

測試報告

號碼(No.) : CE/2017/33835A

日期(Date) : 2017/03/31

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Test Report

嵘樺企業有限公司

RUNG HUA INDUSTRIAL CO., LTD.

桃園市新屋區下田里1鄰23-7號

23-7, 1 NIGHBOR, SIATIAN SINZIH, SIATIAN VILLAGE, SINWU DISTRICT, TAOYUAN CITY 327,
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) :

樣品名稱(Sample Description) : HOOP RING / GRIP RING (擴張環)
收件日期(Sample Receiving Date) : 2017/03/13
測試期間(Testing Period) : 2017/03/13 TO 2017/03/20

=====
測試需求(Test Requested) : 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.)

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).



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 : 藍色塑膠 (BLUE PLASTIC)

測試部位(PART NAME)No. 2 : 灰色塑膠 (GRAY PLASTIC)

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	No. 2
鎘 / Cadmium (Cd)	mg/kg	參考 IEC 62321-5 (2013), 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.	n. d.
鉛 / Lead (Pb)	mg/kg	參考 IEC 62321-5 (2013), 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.	n. d.
汞 / Mercury (Hg)	mg/kg	參考 IEC 62321-4 (2013), 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.	n. d.
六價鉻 / Hexavalent Chromium Cr(VI)	mg/kg	參考 IEC 62321 (2008), 以 UV-VIS 檢測。 / With reference to IEC 62321 (2008) and performed by UV-VIS.	2	n. d.	n. d.
多溴聯苯總和 / Sum of PBBs	mg/kg	參考 IEC 62321-6 (2015), 以氣相層析/質譜儀檢測。 / With reference to IEC 62321-6 (2015) and performed by GC/MS.	-	n. d.	n. d.
一溴聯苯 / Monobromobiphenyl	mg/kg		5	n. d.	n. d.
二溴聯苯 / Dibromobiphenyl	mg/kg		5	n. d.	n. d.
三溴聯苯 / Tribromobiphenyl	mg/kg		5	n. d.	n. d.
四溴聯苯 / Tetrabromobiphenyl	mg/kg		5	n. d.	n. d.
五溴聯苯 / Pentabromobiphenyl	mg/kg		5	n. d.	n. d.
六溴聯苯 / Hexabromobiphenyl	mg/kg		5	n. d.	n. d.
七溴聯苯 / Heptabromobiphenyl	mg/kg		5	n. d.	n. d.
八溴聯苯 / Octabromobiphenyl	mg/kg		5	n. d.	n. d.
九溴聯苯 / Nonabromobiphenyl	mg/kg		5	n. d.	n. d.
十溴聯苯 / Decabromobiphenyl	mg/kg	5	n. d.	n. d.	

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榮華企業有限公司



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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	No. 2
多溴聯苯醚總和 / Sum of PBDEs	mg/kg	參考IEC 62321-6 (2015), 以氣相層析/質譜儀檢測。 / With reference to IEC 62321-6 (2015) and performed by GC/MS.	-	n. d.	n. d.
一溴聯苯醚 / Monobromodiphenyl ether	mg/kg		5	n. d.	n. d.
二溴聯苯醚 / Dibromodiphenyl ether	mg/kg		5	n. d.	n. d.
三溴聯苯醚 / Tribromodiphenyl ether	mg/kg		5	n. d.	n. d.
四溴聯苯醚 / Tetrabromodiphenyl ether	mg/kg		5	n. d.	n. d.
五溴聯苯醚 / Pentabromodiphenyl ether	mg/kg		5	n. d.	n. d.
六溴聯苯醚 / Hexabromodiphenyl ether	mg/kg		5	n. d.	n. d.
七溴聯苯醚 / Heptabromodiphenyl ether	mg/kg		5	n. d.	n. d.
八溴聯苯醚 / Octabromodiphenyl ether	mg/kg		5	n. d.	n. d.
九溴聯苯醚 / Nonabromodiphenyl ether	mg/kg		5	n. d.	n. d.
十溴聯苯醚 / Decabromodiphenyl ether	mg/kg		5	n. d.	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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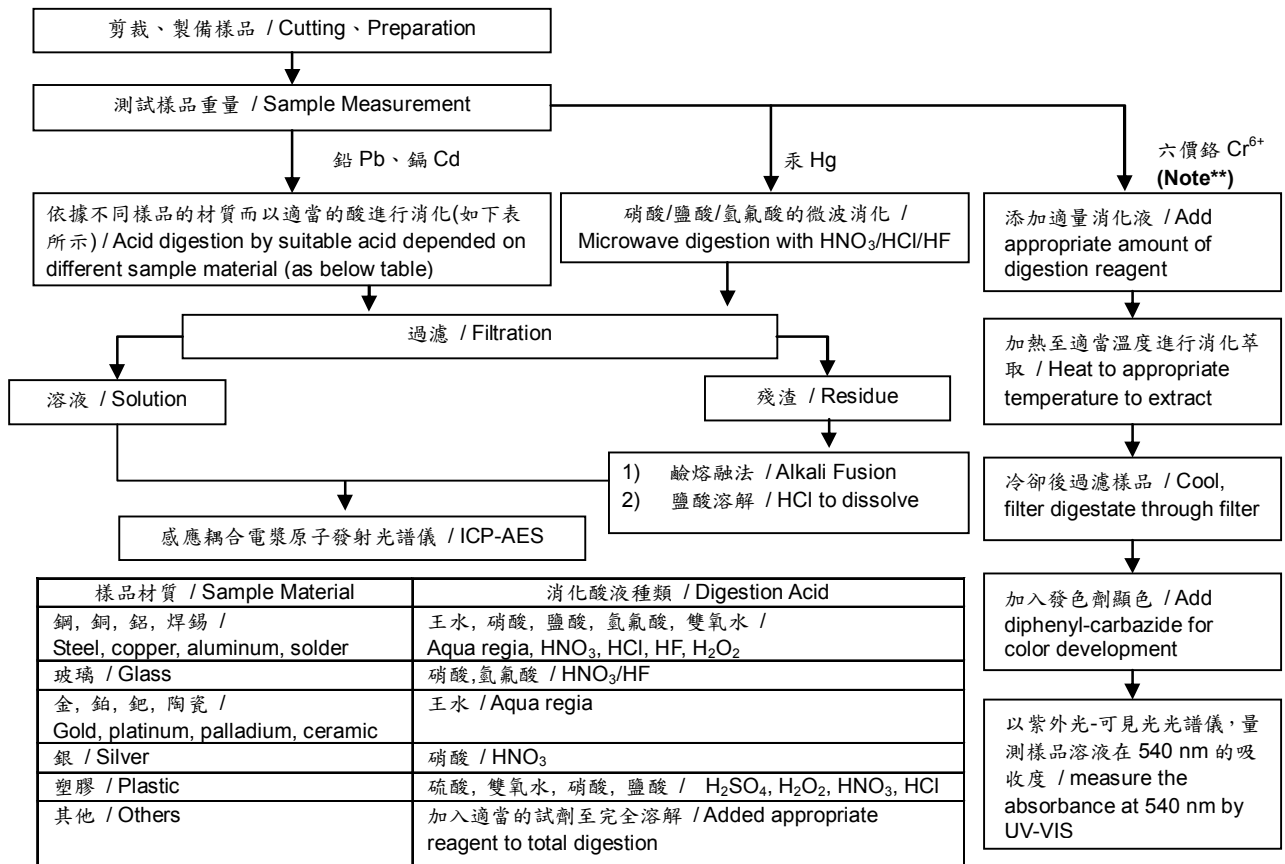
TAIWAN (R. O. C.)



