名稱 (Substance Name)	CAS No.
	1,1,2,2,3,3,4,4,5,5,6,6,6-十三氟-1-己烷磺酸銫鹽 (1:1) 1-Hexanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,6- tridecafluoro-, cesium salt (1:1) (PFHxS-CsH)	92011-17-1
PFHxS, 及其鹽&衍生物 (PFHxS, its salts & derivatives)	二苯並[k,n][1,4,7,10,13]四氧噻吩基環戊二烯鎓,19-[4-(1,1-二甲基乙基)苯基]-6,7,9,10,12,13-六氫-,1,1,2,2,3,3,4,4,5,5,6,6,6-十三氟-1-己烷磺酸鹽 (1:1) Dibenzo[k,n][1,4,7,10,13]tetraoxathiacyclopentadecinium, 19-[4-(1,1-dimethylethyl)phenyl]-6,7,9,10,12,13-hexahydro-, 1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonate (1:1) 全氟己基磺酸氯 (PFHxS-Cl)	928049-42-7 55591-23-6
(PFFIXS, Its Saits & derivatives)	主東C基領酸氯 (PFHXS-CI) Perfluorohexylsulfonyl chloride (PFHxS-CI)	55591-23-6
	PFHxS-磺酸酯聚合物 Sulfonium, [4-[(2-methyl-1-oxo-2-propenyl)oxy]phenyl]diphenyl-, salt with1,1,2,2,3,3,4,4,5,5,6,6,6-tridecafluoro-1-hexanesulfonic acid (1:1), polymer with 2-ethyltricyclo[3.3.1.13,7]dec-2-yl 2-methyl-2-propenoate, 3-hydroxytricyclo[3.3.1.13,7]dec-1-yl 2-methyl-2-propenoate and tetrahydro-2-oxo-3-furanyl 2-methyl-2-propenoate	911027-69-5
	全氟庚酸 (Perfluoroheptane acid) (PFHpA)	375-85-9
	全氟庚酸鈉 (PFHpA-Na) Sodium perfluoroheptanoate (PFHpA-Na)	20109-59-5
	全氟庚酸鉀 (PFHpA-K) Potassium perfluoroheptanoate (PFHpA-K)	21049-36-5
PFHpA, 及其鹽 (PFHpA, its salts)	全氟庚酸銨 (PFHpA-NH ₄) Ammonium perfluoroheptanoate (PFHpA-NH ₄)	6130-43-4
(ггпря, its saits)	全氟庚酸銫 (PFHpA-Cs) Cesium perfluoroheptanoate (PFHpA-Cs)	171198-24-6
	全氟庚酸銀 (PFHpA-Ag) Silver perfluoroheptanoate (PFHpA-Ag)	424-05-5
	全氟庚酸鋰 (PFHpA-Li) Lithium perfluoroheptanoate (PFHpA-Li)	60871-90-1



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群組名稱 (Group Name)	物質名稱 (Substance Name)	CAS No.
•	7H-十二氟庚酸 (7H-Dodecanefluoroheptane acid)	1546-95-8
HPFHpA, 及其鹽	7H-十二氟庚酸鈉 (HPFHpA-Na) Sodium 2,2,3,3,4,4,5,5,6,6,7,7-dodecafluoroheptanoate (HPFHpA-Na)	2264-25-7
(HPFHpA, its salts)	7H-十二氟庚酸銨 (HPFHpA-NH ₄) Ammonium 2,2,3,3,4,4,5,5,6,6,7,7- dodecafluoroheptanoate (HPFHpA-NH ₄)	376-34-1
	全氟庚基磺酸 (Perfluoroheptane sulfonate) (PFHpS)	375-92-8
	全氟庚基磺酸鈉 (PFHpS-Na) Perfluoroheptanesulfonate Na-salt (PFHpS-Na)	21934-50-9
PFHpS, 及其鹽	全氟庚基磺酸鉀 (PFHpS-K) Potassium perfluoroheptanesulfonate (PFHpS-K)	60270-55-5
(PFHpS, its salts)	全氟庚基磺酸銨 (PFHpS-NH ₄) Ammonium perfluoroheptanesulfonate (PFHpS-NH ₄)	68259-07-4
	全氟庚基磺酸鋰 (PFHpS-Li) Lithium perfluoroheptanesulfonate (PFHpS-Li)	117806-54-9
	全氟辛烷磺酸 (Perfluorooctane sulfonates) (PFOS)	1763-23-1
	全氟辛基磺酸鉀 (PFOS-K) Potassium perfluorooctanesulfonate (PFOS-K)	2795-39-3
	全氟辛基磺酸鋰 (PFOS-Li) Perfluorooctanesulfonic acid, lithium salt (PFOS-Li)	29457-72-5
	全氟辛基磺酸銨 (PFOS- NH_4) Perfluorooctanesulfonic acid, ammonium salt (PFOS- NH_4)	29081-56-9
PFOS, 及其鹽&衍生物 (PFOS, its salts & derivatives)	全氟辛基磺酸二乙醇銨 (PFOS-NH(OH) ₂) Perfluorooctane sulfonate diethanolamine salt (PFOS-NH(OH) ₂)	70225-14-8
	全氟辛基磺酸四乙基銨 (PFOS-N(C_2H_5) ₄) Perfluorooctanesulfonic acid,tetraethylammonium salt (PFOS-N(C_2H_5) ₄)	56773-42-3
	全氟辛基磺酸二癸二甲基銨 (PFOS-DDA) N-decyl-N,N-dimethyldecan-1-aminium 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluorooctane-1- sulfonate (PFOS-DDA)	251099-16-8



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群組名稱 (Group Name)	物質名稱 (Substance Name)	CAS No.
PFOS, 及其鹽&衍生物 (PFOS, its salts & derivatives)	全氟辛基磺醯氟 (POSF) Perfluorooctane sulfonyl fluoride (POSF)	307-35-7
	全氟辛基磺酸鎂 (PFOS-Mg) Perfluorooctanesulfonic acid, magnesium salt (PFOS-Mg)	91036-71-4
	全氟辛基磺酸鈉 (PFOS-Na) Perfluorooctanesulfonic acid, sodium salt (PFOS-Na)	4021-47-0
	全氟辛烷磺酸哌啶 Piperidine 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8- heptadecafluorooctanesulfonate	71463-74-6
DEOCA THE	全氟辛基磺醯胺 (Perfluoroctanesulfonamide) (PFOSA)	754-91-6
PFOSA, 及其鹽 (PFOSA, its salts)	全氟辛基磺醯胺鋰鹽 (1:1) (PFOSA-Li) Perfluorooctanesulfonamide lithium salt (1:1) (PFOSA-Li)	76752-79-9
	全氟辛酸 (Perfluorooctanoic acid) (PFOA)	335-67-1
PFOA, 及其鹽&衍生物 (PFOA, its salts & derivatives)	全氟辛酸鈉 (PFOA-Na) Sodium perfluorooctanoate (PFOA-Na)	335-95-5
	全氟辛酸鉀 (PFOA-K) Potassium perfluorooctanoate (PFOA-K)	2395-00-8
	全氟辛酸銀 (PFOA-Ag) Silver perfluorooctanote (PFOA-Ag)	335-93-3
	全氟辛氟 (PFOA-F) Perfluorooctanoyl fluoride (PFOA-F)	335-66-0
	全氟辛酸銨 (APFO) Ammonium pentadecafluorooctanoate (APFO)	3825-26-1
	全氟辛酸鋰 (PFOA-Li) Lithium perfluorooctanoate (PFOA-Li)	17125-58-5
8:2 FTS, 及其鹽 (8:2 FTS, its salts)	1H,1H,2H,2H-全氟癸磺酸 (1H,1H,2H,2H- Perfluorodecanesulfonic acid) (8:2 FTS)	39108-34-4
	1H, 1H, 2H, 2H-全氟癸磺酸鉀 (8:2 FTS-K) 1H,1H,2H,2H-Perfluorodencane sulfonate acid Potassium salt (8:2 FTS-K)	438237-73-1
	1H, 1H, 2H, 2H-全氟癸磺酸銨 (8:2 FTS-NH ₄) 1H,1H,2H,2H-Perfluorodencane sulfonate acid Ammonium salt (8:2 FTS-NH ₄)	149724-40-3



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群組名稱 (Group Name)	物質名稱 (Substance Name)	CAS No.
8:2 FTS, 及其鹽 (8:2 FTS, its salts)	1H, 1H, 2H, 2H-全氟癸磺酸鈉 (8:2 FTS-Na) 1H,1H,2H,2H-Perfluorodencane sulfonate acid Sodium salt (8:2 FTS-Na)	27619-96-1
PFNA, 及其鹽 (PFNA, its salts)	全氟壬酸 (Perfluorononan-1-oic acid) (PFNA) 全氟壬酸鈉 (PFNA-Na) Perfluorononanoate Na-salt (PFNA-Na)	375-95-1 21049-39-8
	全氟壬酸銨 (APFN) Perfluorononanoate ammounium salt (APFN)	4149-60-4
	全氟壬酸鉀 (PFNA-K) Potassium perfluorononanoate (PFNA-K)	21049-38-7
	全氟壬酸鋰 (PFNA-Li) Perfluorononanoate Li-Salt (PFNA-Li)	60871-92-3
	全氟壬酸銀 (PFNA-Ag) Silver perfluorononanoate (PFNA-Ag)	7358-16-9
	全氟癸酸 (Perfluorodecane acid) (PFDA)	335-76-2
	全氟癸酸鈉 (PFDA-Na) Perfluorodecanoate Na-salt (PFDA-Na)	3830-45-3
	全氟癸酸氨 (APFDA) Perfluorodecanoate ammonium salt (APFDA)	3108-42-7
PFDA, 及其鹽 (PFDA, its salts)	全氟癸酸鉀 (PFDA-K*) Potassium perfluorodecanoate (PFDA-K*)	51604-85-4
	全氟癸酸銀 (PFDA-Ag) Silver perfluorodecanoate (PFDA-Ag)	5784-82-7
	全氟癸酸鋰 (PFDA-Li) Lithium perfluorodecanoate (PFDA-Li)	84743-32-8
	全氟十一烷酸 (Perfluoroundecanoic acid) (PFUnDA)	2058-94-8
	全氟十一烷酸銨 (PFUnDA-NH ₄) Ammonium perfluoroundecanoate (PFUnDA-NH ₄)	4234-23-5
PFUnDA, 及其鹽 (PFUnDA, its salts)	全氟十一烷酸鈉 (PFUnDA-Na) Perfluoroundecanoic acid sodium salt (PFUnDA-Na)	60871-96-7
	全氟十一烷酸鉀 (PFUnDA-K) Potassium perfluoroundecanoate (PFUnDA-K)	30377-53-8
	全氟十一烷酸鈣 (PFUnDA-Ca) Calcium perfluoroundecanoate (PFUnDA-Ca)	97163-17-2



