

## 測試報告

號碼：CE/2010/22454A

日期：2010/02/22

頁數：1 of 7

台灣化學纖維股份有限公司  
台北市敦化北路201號



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：聚苯乙烯樹脂  
樣品型號：TAIRIREX GP5000, GP5500, MP6250, HP8250, HP9450  
收件日期：2010/02/09  
測試期間：2010/02/09 TO 2010/02/22

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測試需求：參照多苯環芳香族化合物及其修定指令要求。

測試結果：請見下一頁。

結論：根據客戶所提供的樣品，其多苯環芳香族化合物的測試結果符合德國ZLS的ZEK 01.2-08及其相關修訂文件中的第1類PAHs要求。

Shin-Jyh Chen

Shin-jyh Chen / Asst. Manager  
Signed for and on behalf of  
SGS TAIWAN LTD.  
Chemical Laboratory - Taipei

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### 測試結果

測試部位 NO.1 : 透明塑膠粒 (GP5000)  
 測試部位 NO.2 : 透明塑膠粒 (GP5500)  
 測試部位 NO.3 : 白色塑膠粒 (MP6250)  
 測試部位 NO.4 : 白色塑膠粒 (HP8250)  
 測試部位 NO.5 : 白色塑膠粒 (HP9450)

測試項目	單位	測試方法	方法偵測 極限值	結果				
				NO.1	NO.2	NO.3	NO.4	NO.5
<b>多苯環芳香族化合物 (PAHs)</b>								
Acenaphthene (CAS No.: 000083-32-9)	mg/kg	參考ZLS standard ZEK 01.2-08方法, 以氣相層 析質譜儀(GC/MS)檢測.	0.2	n.d.	n.d.	n.d.	n.d.	n.d.
Acenaphthylene (CAS No.: 000208-96-8)			0.2	n.d.	n.d.	n.d.	n.d.	n.d.
Anthracene (CAS No.: 000120-12-7)			0.2	n.d.	n.d.	n.d.	n.d.	n.d.
Benzo[a]anthracene (CAS No.: 000056-55-3)			0.2	n.d.	n.d.	n.d.	n.d.	n.d.
Benzo[a]pyrene (CAS No.: 000050-32-8)			0.2	n.d.	n.d.	n.d.	n.d.	n.d.
Benzo[b]fluoranthene (CAS No.: 000205-99-2)			0.2	n.d.	n.d.	n.d.	n.d.	n.d.
Benzo[g,h,i]perylene (CAS No.: 000191-24-2)			0.2	n.d.	n.d.	n.d.	n.d.	n.d.
Benzo[k]fluoranthene (CAS No.: 000207-08-9)			0.2	n.d.	n.d.	n.d.	n.d.	n.d.
Chrysene (CAS No.: 000218-01-9)			0.2	n.d.	n.d.	n.d.	n.d.	n.d.
Dibenzo[a,h]anthracene (CAS No.: 000053-70-3)			0.2	n.d.	n.d.	n.d.	n.d.	n.d.
Fluoranthene (CAS No.: 000206-44-0)			0.2	n.d.	n.d.	n.d.	n.d.	n.d.
Fluorene (CAS No.: 000086-73-7)			0.2	n.d.	n.d.	n.d.	n.d.	n.d.
Indeno[1,2,3-c,d] pyrene (CAS No.: 000193-39-5)			0.2	n.d.	n.d.	n.d.	n.d.	n.d.
Naphthalene (CAS No.: 000091-20-3)			0.2	n.d.	n.d.	n.d.	n.d.	n.d.
Phenanthrene (CAS No.: 000085-01-8)			0.2	n.d.	n.d.	n.d.	n.d.	n.d.
Pyrene (CAS No.: 000129-00-0)			0.2	n.d.	n.d.	n.d.	n.d.	n.d.
<b>多苯環芳香族化合物16項總和</b>	-	n.d.	n.d.	n.d.	n.d.	n.d.		

- 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. "-" = Not Regulated / 無規格值

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### 參考資料：

依據ZEK 01.2-08之要求：產品中最大值為

項目	第1類	第2類	第3類
	與食品接觸或放入嘴內的材料，以及給三歲以下的幼兒使用的玩具。	持續地(長時間)與皮膚接觸逾30秒，以及不屬第1類的玩具。	暫時地(短時間)與皮膚接觸但不逾30秒或不會與皮膚接觸。
苯駢(a)芘 Benzo[a]pyrene (mg/kg)	<MDL (<0.2)**	1	20
環保署規範16項PAH 總濃度 (mg/kg)*	<MDL (<0.2)**	10	200

注意：\* = PAH濃度大於0.2mg/kg時，則須計算PAH總濃度值

\*\* = 最大濃度值超出等級一的限制，但在等級二的濃度限制值內時，可能需要確認測試材質是否合適於食品容器或是依照DIN EN1186ff/ § 64 LFGB 80.30-1方法，針對特定PAH的遷移測試進行測試。遷移測試的結論需依照食品法規規範

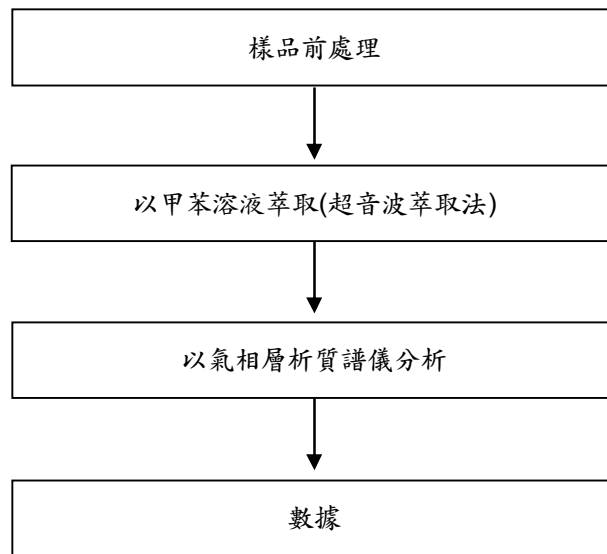
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### 多苯環芳香族化合物分析流程圖

- 1) 測試人員：徐毓明
- 2) 測試負責人：陳新智



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\*\* 報告結尾 \*\*

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