

## 測試報告

## Test Report

號碼(No.) : CE/2015/41072 日期(Date) : 2015/04/14

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南亞塑膠工業股份有限公司

NAN YA PLASTICS CORPORATION

新北市泰山區南林路102號

NO. 102, NANLIN RD., TAISHAN DIST., NEW TAIPEI CITY, TAIWAN



以下測試樣品係由申請廠商所提供及確認 (The following sample(s) was/were submitted and identified by/on behalf of the applicant as) :

送樣廠商(Sample Submitted By) : 南亞塑膠工業股份有限公司 (NAN YA PLASTICS CORPORATION)  
樣品名稱(Sample Description) : NAN YA PVC INDUSTRY FILM(南亞工業用PVC膠膜)  
收件日期(Sample Receiving Date) : 2015/04/07  
測試期間(Testing Period) : 2015/04/07 TO 2015/04/14

=====  
**測試需求(Test Requested) :**

- (1) 依據客戶要求, 參考 RoHS 指令 2011/65/EU Annex II 測試鎘、鉛、汞、六價鉻、多溴聯苯、多溴聯苯醚。(As specified by client, with reference to RoHS Directive 2011/65/EU Annex II to determine Cadmium, Lead, Mercury, Cr(VI), PBBs, PBDEs contents in the submitted sample.)
- (2) 依據客戶要求, 參考 WTO/TBT 通報 G/TBT/N/EU/256, 檢測 DBP, BBP, DEHP, DIBP. (As specified by client, with reference to G/TBT/N/EU/256 of WTO/TBT to test DBP, BBP, DEHP, DIBP.)

**測試方法(Test Method) :** 請見下一頁 (Please refer to next pages).

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

**結論(Conclusion) :**

- (1) 根據客戶所提供的樣品, 其鎘、鉛、汞、六價鉻、多溴聯苯、多溴聯苯醚的測試結果符合 RoHS 指令 2011/65/EU Annex II 之限值要求 (Based on the performed tests on submitted samples, the test result(s) of Cadmium, Lead, Mercury, Cr(VI), PBBs, PBDEs comply with the limits as set by RoHS Directive 2011/65/EU Annex II.)
- (2) 根據客戶所提供的樣品, 其 DBP, BBP, DEHP, DIBP 之測試結果符合 WTO/TBT 通報 G/TBT/N/EU/256 之限值要求 (Based on the performed tests on submitted samples, the test results of DBP, BBP, DEHP, DIBP comply with the limits as set by G/TBT/N/EU/256 of WTO/TBT.)

  
**Troy Chang, Manager - Tech**  
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 : 透明塑膠膜 (TRANSPARENT PLASTIC FILM)

| 測試項目<br>(Test Items)             | 單位<br>(Unit) | 測試方法<br>(Method)   | 方法偵測<br>極限值<br>(MDL) | 結果<br>(Result) | 限值<br>(Limit) |
|----------------------------------|--------------|--|----------------------|----------------|---------------|
|                                  |              |  |                      | No.1           |               |
| 鎘 / Cadmium (Cd)                 | mg/kg        | 參考IEC 62321-5: 2013方法, 以感應耦合電漿原子發射光譜儀檢測. / With reference to IEC 62321-5: 2013 and performed by ICP-AES. | 2                    | n.d.           | 100           |
| 鉛 / Lead (Pb)                    | mg/kg        | 參考IEC 62321-5: 2013方法, 以感應耦合電漿原子發射光譜儀檢測. / With reference to IEC 62321-5: 2013 and performed by ICP-AES. | 2                    | n.d.           | 1000          |
| 汞 / Mercury (Hg)                 | mg/kg        | 參考IEC 62321-4: 2013方法, 以感應耦合電漿原子發射光譜儀檢測. / With reference to IEC 62321-4: 2013 and performed by ICP-AES. | 2                    | n.d.           | 1000          |
| 六價鉻 / Hexavalent Chromium Cr(VI) | 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.           | 1000          |
| 多溴聯苯總和 / Sum of PBBs             | mg/kg        | 參考IEC 62321: 2008方法, 以氣相層析/質譜儀檢測. / With reference to IEC 62321: 2008 and performed by GC/MS.            | -                    | n.d.           | 1000          |
| 一溴聯苯 / Monobromobiphenyl         | mg/kg        |  | 5                    | n.d.           | -             |
| 二溴聯苯 / Dibromobiphenyl           | mg/kg        |  | 5                    | n.d.           | -             |
| 三溴聯苯 / Tribromobiphenyl          | mg/kg        |  | 5                    | n.d.           | -             |
| 四溴聯苯 / Tetrabromobiphenyl        | mg/kg        |  | 5                    | n.d.           | -             |
| 五溴聯苯 / Pentabromobiphenyl        | mg/kg        |  | 5                    | n.d.           | -             |
| 六溴聯苯 / Hexabromobiphenyl         | mg/kg        |  | 5                    | n.d.           | -             |
| 七溴聯苯 / Heptabromobiphenyl        | mg/kg        |  | 5                    | n.d.           | -             |
| 八溴聯苯 / Octabromobiphenyl         | mg/kg        |  | 5                    | n.d.           | -             |
| 九溴聯苯 / Nonabromobiphenyl         | mg/kg        |  | 5                    | n.d.           | -             |
| 十溴聯苯 / Decabromobiphenyl         | mg/kg        | 5  | n.d.                 | -              |               |

