

Report No. 報告號碼: 48228068a 001

Page 1 of 6
第 1 頁 共 6 頁

Client 客戶: Hsing Yen Plastic CO., LTD./ 星彥塑膠股份有限公司
No. 92, Maming Rd., Heming Vil., Xiushui Township, Changhua County 504004,
Taiwan, R.O.C./ 台灣 504004 彰化縣秀水鄉鶴鳴村馬鳴路92號

Test item(s) 測試樣品: Plastic/塑膠

Identification/Model No(s) 樣品描述/規格: PVC PELLET / BLACK-7210, WHITE-9225, KT-001, CLEAR 000-1, 0059

Sample obtaining method: Sending by customer
樣品獲取方式:

Condition at delivery: Test item complete and undamaged.
樣品接收狀態:

Sample receiving date: 2024-01-08
收樣日期:

Testing period: 2024-01-08 – 2024-01-19
測試週期:

Place of testing: TÜV Rheinland Hong Kong Ltd.
測試地點:

Test specification 測試要求:
Customer Requirement/ 客戶要求:

Test result 測試結果:

According to RoHS (recast): Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment, 2011/65/EU Annex II and its amendment Directive (EU) 2015/863: Total Content of Lead, Cadmium, Mercury, Chromium VI, Polybrominated Biphenyls, Polybrominated Diphenyl Ethers; and Benzylbutyl phthalate (BBP), Dibutyl phthalate (DBP), Bis(2-ethylhexyl) phthalate (DEHP), Diisobutyl phthalate (DIBP) / 依據電機電子設備限用有害物質指令(RoHS 2011/65/EU) 附錄II及其修正指令(EU) 2015/863: 鉛、鎘、汞、六價鉻、多溴聯苯、多溴二苯醚、鄰苯二甲酸苯基丁酯、鄰苯二甲酸二丁酯、鄰苯二甲酸二(2-乙基己基)酯、鄰苯二甲酸二異丁酯 之總含量

Refer to result page
參照測試報告

Other information: According to client's request, the sample(s) was/were analyzed as a combined mixed sample.
其他信息: The result(s) was/were serve as reference only.

For and on behalf of
TÜV Rheinland Taiwan Ltd.


Arthur Cheng / Project Manager
Name/Position 姓名/職位



2024-01-31
Date 日期

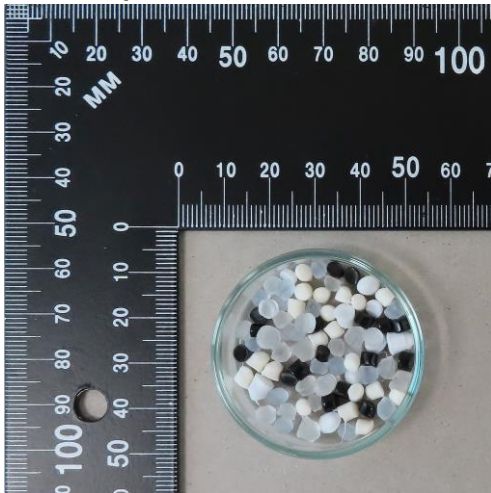
Sample information is provided by customer. Test result is drawn according to the kind and extent of tests performed. This test report relates to the above mentioned test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any safety mark on this or similar products. "Decision Rule" document announced in our website (<https://www.tuv.com/landingpage/en/qm-gcn/>) describes the statement of conformity and its rule of enforcement for test results are applicable throughout this test report.
樣品信息由客戶提供。測試結果根據所做測試的種類和範圍而得出。本測試報告僅對來樣負責。未經本測試中心許可，測試報告不得部分複製。不能根據此報告在上述產品或類似產品上使用任何安全標誌。本測試報告中，描述符合性聲明所應用的判定規則發佈在我司官網 <https://www.tuv.com/landingpage/en/qm-gcn/>。

Test Report No./報告號碼 : 48228068a 001

Page 2 of 6
第2頁共6頁**Material list/材料清單**

Item: PVC PELLET / BLACK-7210, WHITE-9225, KT-001, CLEAR 000-1, 0059

Mat. No./ 材料號碼	Material/材質	Color/顏色	Location/位置
1	Plastic/塑膠	multicolor/彩色	TCL240108-01

