

測試報告 Test Report

號碼(No.) : CE/2019/B4572 日期(Date) : 2019/12/03 頁數 (Page) : 1 of 9

迪愛禧佳龍油墨股份有限公司

DIC GRAPHICS CHIA LUNG CORP.

桃園市龜山區大華里頂湖一街12號

NO. 12, TING FU 1ST STREET, TA HUA VILLAGE, KWEI SHAN DIST., TAO-YUAN 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/on behalf of the applicant as):

送樣廠商(Sample Submitted By) : 迪愛禧佳龍油墨股份有限公司 (DIC GRAPHICS CHIA LUNG CORP.)
樣品名稱(Sample Description) : SHEETFED PRINT INKS (張頁印刷油墨)
樣品型號(Style/Item No.) : 請參考第5頁 (PLEASE REFER TO PAGE 5)
收件日期(Sample Receiving Date) : 2019/11/26
測試期間(Testing Period) : 2019/11/26 to 2019/12/02

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(s).)

測試方法(Test Method) : 請參閱下一頁 (Please refer to following pages).

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


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



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測試報告

Test Report

號碼(No.) : CE/2019/B4572 日期(Date) : 2019/12/03 頁數 (Page) : 2 of 9

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測試結果(Test Results)

測試部位(PART NAME)No. 1 : 黑色油墨 (客戶自行調配之樣品) (BLACK INK (SAMPLE IS BLENDED BY CLIENT))

測試項目 (Test Items)	單位 (Unit)	測試方法 (Method)	MDL	結果 (Result)
				No. 1
鎘 / Cadmium (Cd)	mg/kg	參考IEC 62321-5 (2013), 以感應耦合電漿發射光譜儀檢測. / With reference to IEC 62321-5 (2013) and performed by ICP-OES.	2	n. d.
鉛 / Lead (Pb)	mg/kg		2	n. d.
汞 / Mercury (Hg)	mg/kg	參考IEC 62321-4:2013+ AMD1:2017, 以感應耦合電漿發射光譜儀檢測. / With reference to IEC 62321-4:2013+ AMD1:2017 and performed by ICP-OES.	2	n. d.
六價鉻 / Hexavalent Chromium Cr(VI) (◆)	mg/kg	參考IEC 62321-7-2 (2017), 以UV-VIS檢測; 參考IEC 62321-5 (2013), 以ICP-OES檢測. / With reference to IEC 62321-7-2 (2017) and performed by UV-VIS. ; With reference to IEC 62321-5 (2013) and performed by ICP-OES.	8	n. d.
多溴聯苯總和 / Sum of PBBs	mg/kg	參考IEC 62321-6 (2015), 以氣相層析/質譜儀檢測. / With reference to IEC 62321-6 (2015) and performed by GC/MS.	-	n. d.
一溴聯苯 / Monobromobiphenyl	mg/kg		5	n. d.
二溴聯苯 / Dibromobiphenyl	mg/kg		5	n. d.
三溴聯苯 / Tribromobiphenyl	mg/kg		5	n. d.
四溴聯苯 / Tetrabromobiphenyl	mg/kg		5	n. d.
五溴聯苯 / Pentabromobiphenyl	mg/kg		5	n. d.
六溴聯苯 / Hexabromobiphenyl	mg/kg		5	n. d.
七溴聯苯 / Heptabromobiphenyl	mg/kg		5	n. d.
八溴聯苯 / Octabromobiphenyl	mg/kg		5	n. d.
九溴聯苯 / Nonabromobiphenyl	mg/kg		5	n. d.
十溴聯苯 / Decabromobiphenyl	mg/kg		5	n. d.