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NO. 102, NANLIN RD., TAISHAN DIST., NEW TAIPEI CITY, TAIWAN



| 測試項目<br>(Test Items)   | 單位<br>(Unit) | 測試方法<br>(Method)   | 方法偵測<br>極限值<br>(MDL) | 結果<br>(Result) | 限值<br>(Limit) |
|--|--------------|--|----------------------|----------------|---------------|
|  |              |  |                      | No.1           |               |
| 多溴聯苯醚總和 / Sum of PBDEs   | mg/kg        | 參考IEC 62321: 2008方法, 以氣相層析/<br>質譜儀檢測. / With reference to IEC<br>62321: 2008 and performed by GC/MS.                                   | -                    | n.d.           | 1000          |
| 一溴聯苯醚 / Monobromodiphenyl ether  | mg/kg        |  | 5                    | n.d.           | -             |
| 二溴聯苯醚 / Dibromodiphenyl ether  | mg/kg        |  | 5                    | n.d.           | -             |
| 三溴聯苯醚 / Tribromodiphenyl ether   | mg/kg        |  | 5                    | n.d.           | -             |
| 四溴聯苯醚 / Tetrabromodiphenyl ether   | mg/kg        |  | 5                    | n.d.           | -             |
| 五溴聯苯醚 / Pentabromodiphenyl ether   | mg/kg        |  | 5                    | n.d.           | -             |
| 六溴聯苯醚 / Hexabromodiphenyl ether  | mg/kg        |  | 5                    | n.d.           | -             |
| 七溴聯苯醚 / Heptabromodiphenyl ether   | mg/kg        |  | 5                    | n.d.           | -             |
| 八溴聯苯醚 / Octabromodiphenyl ether  | mg/kg        |  | 5                    | n.d.           | -             |
| 九溴聯苯醚 / Nonabromodiphenyl ether  | mg/kg        |  | 5                    | n.d.           | -             |
| 十溴聯苯醚 / Decabromodiphenyl ether  | mg/kg        | 5  | n.d.                 | -              |               |
| 鄰苯二甲酸丁苯甲酯 / BBP (Butyl Benzyl phthalate) (CAS No.: 85-68-7)              | mg/kg        | 參考IEC 62321-8 (111/321/CD), 以氣相<br>層析儀/質譜儀檢測之. / With<br>reference to IEC 62321-8<br>(111/321/CD). Analysis was performed<br>by GC/MS. | 50                   | n.d.           | 1000          |
| 鄰苯二甲酸二丁酯 / DBP (Dibutyl phthalate) (CAS No.: 84-74-2)                    | mg/kg        |  | 50                   | n.d.           | 1000          |
| 鄰苯二甲酸二(2-乙基己基)酯 / DEHP (Di-(2-ethylhexyl) phthalate) (CAS No.: 117-81-7) | mg/kg        |  | 50                   | n.d.           | 1000          |
| 鄰苯二甲酸二異丁酯 / DIBP (Di-isobutyl phthalate) (CAS No.: 84-69-5)              | mg/kg        |  | 50                   | n.d.           | 1000          |