Test Sample/測試樣品

Test Report No./報告號碼 : 48228068a 001

Page 3 of 6
第3頁共6頁

Test Method/測試方法 : Total Cadmium/鎘, Lead/鉛, Mercury/汞, Chromium/鉻
 - Ref. to/參考 IEC 62321-4:2013 and IEC 62321-5:2013
 Chromium (VI)/六價鉻
 - For Metal material/金屬 - Ref. to IEC 62321-7-1:2015
 - For Polymer, Electronic material or others materials/聚合物, 電子材料或者其他材料 - Ref. to IEC 62321-7-2:2017
 PBBs/多溴聯苯, PBDEs/多溴二苯醚 - Ref. to/參考 IEC 62321-6:2015

Material No./材料編號	Mat.1		
Parameter / 測試項目	Unit / 單位	MDL	Result / 結果
Cadmium (Cd) / 鎘	mg/kg	2	n.d.
Lead (Pb) / 鉛	mg/kg	2	n.d.
Mercury (Hg) / 汞	mg/kg	2	n.d.
Chromium VI (Cr VI) / 六價鉻*	mg/kg	8	n.d.
Sum of Polybrominated biphenyls (PBBs) / 多溴聯苯	mg/kg	-	n.d.
Monobromobiphenyl / 一溴聯苯	mg/kg	5	n.d.
Dibromobiphenyl / 二溴聯苯	mg/kg	5	n.d.
Tribromobiphenyl / 三溴聯苯	mg/kg	5	n.d.
Tetrabromobiphenyl / 四溴聯苯	mg/kg	5	n.d.
Pentabromobiphenyl / 五溴聯苯	mg/kg	5	n.d.
Hexabromobiphenyl / 六溴聯苯	mg/kg	5	n.d.
Heptabromobiphenyl / 七溴聯苯	mg/kg	5	n.d.
Octabromobiphenyl / 八溴聯苯	mg/kg	5	n.d.
Nonabromobiphenyl / 九溴聯苯	mg/kg	5	n.d.
Decabromobiphenyl / 十溴聯苯	mg/kg	5	n.d.
Sum of Polybrominated diphenyl ethers (PBDEs) / 多溴二苯醚	mg/kg	-	n.d.
Monobromodiphenyl ether / 一溴二苯醚	mg/kg	5	n.d.
Dibromodiphenyl ether / 二溴二苯醚	mg/kg	5	n.d.
Tribromodiphenyl ether / 三溴二苯醚	mg/kg	5	n.d.
Tetrabromodiphenyl ether / 四溴二苯醚	mg/kg	5	n.d.
Pentabromodiphenyl ether / 五溴二苯醚	mg/kg	5	n.d.
Hexabromodiphenyl ether / 六溴二苯醚	mg/kg	5	n.d.
Heptabromodiphenyl ether / 七溴二苯醚	mg/kg	5	n.d.
Octabromodiphenyl ether / 八溴二苯醚	mg/kg	5	n.d.
Nonabromodiphenyl ether / 九溴二苯醚	mg/kg	5	n.d.
Decabromodiphenyl ether / 十溴二苯醚	mg/kg	5	n.d.

Notes/ 註釋:

- MDL = Method Detection Limit/方法偵測極限值
- n.d. = Not Detected/未檢出 ; Less than MDL/小於 MDL
- mg/kg = milligram per kilogram/毫克每公斤
- * Once the total Cr content in metal/ plastic or electronic sample is found to be exceeded the limit, the Cr (VI) content will be confirmed with reference to IEC 62321-7-1:2015/ IEC 62321-7-2:2017/ 一旦金屬/塑膠/電子樣品內總鉻含量超過最大允許限值, 六價鉻含量將依照 IEC 62321-7-1:2015/ IEC 62321-7-2:2017 進行確認。

