

測試報告

Test Report

號碼(No.) : CE/2015/C5928 日期(Date) : 2016/01/06

頁數 (Page) : 1 of 8

領先顏料色母廠股份有限公司

LIING SHIAN COLORANT MANUFACTURER CO., LTD.

新北市新莊區新樹路52之13號

NO. 52-13, XINSHU RD., XINZHUANG DIST., NEW TAIPEI CITY 242, TAIWAN



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

送樣廠商(Sample Submitted By) : 領先顏料色母廠股份有限公司 (LIING SHIAN COLORANT MANUFACTURER CO., LTD.)
樣品名稱(Sample Description) : PLA 3D PRINTER FILAMENTS (PLA 3D 耗材)
樣品型號(Style/Item No.) : 1810透明紅色, 2110透明紫色, 1910透明綠色, 0210 藍色, 2010透明橘色, 2910馬卡龍紅色, 1010 紅色, 0110 黑色, 2210 透明原色, 1410 黃色, 2810 馬卡龍綠色, 3010 馬卡龍紫色, 2710 馬卡龍黃色, 0510 蘋果綠色, 3410 亮膚色, 3710 祖母綠色, 1210 湖水藍色, 3510 焦糖色, 1310 白色, 3210 絲光珍珠綠色, 0310 巧克力色, 3110 絲光珍珠白色 (1810 TRANSPARENT RED, 2110 TRANSPARENT PURPLE, 1910 TRANSPARENT GREEN, 0210 BLUE, 2010 TRANSPARENT ORANGE, 2910 MACARON PINK, 1010 RED, 0110 BLACK, 2210 TRANSPARENT, 1410 YELLOW, 2810 MACARON GREEN, 3010 MACARON PURPLE, 2710 MACARON YELLOW, 0510 APPLE GREEN, 3410 LIGHT TAN, 3710 JADE, 1210 AQUA, 3510 CARAMEL, 1310 WHITE, 3210 SILKY PEARL GREEN, 0310 CHOCOLATE, 3110 SILKY PEARL WHITE)

收件日期(Sample Receiving Date) : 2015/12/29
測試期間(Testing Period) : 2015/12/29 TO 2016/01/06

測試需求(Test Requested)

依據客戶指定, 檢測鎘、鉛、汞、六價鉻、多溴聯苯、多溴聯苯醚, DBP, BBP, DEHP, DIBP. (As specified by client, to test Cadmium, Lead, Mercury, Cr(VI), PBBs, PBDEs, DBP, BBP, DEHP, DIBP contents in the submitted sample.)

測試結果(Test Results) : 請見下一頁 (Please refer to next pages).


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

測試報告

Test Report

號碼(No.) : CE/2015/C5928 日期(Date) : 2016/01/06

頁數 (Page) : 2 of 8

領先顏料色母廠股份有限公司

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測試結果(Test Results)

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

測試項目 (Test Items)	單位 (Unit)	測試方法 (Method)	方法偵測 極限值 (MDL)	結果 (Result)
				No. 1
鎘 / Cadmium (Cd)	mg/kg	參考IEC 62321-5: 2013方法, 以感應耦合電漿 原子發射光譜儀檢測. / With reference to IEC 62321-5: 2013 and performed by ICP- AES.	2	n. d.
鉛 / Lead (Pb)	mg/kg	參考IEC 62321-5: 2013方法, 以感應耦合電漿 原子發射光譜儀檢測. / With reference to IEC 62321-5: 2013 and performed by ICP- AES.	2	n. d.
汞 / Mercury (Hg)	mg/kg	參考IEC 62321-4: 2013方法, 以感應耦合電漿 原子發射光譜儀檢測. / With reference to IEC 62321-4: 2013 and performed by ICP- AES.	2	n. d.
六價鉻 / Hexavalent Chromium Cr(VI)	mg/kg	參考IEC 62321: 2008方法, 以UV-VIS檢測. / With reference to IEC 62321: 2008 and performed by UV-VIS.	2	n. d.
鄰苯二甲酸丁苯甲酯 / BBP (Butyl Benzyl phthalate) (CAS No. : 85-68- 7)	mg/kg	參考IEC 62321-8 (111/321/CD), 以氣相層析儀 /質譜儀檢測之. / With reference to IEC 62321-8 (111/321/CD). Analysis was performed by GC/MS.	50	n. d.
鄰苯二甲酸二丁酯 / DBP (Dibutyl phthalate) (CAS No. : 84-74-2)	mg/kg	參考IEC 62321-8 (111/321/CD), 以氣相層析儀 /質譜儀檢測之. / With reference to IEC 62321-8 (111/321/CD). Analysis was performed by GC/MS.	50	n. d.
鄰苯二甲酸二異丁酯 / DIBP (Di- isobutyl phthalate) (CAS No. : 84- 69-5)	mg/kg	參考IEC 62321-8 (111/321/CD), 以氣相層析儀 /質譜儀檢測之. / With reference to IEC 62321-8 (111/321/CD). Analysis was performed by GC/MS.	50	n. d.