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長春人造樹脂廠股份有限公司新竹廠 (CHANG CHUN PLASTICS CO., LTD. (HSINCHU FACTORY)) 新竹縣湖口鄉新竹工業區中華路8號 (NO. 8, CHUNG HWA ROAD, HSINCHU INDUSTRIAL DISTRICT 303, TAIWAN)

群組名稱 (Group Name)	物質名稱 (Substance Name)	CAS No.
PFDoDA, 及其鹽 (PFDoDA, its salts)	全氟十二烷酸 (Perfluorododecanoic acid) (PFDoDA)	307-55-1
	全氟十二烷酸銨 (APFDoDA) Ammonium perfluorododecanoate (APFDoDA)	3793-74-6
	全氟十二烷酸鈉 (PFDoDA-Na) Sodium perfluorododecanoate (PFDoDA-Na)	60872-01-7
	全氟十三烷酸 (Pentacosafluorotridecanoic acid) (PFTrDA)	72629-94-8
PFTrDA, 及其鹽 (PFTrDA, its salts)	全氟十三烷酸銨 (PFTrDA-NH ₄) Ammonium perfluorotridecanoate (PFTrDA-NH ₄)	4288-72-6
	全氟壬烷磺酸 (Perfluorononane sulfonic acid) (PFNS)	68259-12-1
PFNS, 及其鹽 (PFNS, its salts)	全氟壬烷磺酸鈉 (PFNS-Na*) Sodium perfluoro-1-nonanesulfonate (PFNS-Na*)	98789-57-2
	全氟壬烷磺酸銨 (PFNS-NH ₄) Ammonium nonadecafluorononanesulphonate (PFNS-NH ₄)	17202-41-4
	全氟壬烷磺酸鉀 (PFNS-K*) Potassium perfluorononanesulfonate (PFNS-K*)	29359-39-5
DED - DC 77 HR	全氟十二烷磺酸 (Perfluorododecane sulfonic acid) (PFDoDS)	79780-39-5
PFDoDS, 及其鹽 (PFDoDS, its salts)	全氟十二烷磺酸鈉 (PFDoDS-Na*) Sodium perfluoro-1-dodecanesulfonate (PFDoDS-Na*)	1260224-54-1
DET D.C. 77 +175	全氟十三烷磺酸 (Perfluorotridecane sulfonic acid) (PFTrDS)	791563-89-8
PFTrDS, 及其鹽 (PFTrDS, its salts)	全氟十三烷磺酸鈉 (PFTrDS-Na*) Sodium perfluoro-1-tridecanesulfonate (PFTrDS-Na*)	174675-49-1
	全氟癸烷磺酸 (Perfluorodecane sulfonate) (PFDS)	335-77-3
PFDS, 及其鹽 (PFDS, its salts)	全氟癸烷磺酸鈉 (PFDS-Na) Perfluorodecanesulfonate Na-salt (PFDS-Na)	2806-15-7
	全氟癸烷磺酸鉀 (PFDS-K) Perfluorodecanesulfonate K-salt (PFDS-K)	2806-16-8
	全氟癸基磺酸銨 (PFDS-NH ₄) Perfluoroaliphatic dean-sulfonate salt of NH ₄ (PFDS-NH ₄)	67906-42-7
H2PFDA, 及其鹽 (H2PFDA, its salts)	2H,2H-全氟癸酸 (2H,2H-Perfluorodecane acid) (H2PFDA)	27854-31-5
	四丁基磷2H,2H-全氟癸酸酯 Tetrabutylphosphonium 2H,2H-Perfluorodecanoate	882489-14-7



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長春人造樹脂廠股份有限公司新竹廠 (CHANG CHUN PLASTICS CO., LTD. (HSINCHU FACTORY)) 新竹縣湖口鄉新竹工業區中華路8號 (NO. 8, CHUNG HWA ROAD, HSINCHU INDUSTRIAL DISTRICT 303, TAIWAN)

群組名稱 (Group Name)	物質名稱 (Substance Name)	CAS No.
HFPO-DA, 及其鹽&衍生物 (HFPO-DA, its salts & derivatives)	2,3,3,3-四氟-2-(七氟丙氧基)丙酸 (2,3,3,3-tetrafluoro-2- (heptafluoropropoxy)propionic acide) (HFPO-DA)	13252-13-6
	2,3,3,3-四氟-2-(七氟丙氧基)丙酸鉀 2,3,3,3-tetrafluoro-2-(heptafluoropropoxy) propionicacid, K- salts	67118-55-2
	2,3,3,3-四氟-2-(七氟丙氧基)丙酸銨 2,3,3,3-tetrafluoro-2-(heptafluoropropoxy) propionicacid, ammonium salts	62037-80-3
	2,3,3,3-四氟-2-(七氟丙氧基)丙酸醯基氟化物 2,3,3,3-tetrafluoro-2-(heptafluoropropoxy) propionicacid, its acyl halides	2062-98-8
4:2 FTS, 及其鹽 (4:2 FTS, its salts)	1H,1H,2H,2H-全氟己磺酸 (1H,1H,2H,2H- Perfluorohexanesulfonic acid) (4:2 FTS)	757124-72-4
	1H,1H,2H,2H-全氟己烷磺酸鈉 1H,1H,2H,2H-perfluorohexane sulfonate acid sodium salt	27619-93-8
4HPFUnA, 及其鹽 (4HPFUnA, its salts)	2H,2H,3H,3H-全氟癸酸 (2H,2H,3H,3H-Perfluoroundecanoic Acid) (4HPFUnA)	34598-33-9
	2H,2H,3H,3H-全氟癸酸鉀 (H4PFUnA-K) Potassium 2H,2H,3H,3H-Perfluoroundecanoate (H4PFUnA-K)	83310-58-1
	全氟戊磺酸 (Perfluoropentane sulfonic acid) (PFPeS)	2706-91-4
PFPeS, 及其鹽 (PFPeS, its salts)	全氟戊磺酸鈉 (PFPeS-Na*) Sodium perfluoro-1-pentanesulfonate (PFPeS-Na*)	630402-22-1
	全氟戊磺酸鉀 (PFPeS-K) Potassium perfluoropentane-1-sulphonate (PFPeS-K)	3872-25-1
	全氟辛戊磺酸銨 (PFPeS-NH ₄ *) Ammonium perfluoropentanesulfonate (PFPeS-NH ₄ *)	68259-09-6
8:2diPAP, 及其鹽 (8:2diPAP, its salts)	雙(1H,1H,2H,2H-全氟癸基)磷酸酯 (Bis(1H,1H,2H,2H- Perfluorodecyl)phosphate) (8:2diPAP)	678-41-1
	雙(1H,1H,2H,2H-全氟癸基)磷酸酯鈉 (8:2diPAP-Na) Sodium bis(1H,1H,2H,2H-perfluorodecyl)phosphate (8:2diPAP-Na)	114519-85-6



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群組名稱 (Group Name)	物質名稱 (Substance Name)	CAS No.
11H-PFUnDA, 及其鹽 (11H-PFUnDA, its salts)	11H-全氟十一烷酸 (11H-Perfluoroundecanoic acid) (11H-PFUnDA)	1765-48-6
	11H-全氟十一烷酸鉀 (11H-PFUnDA-K) potassium 2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11- icosafluoroundecanoate (11H-PFUnDA-K)	307-71-1
	11H-全氟十一烷酸銨 (11H-PFUnDA-NH ₄) Ammonium 2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11- icosafluoroundecanoate (11H-PFUnDA-NH ₄)	5081-02-7



Test Report

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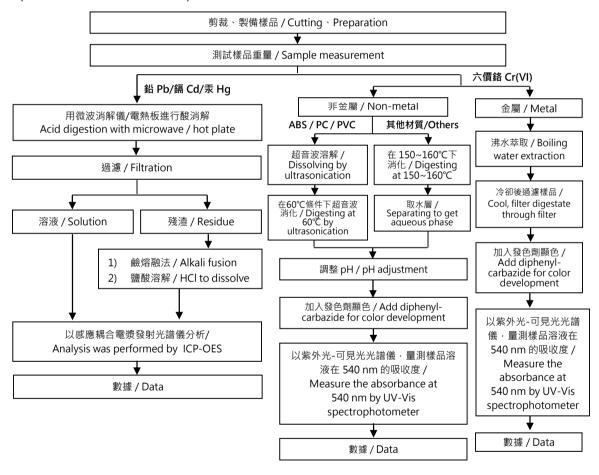
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長春人造樹脂廠股份有限公司新竹廠 (CHANG CHUN PLASTICS CO., LTD. (HSINCHU FACTORY)) 新竹縣湖口鄉新竹工業區中華路8號 (NO. 8, CHUNG HWA ROAD, HSINCHU INDUSTRIAL DISTRICT 303, TAIWAN)

