

測試報告

Test Report

號碼(No.) : CE/2019/24275

日期(Date) : 2019/02/26

頁數(Page): 1 of 15

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) : DAICURE PRINT INKS (UV印刷油墨)
樣品型號(Style/Item No.) : 請參考第6頁 (PLEASE REFER TO PAGE 6)
收件日期(Sample Receiving Date) : 2019/02/21
測試期間(Testing Period) : 2019/02/21 to 2019/02/26

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


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



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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)	方法偵測 極限值 (MDL)	結果 (Result)
				No. 1
鎘 / Cadmium (Cd)	mg/kg	參考IEC 62321-5 (2013), 以感應耦合電漿原子發射光譜儀檢測. / With reference to IEC 62321-5 (2013) and performed by ICP-AES.	2	n. d.
鉛 / Lead (Pb)	mg/kg		2	n. d.
汞 / Mercury (Hg)	mg/kg	參考IEC 62321-4 (2013), 以感應耦合電漿原子發射光譜儀檢測. / With reference to IEC 62321-4 (2013) and performed by ICP-AES.	2	n. d.
六價鉻 / Hexavalent Chromium Cr(VI)	mg/kg	參考IEC 62321-7-2 (2017), 以UV-VIS 檢測. / With reference to IEC 62321-7-2 (2017) and performed by UV-VIS.	8	n. d.
多溴聯苯總和 / Sum of PBBs	mg/kg	參考IEC 62321-6 (2015), 以氣相層析儀/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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測試項目 (Test Items)	單位 (Unit)	測試方法 (Method)	方法偵測 極限值 (MDL)	結果 (Result)
				No. 1
多溴聯苯醚總和 / Sum of PBDEs	mg/kg	參考IEC 62321-6 (2015), 以氣相層析儀/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.	
鄰苯二甲酸丁苯甲酯 / BBP (Butyl Benzyl phthalate) (CAS No. : 85-68-7)	mg/kg	參考IEC 62321-8 (2017), 以氣相層析儀/質譜儀檢測. / With reference to IEC 62321-8 (2017). Analysis was performed by GC/MS.	50	n. d.
鄰苯二甲酸二丁酯 / DBP (Dibutyl phthalate) (CAS No. : 84-74-2)	mg/kg		50	n. d.
鄰苯二甲酸二異丁酯 / DIBP (Di-isobutyl phthalate) (CAS No. : 84-69-5)	mg/kg		50	n. d.
鄰苯二甲酸二(2-乙基己基)酯 / DEHP (Di-(2-ethylhexyl) phthalate) (CAS No. : 117-81-7)	mg/kg		50	n. d.
鄰苯二甲酸二異癸酯 / DIDP (Di-isodecyl phthalate) (CAS No. : 26761-40-0; 68515-49-1)	mg/kg		50	n. d.
鄰苯二甲酸二異壬酯 / DINP (Di-isononyl phthalate) (CAS No. : 28553-12-0; 68515-48-0)	mg/kg		50	n. d.
鄰苯二甲酸二正辛酯 / DNOP (Di-n-octyl phthalate) (CAS No. : 117-84-0)	mg/kg		50	n. d.

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NO. 12, TING FU 1ST STREET, TA HUA VILLAGE, KWEI SHAN DIST., TAO-YUAN CITY, TAIWAN, R. O. C.

測試項目 (Test Items)	單位 (Unit)	測試方法 (Method)	方法偵測 極限值 (MDL)	結果 (Result)
				No. 1
全氟辛烷磺酸 / Perfluorooctane sulfonates (PFOS-Acid, Metal Salt, Amide)	mg/kg	參考US EPA 3550C (2007), 以液相層析儀/質譜儀檢測。 / With reference to US EPA 3550C (2007). Analysis was performed by LC/MS.	10	n. d.
全氟辛酸 / PFOA (CAS No. : 335-67-1)	mg/kg	參考US EPA 3550C (2007), 以液相層析儀/質譜儀檢測。 / With reference to US EPA 3550C (2007). Analysis was performed by LC/MS.	10	n. d.
多氯聯苯 / Polychlorinated Biphenyls (PCBs) (CAS No. : 1336-36-3)	mg/kg	參考US EPA 3550C (2007), 以氣相層析儀/質譜儀檢測。 / With reference to US EPA 3550C (2007). Analysis was performed by GC/MS.	0.5	n. d.
雙酚 A / Bisphenol A (CAS No. : 80-05-7)	mg/kg	參考RSTS-CHEM-239-1 (2016), 以超高效能液相層析串聯質譜儀檢測。 / With reference to RSTS-CHEM-239-1 (2016). Analysis was performed by UPLC-MSMS.	1	n. d.
富馬酸二甲酯 / Dimethyl Fumarate (CAS No. : 624-49-7)	mg/kg	參考US EPA 3550C (2007), 以氣相層析儀/質譜儀檢測。 / With reference to US EPA 3550C (2007). Analysis was performed by GC/MS.	0.1	n. d.
甲醛 / Formaldehyde (CAS No. : 50-00-0)	mg/kg	參考ISO 17226-1(2008), 以高效液相層析儀/二極體陣列偵測器檢測。 / With reference to ISO 17226-1(2008). Analysis was performed by HPLC/DAD.	3	n. d.