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測試報告

Test Report

號碼(No.) : CE/2015/C5928 日期(Date) : 2016/01/06

頁數 (Page) : 3 of 8

領先顏料色母廠股份有限公司

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測試項目 (Test Items)	單位 (Unit)	測試方法 (Method)	方法偵測 極限值 (MDL)	結果 (Result)
				No. 1
鄰苯二甲酸二(2-乙基己基)酯 / DEHP (Di-(2-ethylhexyl) phthalate) (CAS No.: 117-81-7)	mg/kg	參考IEC 62321-8 (111/321/CD), 以氣相層析儀 /質譜儀檢測之. / With reference to IEC 62321-8 (111/321/CD). Analysis was performed by GC/MS.	50	n. d.
多溴聯苯總和 / Sum of PBBs	mg/kg	參考IEC 62321-6: 2015方法, 以氣相層析/質譜 儀檢測. / With reference to IEC 62321-6: 2015 and performed by GC/MS.	-	n. d.
一溴聯苯 / Monobromobiphenyl	mg/kg		5	n. d.
二溴聯苯 / Dibromobiphenyl	mg/kg		5	n. d.
三溴聯苯 / Tribromobiphenyl	mg/kg		5	n. d.
四溴聯苯 / Tetrabromobiphenyl	mg/kg		5	n. d.
五溴聯苯 / Pentabromobiphenyl	mg/kg		5	n. d.
六溴聯苯 / Hexabromobiphenyl	mg/kg		5	n. d.
七溴聯苯 / Heptabromobiphenyl	mg/kg		5	n. d.
八溴聯苯 / Octabromobiphenyl	mg/kg		5	n. d.
九溴聯苯 / Nonabromobiphenyl	mg/kg		5	n. d.
十溴聯苯 / Decabromobiphenyl	mg/kg		5	n. d.
多溴聯苯醚總和 / Sum of PBDEs	mg/kg		-	n. d.
一溴聯苯醚 / Monobromodiphenyl ether	mg/kg		5	n. d.
二溴聯苯醚 / Dibromodiphenyl ether	mg/kg		5	n. d.
三溴聯苯醚 / Tribromodiphenyl ether	mg/kg		5	n. d.
四溴聯苯醚 / Tetrabromodiphenyl ether	mg/kg		5	n. d.
五溴聯苯醚 / Pentabromodiphenyl ether	mg/kg		5	n. d.
六溴聯苯醚 / Hexabromodiphenyl ether	mg/kg		5	n. d.
七溴聯苯醚 / Heptabromodiphenyl ether	mg/kg		5	n. d.
八溴聯苯醚 / Octabromodiphenyl ether	mg/kg		5	n. d.
九溴聯苯醚 / Nonabromodiphenyl ether	mg/kg	5	n. d.	
十溴聯苯醚 / Decabromodiphenyl ether	mg/kg	5	n. d.	

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測試報告

Test Report

號碼(No.) : CE/2015/C5928 日期(Date) : 2016/01/06

頁數 (Page) : 4 of 8

領先顏料色母廠股份有限公司

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備註(Note) :

1. mg/kg = ppm ; 0.1wt% = 1000ppm
2. n. d. = Not Detected (未檢出)
3. MDL = Method Detection Limit (方法偵測極限值)
4. "-" = Not Regulated (無規格值)
5. 樣品的測試是基於申請人要求混合測試，報告中的混合測試結果不代表其中個別單一材質的含量。(The samples was/were analyzed on behalf of the applicant as mixing sample in one testing. The above results was/were only given as the informality value.)

