

測試報告

號碼：CE/2010/13828A

日期：2010/01/26

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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：

樣品名稱：LED顯示器件
SGS相關號碼：GZ12357371EC-2.2
收件日期：2010/01/19
測試期間：2010/01/19 TO 2010/01/26

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測試需求：參照 RoHS 2002/95/EC 及其修定指令要求。

測試方法：參考IEC 62321：2008方法檢測。
(1) 以感應耦合電漿原子發射光譜儀(ICP-AES)檢測鎘含量。
(2) 以感應耦合電漿原子發射光譜儀(ICP-AES)檢測鉛含量。
(3) 以感應耦合電漿原子發射光譜儀(ICP-AES)檢測汞含量。
(4) 以UV-VIS檢測六價鉻含量。
(5) 以Spot test / boiling water extraction方法檢測六價鉻含量。
(6) 以氣相層析儀/質譜儀(GC/MS)檢測多溴聯苯和多溴聯苯醚含量。

測試結果：請見下一頁。


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

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測試結果 (單位: mg/kg)

測試項目	測試方法 (請參考)	結果		方法偵測 極限值
		No. 1	No. 2	
鎘	(1)	n.d.	n.d.	2
鉛	(2)	n.d.	n.d.	2
汞	(3)	n.d.	n.d.	2
六價鉻 (Alkaline extraction)	(4)	n.d.	---	2
六價鉻 (Spot test / boiling water extraction)	(5)	---	Negative	備註4
多溴聯苯總和	(6)	n.d.	---	-
一溴聯苯		n.d.	---	5
二溴聯苯		n.d.	---	5
三溴聯苯		n.d.	---	5
四溴聯苯		n.d.	---	5
五溴聯苯		n.d.	---	5
六溴聯苯		n.d.	---	5
七溴聯苯		n.d.	---	5
八溴聯苯		n.d.	---	5
九溴聯苯		n.d.	---	5
十溴聯苯		n.d.	---	5
多溴聯苯醚總和		n.d.	---	-
一溴聯苯醚		n.d.	---	5
二溴聯苯醚		n.d.	---	5
三溴聯苯醚		n.d.	---	5
四溴聯苯醚		n.d.	---	5
五溴聯苯醚		n.d.	---	5
六溴聯苯醚		n.d.	---	5
七溴聯苯醚		n.d.	---	5
八溴聯苯醚		n.d.	---	5
九溴聯苯醚	n.d.	---	5	
十溴聯苯醚	n.d.	---	5	

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**測試部位描述：**

- No.1 : 混測本體
No.2 : 銀色金屬 (含鍍層)

備註：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. Spot-test:

Negative=鍍層中偵測不到六價鉻, Positive=鍍層中偵測到六價鉻;

當該測項無法確認時, 測試樣品可藉由boiling-water-extraction測試方法進一步確認

Boiling-water-extraction:

Negative=鍍層中偵測不到六價鉻, Positive=鍍層中偵測到六價鉻;

該溶液濃度 ≥ 0.02 mg/kg with 50 cm^2 (sample surface area)

5. "-" = Not Regulated (無規格值)

6. "---" = Not Conducted (未測項目)