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)

- 測試人員：王志瑋 / Technician : JR Wang
- 測試負責人：張啟興 / Supervisor: 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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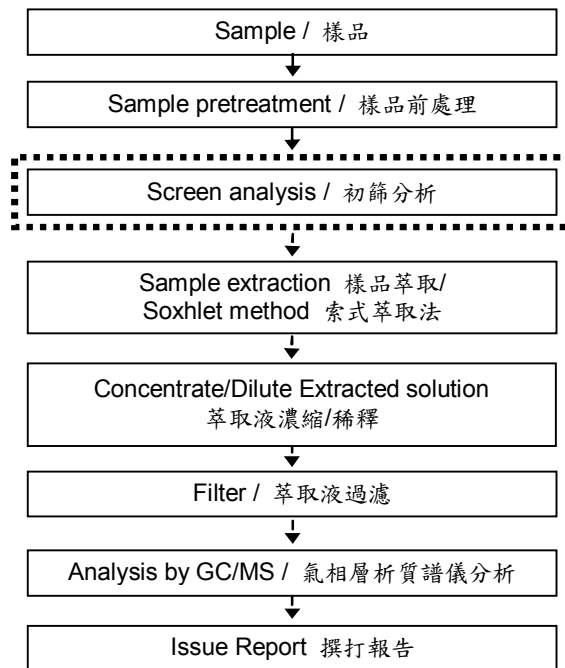
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多溴聯苯/多溴聯苯醚分析流程圖 / Analytical flow chart - PBB/PBDE

- 測試人員：涂雅苓 / Technician: Yaling Tu
- 測試負責人：張啟興 / Supervisor: 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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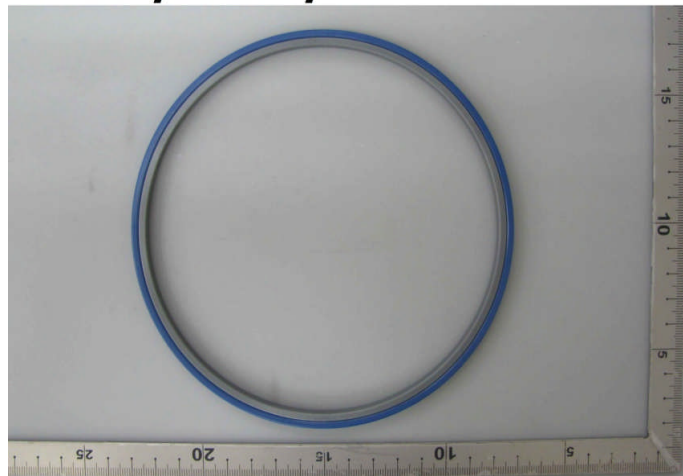


* 照片中如有箭頭標示，則表示為實際檢測之樣品/部位。 *
(The tested sample / part is marked by an arrow if it's shown on the photo.)

CE/2017/33835 NO.1



CE/2017/33835 NO.2



** 報告結尾 (End of Report) **

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