

測試報告 Test Report

號碼(No.): CE/2008/80629H

日期(Date): 2008/08/15

頁數(Page): 1 of 8

台耀科技股份有限公司

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) : COPPER CLAD LAMINATE
樣品型號((Style/Item No.)) : TU-772
收件日期(Sample Receiving Date) : 2008/07/31 AND 2008/08/04
測試期間(Testing Period) : 2008/07/31 TO 2008/08/07 AND 2008/08/04 TO 2008/08/11

=====
測試需求(Test Requested) : 參照 RoHS 2002/95/EC 及其修定指令要求. (In accordance with the RoHS Directive 2002/95/EC, and its amendment directives).
測試結果(Test Results) : 請見下一頁 (Please refer to next pages).
結論(Conclusion) : 根據客戶所提供樣品的測試結果，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 are **compliant with** the limits of RoHS Directive 2002/95/EC and its subsequent amendments).

* 此份報告為合併 CE/2008/78955 及 CE/2008/80629 之報告 *

* This report is combined with reports of CE/2008/78955 and CE/2008/80629 *

Chenyu Kung / Operation Manager
Signed for and on behalf of
SGS TAIWAN LTD.
Chemical Laboratory – Taipei

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. This test report cannot be reproduced, except in full, without prior written permission of the Company. 除非另有說明，此報告結果僅對測試之樣品負責。本報告未經本公司書面許可，不可部份複製。

This Test Report is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at http://www.sgs.com/terms_and_conditions.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this Test Report is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

測試報告

Test Report

號碼(No.): CE/2008/80629H

日期(Date): 2008/08/15

頁數(Page): 2 of 8

台耀科技股份有限公司

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)



測試方法(Test Method)

- (1) 參考BS EN 1122方法B:2001, 用感應耦合電漿原子發射光譜儀檢測鎘含量。 / With reference to BS EN 1122:2001, Method B for Cadmium Content. Analysis was performed by ICP-AES.
- (2) 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.
- (3) 參考US EPA 3050B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 3050B for Lead Content. Analysis was performed by ICP-AES.
- (4) 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.
- (5) 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.
- (6) 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. Analysis was performed by UV/Vis Spectrometry.
- (7) 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.
- (8) 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.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. This test report cannot be reproduced, except in full, without prior written permission of the Company. 除非另有說明, 此報告結果僅對測試之樣品負責。本報告未經本公司書面許可, 不可部份複製。

This Test Report is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at http://www.sgs.com/terms_and_conditions.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this Test Report is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

測試報告

Test Report

號碼(No.): CE/2008/80629H

日期(Date): 2008/08/15

頁數(Page): 3 of 8

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)



測試結果(Test Results) 單位(Unit): mg/kg

測試項目 (Test Items)	測試方法 Method (Refer to)	結果 (Result)		方法偵測 極限值 (MDL)	RoHS 限值 (Limit)
		No.1	No.2		
鎘 / Cadmium (Cd)	(1)	---	n.d.	2	100
	(2)	n.d.	---	2	100
鉛 / Lead (Pb)	(3)	---	n.d.	2	1000
	(4)	n.d.	---	2	1000
汞 / Mercury (Hg)	(5)	n.d.	n.d.	2	1000
六價鉻 / Hexavalent Chromium Cr(VI)	(6)	n.d.	---	2	1000
	(7)	---	n.d.	2	1000
多溴聯苯總和 / Sum of PBBs	(8)	n.d.	n.d.	-	1000
一溴聯苯 / Monobromobiphenyl		n.d.	n.d.	5	-
二溴聯苯 / Dibromobiphenyl		n.d.	n.d.	5	-
三溴聯苯 / Tribromobiphenyl		n.d.	n.d.	5	-
四溴聯苯 / Tetrabromobiphenyl		n.d.	n.d.	5	-
五溴聯苯 / Pentabromobiphenyl		n.d.	n.d.	5	-
六溴聯苯 / Hexabromobiphenyl		n.d.	n.d.	5	-
七溴聯苯 / Heptabromobiphenyl		n.d.	n.d.	5	-
八溴聯苯 / Octabromobiphenyl		n.d.	n.d.	5	-
九溴聯苯 / Nonabromobiphenyl		n.d.	n.d.	5	-
十溴聯苯 / Decabromobiphenyl		n.d.	n.d.	5	-
多溴聯苯醚總和 / Sum of PBDEs		n.d.	n.d.	-	1000
一溴聯苯醚 / Monobromodiphenyl ether		n.d.	n.d.	5	-
二溴聯苯醚 / Dibromodiphenyl ether		n.d.	n.d.	5	-
三溴聯苯醚 / Tribromodiphenyl ether		n.d.	n.d.	5	-
四溴聯苯醚 / Tetrabromodiphenyl ether		n.d.	n.d.	5	-
五溴聯苯醚 / Pentabromodiphenyl ether		n.d.	n.d.	5	-
六溴聯苯醚 / Hexabromodiphenyl ether		n.d.	n.d.	5	-
七溴聯苯醚 / Heptabromodiphenyl ether		n.d.	n.d.	5	-
八溴聯苯醚 / Octabromodiphenyl ether		n.d.	n.d.	5	-
九溴聯苯醚 / Nonabromodiphenyl ether	n.d.	n.d.	5	-	
十溴聯苯醚 / Decabromodiphenyl ether	n.d.	n.d.	5	-	