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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)

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

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

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

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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):

中文:DAICURE SD, SD-X, IP, EP, NCR, SD SOY, NCR SOY, HY-BRYTE, PAD, SL PV, RT-X,UV HANS DA, DNP , RT-X Card, UV NewsMag, RADCURE RAP, RAO, EB TR2 AM, HUV, LED ,CLB ,CLB1 DOC-A, HR, HR-L,HR-K, RT-X KLS, RT-X MHL, HA-X, PAD-C, Daicure RT, SCEPTER NC 混合油墨

英文:DAICURE SD, SD-X, IP, EP, NCR, SD SOY, NCR SOY, HY-BRYTE, PAD, SL PV, RT-X,UV HANS DA, DNP , RT-X Card, UV NewsMag, RADCURE RAP, RAO, EB TR2 AM, HUV, LED ,CLB ,CLB1 DOC-A, HR, HR-L, HR-K, RT-X KLS, RT-X MHL, HA-X, PAD-C, Daicure RT, SCEPTER NC INK SERIES

中文名稱	英文名稱	中文名稱	英文名稱
紅	Magenta	東方藍	Spot Blue
藍	Cyan	維利油	Medium
黃	Yellow	上光油	OP Varnish
特黃	Density Yellow	WL 消光油AK	WL MAT OP Varnish AK
黑	Black	打底油	Primer
特黑	Density Black	滑性劑	Slip Additive
金紅	Warm Red	稀釋劑	Reducer
綠	Green	桔	Orange
紫	Violet	射光藍	Reflex Blue
玫瑰紅	Rose Red	粉紅	Pink
特殊 藍	Special Blue	大紅	Scarlet
白	White	金赤	Bronze Red

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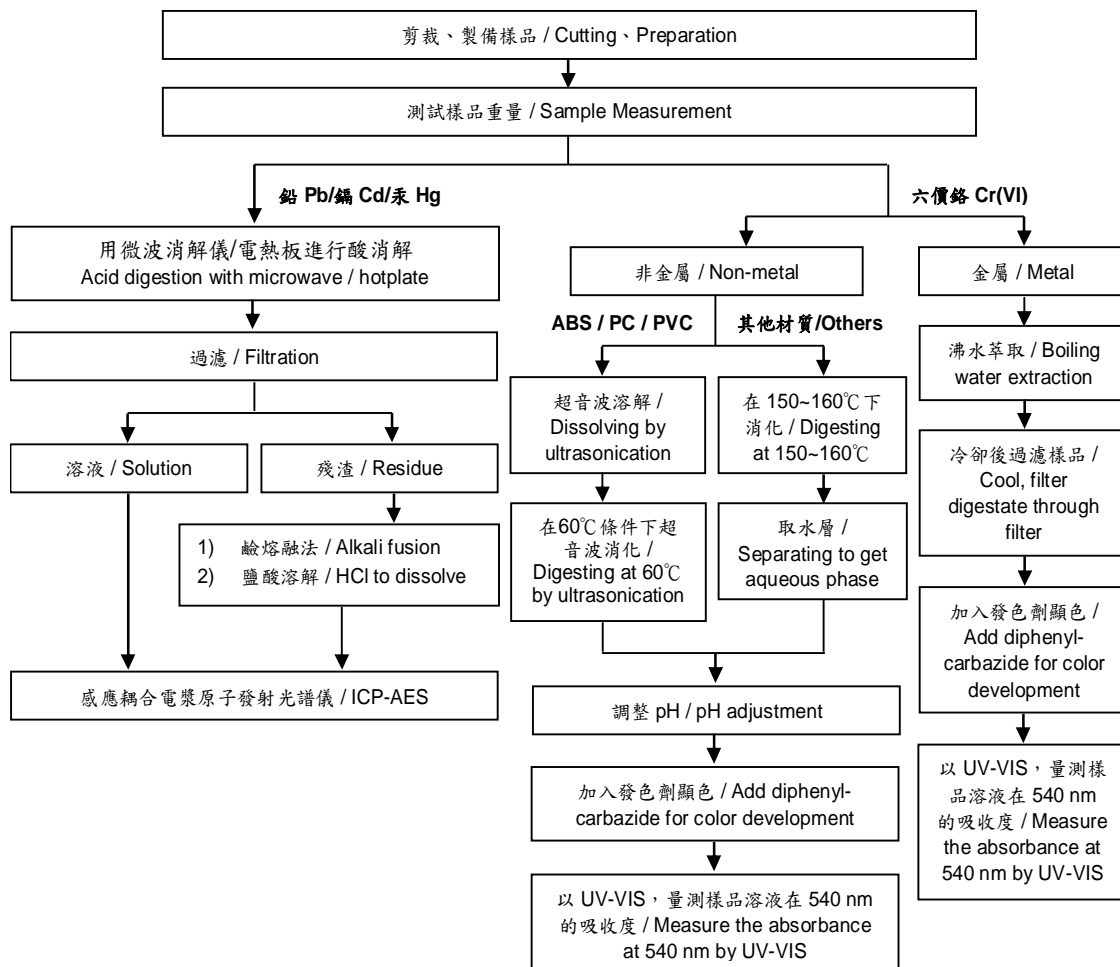
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重金屬流程圖 / Analytical flow chart of Heavy Metal

