

# **Test Report**

號碼(No.): CE/2019/A4158 日期(Date): 2019/10/31 頁數 (Page): 1 of 7

國森企業股份有限公司 KUO SEN ENTERPRISE CO., LTD.

台北市寧波西街87之2號

NO. 87-2, NING PAO WEST ST., 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) 樣品名稱(Sample Description)

: 國森企業股份有限公司 (KUO SEN ENTERPRISE CO., LTD.)

: 強力膠

樣品型號(Style/Item No.)

: GA, GA1, GA2, GA6, GA6Y, GA6Y-1. GA6Y-2, GA7, GA10, GA10F, GA10F(噴), GA10F(成大), G10Z, GA12, GA12A, GA12H, GA17, GA17H, GA17-1, GA17-1H, GA18, G18, GA18F, GA18F(優耐), GA66, GA68, GA108, GA168, GA168H, GA168S, GA210E, GA220E, GA310E, GA320E, GA363, GA363H, GA363P, GA365, GA450, GA450M, GA450M(D)-1, GA450M(D)-2, GA450M(D)-3, GA460Y, GA480, GA500, GA500H, GA500H(D)-1, GA500P, GA500(D)-1, GA500GN(D)-1, GA550GN, GA550GN(D)-1, GA550HGN, GA551GN, GA566, GA566GN, GA600, GA601, GA600-1, GA600-4(乳香), GA600B, GA600B-1, GA600C, GA600D, GA606, GA612, GA614, GA618-2N, GA618-2S, GA619, GA619H, GA621, GA622, GA623, GA624, GA625, GA631, GA631H, GA632,

GA633, GA688, GA701, GA710, GA750, GA230E, G103.

收件日期(Sample Receiving Date)

: 2019/10/24

測試期間(Testing Period)

: 2019/10/24 to 2019/10/31

### 測試需求(Test Requested)

: 依據客戶指定,參考RoHS 2011/65/EU Annex II及其修訂指令(EU) 2015/863測試編、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(s).)

測試方法(Test Method) 測試結果(Test Results) : 請參閱下一頁 (Please refer to following pages). : 請參閱下一頁 (Please refer to following pages).

Troy Chang / Manager - Tec Signed for and behalf of SGS TAIWAN LTD.

Chemical Laboratory - Taipei



# **Test Report**

國森企業股份有限公司 KUO SEN ENTERPRISE CO., LTD. 台北市寧波西街87之2號 NO. 87-2, NING PAO WEST ST., TAIPEI, TAIWAN, R. O. C.

### 測試結果(Test Results)

測試部位(PART NAME)No.1 : 棕色膏狀 (BROWN PASTE)

測試項目 (Test Items)	單位 (Unit)	測試方法 (Method)	MDL	結果 (Result) No.1
鎘 / Cadmium (Cd)	mg/kg	參考IEC 62321-5 (2013),以感應耦合電漿發射光譜儀檢測. / With reference to IEC 62321-5 (2013) and performed by ICP-OES.	2	n. d.
鉛 / Lead (Pb)	mg/kg	參考IEC 62321-5 (2013),以感應耦合電漿發射光譜儀檢測. / With reference to IEC 62321-5 (2013) and performed by ICP-OES.	2	n. d.
汞 / Mercury (Hg)	mg/kg	參考IEC 62321-4:2013+ AMD1:2017,以感 應耦合電漿發射光譜儀檢測. / With reference to IEC 62321-4:2013+ AMD1:2017 and performed by ICP-OES.	2	n. d.
六價鉻 / Hexavalent Chromium Cr(VI)	mg/kg	参考IEC 62321-7-2 (2017),以UV-VIS檢 測. / With reference to IEC 62321-7-2 (2017) and performed by UV-VIS.	8	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 (2017),以氣相層析/質 譜儀檢測. / With reference to IEC 62321-8 (2017). 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.
鄰苯二甲酸二異丁酯 / DIBP (Di- isobutyl phthalate) (CAS No.: 84- 69-5)	mg/kg		50	n. d.