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. (Cr^{6+} test method excluded)





Test Report

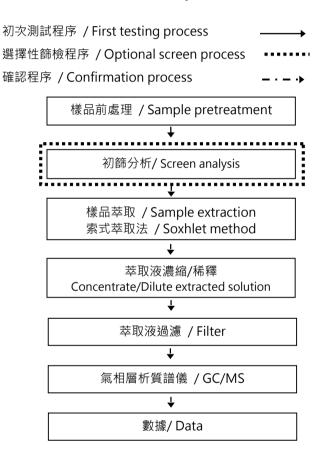
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長春人造樹脂廠股份有限公司新竹廠 (CHANG CHUN PLASTICS CO., LTD. (HSINCHU FACTORY)) 新竹縣湖口鄉新竹工業區中華路8號 (NO. 8, CHUNG HWA ROAD, HSINCHU INDUSTRIAL DISTRICT 303, TAIWAN)

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





Test Report

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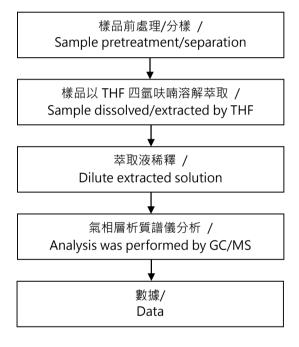
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可塑劑分析流程圖 / Analytical flow chart - Phthalate

【測試方法/Test method: IEC 62321-8】





Test Report

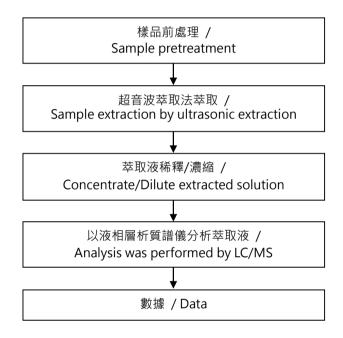
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長春人造樹脂廠股份有限公司新竹廠 (CHANG CHUN PLASTICS CO., LTD. (HSINCHU FACTORY)) 新竹縣湖口鄉新竹工業區中華路8號 (NO. 8, CHUNG HWA ROAD, HSINCHU INDUSTRIAL DISTRICT 303, TAIWAN)

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





Test Report

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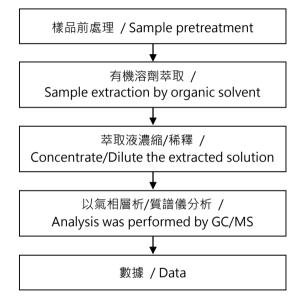
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長春人造樹脂廠股份有限公司新竹廠 (CHANG CHUN PLASTICS CO., LTD. (HSINCHU FACTORY)) 新竹縣湖口鄉新竹工業區中華路8號 (NO. 8, CHUNG HWA ROAD, HSINCHU INDUSTRIAL DISTRICT 303, TAIWAN)

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





Test Report

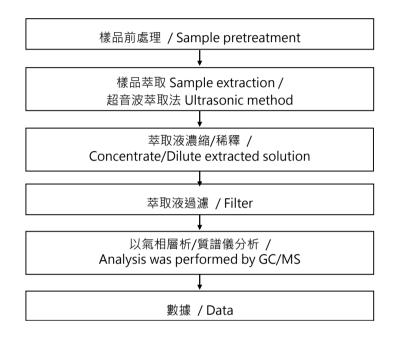
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長春人造樹脂廠股份有限公司新竹廠 (CHANG CHUN PLASTICS CO., LTD. (HSINCHU FACTORY)) 新竹縣湖口鄉新竹工業區中華路8號 (NO. 8, CHUNG HWA ROAD, HSINCHU INDUSTRIAL DISTRICT 303, TAIWAN)

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





Test Report

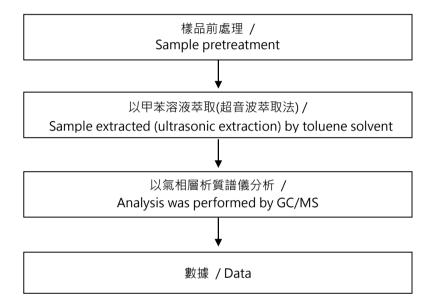
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長春人造樹脂廠股份有限公司新竹廠 (CHANG CHUN PLASTICS CO., LTD. (HSINCHU FACTORY)) 新竹縣湖口鄉新竹工業區中華路8號 (NO. 8, CHUNG HWA ROAD, HSINCHU INDUSTRIAL DISTRICT 303, TAIWAN)

多環芳香烴分析流程圖 / Analytical flow chart - PAHs (Polycyclic Aromatic Hydrocarbons)





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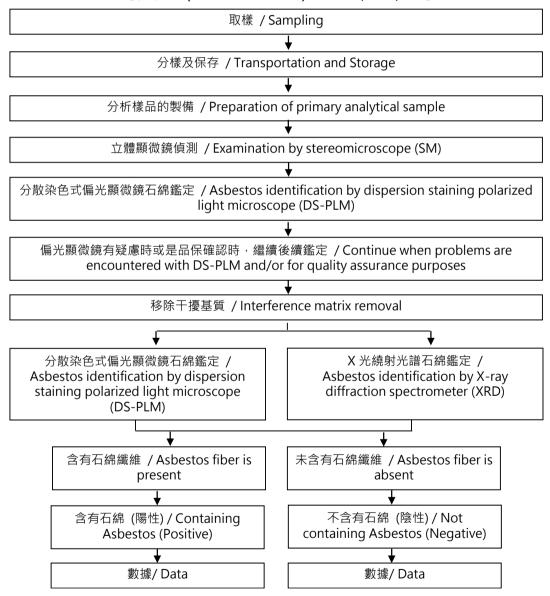
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長春人造樹脂廠股份有限公司新竹廠 (CHANG CHUN PLASTICS CO., LTD. (HSINCHU FACTORY)) 新竹縣湖口鄉新竹工業區中華路8號 (NO. 8, CHUNG HWA ROAD, HSINCHU INDUSTRIAL DISTRICT 303, TAIWAN)

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

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





Test Report

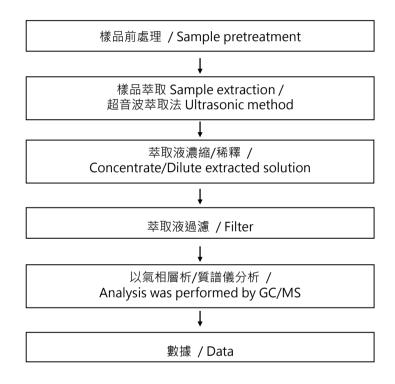
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長春人造樹脂廠股份有限公司新竹廠 (CHANG CHUN PLASTICS CO., LTD. (HSINCHU FACTORY)) 新竹縣湖口鄉新竹工業區中華路8號 (NO. 8, CHUNG HWA ROAD, HSINCHU INDUSTRIAL DISTRICT 303, TAIWAN)

持久性生物累積毒性物質 (PBTs) 分析流程圖 / Analytical flow chart - Persistent, Bioaccumulative, Toxic (PBTs)





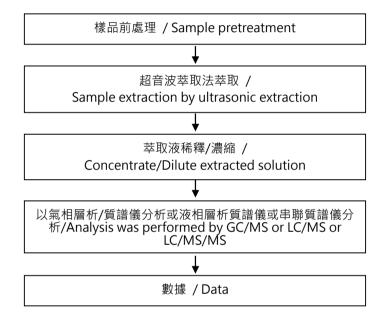
Test Report

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長春人造樹脂廠股份有限公司新竹廠 (CHANG CHUN PLASTICS CO., LTD. (HSINCHU FACTORY)) 新竹縣湖口鄉新竹工業區中華路8號 (NO. 8, CHUNG HWA ROAD, HSINCHU INDUSTRIAL DISTRICT 303, TAIWAN)

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.)





Test Report

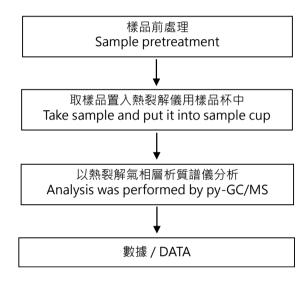
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長春人造樹脂廠股份有限公司新竹廠 (CHANG CHUN PLASTICS CO., LTD. (HSINCHU FACTORY)) 新竹縣湖口鄉新竹工業區中華路8號 (NO. 8, CHUNG HWA ROAD, HSINCHU INDUSTRIAL DISTRICT 303, TAIWAN)

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





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長春人造樹脂廠股份有限公司新竹廠 (CHANG CHUN PLASTICS CO., LTD. (HSINCHU FACTORY)) 新竹縣湖口鄉新竹工業區中華路8號 (NO. 8, CHUNG HWA ROAD, HSINCHU INDUSTRIAL DISTRICT 303, 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.)

ETR24305648



** 報告結尾 (End of Report) **



Test Report

號碼(No.): ETR24C05029 日期(Date): 03-Jan-2025 頁數(Page): 1 of 14

浔剴工業有限公司 (DER KAE INDUSTRIAL CO. LTD.)

新北市土城區忠承路11號 (NO. 11, ZHONGCHENG RD., TUCHENG DIST., NEW TAIPEI CITY 236, TAIWAN (R. O. C.))

