

## 測試報告

號碼(No.) : CE/2016/12210

日期(Date) : 2016/01/18

頁數(Page): 1 of 9

## Test Report

台灣明尼蘇達礦業製造股份有限公司  
3M TAIWAN LTD.

桃園市楊梅區中山南路800巷66號

NO. 66, LANE 800, CHUNG-SHAN S. RD., YANG-MEI DISTRICT, TAOYUAN CITY 326, TAIWAN (R. O. C.)



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) : 台灣明尼蘇達礦業製造股份有限公司 (3M TAIWAN LTD.)  
樣品名稱(Sample Description) : 3M DOUBLE COATED TAPE WITH 100MP, 200MP, 220, 420 ADHESIVE  
樣品型號(Style/Item No.) : F9460PC, F9469PC, F9473PC, 467MP, 468MP, 467MPF, 468MPF, 467MPR, 7952MP, 7955MP, 7962MP, 965MP, 9172MP, 9172PT, 9185MP, 9188, 9667MP, 9668MP, 9676, 9502, 9505, 9502HL, 9505HL, F9752PC, F-9755PC, 9492MP, 9492MPR, 9495MP, 9495MPF, 9495FL, 9795, 9799, 7952MP, 7962MP, 7953MP, 7955MP, 7965MP, 7945MP, 7956MP, 7957MP, 7959MP, 7961MP, 9045MP, 9056MP, 9057MP, 9059MP, 9061MP, 7993MP, 7995MP, 7997MP, 82210, 82215, 82220, 82310, 82315, 82320, 467MC, 467MCF, 468MC, 468MCF  
收件日期(Sample Receiving Date) : 2016/01/12  
測試期間(Testing Period) : 2016/01/12 TO 2016/01/18

### 測試需求(Test Requested) :

- (1) 依據客戶指定, 參考RoHS2011/65/EU Annex II及其修訂指令(EU) 2015/863測試鎘、鉛、汞、六價鉻、多溴聯苯、多溴聯苯醚, DBP, BBP, DEHP, DIBP. (As specified by client, with reference to RoHS 2011/65/EU Annex II and amending Directive (EU) 2015/863 to determine Cadmium, Lead, Mercury, Cr(VI), PBBs, PBDEs, DBP, BBP, DEHP, DIBP contents in the submitted sample.)
- (2) 其他測試項目請見下一頁 . (Please refer to next pages for the other item(s).)

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

  
Troy Chang, Manager - Tech  
Signed for and on behalf of  
SGS TAIWAN LTD.  
Chemical Laboratory - Taipei

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號碼(No.) : CE/2016/12210

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頁數(Page): 2 of 9

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## 測試結果(Test Results)

測試部位(PART NAME)No.1 : 透明膠 (不含離型紙) (TRANSPARENT ADHESIVE (EXCLUDING THE RELEASE PAPER))

| 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 (Result) |
|--|--------------|---|----------------------|-------------|
|  |              |   |                      | No. 1       |
| 鎘 / Cadmium (Cd)   | mg/kg        | 參考IEC 62321-5: 2013方法, 以感應<br>耦合電漿原子發射光譜儀檢測. / With<br>reference to IEC 62321-5: 2013 and<br>performed by ICP-AES.        | 2                    | n. d.       |
| 鉛 / Lead (Pb)  | mg/kg        | 參考IEC 62321-5: 2013方法, 以感應<br>耦合電漿原子發射光譜儀檢測. / With<br>reference to IEC 62321-5: 2013 and<br>performed by ICP-AES.        | 2                    | n. d.       |
| 汞 / Mercury (Hg)   | mg/kg        | 參考IEC 62321-4: 2013方法, 以感應<br>耦合電漿原子發射光譜儀檢測. / With<br>reference to IEC 62321-4: 2013 and<br>performed by ICP-AES.        | 2                    | n. d.       |
| 六價鉻 / Hexavalent Chromium Cr(VI)                         | mg/kg        | 參考IEC 62321: 2008 - Annex C方法,<br>以UV-VIS檢測. / With reference to<br>IEC 62321: 2008 - Annex C and<br>performed by UV-VIS. | 2                    | n. d.       |
| <b>鹵素 / Halogen</b>                                      |              |   |                      |             |
| 鹵素 (氟) / Halogen-Fluorine (F)<br>(CAS No. : 14762-94-8)  | mg/kg        | 參考BS EN 14582:2007, 以離子層析儀<br>分析. / With reference to BS EN<br>14582:2007. Analysis was performed<br>by IC.               | 50                   | n. d.       |
| 鹵素 (氯) / Halogen-Chlorine (Cl)<br>(CAS No. : 22537-15-1) | mg/kg        |   | 50                   | 142         |
| 鹵素 (溴) / Halogen-Bromine (Br)<br>(CAS No. : 10097-32-2)  | mg/kg        |   | 50                   | n. d.       |
| 鹵素 (碘) / Halogen-Iodine (I) (CAS<br>No. : 14362-44-8)    | mg/kg        |   | 50                   | n. d.       |

