

測試報告

Test Report

號碼(No.) : CE/2020/22092

日期(Date) : 2020/02/17

頁數(Page): 1 of 9

凱士士企業股份有限公司

KAI SUH SUH ENTERPRISE CO., LTD.

台北市延平北路一段38號

38, YEN PING N. RD., SEC. 1, TAIPEI, TAIWAN, R. O. C.

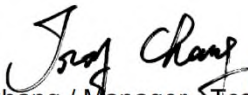
以下測試樣品係由申請廠商所提供及確認 (The following sample(s) was/were submitted and identified by/on behalf of the applicant as):

樣品名稱(Sample Description) : NYLON CABLE TIE (COLORED)/尼龍繫線帶(彩色)
同材質/產品名稱/型號(Used For Products (Style /Item No.)) : 請參考第5頁 (PLEASE REFER TO PAGE 5)
樣品材質(Sample Material) : NYLON66, UL94V-2 (COLORED)
收件日期(Sample Receiving Date) : 2020/02/07
測試期間(Testing Period) : 2020/02/07 to 2020/02/14

測試需求(Test Requested):

- (1) 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(s).)
- (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



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測試結果(Test Results)

測試部位(PART NAME)No. 1 : 整體混測 (MIXED ALL PARTS)

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	參考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.

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測試項目 (Test Items)	單位 (Unit)	測試方法 (Method)	MDL	結果 (Result)
				No. 1
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.
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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測試項目 (Test Items)	單位 (Unit)	測試方法 (Method)	MDL	結果 (Result)
				No. 1
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.
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.
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.
鄰苯二甲酸二正辛酯 / DNOP (Di-n-octyl phthalate) (CAS No. : 117-84-0)	mg/kg		50	n. d.
鄰苯二甲酸二正己酯 / DNHP (Di-n-hexyl phthalate) (CAS No. : 84-75-3)	mg/kg		50	n. d.

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)
5. 樣品的測試是基於申請人要求混合測試, 報告中的混合測試結果不代表其中個別單一材質的含量. (The samples was/were analyzed on behalf of the applicant as mixing sample in one testing. The above results was/were only given as the informality value.)

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同材質/產品名稱/型號(Used For
Products (Style /Item No.)) :

AWS, PC, AP, ATC, MMR, TV, BCS, UC, KUC, TS, PTS, DCC, RC, CTF, SN, DN,
CAP, CATV, KFC, KFS, MAT, BE, BT, CTT, CE, CDW, DR, DCV, RDCV, KTV, DL, DK,
BGQ, PAQ, HL, ES, CV, FC, FCT, FCP, FCW, BG, SR, FD, HTN, HTP, HTS, HP,
RHR, FCV, RRCV, TV, STV, LD3, LE, LK, LX, LQT, LQ, LDT, LY, LG3, LG, LH,
LHN, PLU, LHK, PLK, PLM, PLX, PLW, PLD1, PLD2, PLD4, PLT, PLR, PCL, KWS,
WS, MT, MS, MCV, KW, TCV, TCVS, TTB, MFC, KG-N, PCC, TRH, PG, AG, AGJ, EG,
NPT, CV, CVT, CVS, ES, PH, CS, MCS, LCA, SP, SPA, SPB, SPC, SPD, DS, EB,
BMS, HMS, TMS, MMS, MMR, KCS, SPS, PB, PST, HGS, GS, SWS, LCS, LCL, PCU,
PF, PN, PL, PHV, PCV, PCVS, PFVS, PGV, PSV, PWVS, PWV, PRVS, PDV, PUV, PS,
PHC, PFS, M, AG, EG, AGJ, NPT, HV, HVC, RCV, HRCV, RS, NPTA, RSP, RW, PMA,
HC, CS, CSA, RLS, SCS, MSP, PSP, SCT, 4J, 6J, 8J, 10J, 11J, 12J, VC, SWC,
SNB, SB, RSB, OSB, SN, SPR, SGN, ST, TH, THR, TR, TW, TRW, TT, TTU, CH,
WR, WH, WCT, JWS, JWB, OWS, PWS, BWS, TWS, RH, RWS, LWS, RCS, SM, EGL,
GL, NPTL, AGJL, LCH, SHW, RC, BPA, VF, DT, CHV, VA, BA, BV, STT, A, DP,
AH, T, DV, DE, HB, SWD, CAG, CEG, RSC, MTV, DVA SERIES

