

測試報告 Test Report

號碼(No.) : CE/2008/78952A 日期(Date) : 2008/09/15 頁數(Page) : 1 of 6

台燿科技股份有限公司

TAIWAN UNION TECHNOLOGY CORPORATION

(TAIWAN UNION TECHNOLOGY CORPORATION(CHANGSHU))

新竹縣竹北市博愛街803號

803, PO AI ST., CHUPEI CITY HSINCHU HSIEN 302, TAIWAN

(88 DONGNAN RD., CHANGSHU, JIANGSU, CHINA)



以下測試樣品係由客戶送樣，且由客戶聲稱並經客戶確認如下 (The following samples was/were submitted and identified by/on behalf of the client as) :

樣品名稱(Sample Description) : PREPREG
樣品型號(Style/Item No.) : TU-74P
收件日期(Sample Receiving Date) : 2008/07/31
測試期間(Testing Period) : 2008/07/31 TO 2008/08/07

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

結論(Conclusion) : 根據客戶所提供的樣品，其鎘、鉛、汞、六價鉻、多溴聯苯及多溴聯苯醚的測試結果符合RoHS(2002/95/EC)及其修定指令之要求 (Based on the performed tests on submitted samples, the test results of Cadmium, Lead, Mercury, Hexavalent Chromium Cr(VI), PBBs and PBDEs are **compliant with** the limits of RoHS Directive 2002/95/EC and its subsequent amendments).

Chenyu Kung / Operation Manager
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 : 黃色片狀 (YELLOW SHEET)

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)	法規 限值 (Limit)
				NO.1	
鎘 / Cadmium (Cd)	mg/kg	參考US EPA 3052方法, 用感應耦合電漿原子發射光譜儀檢測鎘含量. / With reference to US EPA Method 3052 for Cadmium Content. Analysis was performed by ICP-AES.	2	n.d.	100
鉛 / Lead (Pb)	mg/kg	參考US EPA 3052方法, 用感應耦合電漿原子發射光譜儀檢測鉛含量. / With reference to US EPA Method 3052 for Lead Content. Analysis was performed by ICP-AES.	2	n.d.	1000
汞 / Mercury (Hg)	mg/kg	參考US EPA 3052方法, 用感應耦合電漿原子發射光譜儀檢測汞含量. / With reference to US EPA Method 3052 for Mercury Content. Analysis was performed by ICP-AES.	2	n.d.	1000
六價鉻 / Hexavalent Chromium Cr(VI)	mg/kg	針對非金屬材質之樣品, 參考US EPA 3060A方法, 用UV-VIS (US EPA 7196A) 檢測六價鉻含量. / With reference to US EPA Method 3060A & 7196A for Hexavalent Chromium for non-metallic samples. Analysis was performed by UV-Vis Spectrometry.	2	n.d.	1000

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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)	法規 限值 (Limit)
				NO.1	
四溴雙酚-A / Tetrabromobisphenol A (TBBP-A) (CAS No.: 000079-94-7)	mg/kg	參考DIN 53313方法, 以氣相層析 儀/質譜儀檢測. / With reference to DIN 53313. Analysis was performed by GC/MS.	10	n.d.	-
多溴聯苯總和 / Sum of PBBs			-	n.d.	1000
一溴聯苯 / Monobromobiphenyl			5	n.d.	-
二溴聯苯 / Dibromobiphenyl			5	n.d.	-
三溴聯苯 / Tribromobiphenyl			5	n.d.	-
四溴聯苯 / Tetrabromobiphenyl			5	n.d.	-
五溴聯苯 / Pentabromobiphenyl			5	n.d.	-
六溴聯苯 / Hexabromobiphenyl			5	n.d.	-
七溴聯苯 / Heptabromobiphenyl			5	n.d.	-
八溴聯苯 / Octabromobiphenyl			5	n.d.	-
九溴聯苯 / Nonabromobiphenyl			5	n.d.	-
十溴聯苯 / Decabromobiphenyl			5	n.d.	-
多溴聯苯醚總和 / Sum of PBDEs	mg/kg	參考US EPA 3540C方法, 以氣相層 析儀/質譜儀檢測多溴聯苯和多溴 聯苯醚含量. / With reference to US EPA 3540C for PBB/PBDE Content. Analysis was performed by GC/MS.	-	n.d.	1000
一溴聯苯醚 / Monobromodiphenyl ether			5	n.d.	-
二溴聯苯醚 / Dibromodiphenyl ether			5	n.d.	-
三溴聯苯醚 / Tribromodiphenyl ether			5	n.d.	-
四溴聯苯醚 / Tetrabromodiphenyl ether			5	n.d.	-
五溴聯苯醚 / Pentabromodiphenyl ether			5	n.d.	-
六溴聯苯醚 / Hexabromodiphenyl ether			5	n.d.	-
七溴聯苯醚 / Heptabromodiphenyl ether			5	n.d.	-
八溴聯苯醚 / Octabromodiphenyl ether			5	n.d.	-
九溴聯苯醚 / Nonabromodiphenyl ether			5	n.d.	-
十溴聯苯醚 / Decabromodiphenyl ether			5	n.d.	-