### 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)

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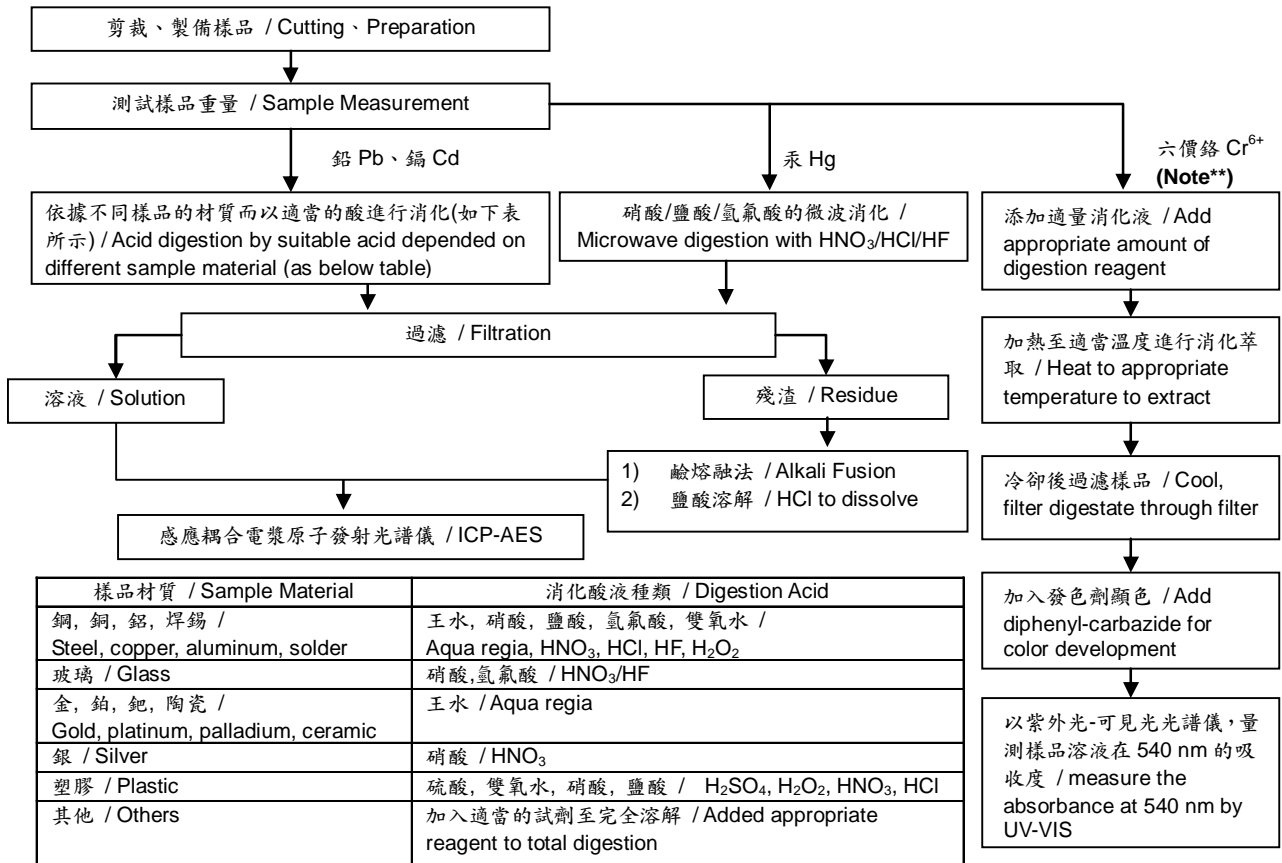
NAN YA PLASTICS CORPORATION

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NO. 102, NANLIN RD., TAISHAN DIST., NEW TAIPEI CITY, TAIWAN



- 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. (Cr<sup>6+</sup> 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



**Note\*\* (For IEC 62321)**

- (1) 針對非金屬材料加入鹼性消化液，加熱至 90~95°C 萃取。 / For non-metallic material, add alkaline digestion reagent and heat to 90~95°C.
- (2) 針對金屬材料加入純水，加熱至沸騰萃取。 / For metallic material, add pure water and heat to boiling.