測試報告 Test Report

號碼(No.) : CE/2015/C5928 日期(Date) : 2016/01/06

頁數 (Page) : 5 of 8

領先顏料色母廠股份有限公司

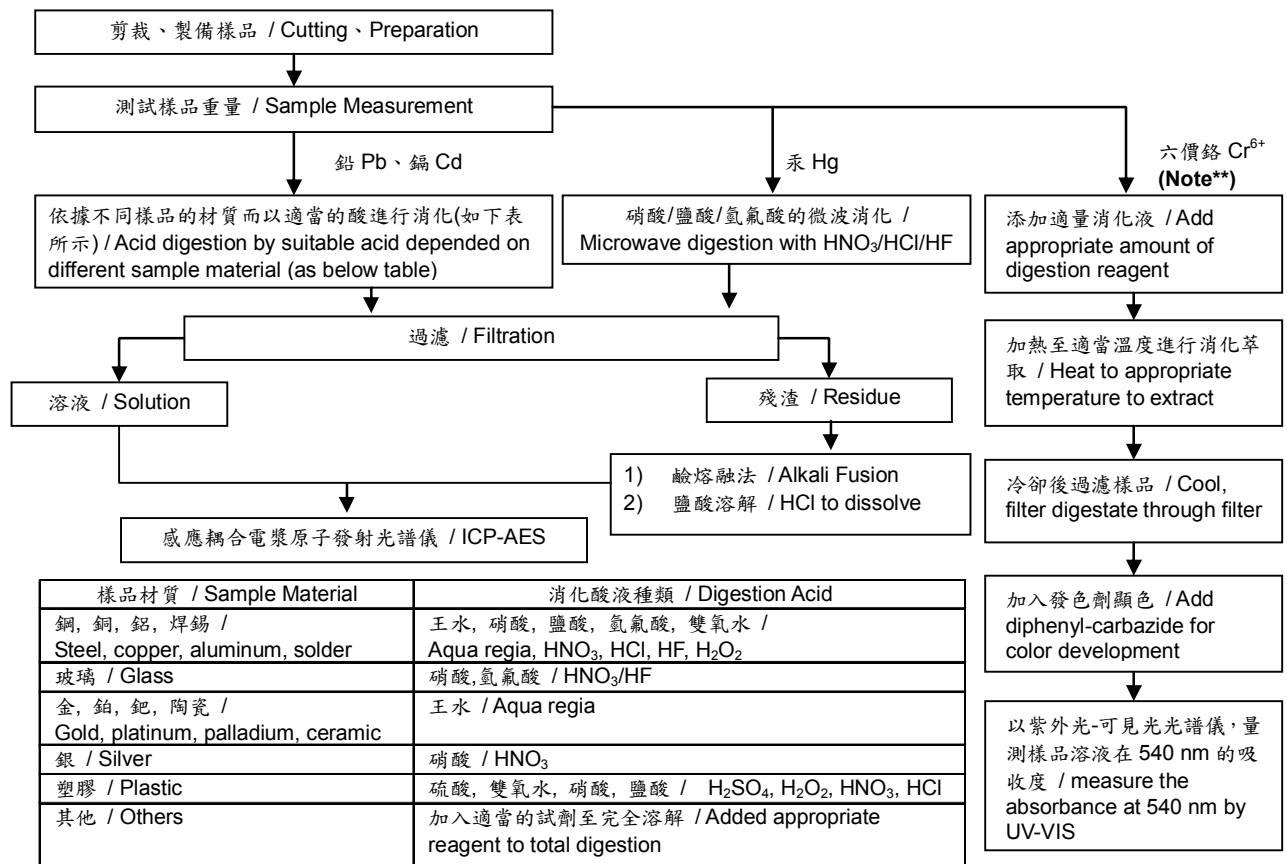
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NO. 52-13, XINSHU RD., XINZHUANG DIST., NEW TAIPEI CITY 242, TAIWAN



- 1) 根據以下的流程圖之條件，樣品已完全溶解。(六價鉻測試方法除外) / These samples were dissolved totally by pre-conditioning method according to below flow chart. (Cr⁶⁺ test method excluded)
- 2) 測試人員：楊登偉 / Name of the person who made measurement: Climbgreat Yang
- 3) 測試負責人：張啟興 / Name of the person in charge of measurement: Troy Chang



Note** (For IEC 62321)

- (1) 針對非金屬材料加入鹼性消化液，加熱至 90~95°C 萃取。 / For non-metallic material, add alkaline digestion reagent and heat to 90~95°C.
- (2) 針對金屬材料加入純水，加熱至沸騰萃取。 / For metallic material, add pure water and heat to boiling.