備註(Note) :

1. mg/kg = ppm
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)

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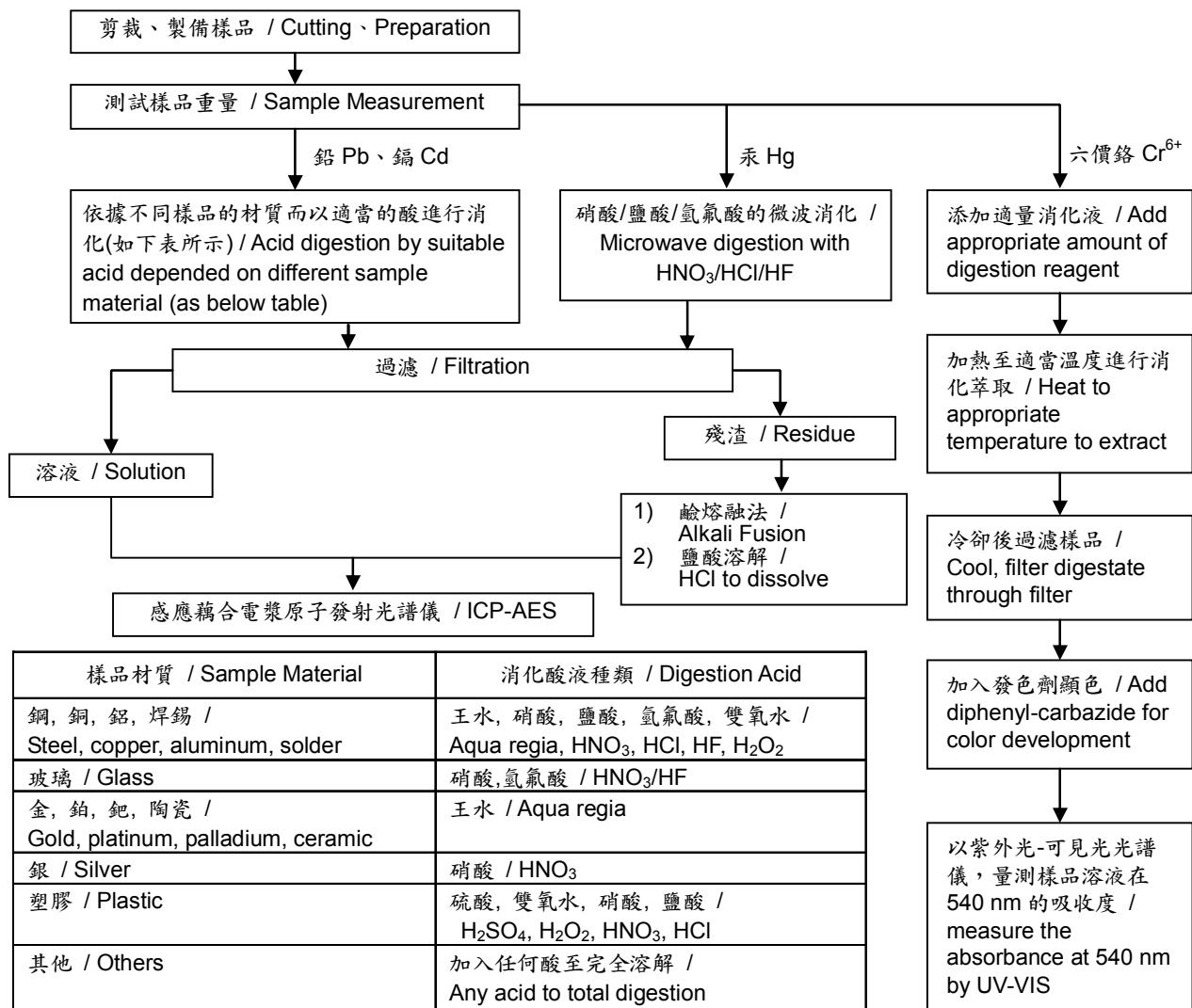
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- 1) 根據以下的流程圖之條件，樣品已完全溶解。(六價鉻測試方法除外) / These samples were dissolved totally by pre-conditioning method according to below flow chart. (Cr⁶⁺ test method excluded)
- 2) 測試人員：楊登偉 / Name of the person who made measurement: Climbgreat Yang
- 3) 測試負責人：張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



