

測試報告 號

號碼(No.) : CE/2015/43244

日期(Date): 2015/04/22

Test Report

台灣化學纖維股份有限公司 FORMOSA CHEMICALS & FIBRE CORPORATION 台北市敦化北路201號 201, TUNG HWA N. ROAD, TAIPEI, 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) | : | 台灣化學纖維股份有限公司(FORMOSA CHEMICALS & FIBRE CORPORATION) | | | | | |
| 樣品名稱(Sample Description) | : | POLYPROPYLENE IMPACT COPOLYMER (聚丙烯耐衝擊共聚物) | | | | | |
| 樣品型號(Style/Item No.) | : | TAIRIPRO PP B8001, K3004, K3009AN, K3009AU, K3029, K3030, K6615, K7005, K7009, K7025, K8003, K8009, K8025, K8050, K8065, K8095, K8802, K9010, K9017, KP03B, T8002 | | | | | |
| 收件日期(Sample Receiving Date) | : | 2015/04/16 | | | | | |
| 測試期間(Testing Period) | : | 2015/04/16 TO 2015/04/22 | | | | | |
| | ===: | | | | | | |

測試需求(Test Requested): 依據客户要求,參考 RoHS 指令 2011/65/EU Annex II 測試鎬、鉛、汞、六價鉻、多溴聯苯酸. (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.)

| (Test | Method) |) : | 請見下一頁 | (Please | refer | to next | pages). |
|-------|---------|-----|-------|---------|-------|---------|---------|
|-------|---------|-----|-------|---------|-------|---------|---------|

- 测试结果(Test Results) : 請見下一頁 (Please refer to next pages).
- 結論(Conclusion)
 根據客户所提供的樣品,其鎬、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.)



测試方法

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測試結果(Test Results)

测試部位(PART NAME)No.1 : 白色塑膠粒 (TRANSLUCENT-WHITE PLASTIC PELLETS)

| 測試項目 (Test Items) | 單位 (Unit) | 測試方法 (Method) | 方法偵測 極限値 (MDL) | 結果 (Result) No.1 | 限值 (Limit) |
|-------------------------------------|--------------|---|----------------------|------------------------|----------------------|
| 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 |
| 六價络 / Hexavalent Chromium Cr(VI) | mg/kg | 参考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 | | - | 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 | 參考IEC 62321: 2008方法,以氣相層析/質 | 5 | n.d. | - |
| 五溴聯苯 / Pentabromobiphenyl | mg/kg | 譜儀檢測. / With reference to IEC | 5 | n.d. | - |
| 六溴聯苯 / Hexabromobiphenyl | mg/kg | 62321: 2008 and performed by GC/MS. | 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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| 測試項目 (Test Items) | 單位 (Unit) | 測試方法 (Method) | 方法偵測 極限値 (MDL) | 結果 (Result) No.1 | 限值 (Limit) |
|----------------------------------|--------------|---|----------------------|------------------------|----------------------|
| 多溴聯苯醚總和 / Sum of PBDEs | mg/kg | | - | n.d. | 1000 |
| 一溴聯苯醚 / Monobromodiphenyl ether | 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. | 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. | - |

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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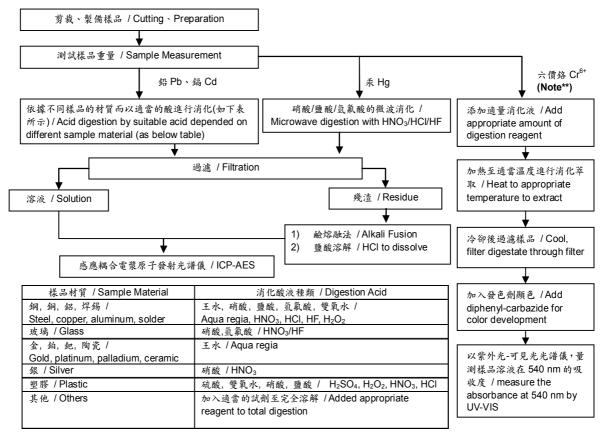
台灣化學纖維股份有限公司

FORMOSA CHEMICALS & FIBRE CORPORATION

台北市敦化北路201號

201, TUNG HWA N. ROAD, TAIPEI, TAIWAN, R. O. C.

- 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) 测试人員: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**:(1) 針對非金屬材料加入鹼性消化液,加熱至90~95℃萃取./For non-metallic material, add alkaline digestion reagent and heat to 90~95℃.

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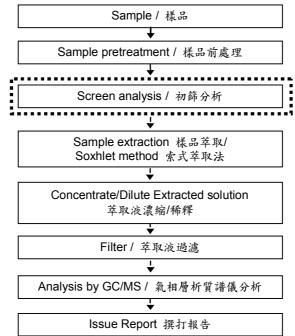
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多溴聯苯/多溴聯苯醚分析流程圖 / PBB/PBDE analytical FLOW CHART



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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.)



** 報告結尾 (End of Report) **

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