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

樣品名稱(Sample Name) : FINISH:Au (電子零件鍍金)

收件日(Sample Receiving Date)

: 24-Dec-2024

測試期間(Testing Period)

: 24-Dec-2024 to 03-Jan-2025

測試需求(Test Requested)

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

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

測試結果(Test Results)

結 論(Conclusion) :

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

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

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



PIN CODE: 742B9BB3



Test Report

號碼(No.): ETR24C05029 日期(Date): 03-Jan-2025 頁數(Page): 2 of 14

浔剴工業有限公司 (DER KAE INDUSTRIAL CO. LTD.)

新北市土城區忠承路11號 (NO. 11, ZHONGCHENG RD., TUCHENG DIST., NEW TAIPEI CITY 236, TAIWAN (R. O. C.))

測試部位敘述 (Test Part Description)

No.1 : 金色碎片 (GOLDEN COLORED FLINDERS)

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				
	by ICP-OES.)				
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				
	by ICP-OES.)				
汞 (Hg) (Mercury (Hg))	參考IEC 62321-4: 2013+ AMD1: 2017	mg/kg	2	n.d.	1000
	以感應耦合電漿發射光譜儀分析。(With				
	reference to IEC 62321-4: 2013+ AMD1:				
	2017, analysis was performed by ICP-				
一一一一一一一一一一一一一一一一一一一一一一一一一一一一一一一一一一一一一	OES.)		0.1	ام ما	
六價鉻 (Hexavalent Chromium) Cr(VI)	參考IEC 62321-7-1: 2015 · 以紫外光-可見 光分光光度計分析。(With reference to	μg/cm²	0.1	n.d.	-
(#2)	IEC 62321-7-1: 2015, analysis was				
	performed by UV-VIS.)				
	performed by 6 v - vis.)	mg/kg	5	n.d.	
二溴聯苯 (Dibromobiphenyl)	1	mg/kg	5	n.d.	_
三溴聯苯 (Tribromobiphenyl)	†	mg/kg	5	n.d.	-
四溴聯苯 (Tetrabromobiphenyl)	4 */JEC 60004 6 004E N/E/JEE/K/K/K	mg/kg	5	n.d.	-
五溴聯苯 (Pentabromobiphenyl)	参考IEC 62321-6: 2015,以氣相層析儀/質	mg/kg	5	n.d.	-
六溴聯苯 (Hexabromobiphenyl)	電儀分析。(With reference to IEC 62321- 6: 2015, analysis was performed by GC/MS.)	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)	1	mg/kg	5	n.d.	-
十溴聯苯 (Decabromobiphenyl)	1	mg/kg	5	n.d.	-
多溴聯苯總和 (Sum of PBBs)	1	mg/kg	-	n.d.	1000



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浔剴工業有限公司 (DER KAE INDUSTRIAL CO. LTD.)

新北市土城區忠承路11號 (NO. 11, ZHONGCHENG RD., TUCHENG DIST., NEW TAIPEI CITY 236, TAIWAN (R. O. C.))

(Method) (Unit)	測試項目	測試方法	單位	MDL	結果	限值
一演聯苯醚 (Monobromodiphenyl ether) 「演聯苯醚 (Dibromodiphenyl ether) 「演聯苯醚 (Tibromodiphenyl ether) 「演聯苯醚 (Tibromodiphenyl ether) 「演聯苯醚 (Pentabromodiphenyl ether) 「演聯苯醚 (Hexabromodiphenyl ether) 「大漢聯苯醚 (Hexabromodiphenyl ether) 「大漢聯苯醚 (Hexabromodiphenyl ether) 「大漢聯苯醚 (Heytabromodiphenyl ether) 「大漢聯苯醚 (Decabromodiphenyl ether) 「大漢聯苯醚 (BBP) (Butyl benzyl phthalate (BBP)) 「「「中華 (BBP) (Dibutyl phthalate (DBP)) 「「「「中華 (DEHP) (Di-(2-ethylhexyl) phthalate (DEHP)) 「「「「Fluorine (F)) (CAS No.: 14762-94-8) 「「「Fluorine (F)) (CAS No.: 14762-94-8) 「「「「Fluorine (CI)) (CAS No.: 22537-15-1) 「「「「(CAS No.: 14762-94-8) 「「「(CAS No.: 14762-94-8) 「「(CI) (Chlorine (CI)) (CAS No.: 22537-15-1) 「「(CAS No.: 14762-94-8) 「「(CI) (Chlorine (CI)) (CAS No.: 10097-8*8 SEN 14582: 2016 - 以離子層析儀分析。(With reference to BS EN 14582: 2016, analysis was performed by IC.) 「「(CI) (Chlorine (CI)) (CAS No.: 10097-8*8 SEN 14582: 2016 - 以離子層析儀分析。(With reference to BS EN	(Test Items)	(Method)	(Unit)		, ,	(Limit)
一 演聯苯醚 (Dibromodiphenyl ether)						
三溴聯苯醚 (Tribromodiphenyl ether) 一次្事業 (Pentabromodiphenyl ether) 参考IEC 62321-6: 2015・以氣相層析儀/質)			-
四溴聯苯醚 (Tetrabromodiphenyl ether) 五溴聯苯醚 (Pentabromodiphenyl ether) 七溴聯苯醚 (Hexabromodiphenyl ether) 七溴聯苯醚 (Hexabromodiphenyl ether) 九溴聯苯醚 (Notabromodiphenyl ether) 十溴聯苯醚 (Notabromodiphenyl ether) 十溴聯苯醚 (Notabromodiphenyl ether) 十溴聯苯醚 (Decabromodiphenyl ether) 为澳聯苯醚 (Decabromodiphenyl ether) 为澳聯苯醚 (Bespi) 第本二甲酸丁苯甲酯 (BBP) (Butyl benzyl phthalate (BBP)) 第本二甲酸丁酯 (DBP) (Dibutyl phthalate (DBP)) 第本二甲酸 (2-乙基己基)酯 (DEHP) (Di-2-ethylhexyl) phthalate (DBP)) 第本二甲酸 (DEBP) (Diisobutyl phthalate (DIBP)) 第本二甲酸 (DESP) (Disobutyl phthalate (DIBP)) 第 (F) (Fluorine (F)) (CAS No.: 14762-94-8) 8) 第 (CI) (Chlorine (CI)) (CAS No.: 22537-15-1) ② (With reference to BS EN 14582: 2016 · 以離子層析儀分析。(With reference to BS EN 14582: 2016 · 以離子層析像分析。(With re			mg/kg			=
大浪聯苯醚 (Pentabromodiphenyl ether)			mg/kg		n.d.	=.
通機分析。(With reference to IEC 62321-			mg/kg		n.d.	-
八溴聯苯醚 (Heptabromodiphenyl ether) 6: 2015, analysis was performed by CZ/MS.) mg/kg 5 n.d. - 八溴聯苯醚 (Octabromodiphenyl ether) 九溴聯苯醚 (Nonabromodiphenyl ether) mg/kg 5 n.d. - 九溴聯苯醚 (Decabromodiphenyl ether) mg/kg 5 n.d. - 多溴聯苯醚 (Decabromodiphenyl ether) mg/kg 5 n.d. - 多溴聯苯醚 (Decabromodiphenyl ether) mg/kg 5 n.d. - 多溴聯苯醚 (Decabromodiphenyl ether) mg/kg 5 n.d. - 少月 (Diama (BBP)) mg/kg 5 n.d. - 咖啡/kg 5 n.d. - - 加速 (BBP) mg/kg 5 n.d. 1000 脚苯二甲酸 (DBP) mg/kg 50 n.d. 1000 加速 (Z-ethylhexyl) phthalate (DIBP) mg/kg 50 n.d. 1000 加速 (F) (Fluorine (F)) (CAS No.: 14762-94-8) 参考BS EN 14582: 2016 · 以離子屬析儀分析。(With reference to BS EN 14582: 2016 · 以離子屬析儀分析。(With		I	mg/kg	5	n.d.	-
大溴聯苯酸 (Octabromodiphenyl ether) 大溴聯苯酸 (Nonabromodiphenyl ether) 大溴聯苯酸 (Nonabromodiphenyl ether) 大溴聯苯酸 (Decabromodiphenyl ether) 大溴酸 (Dec	六溴聯苯醚 (Hexabromodiphenyl ether)	•	mg/kg		n.d.	-
九溴聯苯醚 (Nonabromodiphenyl ether) 十溴聯苯醚 (Decabromodiphenyl ether) 十溴聯苯醚 (Decabromodiphenyl ether) 一多溴聯苯醚總和 (Sum of PBDEs) 一	七溴聯苯醚 (Heptabromodiphenyl ether)	' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' '	mg/kg	5	n.d.	1
十溴聯苯醚 (Decabromodiphenyl ether) 一方	八溴聯苯醚 (Octabromodiphenyl ether)	GC/1V13.)	mg/kg		n.d.	=
多漢字 一方 1000 一方 100	九溴聯苯醚 (Nonabromodiphenyl ether)		mg/kg	5	n.d.	=
郷苯二甲酸丁苯甲酯 (BBP) (Butyl benzyl phthalate (BBP))参考IEC 62321-8: 2017 · 以氣相層析儀/質 mg/kg50n.d.1000郷苯二甲酸二丁酯 (DBP) (Dibutyl phthalate (DBP))夢考IEC 62321-8: 2017 · 以氣相層析儀/質 譜儀分析。(With reference to IEC 62321-8: 2017, analysis was performed by (2-ethylhexyl) phthalate (DEHP))mg/kg50n.d.1000郷苯二甲酸二異丁酯 (DIBP) (Diisobutyl phthalate (DIBP))S: 2017, analysis was performed by GC/MS.)mg/kg50n.d.1000氟 (F) (Fluorine (F)) (CAS No.: 14762-94-8)参考BS EN 14582: 2016 · 以離子層析儀分析。(With reference to BS EN 14582: 2016, analysis was performed by IC.)mg/kg50n.d氯 (CI) (Chlorine (CI)) (CAS No.: 22537-15-1)参考BS EN 14582: 2016 · 以離子層析儀分析。(With reference to BS EN 14582: 2016, analysis was performed by IC.)mg/kg50n.d溴 (Br) (Bromine (Br)) (CAS No.: 10097-32-2)参考BS EN 14582: 2016 · 以離子層析儀分析。(With reference to BS EN 14582: 2016 ·			mg/kg	5	n.d.	=
phthalate (BBP)) 鄰苯二甲酸二丁酯 (DBP) (Dibutyl	多溴聯苯醚總和 (Sum of PBDEs)		mg/kg	-	n.d.	1000
郷苯二甲酸二丁酯 (DBP) (Dibutyl phthalate (DBP))参考IEC 62321-8: 2017、以氣相層析儀/質 譜儀分析。(With reference to IEC 62321-	鄰苯二甲酸丁苯甲酯 (BBP) (Butyl benzyl		mg/kg	50	n.d.	1000
Phthalate (DBP)	phthalate (BBP))					
W本工甲酸二(2-乙基己基)酯 (DEHP) (Di- (2-ethylhexyl) phthalate (DEHP))	鄰苯二甲酸二丁酯 (DBP) (Dibutyl	參考IEC 62321-8: 2017,以氣相層析儀/質	mg/kg	50	n.d.	1000
(2-ethylhexyl) phthalate (DEHP)) 郷苯二甲酸二異丁酯 (DIBP) (Diisobutyl phthalate (DIBP)) 氟 (F) (Fluorine (F)) (CAS No.: 14762-94-8	phthalate (DBP))	譜儀分析。(With reference to IEC 62321-				
本文字 本文	鄰苯二甲酸二(2-乙基己基)酯 (DEHP) (Di-	8: 2017, analysis was performed by	mg/kg	50	n.d.	1000
phthalate (DIBP)) 氟 (F) (Fluorine (F)) (CAS No.: 14762-94- 参考BS EN 14582: 2016 · 以離子層析儀分 析。(With reference to BS EN 14582: 2016, analysis was performed by IC.) 氯 (CI) (Chlorine (CI)) (CAS No.: 22537- 参考BS EN 14582: 2016 · 以離子層析儀分 析。(With reference to BS EN 14582: 2016, analysis was performed by IC.) 溴 (Br) (Bromine (Br)) (CAS No.: 10097- 参考BS EN 14582: 2016 · 以離子層析儀分 析。(With reference to BS EN 14582: 2016 · 以離子層析儀分 mg/kg 50 n.d 32-2)	(2-ethylhexyl) phthalate (DEHP))	GC/MS.)				
無 (F) (Fluorine (F)) (CAS No.: 14762-94- 参考BS EN 14582: 2016・以離子層析儀分 析。(With reference to BS EN 14582: 2016, analysis was performed by IC.) 氯 (Cl) (Chlorine (Cl)) (CAS No.: 22537- 参考BS EN 14582: 2016・以離子層析儀分 析。(With reference to BS EN 14582: 2016, analysis was performed by IC.) 溴 (Br) (Bromine (Br)) (CAS No.: 10097- 参考BS EN 14582: 2016・以離子層析儀分 mg/kg 50 n.d 数考BS EN 14582: 2016・以離子層析儀分 mg/kg 50 n.d 数考BS EN 14582: 2016・以離子層析儀分 mg/kg 50 n.d	鄰苯二甲酸二異丁酯 (DIBP) (Diisobutyl		mg/kg	50	n.d.	1000
8) 析。(With reference to BS EN 14582: 2016, analysis was performed by IC.)	phthalate (DIBP))					
2016, analysis was performed by IC.) 氯 (Cl) (Chlorine (Cl)) (CAS No.: 22537- 参考BS EN 14582: 2016 · 以離子層析儀分 析。(With reference to BS EN 14582: 2016, analysis was performed by IC.) 溴 (Br) (Bromine (Br)) (CAS No.: 10097- 参考BS EN 14582: 2016 · 以離子層析儀分 析。(With reference to BS EN 14582: 2016 · 以離子層析儀分 析為 如	氟 (F) (Fluorine (F)) (CAS No.: 14762-94-	參考BS EN 14582: 2016 · 以離子層析儀分	mg/kg	50	n.d.	_
氯 (CI) (Chlorine (CI)) (CAS No.: 22537- 参考BS EN 14582: 2016 · 以離子層析儀分 析。(With reference to BS EN 14582: 2016, analysis was performed by IC.) 溴 (Br) (Bromine (Br)) (CAS No.: 10097- 参考BS EN 14582: 2016 · 以離子層析儀分 mg/kg 50 n.d 32-2)	8)	析。(With reference to BS EN 14582:				
## ## ## ## ## ## ## ## ## #		2016, analysis was performed by IC.)				
2016, analysis was performed by IC.)	氯 (Cl) (Chlorine (Cl)) (CAS No.: 22537-	參考BS EN 14582: 2016 · 以離子層析儀分	mg/kg	50	n.d.	-
溴 (Br) (Bromine (Br)) (CAS No.: 10097- 参考BS EN 14582: 2016·以離子層析儀分 mg/kg 50 n.d 32-2)	15-1)	析。(With reference to BS EN 14582:				
新。(With reference to BS EN 14582:		2016, analysis was performed by IC.)				
32-2) 析。(With reference to BS EN 14582:	溴 (Br) (Bromine (Br)) (CAS No.: 10097-	參考BS EN 14582: 2016 · 以離子層析儀分	mg/kg	50	n.d.	=
2016, analysis was performed by IC.)	32-2)	析。(With reference to BS EN 14582:				
		2016, analysis was performed by IC.)				
碘 (I) (Iodine (I)) (CAS No.: 14362-44-8) 参考BS EN 14582: 2016·以離子層析儀分 mg/kg 50 n.d	碘 (I) (Iodine (I)) (CAS No.: 14362-44-8)	, ,	mg/kg	50	n.d.	-
析。(With reference to BS EN 14582:	,,,,	析。(With reference to BS EN 14582:				
2016, analysis was performed by IC.)		•				



