

測試報告 Test Report

號碼(No.) : CE/2009/A5860 日期(Date) : 2009/11/06 頁數(Page) : 1 of 9

全科企業股份有限公司

PANTECH TAPE CO., LTD.

桃園縣楊梅鎮中山南路800巷98弄8號

NO. 8, ALLEY 98, LANE 800, CHUNG-SHAN SOUTH ROAD, YANGMEI, TAOYUAN 32669, TAIWAN



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)	: PET保護膜 (PET PROTECTION TAPE)
樣品型號(Style/Item No.)	: BS100/BSC100, BS100T/BSC100T, NS100/NSC100, NS100T/NSC100T, BS50/BSC50, BS50T/BSC50T, NS50/NSC50, NS50T/NSC50T
收件日期(Sample Receiving Date)	: 2009/10/30
測試期間(Testing Period)	: 2009/10/30 TO 2009/11/06

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

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 : 透明色塑膠膜 (含離型膜) (TRANSPARENT PLASTIC FILM (INCLUDING THE RELEASE FILM))

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)
				NO.1
鎘 / Cadmium (Cd)	mg/kg	參考IEC 62321: 2008方法, 以感應 藕合電漿原子發射光譜儀檢測。 / With reference to IEC 62321: 2008 and performed by ICP-AES.	2	n.d.
鉛 / Lead (Pb)	mg/kg	參考IEC 62321: 2008方法, 以感應 藕合電漿原子發射光譜儀檢測。 / With reference to IEC 62321: 2008 and performed by ICP-AES.	2	n.d.
汞 / Mercury (Hg)	mg/kg	參考IEC 62321: 2008方法, 以感應 藕合電漿原子發射光譜儀檢測。 / With reference to IEC 62321: 2008 and performed by ICP-AES.	2	n.d.
六價鉻 / Hexavalent Chromium Cr(VI) by alkaline extraction	mg/kg	參考IEC 62321: 2008方法, 以UV- VIS檢測。 / With reference to IEC 62321: 2008 and performed by UV- VIS.	2	n.d.

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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)
				NO.1
多苯環芳香族化合物 / Polynuclear Aromatic Hydrocarbons (PAHs)				
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. / With reference to ZLS standard ZEK 01.2-08 method. Analysis was performed by GC/MS.	0.2	n.d.
Acenaphthylene (CAS No.: 000208-96-8)			0.2	n.d.
Anthracene (CAS No.: 000120-12-7)			0.2	n.d.
Benzo[a]anthracene (CAS No.: 000056-55-3)			0.2	n.d.
Benzo[a]pyrene (CAS No.: 000050-32-8)			0.2	n.d.
Benzo[b]fluoranthene (CAS No.: 000205-99-2)			0.2	n.d.
Benzo[g,h,i]perylene (CAS No.: 000191-24-2)			0.2	n.d.
Benzo[k]fluoranthene (CAS No.: 000207-08-9)			0.2	n.d.
Chrysene (CAS No.: 000218-01-9)			0.2	n.d.
Dibenzo[a,h]anthracene (CAS No.: 000053-70-3)			0.2	n.d.
Fluoranthene (CAS No.: 000206-44-0)			0.2	n.d.
Fluorene (CAS No.: 000086-73-7)			0.2	n.d.
Indeno[1,2,3-c,d] pyrene (CAS No.: 000193-39-5)			0.2	n.d.
Naphthalene (CAS No.: 000091-20-3)			0.2	n.d.
Phenanthrene (CAS No.: 000085-01-8)			0.2	n.d.
Pyrene (CAS No.: 000129-00-0)			0.2	n.d.
多苯環芳香族化合物16項總和 / Sum of 16 PAHs			-	n.d.

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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)
				NO.1
多溴聯苯總和 / Sum of PBBs	mg/kg	參考IEC 62321: 2008方法, 以氣相層析儀/質譜儀檢測. / With reference to IEC 62321: 2008 and performed by GC/MS.	-	n.d.
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			-	n.d.
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 ; 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)
5. 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。
(The samples was/were analyzed on behalf of the applicant as mixing sample in one testing.
The above results was/were only given as the informality value.)

