

Test Report 測試報告

Applicant 申請廠商 : Simpla Biotech Co., Ltd.
新浦樂生化科技股份有限公司
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桃園市蘆竹區內溪路 50 號

Number 報告號碼 : TWNC01143411
Issue Date 報告發行日期 : Jan 09, 2023

Sample Description 樣品敘述:

One (1) Group of Submitted Samples Said To Be:

壹(一)件所送檢樣品據指(各)為:

Name of Sample : 湯麵碗

樣品名稱

Material : PLA

材質

Country of Origin : Taiwan

原產地

Date Sample Received : Dec 28, 2022

樣品收到日期

Date Test Started : Dec 28, 2022

開始測試日期

Test Conducted 測試內容:

Tests were conducted by applicant's request, for details please refer to attached pages.

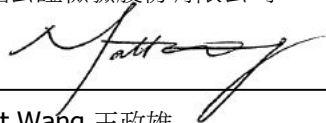
依據客戶要求執行測試，結果請參考附頁。

Authorized By 審核者:

On behalf of Intertek Testing Services

Taiwan Limited

全國公證檢驗股份有限公司

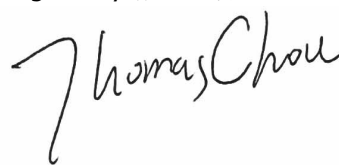


Matt Wang 王政雄

Director 協理



Signed by 報告簽署人:



Thomas Chou 周世民

Manager 經理



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Test Conducted 測試內容:

(一) **Drop Test** 落摔測試

As per applicant's request with reference to ASTM F963 Clause 8.7.
依據廠商要求參考 ASTM F963 第 8.7 章節進行測試。

For all ages; no age grading was specified on product or packaging by applicant, hence the sample was subjected to the most stringent abuse test conditions.

測試年齡: 不分年齡; 申請人沒有在產品或包裝上指定年齡分級, 因此樣品經受了最嚴格的濫用測試條件。

Test method 測試方法:

10 drops at 137 cm.
137 公分高度落下 10 次。

Test Result 測試結果:

1. No visible damage is found after test.
測試後沒有發現可見的損壞或變化。
2. After performing drop testing, neither sharp point/sharp edge nor small part was found.
測試後樣品上無發現尖銳點、尖銳邊以及小物件。

(二) **Microwave safe Test** 微波爐安全測試

Test method 測試方法:

1. Fill test sample with distilled water to 80% the volume capacity
將樣品容量之 80% 的水裝入測試樣品中。
2. Place filled product in the center of a standard microwave oven at 1000W ten times, run at high setting for 5 minutes.
以微波爐瓦數 1000 瓦執行測試, 每次 5 分鐘, 共測試 10 次。

Test Result 測試結果:

No visible damage or color change is found after test.
測試後, 樣品上未發現可見變化。



Test Conducted 測試內容:

(三) Labeling Conformance of Heat Tolerance of Plastic Food Utensils, Containers and Packages
塑膠類食品器具容器包裝之耐熱溫度符合性

Method : MOHW Food No. 1061902219 Announcement (11/13/2017) Methods of Test for Labeling
 檢驗方法 Conformance of Heat Tolerance of Plastic Food Utensils, Containers and Packages (MOHWU0023.02).
 衛生福利部 106 年 11 月 13 日衛授食字第 1061902219 號公告修正塑膠類食品器具容器包裝之耐熱溫度標示符合性試驗方法(MOHU0023.02)。

Result :
 檢驗結果

Test Item 檢驗項目	Result 檢出結果 <u>White plastic bowl (big)</u> 白色塑膠碗(大)
Heat Resistance Test 耐熱試驗 (120 °C , 1 hr) (120 °C , 1 小時)	No change of functionality and color. 功能性未受影響，無變褪色

(四) Analysis of Food Utensils, Containers and Packages - Polylactic Acid (PLA) as Raw Material
食品器具容器包裝檢測 - 原材料為聚乳酸(PLA)