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



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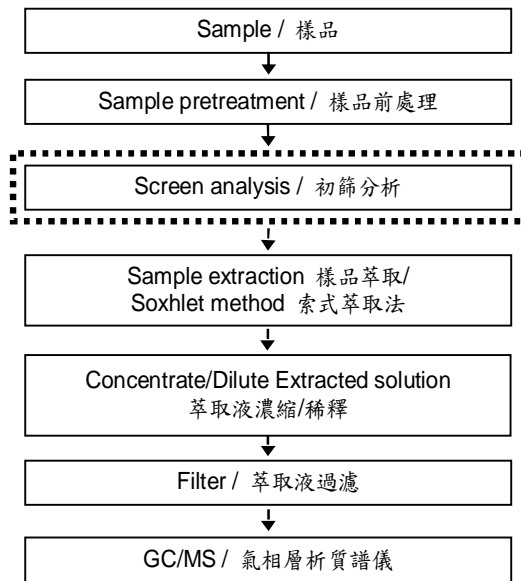
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多溴聯苯/多溴聯苯醚分析流程圖 / Analytical flow chart - PBB/PBDE

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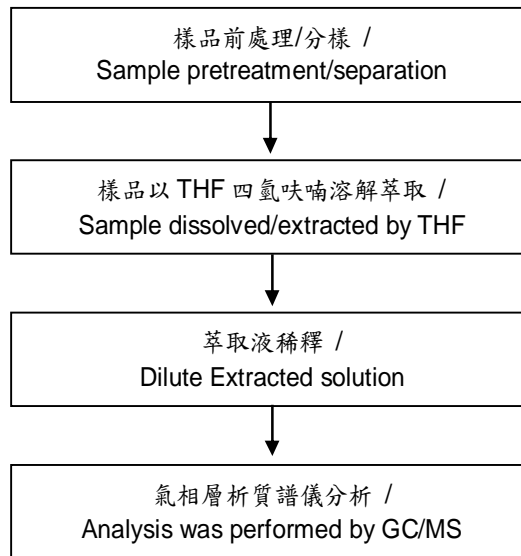
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可塑劑分析流程圖 / Analytical flow chart - Phthalate