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SGS Taiwan Ltd.
台灣檢驗科技股份有限公司 Chemical-Taipei 33 WuChyuan Road, Wuku Industrial Zone, Taipei County, Taiwan /台北縣五股工業區五權路33號 t + 886 (02)2299 3279 f + 886 (02)2299 3237 www.sgs.com

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參考資料(Reference information) :

依據ZEK 01.2-08之要求: 產品中最大值為

(Requirement of ZEK 01.2-08 : Restraining maximum values for products)

項目 (Parameter)	第1類 (Category 1)	第2類 (Category 2)	第3類 (Category 3)
	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. (Materials in contact with foodstuff or materials which are meant to put in the mouth as well as toys for children <36 months.)	持續地(長時間)與皮膚接觸逾30秒, 以及不屬第1類的玩具. (Materials with foreseeable skin contact >30 s (prolonged skin contact) and toys not covered by category 1.)	暫時地(短時間)與皮膚接觸但不逾30秒或不會與皮膚接觸. (Materials with foreseeable skin contact <30 s (short time skin contact) or without skin contact.)
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 (Sum of 16 EPA-PAH) (mg/kg)*	<MDL (<0.2)**	10	200

注意(Remark): * = PAH濃度大於0.2mg/kg時, 則須計算PAH總濃度值

(Only PAH substances >0.2 mg/kg are taken into account while calculating the sum of PAHs)

** = 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

(In case that the maximum values exceed the limits of category 1, but are within the limits of category 2, one may confirm the suitability of the tested material for contact with foodstuff or oral mucosa by additional specific migration tests of PAH components based on DIN EN 1186ff and § 64 LFGB 80.30-1. The conclusion of the migration test results must be made based on food law criteria.)

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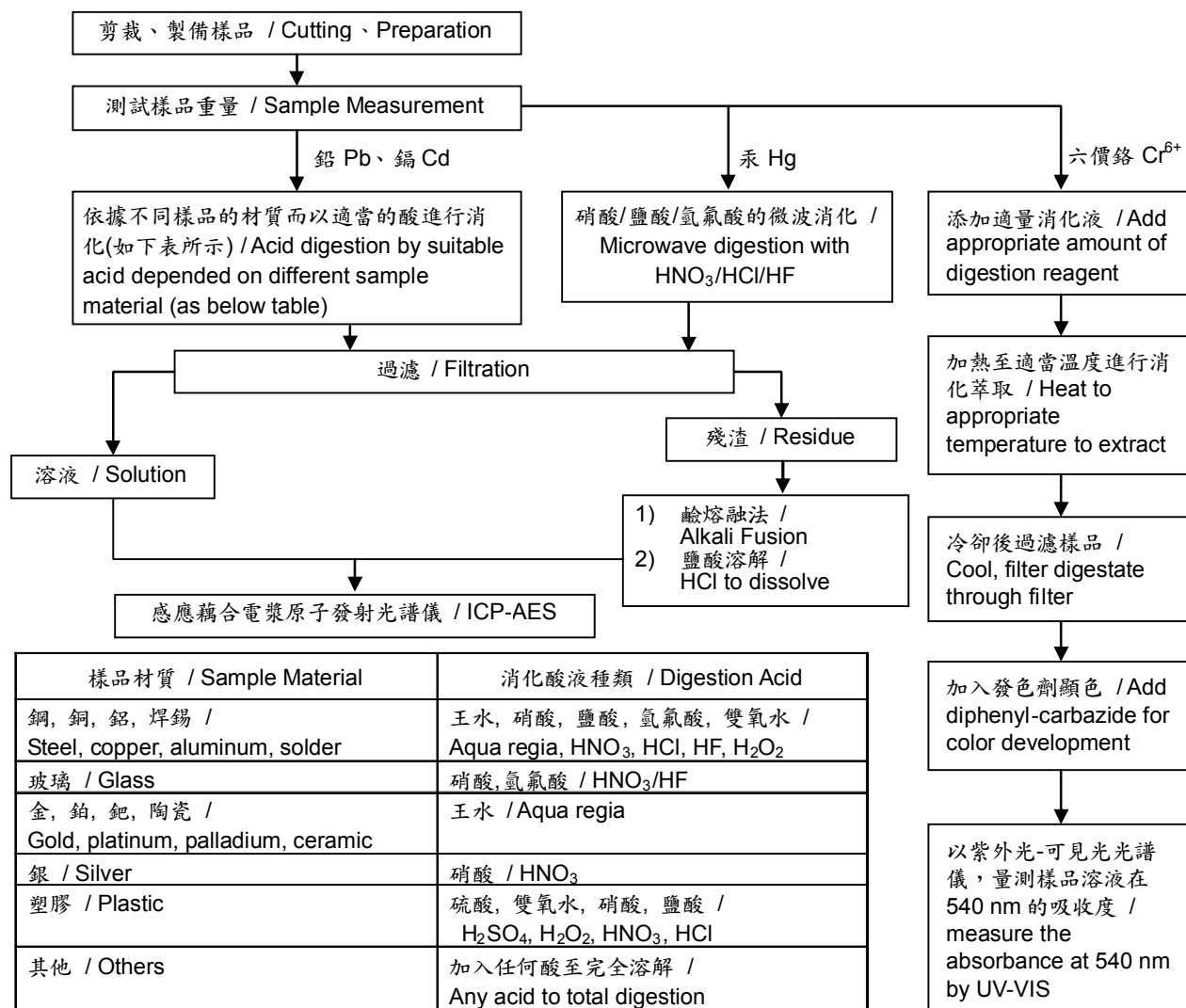
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- 1) 根據以下的流程圖之條件，樣品已完全溶解。(六價鉻測試方法除外) / These samples were dissolved totally by pre-conditioning method according to below flow chart. (Cr⁶⁺ test method excluded)
- 2) 測試人員：楊登偉 / Name of the person who made measurement: Climbgreat Yang
- 3) 測試負責人：張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