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浔剴工業有限公司 (DER KAE INDUSTRIAL CO. LTD.)

新北市土城區忠承路11號 (NO. 11, ZHONGCHENG RD., TUCHENG DIST., NEW TAIPEI CITY 236, TAIWAN (R. O. C.))

測試項目	測試方法	單位	MDL	結果	限值
(Test Items)	(Method)	(Unit)		(Result)	(Limit)
				No.1	
全氟辛烷磺酸及其鹽類 (PFOS and its	修改EN 17681-1: 2022 & EN 17681-2:	mg/kg	0.01	n.d.	-
salts) (Perfluorooctane sulfonates and	2022,以液相層析串聯質譜儀分析。				
its salts (PFOS and its salts)) (CAS No.:	(Modified EN 17681-1: 2022 & EN				
1763-23-1 and its salts)	17681-2: 2022, analysis was performed				
	by LC/MS/MS.)				
全氟辛酸及其鹽類 (PFOA and its salts)	修改EN 17681-1: 2022 & EN 17681-2:	mg/kg	0.01	n.d.	-
(Perfluorooctanoic acid and its salts	2022,以液相層析串聯質譜儀分析。				
(PFOA and its salts)) (CAS No.: 335-67-1	(Modified EN 17681-1: 2022 & EN				
and its salts)	17681-2: 2022, analysis was performed				
	by LC/MS/MS.)				

備註(Note):

- 1. mg/kg = ppm; 0.1wt% = 0.1% = 1000ppm
- 2. MDL = Method Detection Limit (方法偵測極限值)
- 3. n.d. = Not Detected (未檢出); 小於MDL / Less than MDL
- 4. "-" = Not Regulated (無規格值)
- 5. (#2) =
 - a. 當六價鉻結果大於0.13 μg/cm²·表示樣品表層含有六價鉻。(The sample is positive for Cr(VI) if the Cr(VI) concentration is greater than 0.13 μg/cm². The sample coating is considered to contain Cr(VI).)
 - b. 當六價鉻結果為n.d. (濃度小於0.10 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.)
- 6. 除非另有說明,參照ILAC-G8:09/2019決定規則,採用簡單允收規則之二分法(w=0)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.)



Test Report

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浔剴工業有限公司 (DER KAE INDUSTRIAL CO. LTD.)

新北市土城區忠承路11號 (NO. 11, ZHONGCHENG RD., TUCHENG DIST., NEW TAIPEI CITY 236, TAIWAN (R. O. C.))

PFAS Remark:

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

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

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

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浔剴工業有限公司 (DER KAE INDUSTRIAL CO. LTD.)