Method : Lead (Pb) / Cadmium (Cd) / Total Lactic Acid / Consumption of Potassium Permanganate /
 檢驗方法 Heavy Metals (as Pb) / Residues after Evaporation
 鉛含量 / 鎘含量 / 總乳酸 / 高錳酸鉀消耗量 / 重金屬(以 Pb 計) / 蒸發殘渣
 MOHW Food No. 1071901951 Announcement (10/4/2018) Methods of Test for Food Utensils, Containers and Packages - Test of Polylactic Acid Plastic Products (MOHWU0017.03).
 衛生福利部 107 年 10 月 4 日衛授食字第 1071901951 號公告修正食品器具、容器、包裝檢驗方法 - 聚乳酸塑膠類之檢驗(MOHU0017.03)。

Migration of Phthalates / Coloring Agents

溶出塑化劑 / 著色劑

MOHW Food No. 1071901983 Announcement (10/4/2018) Methods of Test for Food Utensils, Containers and Packages - Test of Plastic Products (MOHWU0028.04).

衛生福利部 107 年 10 月 4 日衛授食字第 1071901983 號公告修正食品器具、容器、包裝檢驗方法 - 塑膠類之檢驗(MOHU0028.04)。

Phthalates

材質塑化劑

As per CNS 15138-1 (6/14/2012) - Method of test for determination of phthalates plasticizers in plastic products - Part 1: Gas chromatography/mass spectrometry.

依據 CNS 15138-1 (101 年 6 月 14 日) - 塑膠製品中鄰苯二甲酸酯類塑化劑試驗法-第 1 部：氣相層析質譜法。



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(四) Analysis of Food Utensils, Containers and Packages - Polylactic Acid (PLA) as Raw Material
食品器具容器包裝檢測 - 原材料為聚乳酸(PLA)

Result :
 檢驗結果

Test Item 檢驗項目	Unit 單位	Limit of quantitation 定量極限	Result 檢出值	Limit # 限值
White plastic bowl (big) 白色塑膠碗 (大)				
Material Test 材質試驗				
Lead (Pb) 鉛含量	ppm	5	Not detected 未檢出	100
Cadmium (Cd) 鎘含量	ppm	0.5	Not detected 未檢出	100
Di(2-ethylhexyl) Phthalate (DEHP) 鄰苯二甲酸二(2-乙基己基)酯(DEHP)	%	0.003	Not detected 未檢出	0.1
Di-n-octyl Phthalate (DNOP) 鄰苯二甲酸二正辛酯(DNOP)	%	0.003	Not detected 未檢出	0.1
Dibutyl Phthalate (DBP) 鄰苯二甲酸二丁酯(DBP)	%	0.003	Not detected 未檢出	0.1
Benzylbutyl Phthalate (BBP) 鄰苯二甲酸丁苯甲酯(BBP)	%	0.003	Not detected 未檢出	0.1
Diisodecyl Phthalate (DIDP) 鄰苯二甲酸二異癸酯(DIDP)	%	0.003	Not detected 未檢出	0.1
Diisononyl Phthalate (DINP) 鄰苯二甲酸二異壬酯(DINP)	%	0.003	Not detected 未檢出	0.1
Dimethyl Phthalate (DMP) 鄰苯二甲酸二甲酯(DMP)	%	0.003	Not detected 未檢出	0.1
Diethyl Phthalate (DEP) 鄰苯二甲酸二乙酯(DEP)	%	0.003	Not detected 未檢出	0.1
Migration Test 溶出試驗				
Total Lactic Acid 總乳酸 (Water, 60°C, 30 min) (水、60°C、30分鐘)	ppm	5	Not detected 未檢出	30
Consumption of Potassium Permanganate 高錳酸鉀消耗量 (Water, 60°C, 30 min) (水、60°C、30分鐘)	ppm	0.2	0.8	10
Heavy Metals (as Pb) 重金屬(以 Pb 計) (4% Acetic Acid, 60°C, 30 min) (4%醋酸、60°C、30分鐘)	ppm	1	< 1	1



Test Conducted 測試內容:

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Result :
 檢驗結果

Test Item 檢驗項目	Unit 單位	Limit of quantitation 定量極限	Result 檢出值	Limit # 限值
<u>White plastic bowl (big)</u> <u>白色塑膠碗 (大)</u>				
Migration Test 溶出試驗				
Residues after Evaporation (pH>5) 蒸發殘渣(pH>5) (Water, 60°C, 30 min) (水、60°C、30分鐘)	ppm	1	Not detected 未檢出	30
Residues after Evaporation (pH≤5) 蒸發殘渣(pH≤5) (4% Acetic Acid, 60°C, 30 min) (4%醋酸、60°C、30分鐘)	ppm	1	Not detected 未檢出	30
Residues after Evaporation (Oils and Fatty Foods) 蒸發殘渣(油脂/脂肪性食品) (n-Heptane, 25°C, 1 hour) (正庚烷、25°C、1小時)	ppm	1	Not detected 未檢出	30
Residues after Evaporation (Alcoholic Beverages) 蒸發殘渣(酒類) (20% Alcohol, 60°C, 30 min) (20%酒精、60°C、30分鐘)	ppm	1	Not detected 未檢出	30
Di(2-ethylhexyl) Phthalate (DEHP) 鄰苯二甲酸二(2-乙基己基)酯(DEHP) (n-Heptane, 25°C, 1 hour) (正庚烷、25°C、1小時)	ppm	0.05	Not detected 未檢出	1.5
Dibutyl Phthalate (DBP) 鄰苯二甲酸二丁酯(DBP) (n-Heptane, 25°C, 1 hour) (正庚烷、25°C、1小時)	ppm	0.05	Not detected 未檢出	0.3
Benzyl Butyl Phthalate (BBP) 鄰苯二甲酸丁苯甲酯(BBP) (n-Heptane, 25°C, 1 hour) (正庚烷、25°C、1小時)	ppm	0.05	Not detected 未檢出	30
Di-(Iso-Nonyl) Phthalate (DINP) 鄰苯二甲酸二異壬酯(DINP) (n-Heptane, 25°C, 1 hour) (正庚烷、25°C、1小時)	ppm	0.5	Not detected 未檢出	9



Test Conducted 測試內容:

(四) Analysis of Food Utensils, Containers and Packages - Polylactic Acid (PLA) as Raw Material
食品器具容器包裝檢測 - 原材料為聚乳酸(PLA)

Result :
 檢驗結果

Test Item 檢驗項目	Unit 單位	Limit of quantitation 定量極限	Result 檢出值	Limit # 限值
White plastic bowl (big) 白色塑膠碗 (大)				
Migration Test 溶出試驗				
Di-(Iso-Decyl) Phthalate (DIDP) 鄰苯二甲酸二異癸酯(DIDP) (n-Heptane, 25°C, 1 hour) (正庚烷、25°C、1小時)	ppm	0.5	Not detected 未檢出	9
Bis(2-ethylhexyl) Adipate (DEHA) 己二酸二辛酯(DEHA) (n-Heptane, 25°C, 1 hour) (正庚烷、25°C、1小時)	ppm	0.05	Not detected 未檢出	18
Coloring Agents (pH>5) 著色劑(pH>5) (Water, 95°C, 30 min) (水、95°C、30分鐘)	--	--	Not detected 未檢出	No migration 著色劑 無溶出
Coloring Agents (pH≤5) 著色劑(pH≤5) (4% Acetic Acid, 95°C, 30 min) (4%醋酸、95°C、30分鐘)	--	--	Not detected 未檢出	No migration 著色劑 無溶出
Coloring Agents (Oils and Fatty Foods) 著色劑(油脂/脂肪性食品) (n-Heptane, 25°C, 1 hour) (正庚烷、25°C、1小時)	--	--	Not detected 未檢出	No migration 著色劑 無溶出
Coloring Agents (Alcoholic Beverages) 著色劑(酒類) (20% Alcohol, 60°C, 30 min) (20%酒精、60°C、30分鐘)	--	--	Not detected 未檢出	No migration 著色劑 無溶出

: As per MOHW Food No. 1021350146 Announcement (8/20/2013) - Sanitation Standard for Food Utensils, Containers and Packages.

依據衛生福利部 102 年 8 月 20 日部授食字第 1021350146 號公告「食品器具容器包裝衛生標準」

As requested by applicant, the test was conducted only on components listed in this report. Other components were not tested.

依據客戶要求，僅測試列於此份報告的測試部位，其餘部位並未執行。

CNS : Chinese National Standards 中華民國國家標準



Sample photo 樣品照片:



End of Report 結束

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