



材料及工程實驗室-台北

試驗報告



報告編號：HV-13-05905X

頁數：1 OF 8

報告日期：2013 年 11 月 20 日

膜法園有限公司

桃園縣桃園市宏昌六街 61 巷 36 弄 70 號

我們依照顧客的要求，根據顧客提供的產品敘述如下：

產品敘述： MYMOS 車體專用包膜
產品型號： MYMOS 車體專用包膜
原產國： 台灣
備註： 除非另有說明，此報告結果僅對測試之樣品負責
未經本公司事先書面同意，此報告不可部分複製

我們依照顧客的要求，根據顧客送交之樣品進行試驗結果如下：

委託試驗要求：(依照客戶提供之測試規格進行試驗，詳細內容請參照附頁。)

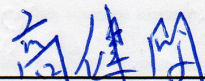
- (1) 耐候試驗
- (2) 耐酸性試驗
- (3) 耐鹼性試驗
- (4) 抗拉強度
- (5) 撕裂強度

試驗結果：

— 如附頁所示 —

收件日期： 2013 年 09 月 09 日

試驗日期： 2013 年 09 月 09 日~2013 年 11 月 12 日


報告簽署人

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材料及工程實驗室-台北

試驗報告



報告編號：HV-13-05905X

頁數：2 OF 8

報告日期：2013 年 11 月 20 日

(1) 耐候試驗

試驗設備：

名稱	廠牌	型號
Accelerated Weathering Tester	Q-PANEL	QUV/SE
Spectrophotometer	MINOLTA	CM-3600d

實驗室環境條件：

環境溫度：23±2℃
相對濕度：50±5%RH

試驗方法：

ASTM G154-12 Standard Practice for Operating Fluorescent Light Apparatus for UV Exposure of Nonmetallic Materials
ASTM D2244-11 Standard Practice for Calculation of Color Tolerances and Color Differences from Instrumentally Measured Color Coordinates

試驗條件：

耐候試驗
燈管：UVA-340
照射能量：0.89W/m² 在 340 nm
每一循環條件：8小時照光，黑板溫度60℃；4小時冷凝，黑板溫度50℃
試驗時間：800 小時

總色差量測 (ΔE*ab)

光源：CIE illuminant D₆₅
標準視角：CIE 1964 standard colorimetric observer (10° observer)
量測孔徑：φ 25.4mm
量測間距：10mm
波長範圍：360nm~740nm
量測模式：反射式量測

試驗結果：

試驗項目		試驗結果		
		耐候 400 小時後	耐候 600 小時後	耐候 800 小時後
目視外觀	黃色	無龜裂、剝離現象	無龜裂、剝離現象	無龜裂、剝離現象
	透明色	無龜裂、剝離現象	無龜裂、剝離現象	無龜裂、剝離現象

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材料及工程實驗室-台北

試驗報告



報告編號: HV-13-05905X

頁數: 4 OF 8

報告日期: 2013 年 11 月 20 日

(2) 耐酸性

實驗室環境條件:

環境溫度: $23 \pm 2^{\circ}\text{C}$

相對濕度: $65 \pm 10\% \text{RH}$

試驗方法:

CNS 10757(1995) 塗料一般檢驗法(有關塗膜之物理、化學抗性之試驗法)

試驗條件:

試驗溶液: 5 % 硫酸

試驗溫度: 23°C

試驗時間: 24 小時

試驗結果:

試驗項目	試驗結果	
	黃色	透明色
耐酸性	酸浸漬試驗無異常	酸浸漬試驗無異常

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材料及工程實驗室-台北

試驗報告



報告編號：HV-13-05905X

頁數：5 OF 8

報告日期：2013 年 11 月 20 日

(3) 耐鹼性

實驗室環境條件：

環境溫度：23±2°C

相對濕度：65±10%RH

試驗方法：

CNS 10757(1995) 塗料一般檢驗法(有關塗膜之物理、化學抗性之試驗法)