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. This test report cannot be reproduced, except in full, without prior written permission of the Company. 除非另有說明，此報告結果僅對測試之樣品負責。本報告未經本公司書面許可，不可部份複製。

This Test Report is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at http://www.sgs.com/terms_and_conditions.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this Test Report is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

測試報告 Test Report

號碼(No.): CE/2008/80629H

日期(Date): 2008/08/15

頁數(Page): 4 of 8

台耀科技股份有限公司

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)



測試部位描述 (TEST PART DESCRIPTION):

NO.1 : 黃色片狀 (YELLOW SHEET (CE/2008/78955))

NO.2 : 銅色箔片 (COPPER COLORED FOIL (CE/2008/80629))

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)
5. "---" = Not Conducted (未測項目)

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. This test report cannot be reproduced, except in full, without prior written permission of the Company. 除非另有說明，此報告結果僅對測試之樣品負責。本報告未經本公司書面許可，不可部份複製。

This Test Report is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at http://www.sgs.com/terms_and_conditions.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this Test Report is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

測試報告 Test Report

號碼(No.): CE/2008/80629H

日期(Date): 2008/08/15

頁數(Page): 5 of 8

台耀科技股份有限公司

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)



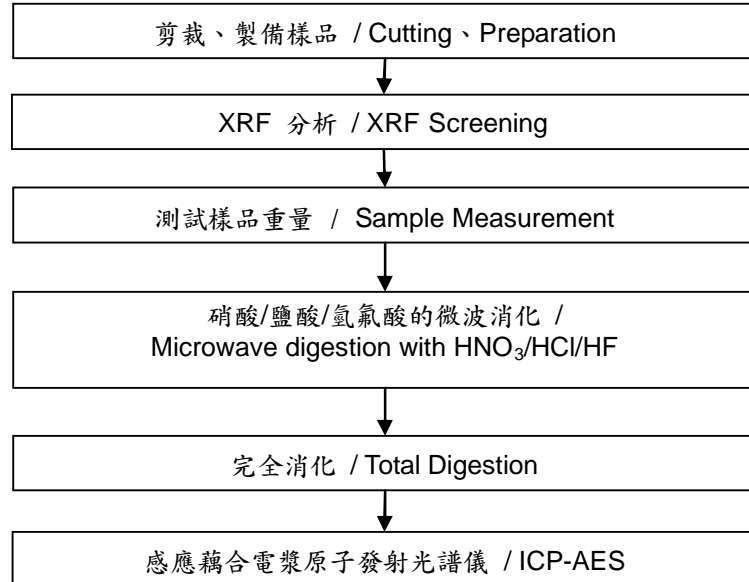
NO.1

依據 SONY QAR-05-002 的要求: / Per requirements of SONY QAR-05-002:

- 1) 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.
- 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

塑料的消化流程圖 – 鉛、鎘的測試方式為 EPA 3052 (無殘渣) /

Flow Chart of Digestion for Plastic –EPA 3052 for Pb、Cd (without residue)



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. This test report cannot be reproduced, except in full, without prior written permission of the Company. 除非另有說明, 此報告結果僅對測試之樣品負責。本報告未經本公司書面許可, 不可部份複製。

This Test Report is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at http://www.sgs.com/terms_and_conditions.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this Test Report is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

測試報告 Test Report

號碼(No.): CE/2008/80629H

日期(Date): 2008/08/15

頁數(Page): 6 of 8

台耀科技股份有限公司

TAIWAN UNION TECHNOLOGY CORPORATION

(TAIWAN UNION TECHNOLOGY CORPORATION (CHANGSHU))