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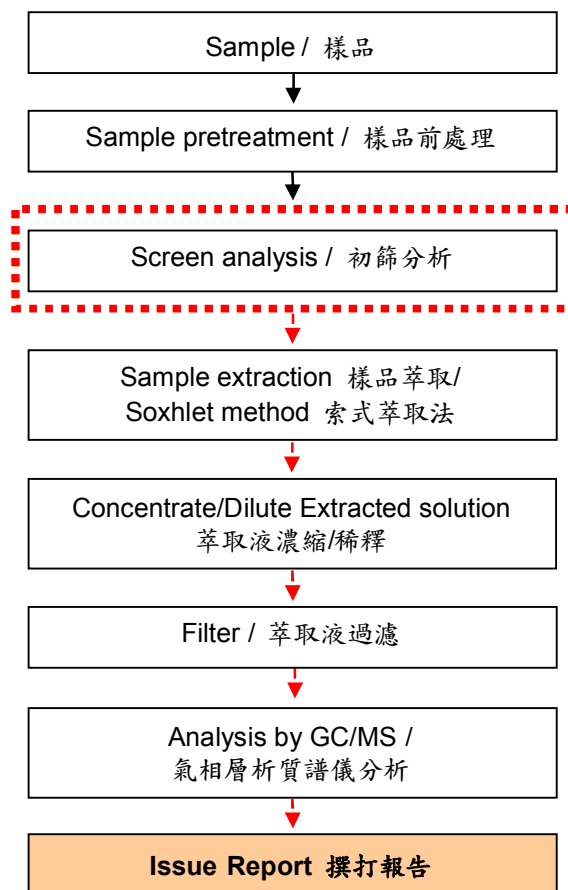
多溴聯苯/多溴聯苯醚分析流程圖 / PBB/PBDE analytical FLOW CHART

- 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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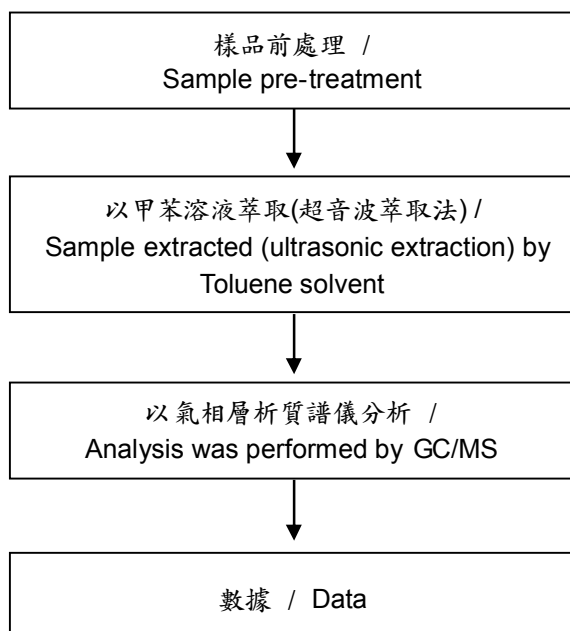
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多苯環芳香族化合物分析流程圖 /

PAHs (Polynuclear Aromatic Hydrocarbons) analytical flow chart

- 1) 測試人員：徐毓明 / Name of the person who made measurement: Andy Shu
- 2) 測試負責人：陳新智 / Name of the person in charge of measurement: Shinjyh Chen



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**** 報告結尾(End of Report) ****

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