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測試報告 Test Report

號碼(No.) : CE/2009/23901 日期(Date) : 2009/02/23 頁數(Page) : 1 of 9

大松實業股份有限公司
DYNACHEM & CO., LTD.

台北市重慶北路三段139號B樓

8F, NO. 139, SEC. 3, CHUNG CHING NORTH ROAD, TAIPEI, TAIWAN, R. O. C.



以下測試樣品係由客戶送樣，且由客戶簽署並經客戶確認如下 (The following samples was/were submitted and identified by/on behalf of the client as) :

樣品名稱 (Sample Description)	:	聚甲基-丙烯酸-甲酯粒 (POLYMETHYL METHACRYLATE (PMMA), DESIGNATED "SHINKOLITE-P, ACRYPET" FURNISHED AS PELLETS)
樣品型號 (Style/Item No.)	:	MD; MF; TF8; V; VH; VH067A; VH4; VH5; VH6; VHM; VHS; IRD30; IRD50; IRD70; IRH30; IRH60; IRH70; IRG304; IRG604; IRK304; IRS204; IRS404; IRK204; VRL20; VRL40; VRS40; VRM40
生產或供應廠商 (Manufacturer/Vendor)	:	MITSUBISHI RAYON CO., LTD. ; NANTONG RAYON CHEMICAL CO., LTD.
收件日期 (Sample Receiving Date)	:	2009/02/16
測試期間 (Testing Period)	:	2009/02/16 TO 2009/02/23

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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測試報告 Test Report

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RP, NO. 139, SEC. 3, CHUNG CHING NORTH ROAD, TAIPEI, TAIWAN, R. O. C.



測試結果 (Test Results)

測試部位 (PART NAME) NO.1

: 透明塑膠粒 (TRANSPARENT PLASTIC PELLETS)

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, 用感應 耦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, 用感應 耦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, 用感應 耦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, 用UV- VIS檢測。/ With reference to IEC 62321: 2008 and performed by UV- VIS.	2	n.d.
全氟辛烷磺酸 / Perfluorooctane sulfonates (PFOS) PFOS - Acid PFOS - Metal Salt PFOS - Anido	mg/kg	參考US EPA 3540C: 1996方法, 以液 相層析質譜儀檢測全氟辛烷磺酸含 量。/ With reference to US EPA 3540C: 1996 method for PFOS Content. Analysis was performed by LC/MS.	10	n.d.
全氟辛酸(銨) / PFOA (CAS No.: 000335- 67-1)	mg/kg	參考US EPA 3540C: 1996方法, 以液 相層析質譜儀檢測全氟辛酸(銨)含 量。/ With reference to US EPA 3540C: 1996 method for PFOA Content. Analysis was performed by LC/MS.	10	n.d.

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8F, NO. 139, SEC. 3, CHUNG CHING NORTH ROAD, TAIPEI, TAIWAN, R. O. C.



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.		
鹵素 / Halogen		參考 BS EN 14582:2007, 以離子層析儀分析氯, 氟, 溴, 碘含量。 / With reference to BS EN 14582:2007. Analysis was performed by IC method for P, Cl, Br, I content.		
鹵素 (氟) / Halogen-Fluorine (F) (CAS No.: 011762-94-8)	mg/kg	參考 BS EN 14582:2007, 以離子層析儀分析氟含量。 / With reference to BS EN 14582:2007. Analysis was performed by IC method for Fluorine content.	50	n.d.

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DYNACHEN & CO., LTD.

台北市重慶北路三段139號8樓

8F, NO. 139, SEC. 3, CHUNG CHING NORTH ROAD, TAIPEI, TAIWAN, R. O. C.



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
鹵素(氯) / Halogen-Chlorine (Cl) (CAS No.: 022037-15-1)	mg/kg	參考BS EN 14582:2007, 以離子層析儀分析氯含量。 / With reference to BS EN 14582:2007. Analysis was performed by IC method for Chlorine content.	50	n.d.
鹵素(溴) / Halogen-Bromine (Br) (CAS No.: 010097-32-2)	mg/kg	參考BS EN 14582:2007, 以離子層析儀分析溴含量。 / With reference to BS EN 14582:2007. Analysis was performed by IC method for Bromine content.	50	n.d.
鹵素(碘) / Halogen-Iodine (I) (CAS No.: 014062-44-8)	mg/kg	參考BS EN 14582:2007, 以離子層析儀分析碘含量。 / With reference to BS EN 14582:2007. Analysis was performed by IC method for Iodine content.	50	n.d.