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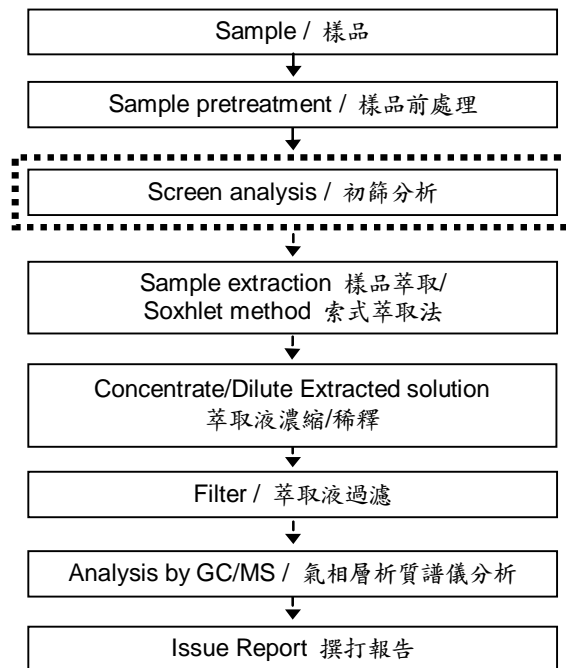
### 多溴聯苯/多溴聯苯醚分析流程圖 / PBB/PBDE analytical FLOW CHART

- 測試人員：翁賜彬 / Name of the person who made measurement: Roman Wong
- 測試負責人：張啓興 / Name of the person in charge of measurement: Troy Chang

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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新北市泰山區南林路102號

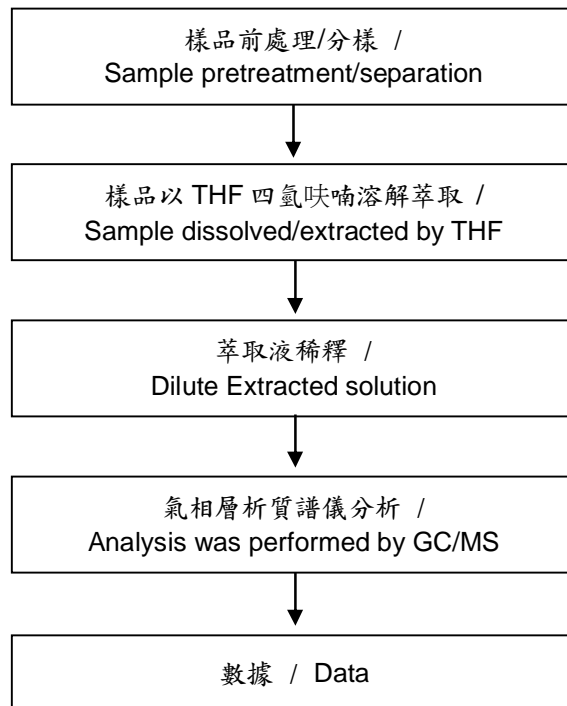
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## 可塑劑分析流程圖 / Analytical flow chart of phthalate content

- 測試人員：徐毓明 / Name of the person who made measurement: Andy Shu
- 測試負責人：張啓興 / Name of the person in charge of measurement: Troy Chang

### 【測試方法/Test method: IEC 62321-8】



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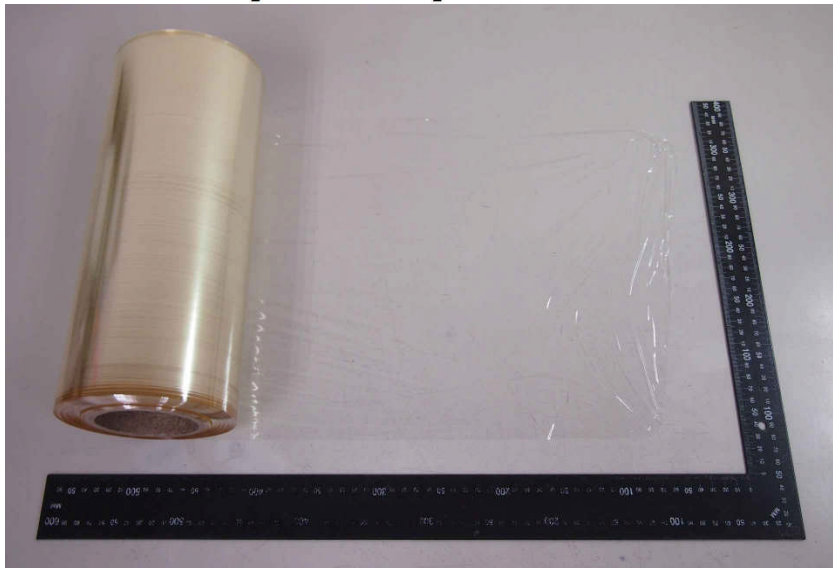
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**\* 照片中如有箭頭標示，則表示為實際檢測之樣品/部位。 \***  
(The tested sample / part is marked by an arrow if it's shown on the photo.)

### CE/2015/41072



**\*\* 報告結尾 (End of Report) \*\***

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