

測試報告 Test Report

報告編號(No.): HTF23B00737A01

報告日期(DATE): 2023/12/08

頁數(PAGE): 1 of 6

集泉塑膠工業股份有限公司 (LIVING FOUNTAIN PLASTIC INDUSTRIAL CO., LTD.)

台中市霧峰區民生路198巷31號 (NO.31, LN. 198, MINSHENG RD., WUFENG DIST., TAICHUNG CITY 41346
TAIWAN)

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) : 集泉塑膠工業股份有限公司 (LIVING FOUNTAIN PLASTIC INDUSTRIAL CO., LTD.)
樣品名稱(Sample Description) : LB-02P CPET NOODLE BOWL (LB-02P CPET麵碗)
樣品型號(Style/Item No.) : LB-02P
樣品材質(Sample Material) : PET
原產國(Country Of Origin) : TAIWAN

收件日(Sample Receiving Date) : 2023/11/23
測試期間(Testing Period) : 2023/11/23 to 2023/12/04 and 2023/12/06 to 2023/12/08

測試需求 (Test Requested)

依據客戶指定，參考Regulation (EU) No 10/2011及其修訂條文、Regulation (EC) No 1935/2004 第3條進行測試。
測試項目請參閱測試結果表格。(As specified by client, the sample(s) was/were tested with reference to Regulation (EU) No 10/2011 with amendments and hence Article 3 of Regulation (EC) No 1935/2004. Please refer to the result table for testing item(s).)

測試結果 (Test Results) : 請見下一頁。(Please refer to next page(s).)

* 此份報告為加測及合併HTF23B00737之報告 *
(This is an additional and combined test report for HTF23B00737.)


Singh Hsiao / Asst. Manager
Signed for and on behalf of
SGS TAIWAN LTD.
Chemical Laboratory - Taipei



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Test Report

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測試部位敘述(Test Part Description)

No.1 : 白色塑膠 (WHITE PLASTIC)

測試結果(Test Results)

通過(PASS)

測試項目 (Test Item(s))	測試方法 (Method)	單位 (Unit)	RL	結果 (Result) No.1			限值 (Limit)
				1st	2nd	3rd	
總遷移量 (10% 乙醇, 100°C或迴流, 1小時) / Overall Migration (10% ethanol, 100°C or reflux, 1 h)	參考 EN 1186: 2022. / With reference to EN 1186: 2022.	mg/dm ²	3	n.d.	n.d.	n.d.	10 (■1)
總遷移量 (3% 醋酸, 100°C或迴流, 1小時) / Overall Migration (3% acetic acid, 100°C or reflux, 1 h)		mg/dm ²	3	n.d.	n.d.	n.d.	10 (■1)
總遷移量表面積與體積之比 / The ratio of surface area to volume for overall migration		dm ² /kg	-	10.0			-
總遷移量 (油脂類食物替代: 95% 乙醇, 60°C, 3小時) / Overall Migration (fatty food substitute: 95% ethanol, 60°C, 3 h)	參考 EN 1186: 2022. / With reference to EN 1186: 2022.	mg/dm ²	3	n.d.	n.d.	n.d.	10 (■1)
總遷移量 (油脂類食物替代: 異辛烷, 60°C, 1小時) / Overall Migration (fatty food substitute: isooctane, 60°C, 1 h)		mg/dm ²	3	n.d.	n.d.	n.d.	10 (■1)
總遷移量表面積與體積之比 / The ratio of surface area to volume for overall migration		dm ² /kg	-	4.28			-
雙酚 A 特定遷移 / Specific Migration of Bisphenol A	參考 EN 13130-1: 2004, 以液相層析串聯式質譜儀分析。(3% 醋酸, 100°C或迴流, 1 小時) / With reference to EN 13130-1: 2004. Analysis was performed by LC/MS/MS. (3% acetic acid, 100°C or reflux Temperature, 1 h)	mg/kg	0.01	n.d.	n.d.	n.d.	0.05 (■1)