測試報告

Test Report

號碼(No.) : CE/2015/C5928 日期(Date) : 2016/01/06

頁數 (Page) : 6 of 8

領先顏料色母廠股份有限公司

LIING SHIAN COLORANT MANUFACTURER CO., LTD.

新北市新莊區新樹路52之13號

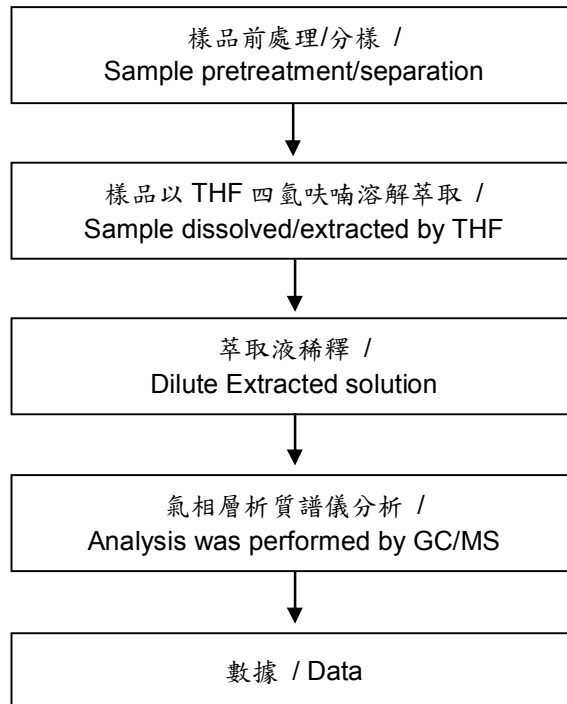
NO. 52-13, XINSHU RD., XINZHUANG DIST., NEW TAIPEI CITY 242, TAIWAN



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

- 測試人員：徐毓明 / Name of the person who made measurement: Andy Shu
- 測試負責人：張啟興 / Name of the person in charge of measurement: Troy Chang

【測試方法/Test method: IEC 62321-8】



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測試報告 Test Report

號碼(No.) : CE/2015/C5928 日期(Date) : 2016/01/06

頁數 (Page) : 7 of 8

領先顏料色母廠股份有限公司

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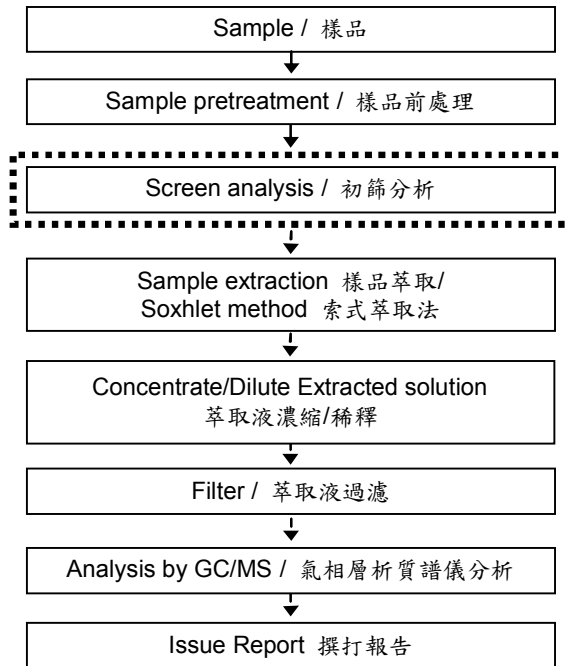
多溴聯苯/多溴聯苯醚分析流程圖 / PBB/PBDE analytical FLOW CHART

- 測試人員：翁賜彬 / Name of the person who made measurement: Roman Wong
- 測試負責人：張啟興 / Name of the person in charge of measurement: Troy Chang

初次測試程序 / First testing process ———▶

選擇性篩檢程序 / Optional screen process▶

確認程序 / Confirmation process - - -▶



測試報告

Test Report

號碼(No.) : CE/2015/C5928 日期(Date) : 2016/01/06

頁數 (Page) : 8 of 8

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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.)

CE/2015/C5928



** 報告結尾 (End of Report) **

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