號碼(No.): CE/2019/A4158 日期(Date): 2019/10/31

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# **Test Report**

國森企業股份有限公司 KUO SEN ENTERPRISE CO., LTD. 台北市寧波西街87之2號

NO. 87-2, NING PAO WEST ST., TAIPEI, TAIWAN, R. O. C.

測試項目 (Test Items)	單位 (Unit)	測試方法 (Method)	MDL	結果 (Result)
  多溴聯苯總和 / Sum of PBBs	mg/kg		_	No. 1
一溴聯苯 / Monobromobiphenyl	mg/kg		5	n. d.
二溴聯苯 / Dibromobiphenyl		+	5	
三溴聯苯 / Tribromobiphenyl	mg/kg		5	n. d.
四溴聯苯 / Tetrabromobi phenyl	mg/kg			n. d.
	mg/kg		5	n. d.
五溴聯苯 / Pentabromobiphenyl	mg/kg	参考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.	5	n. d.
六溴聯苯 / Hexabromobiphenyl	mg/kg		5	n. d.
七溴聯苯 / Heptabromobiphenyl	mg/kg		5	n. d.
へ溴聯苯 / 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.

號碼(No.): CE/2019/A4158 日期(Date): 2019/10/31

## 備註(Note):

- 1. mg/kg = ppm ; 0.1wt% = 1000ppm
- 2. MDL = Method Detection Limit (方法偵測極限值)
- 3. n.d. = Not Detected (未檢出)
- 4. "-" = Not Regulated (無規格值)

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# **Test Report**

國森企業股份有限公司 KUO SEN ENTERPRISE CO., LTD. 台北市寧波西街87之2號

NO. 87-2, NING PAO WEST ST., TAIPEI, TAIWAN, R. O. C.

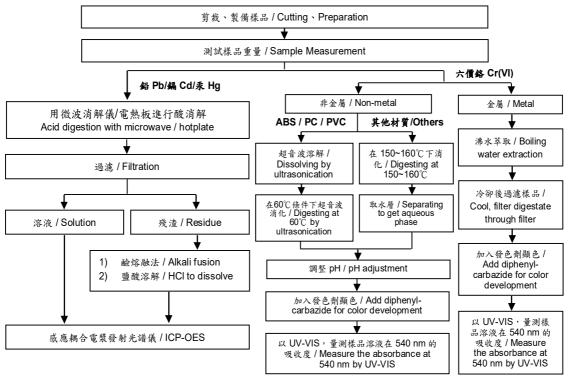
### 重金屬流程圖 / Analytical flow chart of Heavy Metal

號碼(No.): CE/2019/A4158 日期(Date): 2019/10/31

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. ( $Cr^{6+}$  test method excluded)

- 測試人員:陳恩臻 / Technician: Rita Chen
- 測試負責人:張啟興 / Supervisor: Troy Chang



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# **Test Report**

國森企業股份有限公司 KUO SEN ENTERPRISE CO., LTD. 台北市寧波西街87之2號 NO. 87-2, NING PAO WEST ST., TAIPEI, TAIWAN, R. O. C.

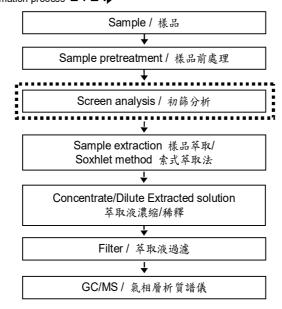
### 多溴聯苯/多溴聯苯醚分析流程圖 / Analytical flow chart - PBB/PBDE

號碼(No.): CE/2019/A4158 日期(Date): 2019/10/31

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 -確認程序 / Confirmation process - - - →



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# 測試報告 **Test Report**

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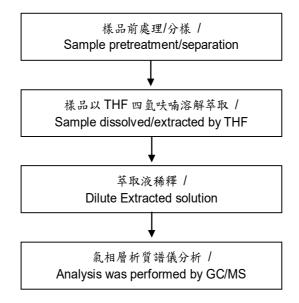
國森企業股份有限公司 KUO SEN ENTERPRISE CO., LTD. 台北市寧波西街87之2號 NO. 87-2, NING PAO WEST ST., TAIPEI, TAIWAN, R. O. C.