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測試報告

Test Report

號碼(No.) : CE/2019/B4572 日期(Date) : 2019/12/03 頁數 (Page) : 3 of 9

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測試項目 (Test Items)	單位 (Unit)	測試方法 (Method)	MDL	結果 (Result)
				No. 1
多溴聯苯醚總和 / Sum of PBDEs	mg/kg	參考IEC 62321-6 (2015), 以氣相層析/ 質譜儀檢測. / With reference to IEC 62321-6 (2015) and performed by GC/MS.	–	n. d.
一溴聯苯醚 / Monobromodiphenyl ether	mg/kg		5	n. d.
二溴聯苯醚 / Dibromodiphenyl ether	mg/kg		5	n. d.
三溴聯苯醚 / Tribromodiphenyl ether	mg/kg		5	n. d.
四溴聯苯醚 / Tetrabromodiphenyl ether	mg/kg		5	n. d.
五溴聯苯醚 / Pentabromodiphenyl ether	mg/kg		5	n. d.
六溴聯苯醚 / Hexabromodiphenyl ether	mg/kg		5	n. d.
七溴聯苯醚 / Heptabromodiphenyl ether	mg/kg		5	n. d.
八溴聯苯醚 / Octabromodiphenyl ether	mg/kg		5	n. d.
九溴聯苯醚 / Nonabromodiphenyl ether	mg/kg		5	n. d.
十溴聯苯醚 / Decabromodiphenyl ether	mg/kg		5	n. d.
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 (2017), 以氣相層析/ 質譜儀檢測. / With reference to IEC 62321-8 (2017). Analysis was performed by GC/MS.	50	n. d.
鄰苯二甲酸丁苯甲酯 / BBP (Butyl Benzyl phthalate) (CAS No. : 85-68- 7)	mg/kg		50	n. d.
鄰苯二甲酸二丁酯 / DBP (Dibutyl phthalate) (CAS No. : 84-74-2)	mg/kg		50	n. d.
鄰苯二甲酸二異丁酯 / DIBP (Di- isobutyl phthalate) (CAS No. : 84- 69-5)	mg/kg		50	n. d.

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測試報告 Test Report

號碼(No.) : CE/2019/B4572 日期(Date) : 2019/12/03 頁數 (Page) : 4 of 9

迪愛禧佳龍油墨股份有限公司

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備註(Note) :

1. mg/kg = ppm ; 0.1wt% = 1000ppm
2. MDL = Method Detection Limit (方法偵測極限值)
3. n.d. = Not Detected (未檢出)
4. "-" = Not Regulated (無規格值)
5. (◆) :

若鉻含量小於六價鉻之方法偵測極限值，則六價鉻為n.d.，不須再測試六價鉻。

The result of Cr(VI) is "n.d." as the result of Chromium (Cr) is less than the MDL of Cr(VI), and confirmation test of Cr(VI) is not required.

若鉻含量未小於六價鉻之方法偵測極限值，需進行六價鉻測試。

If the Chromium (Cr) content is not less than the MDL of Cr(VI), confirmation test of Cr(VI) is required.

測試報告

Test Report

號碼(No.) : CE/2019/B4572 日期(Date) : 2019/12/03 頁數 (Page) : 5 of 9

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樣品型號(Style/Item No.) : 客戶自行調配之樣品 (SAMPLE IS BLENDED BY CLIENT):

樣品型號:

中文:FUSION-G, FUSION-G MK, FUSION-G NPZ, NEW ERA, NEW ERA (D), VISION, VISION (D), FG, SG, NCP 系列油墨

英文:FUSION-G, FUSION-G MK, FUSION-G NPZ, NEW ERA, NEW ERA (D), VISION, VISION (D), FG, SG, NCP INK SERIES

中文名稱:

NEW ERA 紅, NEW ERA 藍, NEW ERA 黃, NEW ERA 黑, NEW ERA 特黑, FUSION-G 紅, FUSION-G 藍, FUSION-G 黃, FUSION-G 黑, FUSION-G MK 紅, FUSION-G MK 藍, FUSION-G MK 黃, FUSION-G MK 黑, VISION 黃, VISION 紅, VISION 藍, VISION 黑, FG 14 大紅, FG 20 維利油, FG 10 上光油, WET 上光油, CG 洋紅, CG 桃紅, FG 74 竹桃紅, FG 59 深藍, FG 62 紺藍, FUSION-G NPZ 紅, FUSION-G NPZ 藍, FUSION-G NPZ 黃, FUSION-G NPZ 黑, FG 23 大紅, FG 27 金紅, FG 28 金紅, FG 31 橙, FG 白, FG 42 深黃, SG 159 中藍, SG 160 深藍, SG 162 紺藍, SG 255 孔雀藍, SG 213 深紅, SG 100 維利油, SG 322 大紅, SG 326 金紅, SG 325 金紅, SG 339 桔紅, SG 179 白, SG 142 深黃, SG 340 深黃, SG 344 中黃, 東方藍, 乾燥劑, 乾燥抑制劑, 皮膜強化劑, 00 凡立水, New Champion 特殊色系列。

英文名稱:

NEW ERA Magenta, NEW ERA Cyan, NEW ERA Yellow, NEW ERA Black, NEW ERA Density Black, FUSION-G Magenta, FUSION-G Cyan, FUSION-G Yellow, FUSION-G Black, FUSION-G MK Magenta, FUSION-G MK Cyan, FUSION-G MK Yellow, FUSION-G MK Black, VISION Yellow, VISION Magenta, VISION Cyan, VISION Black, FG 14 Red, FG 20 Medium, FG 10 OP Varnish, WET OP Varnish, CG PINK, CG PINK, FG 74 PINK, FG 59 Dense Blue, FG 62 Ultramarine Blue, FUSION-G NPZ Magenta, FUSION-G NPZ Cyan, FUSION-G NPZ Yellow, FUSION-G NPZ Black, FG 23 Red, FG 27 Warm Red, FG 28 Warm Red, FG 31 Orange, FG White, FG 42 Dense Yellow, SG 159 Blue, SG 160 Dense Blue, SG 162 Ultramarine Blue, SG 255 Peacock Blue, SG 213 Dense Red, SG 100 Medium, SG 322 Red, SG 326 Warm Red, SG 325 Warm Red, SG 339 Orange Red, SG 179 White, SG 142 Dense Yellow, SG 340 Dense Yellow, SG 344 Yellow, Spot Blue Dryer, Dry prevent agent, Surface enhance agent, 00 Varnish, New Champion Spot Colors series。

測試報告 Test Report

號碼(No.) : CE/2019/B4572 日期(Date) : 2019/12/03

頁數 (Page) : 6 of 9

迪愛禧佳龍油墨股份有限公司

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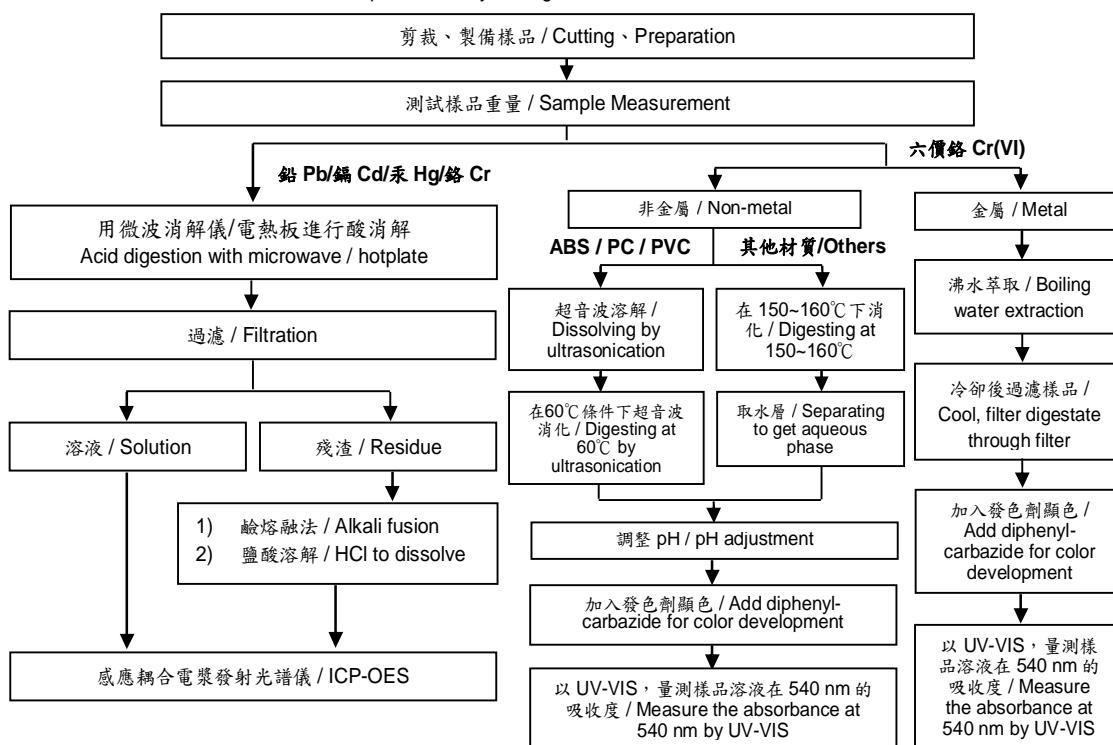
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重金屬流程圖 / Analytical flow chart of Heavy Metal

根據以下的流程圖之條件，樣品已完全溶解。(六價鉻測試方法除外)