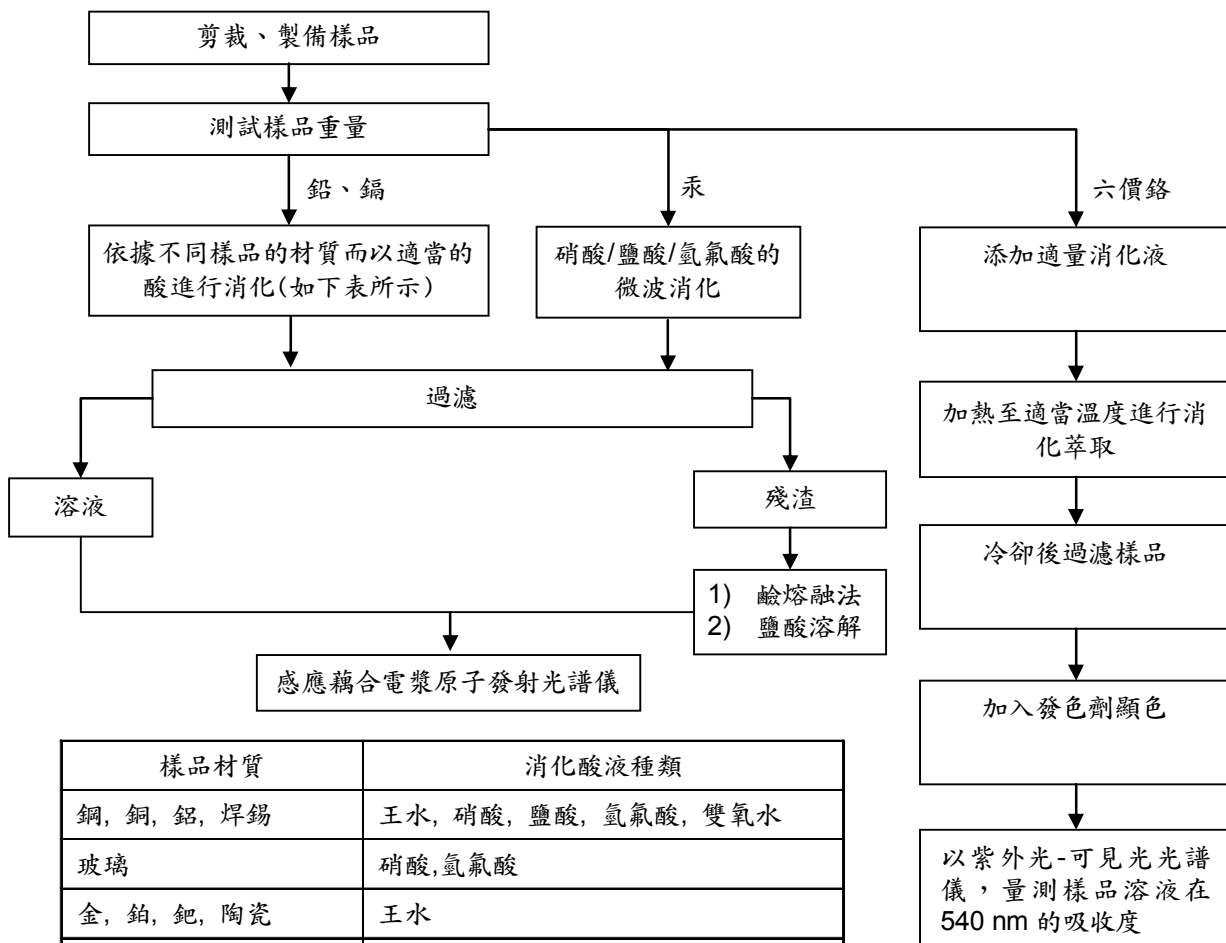
7. 樣品的測試是基於申請人要求混合測試, 報告中的混合測試結果不代表其中個別單一材質的含量。

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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)
- 2) 測試人員：楊登偉
- 3) 測試負責人：張啓興



樣品材質	消化酸液種類
鋼, 銅, 鋁, 焊錫	王水, 硝酸, 鹽酸, 氫氟酸, 雙氧水
玻璃	硝酸, 氫氟酸
金, 鉑, 鈀, 陶瓷	王水
銀	硝酸
塑膠	硫酸, 雙氧水, 硝酸, 鹽酸
其他	加入任何酸至完全溶解

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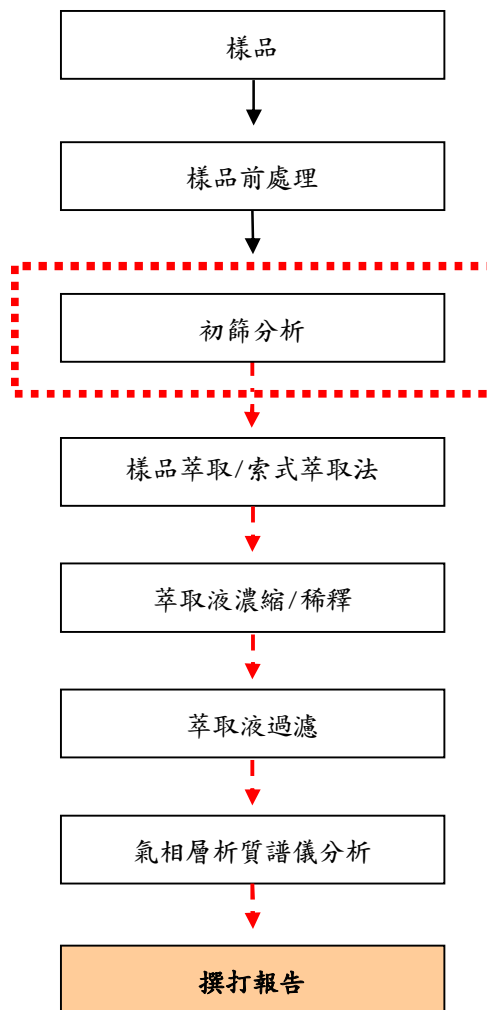
多溴聯苯/多溴聯苯醚分析流程圖