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群組名稱	物質名稱 (Substance Name)	CAS No.
(Group Name)	•	
	全氟辛烷磺酸鹽 Perfluorooctanesulfonate (anion)	45298-90-6
	全氟辛烷磺酸與 N,N-二乙基乙胺 $(1:1)$ (PFOS-N(C_2H_5) ₃) 1-Octanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-, compd. with N,N-diethylethanamine $(1:1)$ (PFOS-N(C_2H_5) ₃)	54439-46-2
	N,N,N-三甲基-1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-十七氟-1-辛烷磺酸甲銨(1:1) (PFOS-N(CH ₃) ₄) Methanaminium, N,N,N-trimethyl-, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-1- octanesulfonate (1:1) (PFOS-N(CH ₃) ₄)	56773-44-5
	1 -五胺·N,N,N-三丙基-, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-十七氟-1 -辛烷磺酸鹽(1:1) (PFOS-N(C_3H_7) $_3$ (C_5H_{11})) 1 -Pentanaminium, N,N,N-tripropyl-, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-1-octanesulfonate (1:1) (PFOS-N(C_3H_7) $_3$ (C_5H_{11}))	56773-56-9
PFOS, 及其鹽&衍生物 (PFOS, its salts & derivatives)	1-丁銨·N,N-二丁基-N-甲基-·1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8- 十七氟-1-辛烷磺酸鹽 (1:1) (PFOS-N(C ₄ H ₉) ₃ (CH ₃)) 1-Butanaminium, N,N-dibutyl-N-methyl-, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-1- octanesulfonate (1:1) (PFOS-N(C ₄ H ₉) ₃ (CH ₃))	124472-68-0
	碘鎓·雙[4-(1,1-二甲基乙基)苯基]-·1,1,2,2,3,3,4,4,5,5,6,6,7,7 ,8,8,8 -十七氟-1-辛烷磺酸鹽 (1:1) lodonium, bis[4-(1,1-dimethylethyl)phenyl]-, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-1- octanesulfonate (1:1)	213740-80-8
	二苯基鍺(2,4,6-三甲基苯基)-, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-十七 氟- 1-辛烷磺酸鹽 (1:1) Sulfonium, diphenyl(2,4,6-trimethylphenyl)-, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-1- octanesulfonate (1:1)	258341-99-0
	吡啶鎓 · 1-十六烷基- · 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-十七氟-1 - 辛烷磺酸鹽 (1:1) Pyridinium, 1-hexadecyl-, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8- heptadecafluoro-1-octanesulfonate (1:1)	334529-63-4
	1-癸胺·N,N,N-三乙基-·1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-十七氟-1-辛 烷磺酸鹽(1:1) 1-Decanaminium, N,N,N-triethyl-, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8- heptadecafluoro-1-octanesulfonate (1:1)	773895-92-4

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新北市五股區新北產業園區五權七路 25 號 t+886(02)2299 3939 f+886(02)2299 3237 25, Wu Chyuan 7th Road, New Taipei Industrial Park, Wu Ku District, New Taipei City, Taiwan



Test Report

號碼(No.): ETR24C05029 日期(Date): 03-Jan-2025 頁數(Page): 7 of 14

浔剴工業有限公司 (DER KAE INDUSTRIAL CO. LTD.)

新北市土城區忠承路11號 (NO. 11, ZHONGCHENG RD., TUCHENG DIST., NEW TAIPEI CITY 236, TAIWAN (R. O. C.))

群組名稱	物質名稱	CAS No.
(Group Name)	(Substance Name)	
	全氟辛烷磺酸四丁基鏻 (PFOS-P(C ₄ H ₉) ₄)) Tetrabutylphosphonium perfluorooctane sulfonate (PFOS-P(C ₄ H ₉) ₄))	2185049-59-4
	全氟辛烷磺酸二乙胺鹽 (PFOS-C ₄ H ₁₁ N) Perfluorooctanesulfonic acid diethylamine salt (PFOS-C ₄ H ₁₁ N)	2205029-08-7
PFOS, 及其鹽&衍生物 (PFOS, its salts & derivatives)	庚基二甲基 $\{2-[(2-甲基丙-2-烯酰基)氧基]乙基\}全氟辛烷磺酸氮紮鹽 (PFOS-C15H30NO2) Heptyldimethyl\{2-[(2-methylprop-2-enoyl)oxy]ethyl\}azanium perfluorooctanesulfonate (PFOS-C15H30NO2)$	1203998-97-3
	1-辛烷磺酸 · 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-十七氟-,1,1' -酸酐 (PFOSAN) 1-Octanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8- heptadecafluoro-, 1,1'-anhydride (PFOSAN)	423-92-7
	全氟辛酸 (Perfluorooctanoic acid) (PFOA)	335-67-1
	全氟辛酸鈉 (PFOA-Na) Sodium perfluorooctanoate (PFOA-Na)	335-95-5
	全氟辛酸鉀 (PFOA-K) Potassium perfluorooctanoate (PFOA-K)	2395-00-8
	全氟辛酸銀 (PFOA-Ag) Silver perfluorooctanote (PFOA-Ag)	335-93-3
	全氟辛氟 (PFOA-F) Perfluorooctanoyl fluoride (PFOA-F)	335-66-0
	全氟辛酸銨 (APFO) Ammonium pentadecafluorooctanoate (APFO)	3825-26-1
PFOA, 及其鹽&衍生物	全氟辛酸鋰 (PFOA-Li) Lithium perfluorooctanoate (PFOA-Li)	17125-58-5
(PFOA, its salts & derivatives)	全氟辛酸鈷 (PFOA-Co) Cobalt perfluorooctanoate (PFOA-Co)	35965-01-6
	全氟辛酸銫 (PFOA-Cs) Cesium perfluorooctanoate (PFOA-Cs)	17125-60-9
	全氟辛酸鉻 (PFOA-Cr(3^+)) Octanoic acid, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-pentadecafluoro-, chromium($3+$) (PFOA-Cr(3^+))	68141-02-6
	全氟辛酸-哌嗪(2:1) PFOA-NH($C_4H_{10}N$) Pentadecafluorooctanoic acidpiperazine (2/1)PFOA-NH($C_4H_{10}N$)	423-52-9
	全氟辛酸鹽 Pentadecafluorooctanoate (anion)	45285-51-6
	全氟辛酸酐 Perfluorooctanoic Anhydride	33496-48-9

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新北市五股區新北產業園區五權七路 25 號 t+886(02)2299 3939 f+886(02)2299 3237 25, Wu Chyuan 7th Road, New Taipei Industrial Park, Wu Ku District, New Taipei City, Taiwan



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浔剴工業有限公司 (DER KAE INDUSTRIAL CO. LTD.)

新北市土城區忠承路11號 (NO. 11, ZHONGCHENG RD., TUCHENG DIST., NEW TAIPEI CITY 236, TAIWAN (R. O. C.))

群組名稱 (Group Name)	物質名稱 (Substance Name)	CAS No.
	乙銨・N,N,N-三乙基-, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-十五氟辛酸(1:1) Ethanaminium, N,N,N-triethyl-, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,8- pentadecafluorooctanoate (1:1)	98241-25-9
	全氟辛酸四甲銨鹽 Tetramethylammoniumperfluoroctanoat	32609-65-7
	1-丙銨·N,N,N-三丙基-, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-十五氟辛酸 (1:1) 1-Propanaminium, N,N,N-tripropyl-, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-pentadecafluorooctanoate (1:1)	277749-00-5
	辛酸·2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-十五氟-鉀鹽·水合物 (1:1:2) (PFOA-K(H ₂ O) ₂) Octanoic acid, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-pentadecafluoro-, potassium salt, hydrate (1:1:2) (PFOA-K(H ₂ O) ₂)	98065-31-7
PFOA, 及其鹽&衍生物 (PFOA, its salts & derivatives)	辛酸·2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-十五氟-·化合物。與乙胺 (1:1) (PFOA-C ₂ H ₇ N) Octanoic acid, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-pentadecafluoro-, compd. with ethanamine (1:1) (PFOA-C ₂ H ₇ N)	1376936-03-6
	十五氟辛酸化合物與吡啶 (1:1) (9CI) (PFOA- C_5H_5N) Octanoic acid, pentadecafluoro-, compd. with pyridine (1:1) (9CI) (PFOA- C_5H_5N)	95658-47-2
	十五氟辛酸-1-苯基哌嗪(1:1) (PFOA- $C_{10}H_{14}N_2$) Pentadecafluorooctanoic acid- 1-phenylpiperazine(1:1) (PFOA- $C_{10}H_{14}N_2$)	1514-68-7
	1-辛胺·N,N,N-三甲基-·2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-十五氟辛酸 (1:1) (PFOA- C ₁₁ H ₂₆ N) 1-Octanaminium, N,N,N-trimethyl-, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-pentadecafluorooctanoate (1:1) (PFOA- C ₁₁ H ₂₆ N)	927835-01-6



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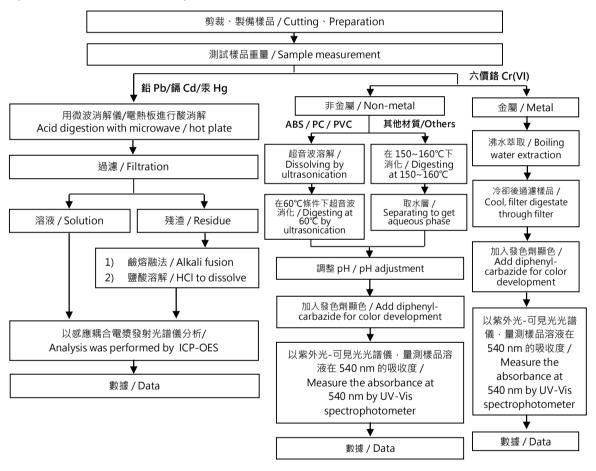
浔剴工業有限公司 (DER KAE INDUSTRIAL CO. LTD.)

新北市土城區忠承路11號 (NO. 11, ZHONGCHENG RD., TUCHENG DIST., NEW TAIPEI CITY 236, TAIWAN (R. O. C.))

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)





Test Report

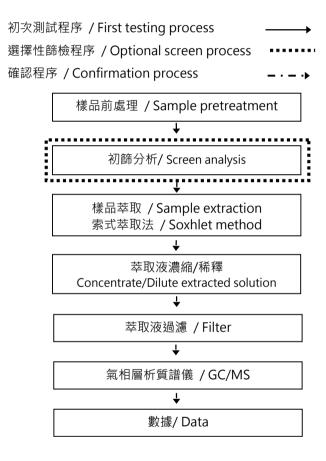
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浔剴工業有限公司 (DER KAE INDUSTRIAL CO. LTD.)