These samples were dissolved totally by pre-conditioning method according to below flow chart. (Cr⁶⁺ test method excluded)

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



測試報告 Test Report

號碼(No.) : CE/2019/B4572 日期(Date) : 2019/12/03 頁數 (Page) : 7 of 9

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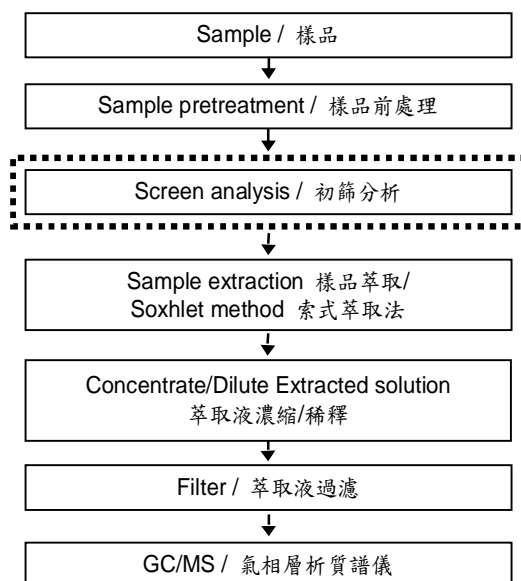
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多溴聯苯/多溴聯苯醚分析流程圖 / Analytical flow chart - PBB/PBDE

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

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



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測試報告 Test Report

號碼(No.) : CE/2019/B4572 日期(Date) : 2019/12/03 頁數 (Page) : 8 of 9

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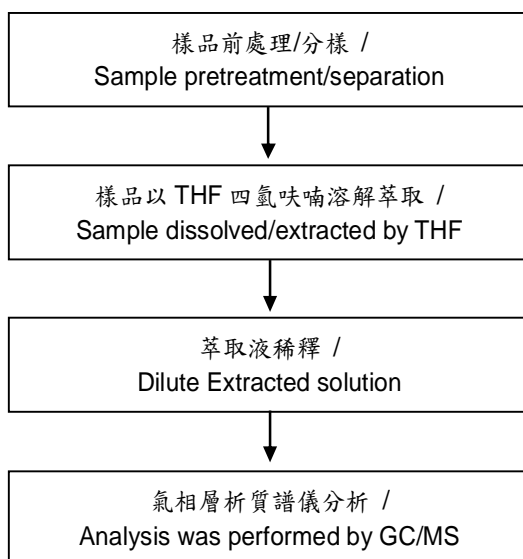
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可塑劑分析流程圖 / Analytical flow chart - Phthalate

- 測試人員：涂雅苓 / Technician: Yaling Tu
- 測試負責人：張啟興 / Supervisor : 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/2019/B4572 日期(Date) : 2019/12/03 頁數 (Page) : 9 of 9

迪愛禧佳龍油墨股份有限公司

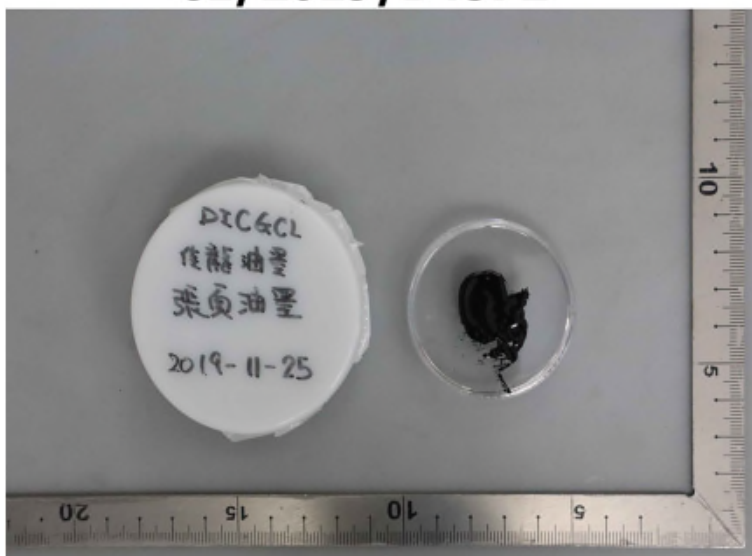
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* 照片中如有箭頭標示，則表示為實際檢測之樣品/部位。*
(The tested sample / part is marked by an arrow if it's shown on the photo.)

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** 報告結尾 (End of Report) **

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