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測試項目 (Test Item(s))	測試方法 (Method)	單位 (Unit)	RL	結果 (Result) No.1			限值 (Limit)
				1st	2nd	3rd	
重金屬特定遷移 / Specific Migration of Heavy Metals							
鉻 / Chromium (Cr)	參考 EN 13130-1: 2004, 以感應耦合電漿質譜儀分析。(3%醋酸, 100°C或迴流, 1 小時) / With reference to EN 13130-1: 2004. Analysis was performed by ICP-MS. (3% acetic acid, 100°C or reflux Temperature, 1 h)	mg/kg	0.01	n.d.	n.d.	n.d.	n.d. (■3)
砷 / Arsenic (As)		mg/kg	0.01	n.d.	n.d.	n.d.	n.d. (■3)
鎘 / Cadmium (Cd)		mg/kg	0.002	n.d.	n.d.	n.d.	n.d. (■3)
汞 / Mercury (Hg)		mg/kg	0.01	n.d.	n.d.	n.d.	n.d. (■3)
鉛 / Lead (Pb)		mg/kg	0.01	n.d.	n.d.	n.d.	n.d. (■3)
鋰 / Lithium (Li)		mg/kg	0.1	n.d.	n.d.	n.d.	0.6 (■1)
鋁 / Aluminum (Al)		mg/kg	0.1	n.d.	n.d.	n.d.	1 (■1)
錳 / Manganese (Mn)		mg/kg	0.1	n.d.	n.d.	n.d.	0.6 (■1)
鐵 / Iron (Fe)		mg/kg	5	n.d.	n.d.	n.d.	48 (■1)
鈷 / Cobalt (Co)		mg/kg	0.01	n.d.	n.d.	n.d.	0.05 (■1)
鎳 / Nickel (Ni)		mg/kg	0.01	n.d.	n.d.	n.d.	0.02 (■1)
銅 / Copper (Cu)		mg/kg	0.25	n.d.	n.d.	n.d.	5 (■1)
鋅 / Zinc (Zn)	mg/kg	0.5	n.d.	n.d.	n.d.	5 (■1)	
鋇 / Barium (Ba)	mg/kg	0.25	n.d.	n.d.	n.d.	1 (■1)	
銻 / Antimony (Sb)	mg/kg	0.01	n.d.	n.d.	n.d.	0.04 (■1)	

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測試報告

Test Report

報告編號(No.): HTF23B00737A01

報告日期(DATE): 2023/12/08

頁數(PAGE): 4 of 6

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測試項目 (Test Item(s))	測試方法 (Method)	單位 (Unit)	RL	結果 (Result) No.1			限值 (Limit)
				1st	2nd	3rd	
鐳 / Lanthanum (La)	參考 EN 13130-1: 2004, 以感應耦合電漿質譜儀分析。(3% 醋酸, 100°C或迴流, 1 小時) / With reference to EN 13130-1: 2004. Analysis was performed by ICP-MS. (3% acetic acid, 100°C or reflux Temperature, 1 h)	mg/kg	0.025	n.d.	n.d.	n.d.	0.05 (Gd+Eu+La+Tb Total) (■1)
銦 / Europium (Eu)		mg/kg	0.025	n.d.	n.d.	n.d.	
釔 / Gadolinium (Gd)		mg/kg	0.025	n.d.	n.d.	n.d.	
鐿 / Terbium (Tb)		mg/kg	0.025	n.d.	n.d.	n.d.	
鄰苯二甲酸酯特定遷移 / Specific Migration of Phthalates							
鄰苯二甲酸二 (2-乙基己基) 酯 (Di- (2-ethylhexyl) phthalate) (DEHP) (CAS No.: 117-81-7)	參考 EN 13130-1: 2004, 以液相層析串聯式質譜儀分析。(3% 醋酸, 100°C或迴流, 1 小時) / With reference to EN 13130-1: 2004. Analysis was performed by LC/MS/MS. (3% acetic acid, 100°C or reflux Temperature, 1 h)	mg/kg	0.1	n.d.	n.d.	n.d.	0.6 (■1)
鄰苯二甲酸二丁酯 (Dibutyl phthalate) (DBP) (CAS No.: 84-74-2)		mg/kg	0.05	n.d.	n.d.	n.d.	0.12 (■1)
鄰苯二甲酸丁苯甲酯 (Butyl Benzyl phthalate) (BBP) (CAS No.: 85-68-7)		mg/kg	0.1	n.d.	n.d.	n.d.	6 (■1)
鄰苯二甲酸二烯丙酯 (Diallyl phthalate) (DAP) (CAS No.: 131-17-9)		mg/kg	0.01	n.d.	n.d.	n.d.	n.d. (■3)
鄰苯二甲酸二異癸酯 (Di-isodecyl phthalate) (DIDP) (CAS No.: 26761-40-0; 68515-49-1)		mg/kg	0.5	n.d.	n.d.	n.d.	-
鄰苯二甲酸二異壬酯 (Di-isononyl phthalate) (DINP) (CAS No.: 28553-12-0; 68515-48-0)		mg/kg	0.5	n.d.	n.d.	n.d.	-
鄰苯二甲酸二異丁酯 (DIBP) / Diisobutyl phthalate (DIBP) (CAS No.: 84-69-5)		mg/kg	0.05	n.d.	n.d.	n.d.	-
DIBP, DBP, BBP 與 DEHP之計算總和 / Calculated Sum of DIBP, DBP, BBP and DEHP (#3)		mg/kg	-	n.d.	n.d.	n.d.	0.6 (■1)
DINP 與 DIDP之總和 / Sum of DINP and DIDP		mg/kg	-	n.d.	n.d.	n.d.	1.8 (■1)
特定遷移量表面積與體積之比 / The ratio of surface area to volume for specific migration	dm²/kg	-	6.00			-	
穩定性 (Stability)				符合 (Compliant)			-