新北市土城區忠承路11號 (NO. 11, ZHONGCHENG RD., TUCHENG DIST., NEW TAIPEI CITY 236, TAIWAN (R. O. C.))

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





Test Report

號碼(No.): ETR24C05029 日期(Date

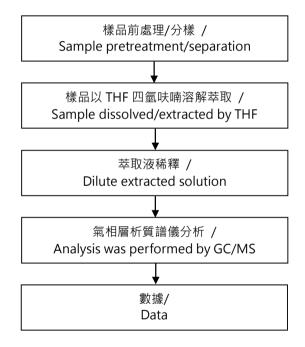
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浔剴工業有限公司 (DER KAE INDUSTRIAL CO. LTD.)

新北市土城區忠承路11號 (NO. 11, ZHONGCHENG RD., TUCHENG DIST., NEW TAIPEI CITY 236, TAIWAN (R. O. C.))

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

【測試方法/Test method: IEC 62321-8】





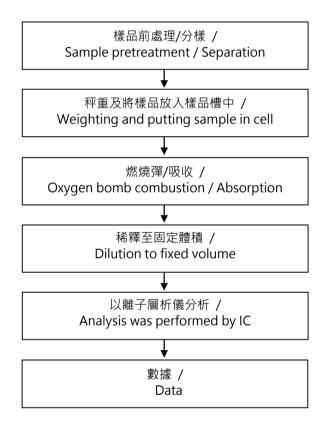
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浔剴工業有限公司 (DER KAE INDUSTRIAL CO. LTD.)

新北市土城區忠承路11號 (NO. 11, ZHONGCHENG RD., TUCHENG DIST., NEW TAIPEI CITY 236, TAIWAN (R. O. C.))

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





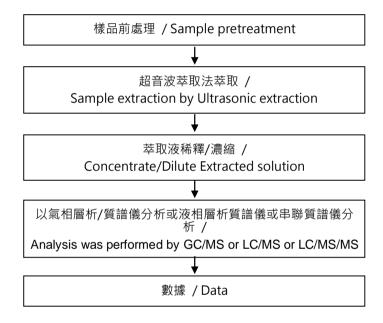
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浔剴工業有限公司 (DER KAE INDUSTRIAL CO. LTD.)

新北市土城區忠承路11號 (NO. 11, ZHONGCHENG RD., TUCHENG DIST., NEW TAIPEI CITY 236, TAIWAN (R. O. C.))

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.)





Test Report

號碼(No.): ETR24C05029 日期(Date): 03-Jan-2025

浔剴工業有限公司 (DER KAE INDUSTRIAL CO. LTD.)

新北市土城區忠承路11號 (NO. 11, ZHONGCHENG RD., TUCHENG DIST., NEW TAIPEI CITY 236, TAIWAN (R. O. C.))

* 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.)

ETR24C05029



** 報告結尾 (End of Report) **

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Test Report

號碼(No.): ETR24604834 日期(Date): 01-Jul-2024 頁數(Page): 1 of 6

祥弘通商股份有限公司 (SHINE-WORLD COMMERCE LTD.) 台北市松江路101號5樓之2 (5TH-2 FL., 101, SUNG KIANG ROAD, TAIPEI)

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 Bv)

: 祥弘通商股份有限公司 (SHINE-WORLD COMMERCE LTD.)

樣品名稱(Sample Name)

HIGH CARBON STEEL WIRE

收件日(Sample Receiving Date)

: 24-Jun-2024

測試期間(Testing Period)

: 24-Jun-2024 to 01-Jul-2024

測試需求(Test Requested)

(1) 依據客戶指定,參考RoHS指令2011/65/EU Annex II測試鎘、鉛、汞、六價鉻。 (As specified by client, with reference to RoHS Directive 2011/65/EU Annex II to determine Cadmium, Lead, Mercury, Cr(VI) contents in the submitted sample(s).)

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

測試結果(Test Results)

論(Conclusion)

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

: (1) 根據客戶所提供的樣品·其鎘、鉛、汞、六價鉻的測試結果符合RoHS 2011/65/EU Annex II之限值要求。 (Based on the performed tests on submitted sample(s), the test results of Cadmium, Lead, Mercury, Cr(VI) comply with the limits as set

by RoHS Directive 2011/65/EU Annex II.)

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



PIN CODE: 96D8E614



Test Report

號碼(No.): ETR24604834 日期(Date): 01-Jul-2024 頁數(Page): 2 of 6

祥弘通商股份有限公司 (SHINE-WORLD COMMERCE LTD.) 台北市松江路101號5樓之2 (5TH-2 FL., 101, SUNG KIANG ROAD, TAIPEI)

測試部位敘述 (Test Part Description)

No.1 : 銀色金屬線 (SILVER COLORED METAL WIRE)

測試結果 (Test Results)

測試項目 (Test Items)	測試方法 (Method)	單位 (Unit)	MDL	結果 (Result) No.1	限值 (Limit)
鎘 (Cd) (Cadmium (Cd))	參考IEC 62321-5: 2013 · 以感應耦合電漿發射光譜儀分析。(With reference to IEC 62321-5: 2013, analysis was performed by ICP-OES.)	mg/kg	2	n.d.	100
鉛 (Pb) (Lead (Pb))	參考IEC 62321-5: 2013 · 以感應耦合電漿 發射光譜儀分析。(With reference to IEC 62321-5: 2013, analysis was performed by ICP-OES.)	mg/kg	2	n.d.	1000
汞 (Hg) (Mercury (Hg))	參考IEC 62321-4: 2013 + AMD1: 2017 · 以感應耦合電漿發射光譜儀分析。(With reference to IEC 62321-4: 2013 + AMD1: 2017, analysis was performed by ICP-OES.)	mg/kg	2	n.d.	1000
六價鉻 (Hexavalent Chromium) Cr(VI) (#2)	參考IEC 62321-7-1: 2015·以紫外光-可見 光分光光度計分析。(With reference to IEC 62321-7-1: 2015, analysis was performed by UV-VIS.)	μg/cm²	0.1	n.d.	-
鈹 (Be) (Beryllium (Be)) (CAS No.: 7440-41-7)	參考US EPA 3050B: 1996·以感應耦合電 漿發射光譜儀分析。(With reference to US EPA 3050B: 1996, analysis was performed by ICP-OES.)	mg/kg	2	n.d.	-



Test Report

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祥弘通商股份有限公司 (SHINE-WORLD COMMERCE LTD.) 台北市松江路101號5樓之2 (5TH-2 FL., 101, SUNG KIANG ROAD, TAIPEI)

備註(Note):

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



Test Report

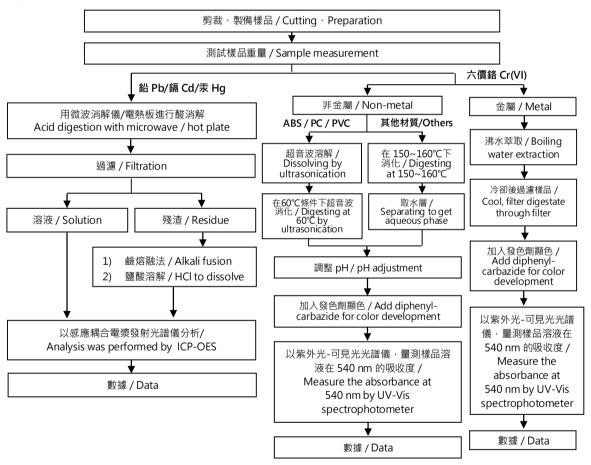
號碼(No.): ETR24604834 日期(Date): 01-Jul-2024

祥弘通商股份有限公司 (SHINE-WORLD COMMERCE LTD.) 台北市松江路101號5樓之2 (5TH-2 FL., 101, SUNG KIANG ROAD, TAIPEI)

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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Test Report

號碼(No.): ETR24604834

日期(Date): 01-Jul-2024

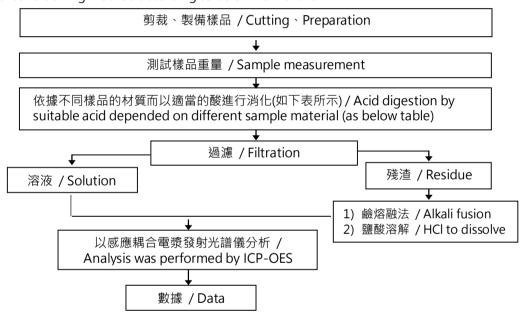
頁數(Page): 5 of 6

祥弘通商股份有限公司 (SHINE-WORLD COMMERCE LTD.) 台北市松江路101號5樓之2 (5TH-2 FL., 101, SUNG KIANG ROAD, TAIPEI)

元素以 ICP-OES 分析的消化流程圖

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

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



鋼,銅,鋁,焊錫 / Steel, copper, aluminum, solder	王水,硝酸,鹽酸,氫氟酸,雙氧水 / Aqua regia, HNO ₃ , HCl, HF, H ₂ O ₂
玻璃 / Glass	硝酸,氫氟酸 / HNO₃,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 , HCI
其他 / Others	加入適當的試劑至完全溶解 / Added appropriate reagent to total digestion



Test Report

號碼(No.): ETR24604834

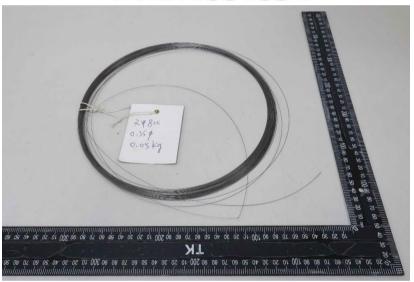
日期(Date): 01-Jul-2024

頁數(Page): 6 of 6

祥弘通商股份有限公司 (SHINE-WORLD COMMERCE LTD.) 台北市松江路101號5樓之2 (5TH-2 FL., 101, SUNG KIANG ROAD, TAIPEI)

* 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.)