新竹縣竹北市博愛街803號

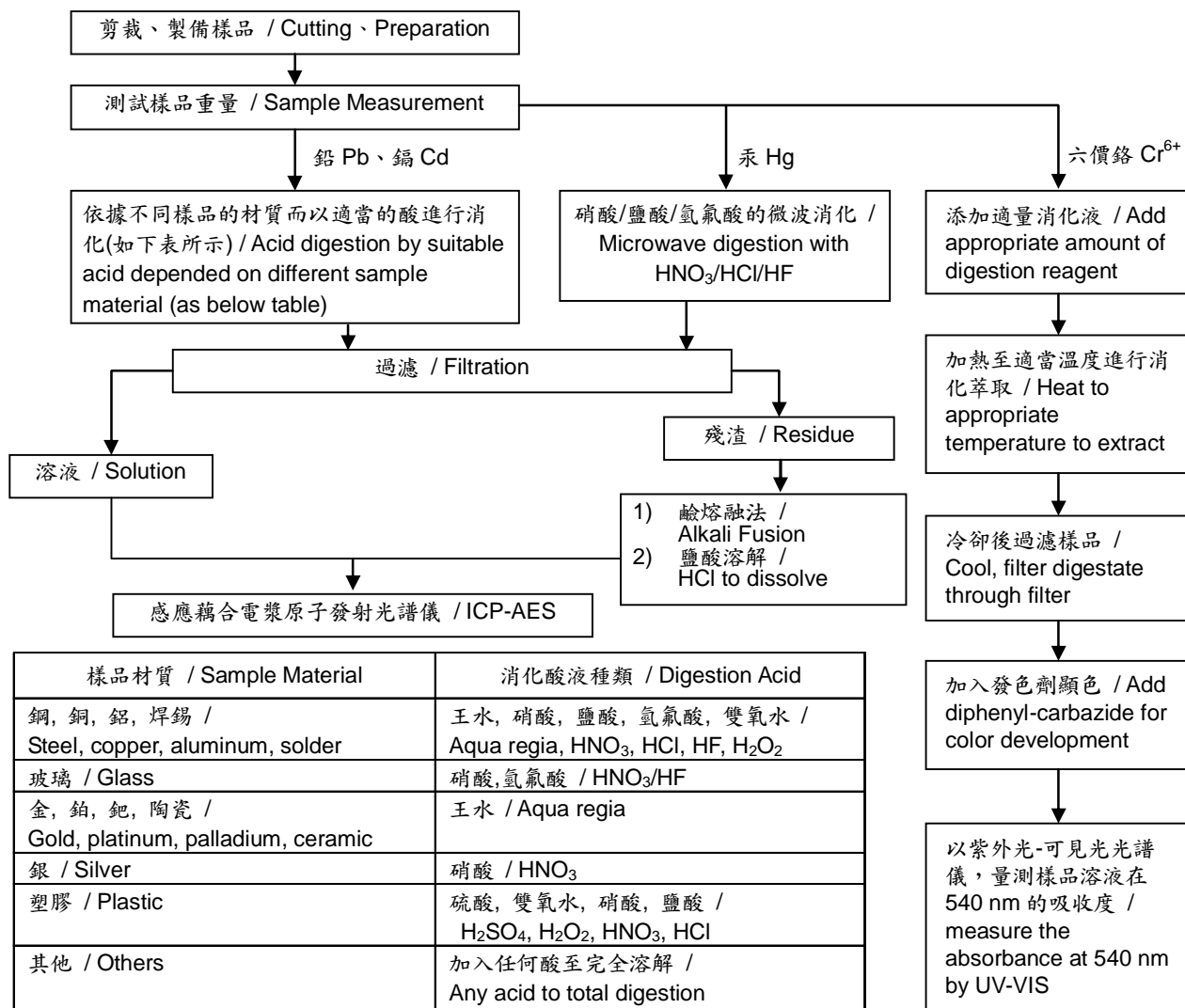
803, PO AI ST., CHUPEI CITY HSINCHU HSIEN 302, TAIWAN

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



NO.2

- 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



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. This test report cannot be reproduced, except in full, without prior written permission of the Company. 除非另有說明，此報告結果僅對測試之樣品負責。本報告未經本公司書面許可，不可部份複製。
This Test Report is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at http://www.sgs.com/terms_and_conditions.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this Test Report is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

測試報告 Test Report

號碼(No.): CE/2008/80629H

日期(Date): 2008/08/15

頁數(Page): 7 of 8

台耀科技股份有限公司

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)