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頁數(PAGE): 5 of 6

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Remark :

- 穩定趨勢是依照2011年1月14日歐盟委員會法規 (EU) No 10/2011 之附錄五所描述之重複使用樣品從第一次至第三次的遷移結果。 (Stability trend is based on the result of the material from first to third migration test as per described in Commission Regulation (EU) No 10/2011 of 14 January 2011 Annex V for repeated use articles.)
- 符合性是以穩定趨勢及第三次遷移結果判定。 (The compliance is based on the stability trend and 3rd migration result.)
- (■1) 限值是依據Commission Regulation 2011年1月14日 (EU) No 10/2011及其修訂案。 / Limit is according to Commission Regulation (EU) No 10/2011 of 14 January 2011 with amendments.
- (■3) 依據Commission Regulation 2011年1月14日 (EU) No 10/2011及其修訂案，該測試項目為不得檢出，其第一次遷移結果應小於RL。 / According to Commission Regulation (EU) No 10/2011 of 14 January 2011 with amendments, the test item(s) is/are prohibited from migrating in detectable quantities, and the first migration shall be less than RL.
- (#3) 以公式 $DBP*5 + DIBP*4 + BBP*0.1 + DEHP*1$ 計算總和並以 DEHP 當量表示。 / Calculated sum expressed as DEHP equivalents using the following equation: $DBP*5 + DIBP*4 + BBP*0.1 + DEHP*1$.
- 替代試驗：客戶選擇(EU) No 10/2011 遷移測試條件為OM4，依EN 1186-1及EN 13130-1要求轉換為對應之替代試驗條件。 / Substitute test: test condition of OM4 in (EU) No 10/2011 is specified by client and conventional condition for the substitute tests instead of OM4 is based on EN 1186-1 and EN 13130-1.

Test condition with simulant D2	Test condition with simulant ethanol 95%	Test condition with simulant iso-Octane
1 h at 100°C	3 h at 60°C	1 h at 60°C

備註(Note) :

1. mg/kg = ppm ; 0.1% = 1000 ppm
2. mg/dm² = milligram per square decimeter (毫克/每100平方公分)
3. RL = Reporting Limit (報告極限值)
4. n.d. = Not Detected (未檢出) = Less than (小於) RL
5. "-" = Not Regulated (無規格值)
6. °C = degree Celsius (攝氏溫度)
7. 測試條件及模擬液是由客戶指定。 (Test condition and simulant were specified by client.)
8. 本報告不得分離或擷錄使用。 (The report is invalid if it is partly reproduced or used.)
9. 本實驗室之報告符合性聲明依ILAC-G8:09/2019簡單允收之二分法判定規則(w=0，AL=TL)做為測試結果符合性聲明判定之判定依據。 (The decision rule of the statements of conformity is following the ILAC G8:09/2019 by using the simple acceptance decision rule.)

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TAIWAN)

* 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.)

HTF23B00737**** 報告結尾 (End of Report) ****

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