ETR24604834



** 報告結尾 (End of Report) **



Test Report

號碼(No.): ETR24706233 日期(Date): 07-Aug-2024 頁數(Page): 1 of 7

太松實業股份有限公司 (DYNACHEM & CO., LTD.)

台北市大同區重慶北路三段139號8樓 (8F, NO. 139, SEC. 3, CHUNG CHING NORTH ROAD, TAIPEI, TAIWAN, R. O. C.)

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) 太松實業股份有限公司 (DYNACHEM & CO., LTD.)

樣品名稱(Sample Name) **PA66**

樣品型號(Style/Item No.) 301-G15; 301-G30; 301-G42; 301-G45

供應/製造廠商(Supplier) DYNACHEM & CO., LTD.

收件日(Sample Receiving Date) 31-Jul-2024

測試期間(Testing Period) 31-Jul-2024 to 07-Aug-2024

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

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).)

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,其編、鉛、汞、六價鉻、多溴聯苯、多溴聯苯醚, DBP,

BBP, DEHP, DIBP的測試結果符合RoHS 2011/65/EU Annex II暨其修訂指令(EU)

2015/863之限值要求。 (Based on the performed tests on submitted

sample(s), the test results of Cadmium, Lead, Mercury, Cr(VI), PBBs, PBDEs, DBP, BBP, DEHP, DIBP comply with the limits as set by RoHS Directive (EU)

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

Signed for and on behalf SĞS TAIWAN LTD. Chemical Laboratory - Taipei



PIN CODE: CF1CE04F



Test Report

號碼(No.): ETR24706233 日期(Date): 07-Aug-2024

太松實業股份有限公司 (DYNACHEM & CO., LTD.)

台北市大同區重慶北路三段139號8樓 (8F, NO. 139, SEC. 3, CHUNG CHING NORTH ROAD, TAIPEI, TAIWAN, R. O. C.)

測試部位敘述 (Test Part Description)

No.1 : 白色塑膠粒 (WHITE PLASTIC PELLETS)

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				
	by ICP-OES.)				
鉛 (Pb) (Lead (Pb))	參考IEC 62321-5: 2013 · 以感應耦合電漿	mg/kg	2	8.41	1000
	發射光譜儀分析。(With reference to IEC				
	62321-5: 2013, analysis was performed				
-	by ICP-OES.)				
汞 (Hg) (Mercury (Hg))	參考IEC 62321-4: 2013+ AMD1: 2017	mg/kg	2	n.d.	1000
	以感應耦合電漿發射光譜儀分析。(With				
	reference to IEC 62321-4: 2013+ AMD1:				
	2017, analysis was performed by ICP-				
一一一一一一一一一一一一一一一一一一一一一一一一一一一一一一一一一一一一一	OES.)	100 or /1 cor	8	اه ما	1000
六價鉻 Cr(VI) (Hexavalent Chromium	參考IEC 62321-7-2: 2017・以紫外光-可見	mg/kg	8	n.d.	1000
Cr(VI))	光分光光度計分析。(With reference to				
	IEC 62321-7-2: 2017, analysis was				
	performed by UV-VIS.)	mg/kg	5	n.d.	_
二溴聯苯 (Dibromobiphenyl)	1	mg/kg	5	n.d.	_
三溴聯苯 (Tribromobiphenyl)	1	mg/kg	5	n.d.	_
四溴聯苯 (Tetrabromobiphenyl)	1	mg/kg	5	n.d.	_
五溴聯苯 (Pentabromobiphenyl)	參考IEC 62321-6: 2015,以氣相層析儀/質	mg/kg	5	n.d.	-
六溴聯苯 (Hexabromobiphenyl)	音儀方所。(With reference to IEC 62321- n 6: 2015, analysis was performed by	mg/kg	5	n.d.	-
七溴聯苯 (Heptabromobiphenyl)		mg/kg	5	n.d.	_
八溴聯苯 (Octabromobiphenyl)	GC/MS.)	mg/kg	5	n.d.	-
九溴聯苯 (Nonabromobiphenyl)		mg/kg	5	n.d.	-
十溴聯苯 (Decabromobiphenyl)	1	mg/kg	5	n.d.	
多溴聯苯總和 (Sum of PBBs)	1	mg/kg	-	n.d.	1000

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新北市五股區新北產業園區五權七路 25 號 t+886(02)2299 3939 f+886(02)2299 3237 25, Wu Chyuan 7th Road, New Taipei Industrial Park, Wu Ku District, New Taipei City, Taiwan

頁數(Page): 2 of 7



Test Report

號碼(No.): ETR24706233 日期(Date): 07-Aug-2024

太松實業股份有限公司 (DYNACHEM & CO., LTD.)

台北市大同區重慶北路三段139號8樓 (8F, NO. 139, SEC. 3, CHUNG CHING NORTH ROAD, TAIPEI, TAIWAN, R. O. C.)

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)		mg/kg	5	n.d.	-
五溴聯苯醚 (Pentabromodiphenyl ether)	參考IEC 62321-6: 2015 · 以氣相層析儀/質 譜儀分析。(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/1VI3.)	mg/kg	5	n.d.	-
九溴聯苯醚 (Nonabromodiphenyl ether)		mg/kg	5	n.d.	-
十溴聯苯醚 (Decabromodiphenyl ether)	1	mg/kg	5	n.d.	-
多溴聯苯醚總和 (Sum of PBDEs)		mg/kg	ı	n.d.	1000
鄰苯二甲酸丁苯甲酯 (BBP) (Butyl benzyl		mg/kg	50	n.d.	1000
phthalate (BBP))					
鄰苯二甲酸二丁酯 (DBP) (Dibutyl	參考IEC 62321-8: 2017,以氣相層析儀/質	mg/kg	50	n.d.	1000
phthalate (DBP))	譜儀分析。(With reference to IEC 62321-				
鄰苯二甲酸二(2-乙基己基)酯 (DEHP) (Di-	8: 2017, analysis was performed by	mg/kg	50	n.d.	1000
(2-ethylhexyl) phthalate (DEHP))	GC/MS.)				
鄰苯二甲酸二異丁酯 (DIBP) (Diisobutyl		mg/kg	50	n.d.	1000
phthalate (DIBP))					

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. 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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號碼(No.): ETR24706233

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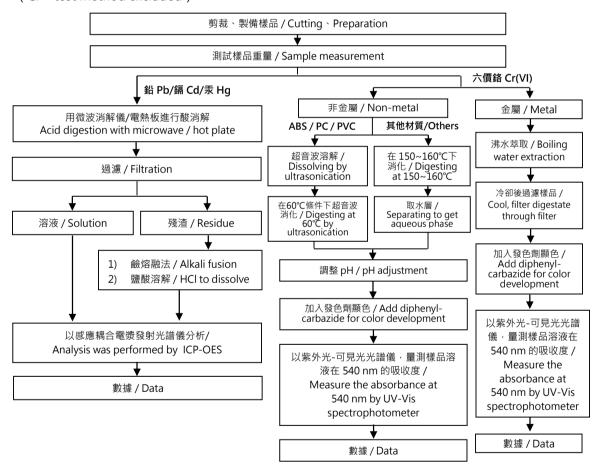
太松實業股份有限公司 (DYNACHEM & CO., LTD.)

台北市大同區重慶北路三段139號8樓 (8F, NO. 139, SEC. 3, CHUNG CHING NORTH ROAD, TAIPEI, TAIWAN, R. O. C.)

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)





Test Report

號碼(No.): ETR24706233

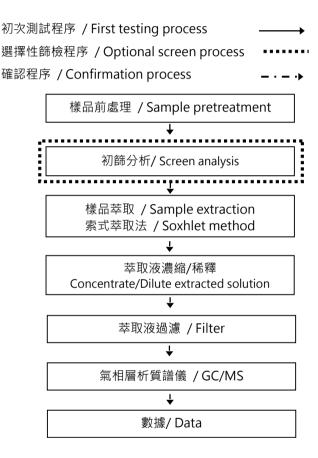
日期(Date): 07-Aug-2024

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台北市大同區重慶北路三段139號8樓 (8F, NO. 139, SEC. 3, CHUNG CHING NORTH ROAD, TAIPEI, TAIWAN, R. O. C.)

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





Test Report

號碼(No.): ETR24706233

日期(Date): 07-Aug-2024

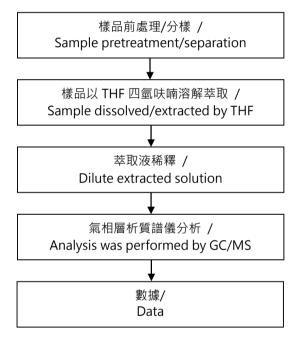
頁數(Page): 6 of 7

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台北市大同區重慶北路三段139號8樓 (8F, NO. 139, SEC. 3, CHUNG CHING NORTH ROAD, TAIPEI, TAIWAN, R. O. C.)

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

【測試方法/Test method: IEC 62321-8】





Test Report

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太松實業股份有限公司 (DYNACHEM & CO., LTD.)

台北市大同區重慶北路三段139號8樓 (8F, NO. 139, SEC. 3, CHUNG CHING NORTH ROAD, TAIPEI, TAIWAN, R. O. C.)

* 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.)

ETR24706233



** 報告結尾 (End of Report) **