

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
No. 50, Neixi Rd., Luzhu Dist.,
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桃園市蘆竹區內溪路 50 號

Number 報告號碼 : TWNC01051039
Issue Date 報告發行日期 : Jan 19, 2022

Sample Description 樣品敘述 :

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

壹(一)件所送檢樣品據指為:

Name Of Sample : PLA Cutting Board

樣品名稱 : PLA 砧板

Date Sample Received : Jan 11, 2022

樣品收到日期

Date Test Started : Jan 11, 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) **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(MOHUWU0023.02)。

Result :
檢驗結果

Test Item 檢驗項目	Result 檢出結果
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



Test Conducted 測試內容 :

(二) 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。

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 Yellow plastic board 黃色塑膠板	Limit # 限值
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



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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 Yellow plastic board 黃色塑膠板	Limit # 限值
Material Test 材質試驗				
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	1.8	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
Residues after Evaporation (pH>5) 蒸發殘渣(pH>5) (Water, 60°C, 30 min) (水、60°C、30分鐘)	ppm	1	2	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



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 <u>Yellow plastic board</u> 黃色塑膠板	Limit # 限值
Migration Test 溶出試驗				
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
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
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



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
			Yellow plastic board 黃色塑膠板	
Migration Test 溶出試驗				
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

: 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」

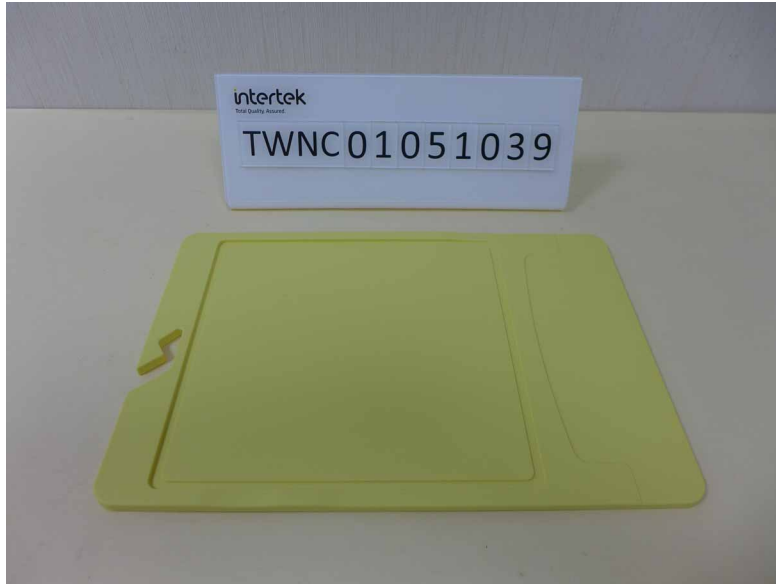
CNS : Chinese National Standards 中華民國國家標準

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。



Number 報告號碼 : TWNC01051039

Samples photo 樣品照片:



End of Report 結束

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