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# 測試報告

號碼(No.) : CE/2016/12210

日期(Date) : 2016/01/18

頁數(Page): 3 of 9

# Test Report

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| 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 (Result) |
|----------------------------------|--------------|---|----------------------|-------------|
|                                  |              |   |                      | No. 1       |
| 多溴聯苯總和 / Sum of PBBs             | mg/kg        | 參考 IEC 62321-6: 2015 方法, 以氣相層析/質譜儀檢測. / With reference to IEC 62321-6: 2015 and performed by GC/MS. | -                    | n. d.       |
| 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.       |
| 多溴聯苯醚總和 / Sum of PBDEs           | mg/kg        |   | -                    | n. d.       |
| 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.                |             |

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# 測試報告

號碼(No.) : CE/2016/12210

日期(Date) : 2016/01/18

頁數(Page): 4 of 9

# Test Report

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3M TAIWAN LTD.

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NO. 66, LANE 800, CHUNG-SHAN S. RD., YANG-MEI DISTRICT, TAOYUAN CITY 326, TAIWAN (R. O. C.)



| 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 (Result) |
|--|--------------|---|----------------------|-------------|
|  |              |   |                      | No. 1       |
| 鄰苯二甲酸二異丁酯 / DIBP (Di-isobutyl phthalate) (CAS No.: 84-69-5)                | mg/kg        | 參考IEC 62321-8 (111/321/CD), 以氣相層析儀/質譜儀檢測之。 / With reference to IEC 62321-8 (111/321/CD). Analysis was performed by GC/MS. | 50                   | n. d.       |
| 鄰苯二甲酸二丁酯 / DBP (Dibutyl phthalate) (CAS No.: 84-74-2)                      | mg/kg        |   | 50                   | n. d.       |
| 鄰苯二甲酸丁苯甲酯 / BBP (Butyl Benzyl phthalate) (CAS No.: 85-68-7)                | mg/kg        |   | 50                   | n. d.       |
| 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.       |
| 鄰苯二甲酸二正辛酯 / DNOP (Di-n-octyl phthalate) (CAS No.: 117-84-0)                | mg/kg        |   | 50                   | n. d.       |
| 鄰苯二甲酸二異壬酯 / DINP (Di-isononyl phthalate) (CAS No.: 28553-12-0; 68515-48-0) | mg/kg        |   | 50                   | n. d.       |
| 鄰苯二甲酸二異癸酯 / DIDP (Di-isodecyl phthalate) (CAS No.: 26761-40-0; 68515-49-1) | mg/kg        |   | 50                   | 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)