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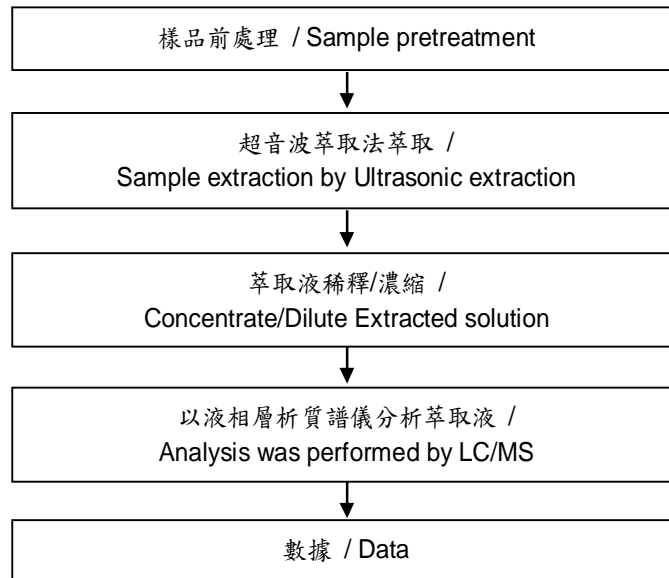
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全氟辛酸/全氟辛烷磺酸分析流程圖 / Analytical flow chart - PFOA/PFOS

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



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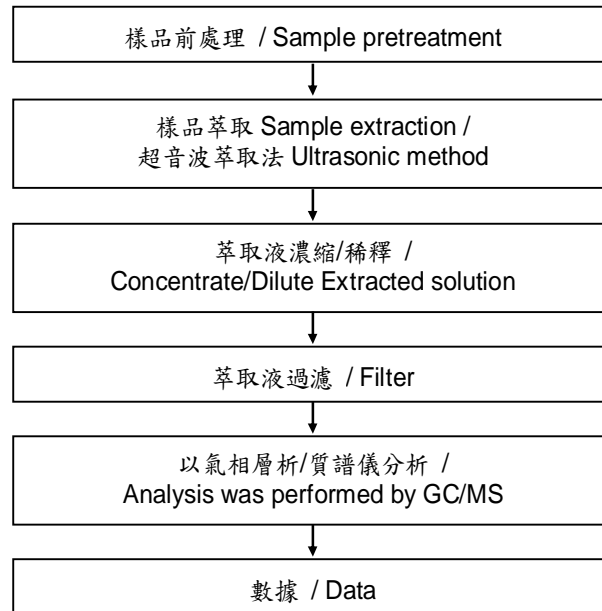
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多氯聯苯分析流程圖 / Analytical flow chart - PCBs

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



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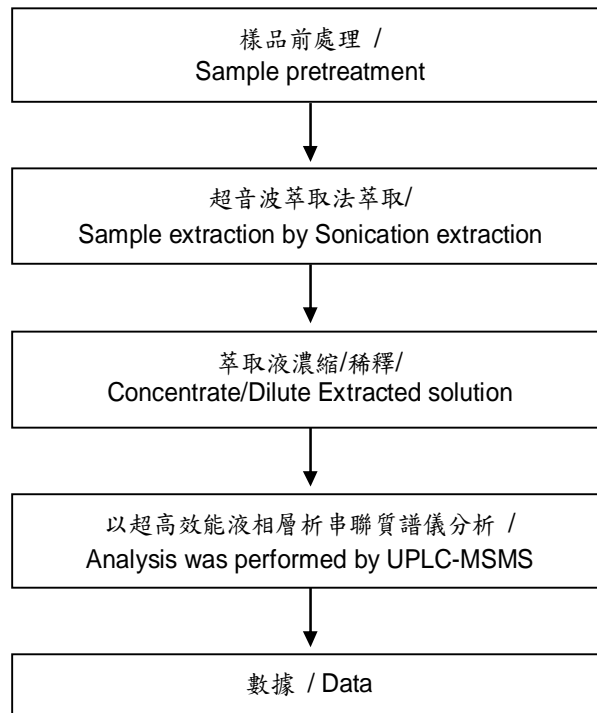
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NO. 12, TING FU 1ST STREET, TA HUA VILLAGE, KWEI SHAN DIST., TAO-YUAN CITY, TAIWAN, R. O. C.