備註(Notes):

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)

PFOS參考資訊(Reference Information): 指令 2006/122/EC (Directive 2006/122/EC)

- (1) 該物質不可置於市場上或使用於特殊物質或配置成分重量濃度等於或大於0.005%。
(May not be placed on the market or used as a substance or constituent of preparations in a concentration equal to or higher than 0.005 % by mass.)
- (2) 該物質不可置於市場上的半成品或商品或其物件: 假若零件上明顯地具有PFOS並參照結構上及微細構造上計算PFOS重量濃度等於或大於0.1%, 而紡織品或其他覆蓋物質, 如果PFOS在覆蓋物質中含量等於或大於 $1\mu\text{g}/\text{m}^2$ 。
(May not be placed on the market in semi-finished products or articles, or parts thereof, if the concentration of PFOS is equal to or higher than 0.1 % by mass calculated with reference to the mass of structurally or microstructurally distinct parts that contain PFOS or, for textiles or other coated materials, if the amount of PFOS is equal to or higher than $1\mu\text{g}/\text{m}^2$ of the coated material.)

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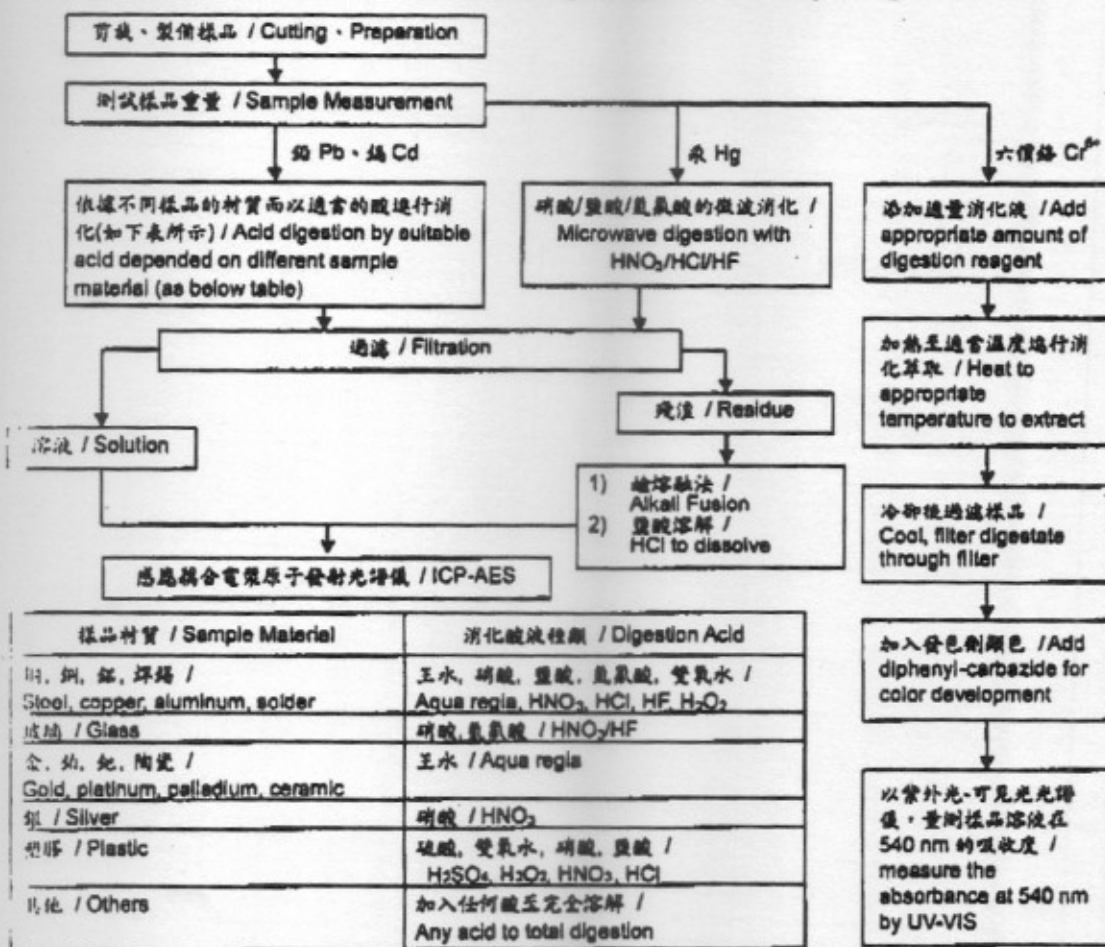
太松實業股份有限公司
DYNACHEM & CO., LTD.

台北市忠於北路三段130號8樓

8F, NO. 130, SEC. 3, CHUNG CHING NORTH ROAD, TAIPEI, TAIWAN, R. O. C.



- 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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DYNACHIEF CO., LTD.