## 測試報告 Test Report

號碼(No.) : CE/2016/12210

日期(Date) : 2016/01/18

頁數(Page): 5 of 9

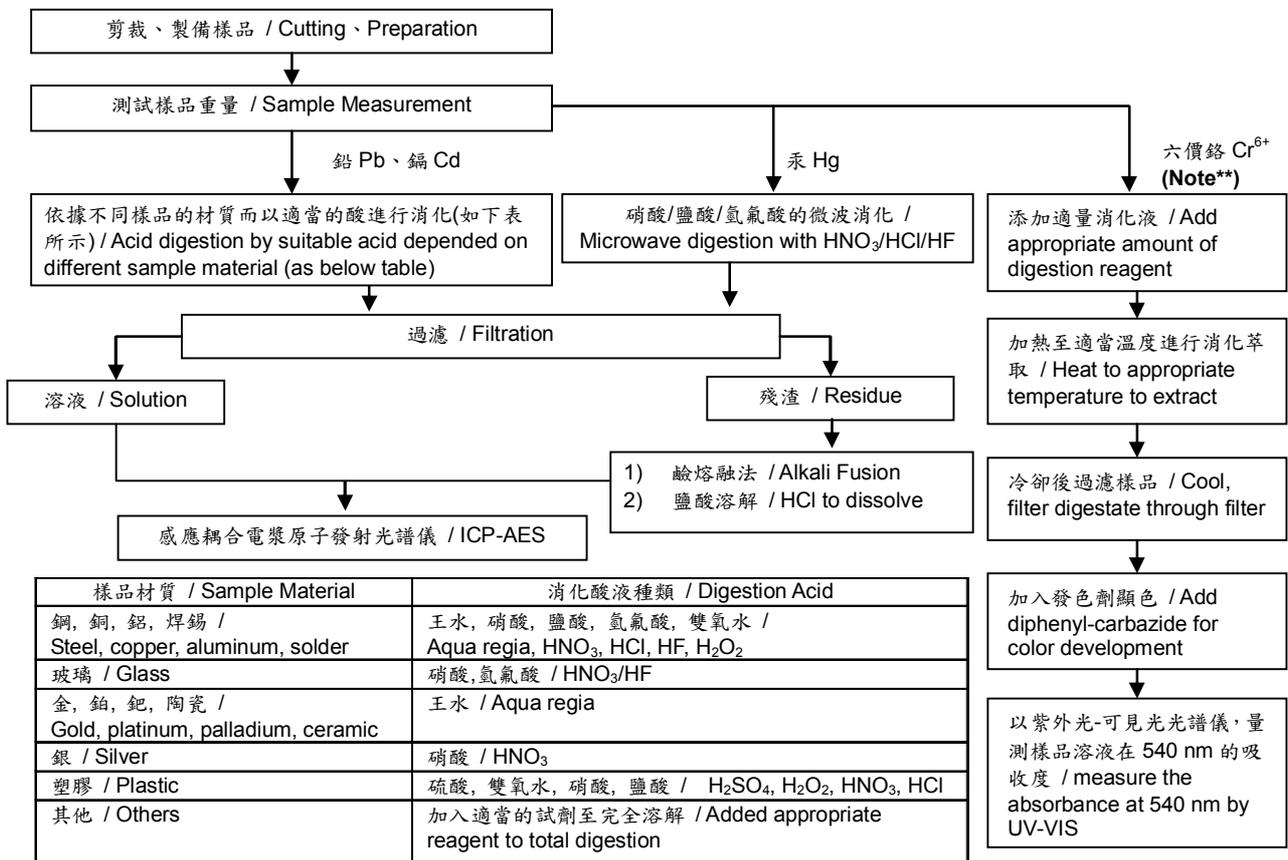
台灣明尼蘇達礦業製造股份有限公司  
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- 1) 根據以下的流程圖之條件，樣品已完全溶解。(六價鉻測試方法除外) / These samples were dissolved totally by pre-conditioning method according to below flow chart. (Cr<sup>6+</sup> test method excluded)
- 2) 測試人員：楊登偉 / Name of the person who made measurement: Climbgreat Yang
- 3) 測試負責人：張啟興 / 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.

## 測試報告

## Test Report

號碼(No.) : CE/2016/12210

日期(Date) : 2016/01/18

頁數(Page): 6 of 9

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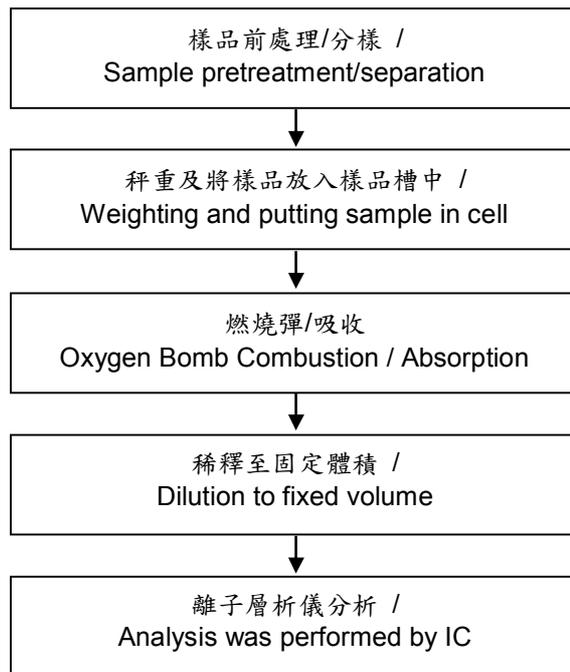
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NO. 66, LANE 800, CHUNG-SHAN S. RD., YANG-MEI DISTRICT, TAOYUAN CITY 326, TAIWAN (R. O. C.)