### 可塑劑分析流程圖 / Analytical flow chart - Phthalate

測試人員:涂雅苓 / Technician: Yaling Tu

測試負責人:張啟興 / Supervisor: Troy Chang

【測試方法/Test method: IEC 62321-8】





# **Test Report**

國森企業股份有限公司 KUO SEN ENTERPRISE CO., LTD. 台北市寧波西街87之2號 NO. 87-2, NING PAO WEST ST., TAIPEI, TAIWAN, R. O. C.

> \* 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/2019/A4158

號碼(No.): CE/2019/A4158 日期(Date): 2019/10/31



\*\* 報告結尾 (End of Report) \*\*

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日期 : 2018/05/30 號碼 : CE/2018/54988

頁數: 1 of 5

國森企業股份有限公司 台北市寧波西街87之2號

### 以下測試樣品係由申請廠商所提供及確認:

送樣廠商 國森企業股份有限公司

樣品名稱 ENVIRONMENTALLY FRIENDLY STRONG ADHESIVE (環保型強力接著劑)

GA618-2N, GA619, GA619H, GA618-2S, GA621, GA622, GA623, GA624, GA625, GA600B, GA600D, 樣品型號

GA631, GA631H, GA632

收件日期 2018/05/24

2018/05/24 TO 2018/05/30 測試期間

測試結果 請參閱下一頁。





號碼 : CE/2018/54988

日期 : 2018/05/30

頁數: 2 of 5

國森企業股份有限公司 台北市寧波西街87之2號

### 測試結果

測試部位 No.1 : 透明膠狀

測試項目	單位	測試方法	方法偵測	結果
MANAG	7 ,4		極限值	No. 1
甲醛 (CAS No.: 50-00-0)	mg/kg	參考ISO 17226-1(2008),以高效液	3	n. d.
		相層析儀/二極體陣列偵測器		
		(HPLC/DAD)檢測.		
甲苯 (CAS No.: 108-88-3)	mg/kg	參考US EPA 5021A (2014),以氣相	10	n. d.
		層析儀/質譜儀(GC/MS)檢測.		

#### 備註:

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

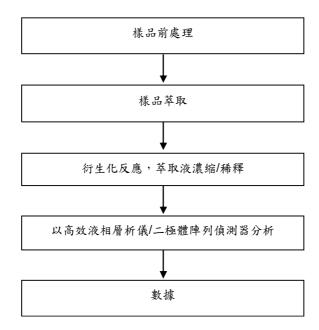


國森企業股份有限公司 台北市寧波西街87之2號

頁數:3 of 5 號碼 : CE/2018/54988 日期: 2018/05/30

### 甲醛分析流程圖

測試人員: 涂雅苓 測試負責人:張啟興





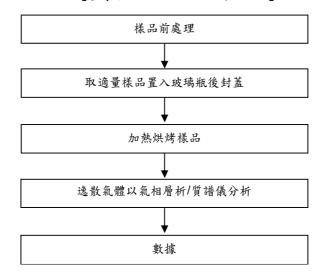
國森企業股份有限公司 台北市寧波西街87之2號

頁數: 4 of 5 號碼 : CE/2018/54988 日期: 2018/05/30

### 揮發性有機化合物(VOCs)分析流程圖

測試人員:吳椿景 測試負責人: 陳新智

【參考方法: US EPA 5021, 5021A】





國森企業股份有限公司 台北市寧波西街87之2號 號碼: CE/2018/54988 日期: 2018/05/30

頁數:5 of 5

\* 照片中如有箭頭標示,則表示為實際檢測之樣品/部位. \*

CE/2018/54988



報告結尾 \*\*



**Test Report** 

號碼(No.): CE/2018/70889 日期(Date): 2018/07/13 頁數(Page): 1 of 5

國森企業股份有限公司 KUO SEN ENTERPRISE CO., LTD. 台北市寧波西街87之2號 NO. 87-2, NING PAO WEST ST., 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) 國森企業股份有限公司(KUO SEN ENTERPRISE CO., LTD.)