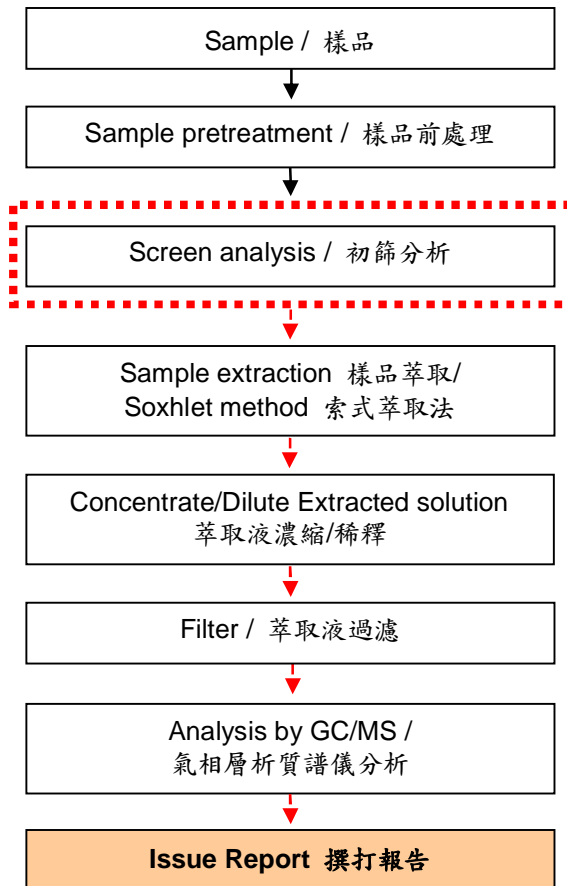
多溴聯苯/多溴聯苯醚分析流程圖 / PBB/PBDE analytical FLOW CHART

- 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 - - - ▶



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. This test report cannot be reproduced, except in full, without prior written permission of the Company. 除非另有說明，此報告結果僅對測試之樣品負責。本報告未經本公司書面許可，不可部份複製。

This Test Report is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at http://www.sgs.com/terms_and_conditions.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this Test Report is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

測試報告 Test Report

號碼(No.): CE/2008/80629H

日期(Date): 2008/08/15

頁數(Page): 8 of 8

台耀科技股份有限公司

TAIWAN UNION TECHNOLOGY CORPORATION

(TAIWAN UNION TECHNOLOGY CORPORATION (CHANGSHU))

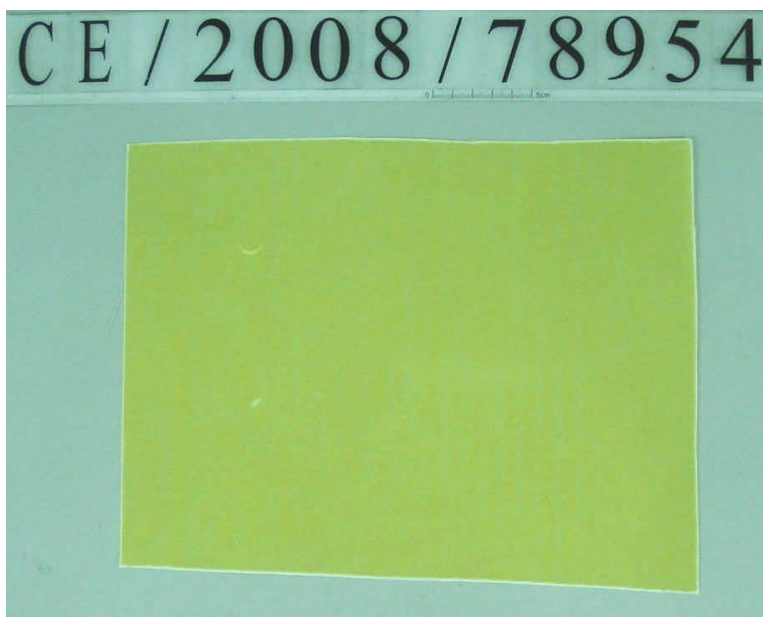
新竹縣竹北市博愛街803號

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

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



NO. 1



NO. 2



**** 報告結尾 ****

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. This test report cannot be reproduced, except in full, without prior written permission of the Company. 除非另有說明，此報告結果僅對測試之樣品負責。本報告未經本公司書面許可，不可部份複製。

This Test Report is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at http://www.sgs.com/terms_and_conditions.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this Test Report is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.