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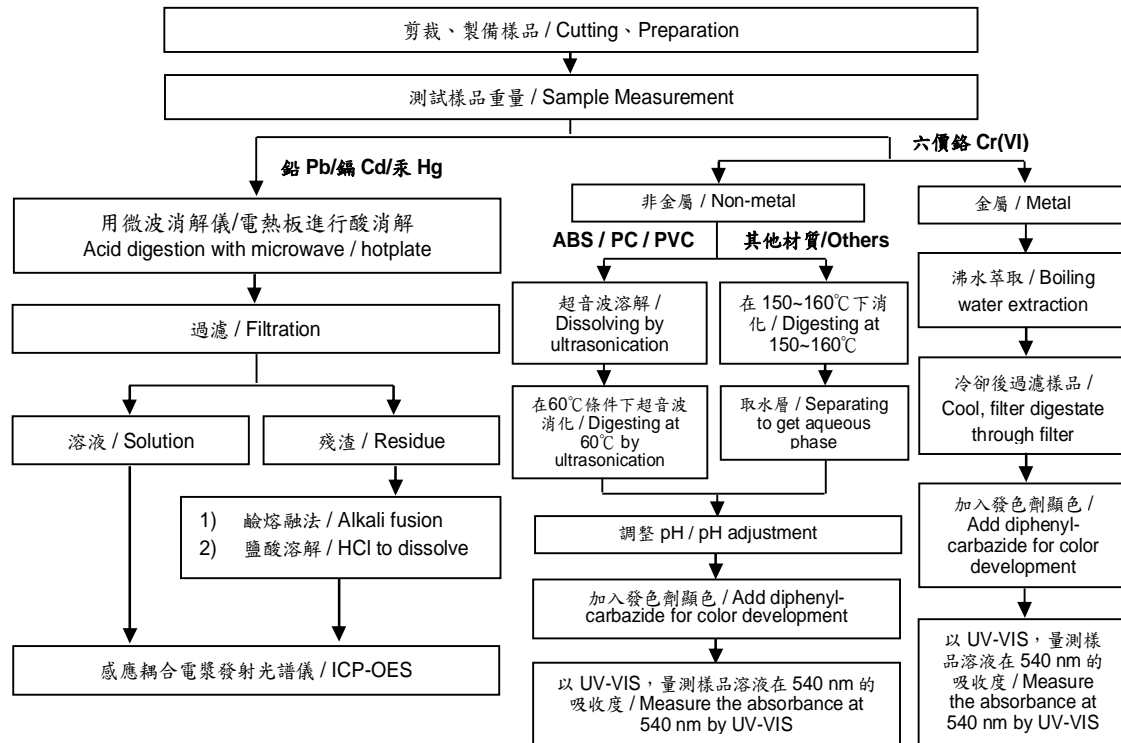
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重金屬流程圖 / Analytical flow chart of Heavy Metal

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：陳思臻 / Technician : Rita Chen
- 測試負責人：張啟興 / Supervisor: Troy Chang



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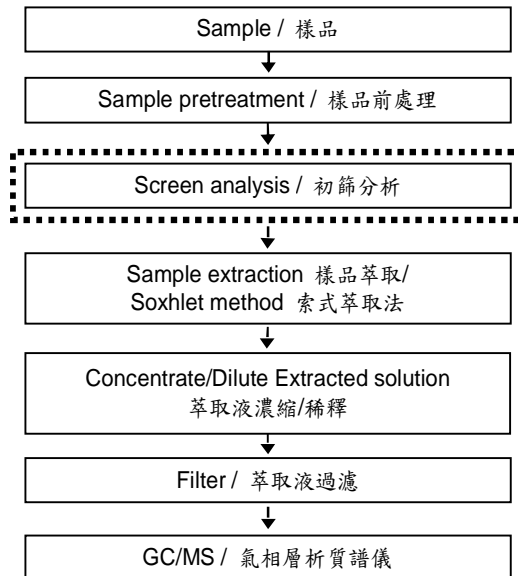
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多溴聯苯/多溴聯苯醚分析流程圖 / Analytical flow chart - PBB/PBDE

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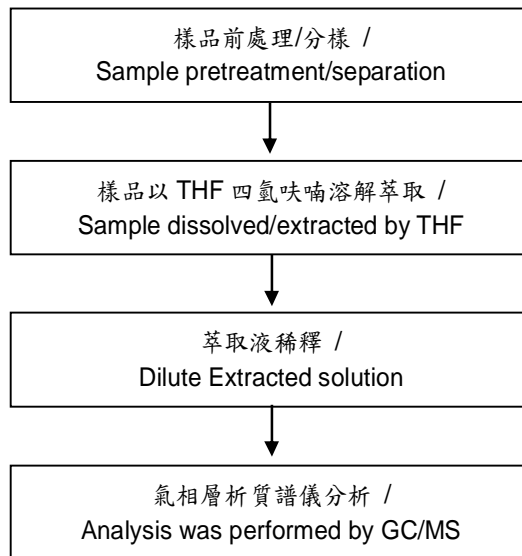
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可塑劑分析流程圖 / Analytical flow chart - Phthalate

- 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】



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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/2020/22092



** 報告結尾 (End of Report) **