初次測試程序 ———▶

選擇性篩檢程序 ·····▶

確認程序 - - - ▶

- 1) 測試人員：翁賜彬
- 2) 測試負責人：陳新智



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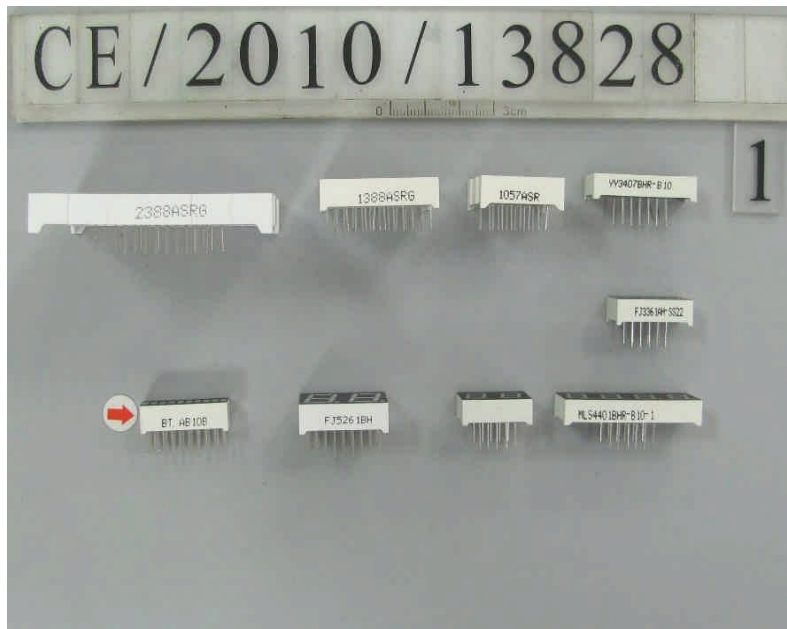
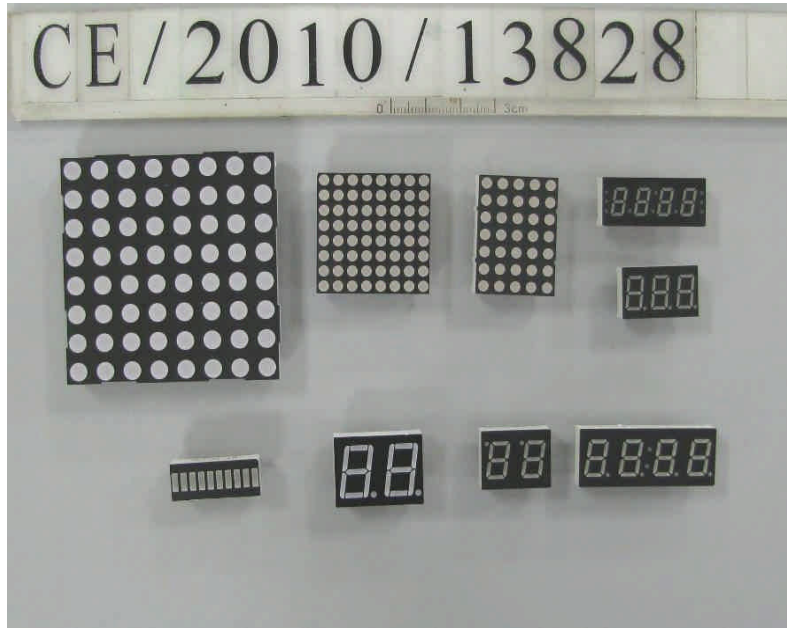
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** 報告結尾 **

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