雙酚A分析流程圖 / Analytical flow chart - Bisphenol A

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



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日期(Date) : 2019/02/26

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Test Report

迪愛禧佳龍油墨股份有限公司

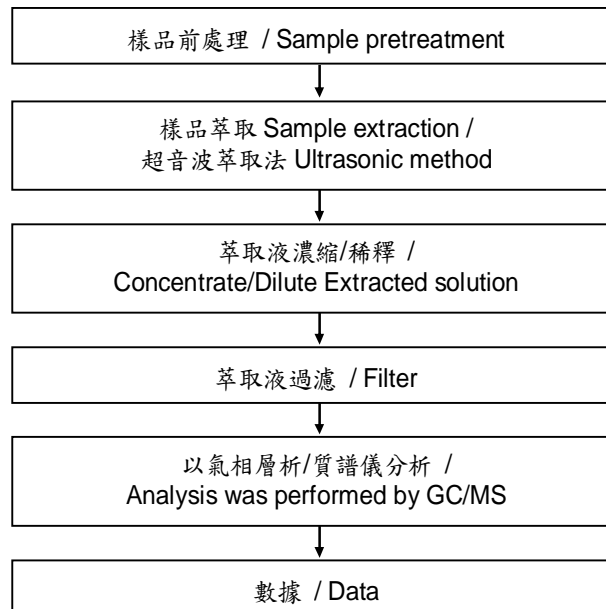
DIC GRAPHICS CHIA LUNG CORP.

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.

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

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



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迪愛禧佳龍油墨股份有限公司

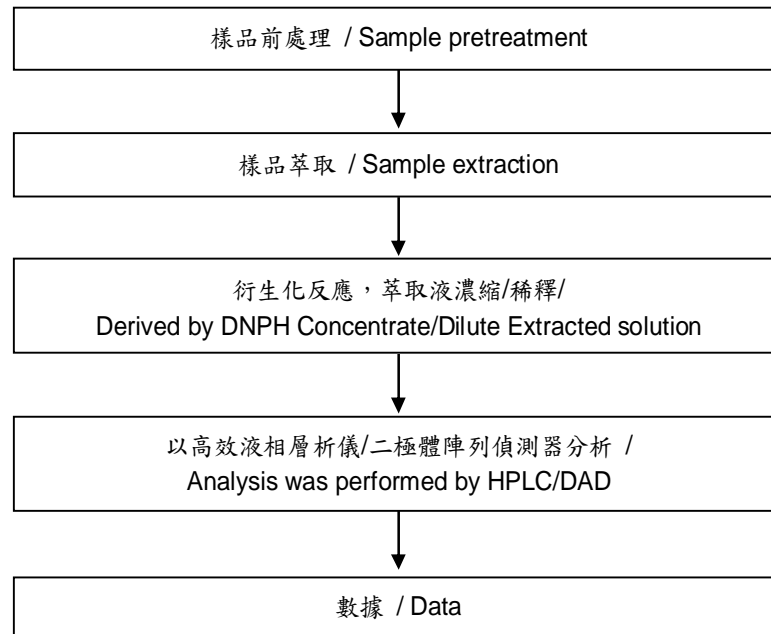
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桃園市龜山區大華里頂湖一街12號

NO. 12, TING FU 1ST STREET, TA HUA VILLAGE, KWEI SHAN DIST., TAO-YUAN CITY, TAIWAN, R. O. C.

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

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



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DIC GRAPHICS CHIA LUNG CORP.

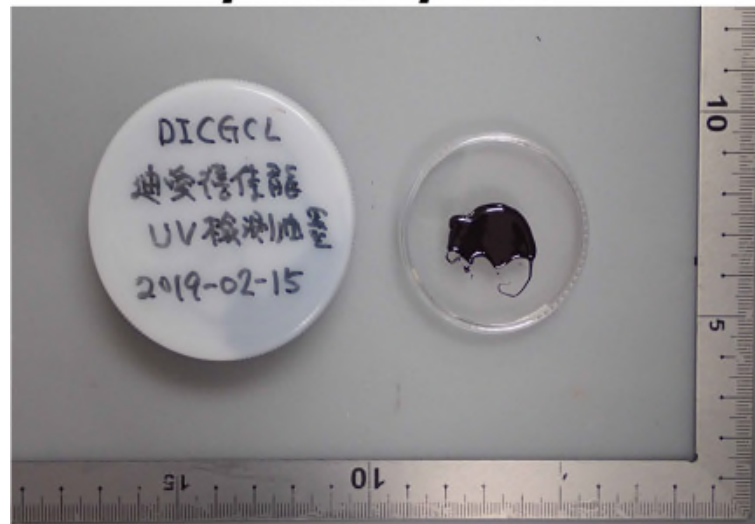
桃園市龜山區大華里頂湖一街12號

NO. 12, TING FU 1ST STREET, TA HUA VILLAGE, KWEI SHAN DIST., TAO-YUAN CITY, TAIWAN, R. O. C.

* 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/2019/24275



** 報告結尾 (End of Report) **