### 鹵素分析流程圖 / Analytical flow chart of halogen content

- 測試人員：陳思臻 / Name of the person who made measurement: Rita Chen
- 測試負責人：張啟興 / Name of the person in charge of measurement: Troy Chang



## 測試報告

## Test Report

號碼(No.) : CE/2016/12210

日期(Date) : 2016/01/18

頁數(Page): 7 of 9

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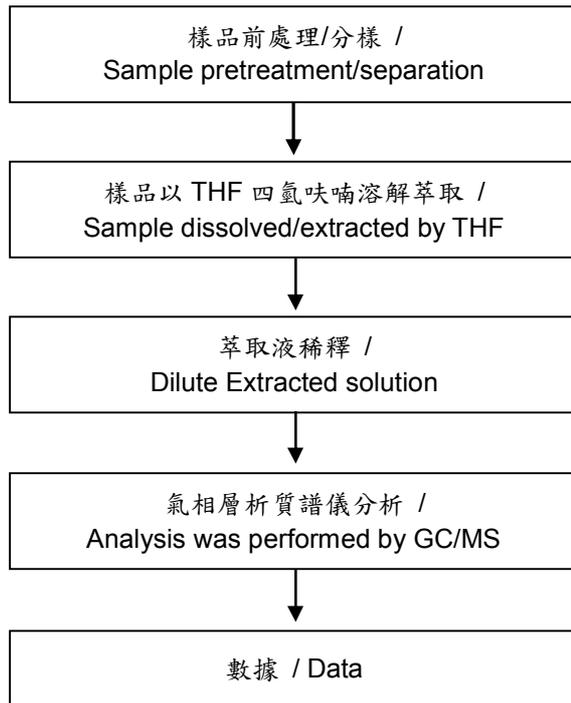
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### 可塑劑分析流程圖 / Analytical flow chart of phthalate content

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

#### 【測試方法/Test method: IEC 62321-8】



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號碼(No.) : CE/2016/12210

日期(Date) : 2016/01/18

頁數(Page): 8 of 9

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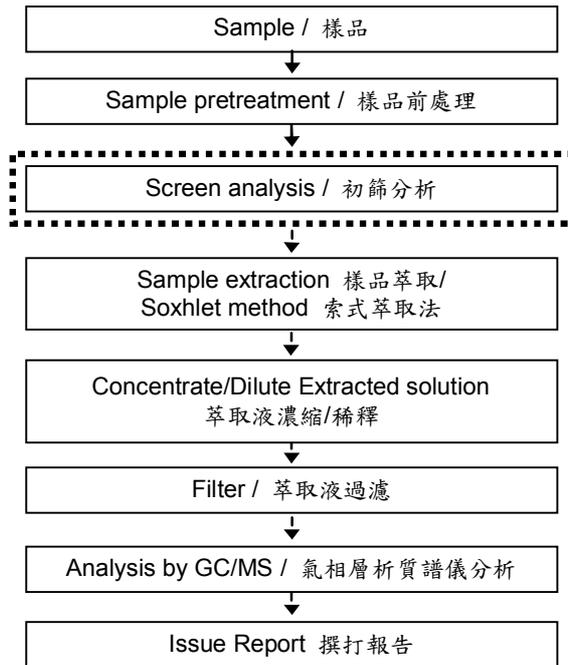
### 多溴聯苯/多溴聯苯醚分析流程圖 / PBB/PBDE analytical FLOW CHART

- 測試人員：翁賜彬 / Name of the person who made measurement: Roman Wong
- 測試負責人：張啟興 / 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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## Test Report

號碼(No.) : CE/2016/12210

日期(Date) : 2016/01/18

頁數(Page): 9 of 9

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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/2016/12210



\*\* 報告結尾 (End of Report) \*\*