試驗條件：

試驗溶液：5 %碳酸鈉

試驗溫度：23°C

試驗時間：24 小時

試驗結果：

試驗項目	試驗結果	
	黃色	透明色
耐鹼性	鹼浸漬試驗無異常	鹼浸漬試驗無異常

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材料及工程實驗室-台北

試驗報告



報告編號：HV-13-05905X

頁數：6 OF 8

報告日期：2013 年 11 月 20 日

(4) 抗拉強度

試驗設備：

名稱	廠牌	型號
150mm 針盤式游標卡尺	Mitutoyo	505-681
50kN 材料試驗機	INSTRON	5969

實驗室環境條件：

環境溫度：23±2°C

相對濕度：50±5%RH

試驗方法：

ASTM D882-10 Standard Test Method for Tensile Properties of Thin Plastic Sheeting

試驗條件：

試驗速度：500 mm/min

標線距離：25 mm

試驗結果：

試驗項目		試驗結果	
		原始	耐候 800 小時
抗拉強度 (kgf/cm ²)	黃色	233.7	272.5
	透明色	228.9	323.4

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材料及工程實驗室-台北

試驗報告



報告編號：HV-13-05905X

頁數：7 OF 8

報告日期：2013 年 11 月 20 日

(5) 撕裂強度

試驗設備：

名稱	廠牌	型號
150mm 針盤式游標卡尺	Mitutoyo	505-681
50kN 材料試驗機	INSTRON	5969

實驗室環境條件：

環境溫度：23±2°C

相對濕度：50±5%RH

試驗方法：

ASTM D1004-09 Standard Test Method for Initial Tear Resistance of Plastic Film and Sheeting

試驗條件：

試驗速度：51 mm/min

試驗結果：

試驗項目		試驗結果	
		原始	耐候 800 小時
撕裂強度 (kgf/mm)	黃色	10.52	12.47
	透明色	13.02	13.73

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測試報告

號碼：CE/2013/64911

日期：2013/07/04

頁數：1 of 5

膜法園有限公司
桃園縣桃園市宏昌六街



以下測試樣品係由申請廠商所提供及確認：

送樣廠商：膜法園有限公司
樣品名稱：車體專用包膜
原產國：台灣
收件日期：2013/06/27
測試期間：2013/06/27 TO 2013/07/04

測試需求：依據客戶指定，進行鎘，鉛，汞，六價鉻，多溴聯苯，多溴聯苯醚測試。

測試方法：參考IEC 62321: 2008方法。

測試結果：請見下一頁。



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測試報告

號碼：CE/2013/64911

日期：2013/07/04

頁數：2 of 5

膜法園有限公司
桃園縣桃園市宏昌六街



測試結果

測試部位 No.1：透明片狀及其上膠（不含離型膜）

測試項目	單位	測試方法	方法偵測 極限值	結果 No.1
鎘	mg/kg	參考 IEC 62321: 2008 方法, 以感應耦合電漿 原子發射光譜儀 (ICP-AES) 檢測。	2	n.d.
鉛	mg/kg		2	n.d.
汞	mg/kg		2	n.d.
六價鉻	mg/kg	參考 IEC 62321: 2008 方法, 以 UV-VIS 檢測。	2	n.d.
多溴聯苯總和	mg/kg	參考 IEC 62321: 2008 方法, 以氣相層析/質 譜儀 (GC/MS) 檢測。	-	n.d.
一溴聯苯	mg/kg		5	n.d.
二溴聯苯	mg/kg		5	n.d.
三溴聯苯	mg/kg		5	n.d.
四溴聯苯	mg/kg		5	n.d.
五溴聯苯	mg/kg		5	n.d.
六溴聯苯	mg/kg		5	n.d.
七溴聯苯	mg/kg		5	n.d.
八溴聯苯	mg/kg		5	n.d.
九溴聯苯	mg/kg		5	n.d.
十溴聯苯	mg/kg		5	n.d.
多溴聯苯醚總和	mg/kg		-	n.d.
一溴聯苯醚	mg/kg		5	n.d.
二溴聯苯醚	mg/kg		5	n.d.
三溴聯苯醚	mg/kg		5	n.d.
四溴聯苯醚	mg/kg		5	n.d.
五溴聯苯醚	mg/kg		5	n.d.
六溴聯苯醚	mg/kg		5	n.d.
七溴聯苯醚	mg/kg		5	n.d.
八溴聯苯醚	mg/kg		5	n.d.
九溴聯苯醚	mg/kg		5	n.d.
十溴聯苯醚	mg/kg		5	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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