Maximum permissible Limit acc. to 2011/65/EU (mg/kg) / 允許限值	Cd/鎘	Cr(VI)/六價鉻	Pb/鉛	Hg/汞	PBBs/多溴聯苯	PBDEs/多溴二苯醚
	100	1000	1000	1000	1000	1000

Test Report No./報告號碼 : 48228068a 001

Page 4 of 6
第4頁共6頁

Test Method/測試方法 : BBP/DBP/DEHP/DIBP - Ref. to/ 參考 IEC 62321-8:2017

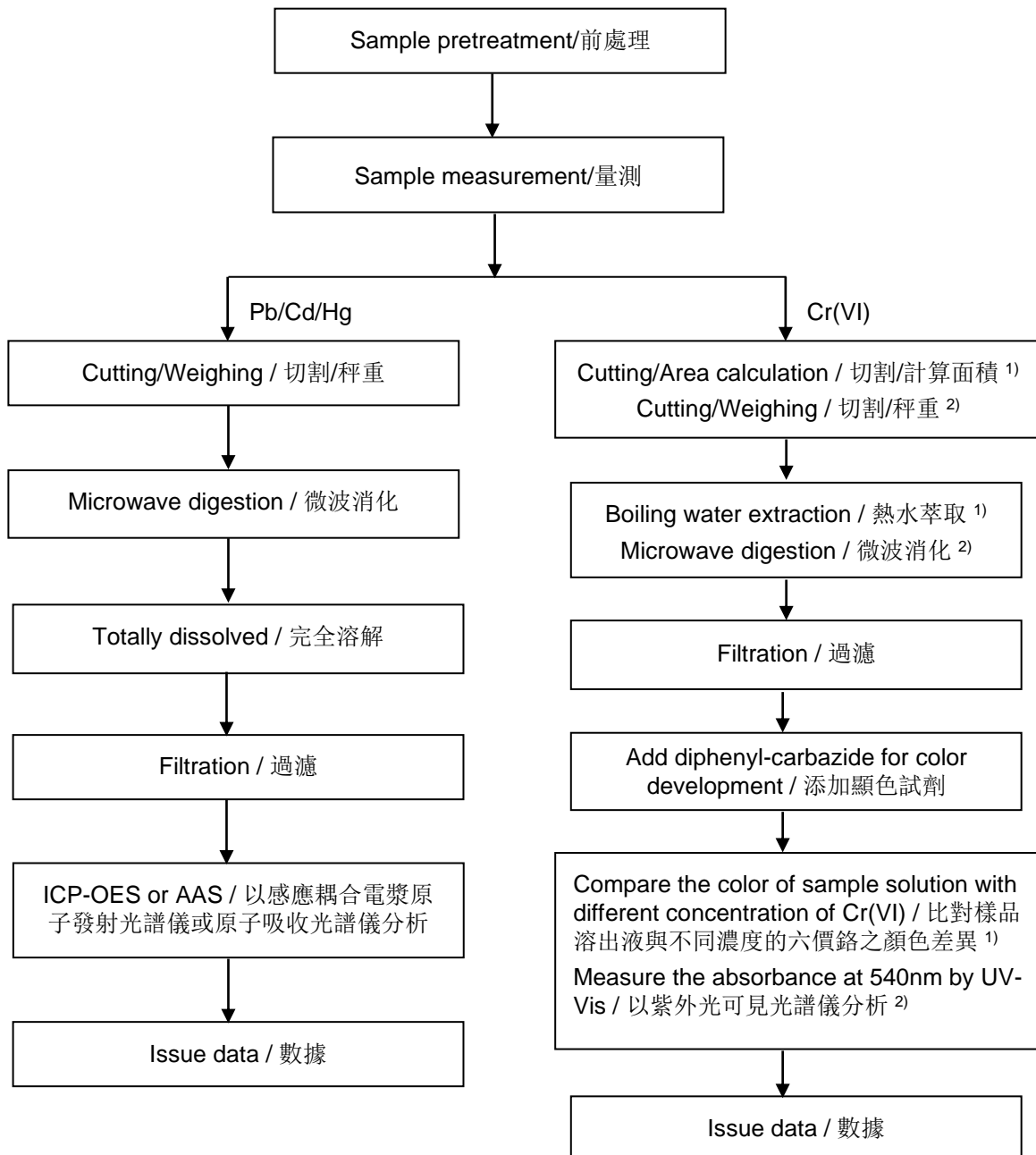
Material No./材料編號			Mat.1
Parameter / 測試項目	Unit / 單位	MDL	Result / 結果
Benzylbutylphthalate (BBP) /鄰苯二甲酸苯基丁酯	mg/kg	50	n.d.
Dibutylphthalate (DBP) /鄰苯二甲酸二丁酯	mg/kg	50	n.d.
Diethylhexylphthalate (DEHP) /鄰苯二甲酸二(2-乙基己基)酯	mg/kg	50	n.d.
Diisobutylphthalate (DIBP) /鄰苯二甲酸二異丁酯	mg/kg	50	n.d.