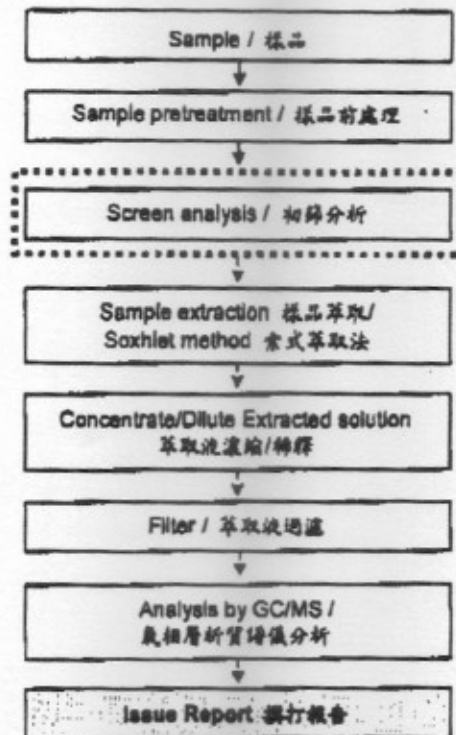
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#F, NO. 139, SEC. 3, CHUNG CHING NORTH ROAD, TAIPEI, TAIWAN, R. O. C.



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

- 1) 測試人員：翁錫彬 / 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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鹵素分析流程圖 / Analytical flow chart of halogen content

- 1) 測試人員：陳立倫 / Name of the person who made measurement: Alan Chen
- 2) 測試負責人：張啓興 / Name of the person in charge of measurement: Troy Chang



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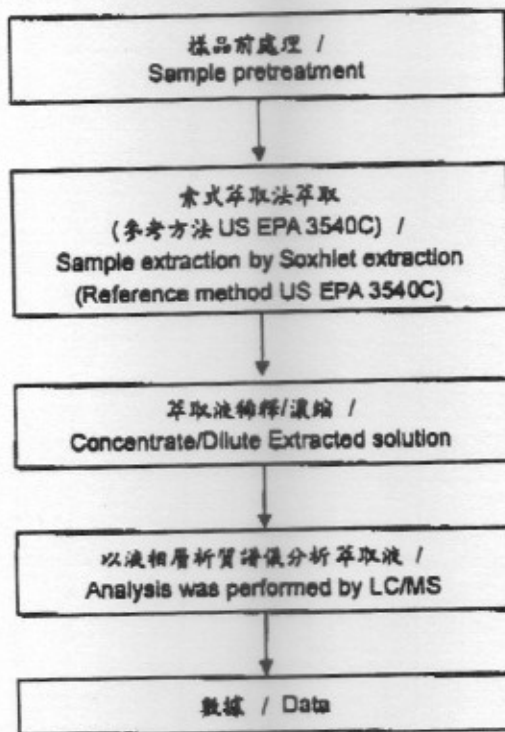
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全氟辛酸(胺)/全氟辛烷磺酸分析流程圖 / Analytical flow chart of PFOA/PFOS content

- 1) 測試人員：劉家達 / Name of the person who made measurement: Carrie Liu
- 2) 測試負責人：陳新智 / Name of the person in charge of measurement: Shinjyh Chen



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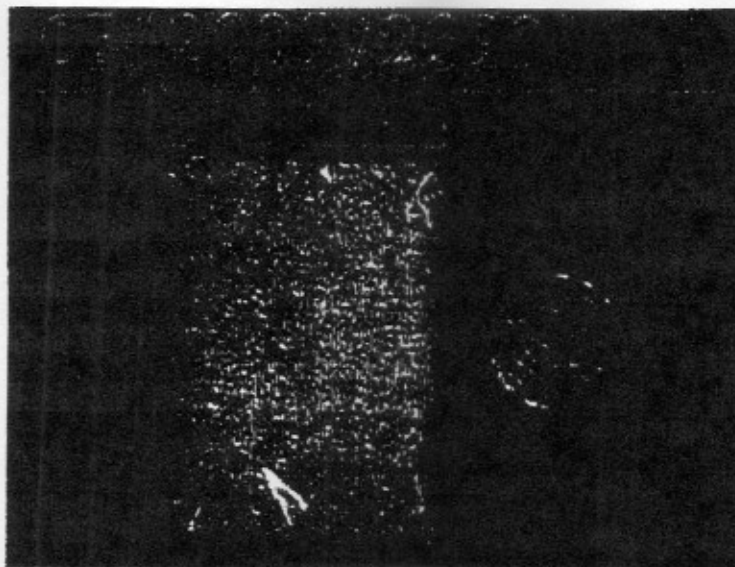
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DYNAMIC CO., LTD.

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