樣品名稱(Sample Description) STRONG ADHESIVE (強力接著劑)

GA210E, GA220E, GA230E, GA310E, GA320E, GA330E 樣品型號(Style/Item No.)

收件日期(Sample Receiving Date) 2018/07/06

2018/07/06 TO 2018/07/13 測試期間(Testing Period)

測試結果(Test Results) : 請參閱下一頁 (Please refer to following pages).





**Test Report** 

日期(Date): 2018/07/13 頁數(Page): 2 of 5 號碼(No.): CE/2018/70889

國森企業股份有限公司 KUO SEN ENTERPRISE CO., LTD. 台北市寧波西街87之2號 NO. 87-2, NING PAO WEST ST., TAIPEI, TAIWAN, R. O. C.

### 測試結果(Test Results)

測試部位(PART NAME)No.1 : 淡黃色膠 (LT. YELLOW ADHESIVE)

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
甲苯 / Toluene (CAS No.: 108-88-3)	mg/kg	参考US EPA 5021A (2014),以氣相層 析儀/質譜儀檢測. / With reference to US EPA 5021A (2014). Analysis was performed by GC/MS.	10	n. d.
甲醛 / Formaldehyde (CAS No.: 50-00-0)	mg/kg	參考ISO 17226-1(2008),以高效液相 層析儀/二極體陣列偵測器檢測./ With reference to ISO 17226- 1(2008). Analysis was performed by HPLC/DAD.	3	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)



# **Test Report**

國森企業股份有限公司 KUO SEN ENTERPRISE CO., LTD. 台北市寧波西街87之2號 NO. 87-2, NING PAO WEST ST., TAIPEI, TAIWAN, R. O. C.

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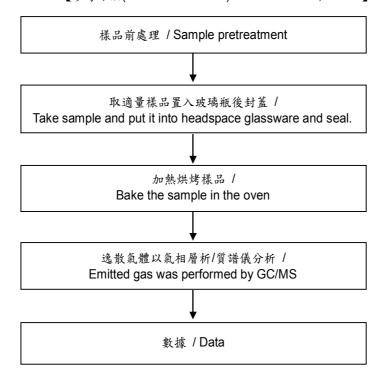
### 揮發性有機化合物分析流程圖 / Analytical flow chart - volatile organic compounds (VOCs)

測試人員:吳椿景 / Technician: Chun Wu 測試負責人: 陳新智 / Supervisor: Shinjyh Chen

號碼(No.): CE/2018/70889

【参考方法(Reference method): US EPA 5021, 5021A】

日期(Date): 2018/07/13





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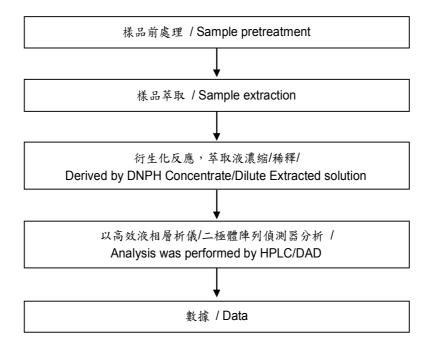
國森企業股份有限公司 KUO SEN ENTERPRISE CO., LTD. 台北市寧波西街87之2號 NO. 87-2, NING PAO WEST ST., TAIPEI, TAIWAN, R. O. C. 頁數(Page): 4 of 5

### 甲醛分析流程圖 / Analytical flow chart - Formaldehyde

日期(Date): 2018/07/13

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

號碼(No.): CE/2018/70889





# **Test Report**

國森企業股份有限公司 KUO SEN ENTERPRISE CO., LTD. 台北市寧波西街87之2號

NO. 87-2, NING PAO WEST ST., TAIPEI, TAIWAN, R. O. C.

號碼(No.): CE/2018/70889

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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.)

日期(Date): 2018/07/13

CE/2018/70889



\*\* 報告結尾 (End of Report) \*\*