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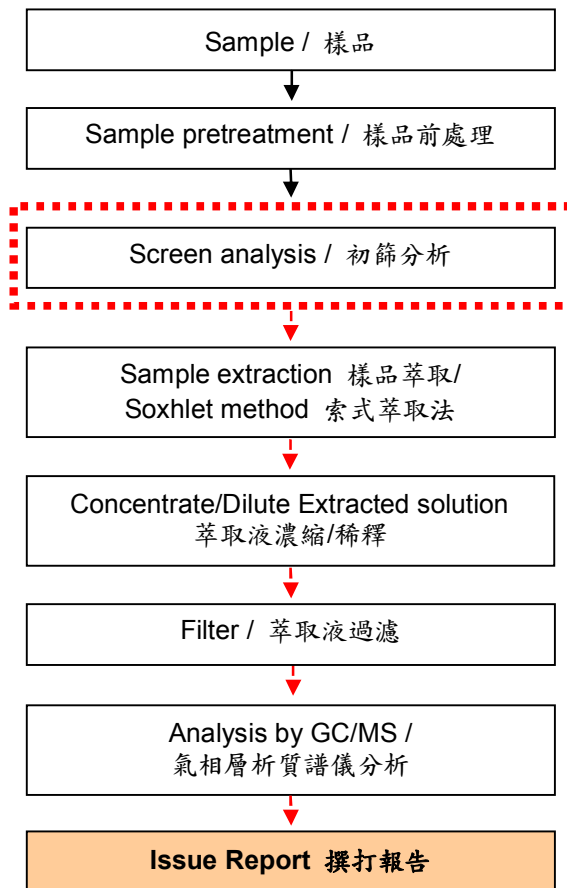
多溴聯苯/多溴聯苯醚分析流程圖 / PBB/PBDE analytical FLOW CHART

- 1) 測試人員：翁賜彬 / Name of the person who made measurement: Roman Wong
- 2) 測試負責人：陳新智 / Name of the person in charge of measurement: Shinjyh Chen

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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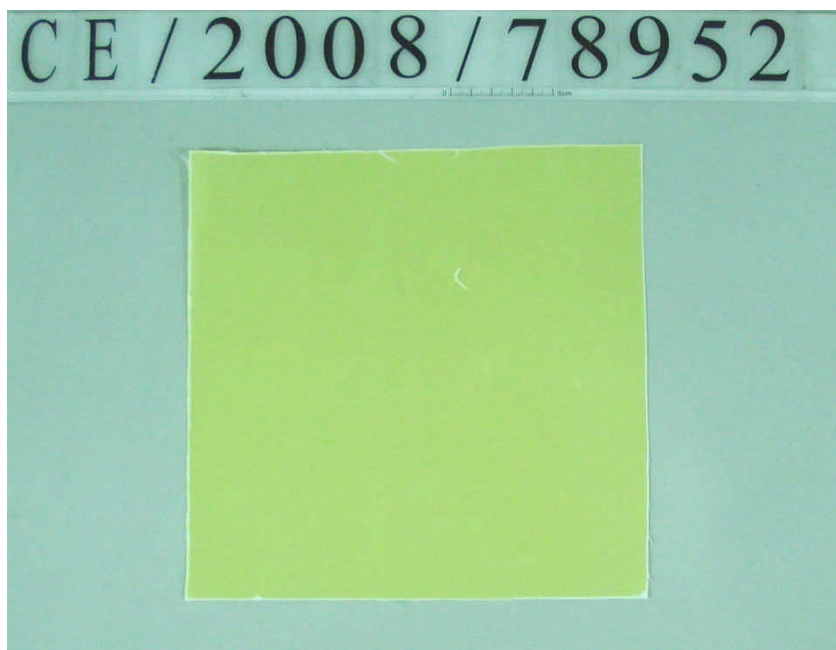
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** 報告結尾 **

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