Notes/ 註釋: - MDL = Method Detection Limit/方法偵測極限值
 - n.d. = Not Detected/未檢出 ; Less than MDL/小於 MDL
 - mg/kg = milligram per kilogram/毫克每公斤

Maximum permissible Limit acc. to (EU) 2015/863 (mg/kg) / 允許限值	BBP	DBP	DEHP	DIBP
	鄰苯二甲酸 苯基丁酯	鄰苯二甲酸 二丁酯	鄰苯二甲酸二(2- 乙基己基)酯	鄰苯二甲酸 二異丁酯
	1000	1000	1000	1000

Testing procedure / 測試流程圖 :

RoHS (Pb/鉛, Cd/鎘, Hg/汞, Cr(VI)/六價鉻)



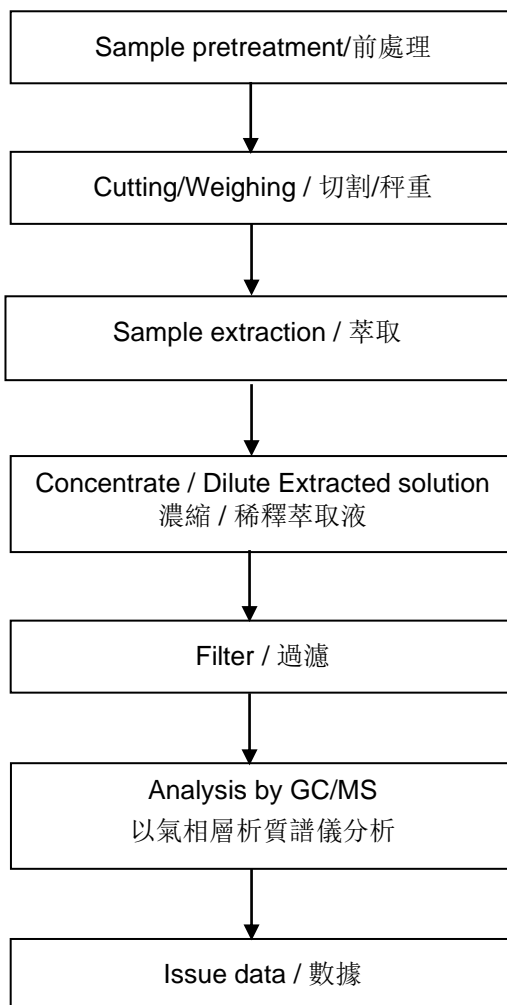
Notes/註釋: ¹⁾ For metallic material / 用於金屬物質
²⁾ For non-metallic material / 用於非金屬物質

Test Report No./報告號碼 : 48228068a 001

Page 6 of 6
第 6 頁 共 6 頁

Testing procedure / 測試流程圖 :

RoHS (PBBs/多溴聯苯, PBDEs/多溴二苯醚, BBP/鄰苯二甲酸苯基丁酯、DBP/鄰苯二甲酸二丁酯、DEHP/鄰苯二甲酸二(2-乙基己基)酯、DIBP/鄰苯二甲酸二異丁酯)



--- End of Test-Report / 此報告結束---