

# 測試報告 Test Report

報告編號(No.): HKF23200103

報告日期(DATE): 2023/03/08

頁數(PAGE): 1 of 7

瑞洋塑膠工業股份有限公司 ( SUIYO PLASTICS INDUSTRIAL CO., LTD. )

臺南市安定區海寮里155-3號 ( NO. 155-3, HAILIAO, ANDING DIST., TAINAN CITY 745, 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) : POLYCARBONATE BOTTLE FOR DRINKING WATER-ORIGINAL COLOR/PC ( PC蒸餾水筒-本色 )

樣品包裝/數量(Sample Package/Quantity) : 請參考報告末頁樣品照片 ( PLEASE REFER TO THE SAMPLE PHOTO AT THE END OF THE REPORT ) / -

樣品保存方式(Sample Packaging) : 常溫 ( AMBIENT TEMP. )

樣品型號(Style/Item No.) : -

樣品批號(Lot. No.) : -

樣品材質(Sample Material) : PC-POLYCARBONATE

送樣廠商(Sample Submitted By) : 瑞洋塑膠工業股份有限公司 ( SUIYO PLASTICS INDUSTRIAL CO., LTD. )

送樣廠商地址/電話/聯絡人(Company Add/Tel/Contact Person) : 臺南市安定區海寮里155-3號(NO. 155-3, HAILIAO, ANDING DIST., TAINAN CITY 745, TAIWAN, R. O. C.) / 06-5930377 / 洪靜美

製造日期(Manufacturing Date) : -

有效日期(Expiry Date) : -

原產國(Country of Origin) : 台灣 ( TAIWAN )

收件日(Sample Receiving Date) : 2023/02/23

測試期間(Testing Period) : 2023/02/23 to 2023/03/08

## 測試需求 (Test Requested)

依據客戶指定，參考中華民國食品器具容器包裝衛生標準 (112.01.11部授食字第1111303439號令修正) 進行測試。測試項目請參閱測試結果表格。(As specified by client, with reference to Sanitation Standard for Food Utensils, Containers and Packages (MOHW Food No. 1111303439, amended on 2023/01/11) to conduct test. Please refer to the result table(s) for testing item(s).)

## 測試結果 (Test Results)

: 請見下一頁。(Please refer to next page(s).)

張伯睿



報告簽署人/張伯睿 博士/部經理  
化學實驗室-高雄

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com.tw/Terms-and-Conditions> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com.tw/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

# 測試報告 Test Report

報告編號(No.): HKF23200103

報告日期(DATE): 2023/03/08

頁數(PAGE): 2 of 7

瑞洋塑膠工業股份有限公司 ( SUIYO PLASTICS INDUSTRIAL CO., LTD. )

臺南市安定區海寮里155-3號 ( NO. 155-3, HAILIAO, ANDING DIST., TAINAN CITY 745, TAIWAN, R. O. C. )

## 測試部位敘述(Test Part Description)

No.1 : 透明塑膠桶 (TRANSPARENT PLASTIC BOTTLE)

## 測試結果(Test Results)

測試項目 (Test Item(s))	測試方法 (Method)	單位 (Unit)	LOQ/ LOD	結果 (Result)	食品衛生 法規 (Limit)	
				No.1		
★鉛 / Lead (Pb)	衛生福利部107.09.27衛授食字第1071901895號公告修正食品器具、容器、包裝檢驗方法-聚碳酸酯塑膠類之檢驗。 / Methods of Test for Food Utensils, Containers and Packages - Test of Polycarbonate Plastic Products (MOHW Food No. 1071901895 announced, September 27, 2018).	ppm	5	n.d.	100	
★鎘 / Cadmium (Cd)		ppm	0.5	n.d.	100	
★高錳酸鉀消耗量-(水, 95°C, 30分鐘) / Potassium permanganate consumption-(water, 95°C, 30 min)		ppm	3	n.d.	10	
★重金屬(以鉛計)-(4%醋酸, 60°C, 30分鐘) / Heavy metal (as Pb)-(4% acetic acid, 60°C, 30 min)		ppm	-	<1	1	
★蒸發殘渣-(水, 95°C, 30分鐘) / Evaporation residue-(water, 95°C, 30 min)		ppm	3	n.d.	30	
★蒸發殘渣-(4%醋酸, 60°C, 30分鐘) / Evaporation residue-(4% acetic acid, 60°C, 30 min)		ppm	3	n.d.	30	
★雙酚A-(水, 95°C, 30分鐘) / Bisphenol A - (water, 95°C, 30 min)		ppm	0.0005	n.d.	0.6	
★雙酚A-(4%醋酸, 60°C, 30分鐘) / Bisphenol A - (4% acetic acid, 60°C, 30 min)		ppm	0.0005	n.d.	0.6	
★鄰苯二甲酸二丁酯 / DBP (Di-n-butyl phthalate) (CAS No.: 84-74-2)		CNS 15138-1 · Z8139-1 : 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。 / CNS 15138-1 Z8139-1 Method of test for determination of phthalates plasticizers in plastic products - Part 1: Gas chromatography/mass spectrometry.	%	0.003	n.d.	0.1
★鄰苯二甲酸二(2-乙基己基)酯 / DEHP (Di-(2-ethylhexyl) phthalate) (CAS No.: 117-81-7)			%	0.003	n.d.	0.1
★鄰苯二甲酸丁苯甲酯 / BBP (Butyl Benzyl phthalate) (CAS No.: 85-68-7)	%		0.003	n.d.	0.1	
★鄰苯二甲酸二異癸酯 / DIDP (Diisodecyl phthalate) (CAS No.: 26761-40-0; 68515-49-1)	%		0.01	n.d.	0.1	

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com.tw/Terms-and-Conditions> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com.tw/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

# 測試報告

## Test Report

報告編號(No.): HKF23200103

報告日期(DATE): 2023/03/08

頁數(PAGE): 3 of 7

瑞洋塑膠工業股份有限公司 ( SUIYO PLASTICS INDUSTRIAL CO., LTD. )

臺南市安定區海寮里155-3號 ( NO. 155-3, HAILIAO, ANDING DIST., TAINAN CITY 745, TAIWAN, R. O. C. )

測試項目 (Test Item(s))	測試方法 (Method)	單位 (Unit)	LOQ/ LOD	結果 (Result)	食品衛生 法規 (Limit)
				No.1	
★鄰苯二甲酸二乙酯 / DEP (Diethyl phthalate) (CAS No.: 84-66-2)	CNS 15138-1 · Z8139-1 : 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。 / CNS 15138-1 Z8139-1 Method of test for determination of phthalates plasticizers in plastic products - Part 1: Gas chromatography/mass spectrometry.	%	0.003	n.d.	0.1
★鄰苯二甲酸二正辛酯 / DNOP (Di-n-octyl phthalate) (CAS No.: 117-84-0)		%	0.003	n.d.	0.1
★鄰苯二甲酸二甲酯 / DMP (Dimethyl phthalate) (CAS No.: 131-11-3)		%	0.003	n.d.	0.1
★鄰苯二甲酸二異壬酯 / DINP (Diisononyl phthalate) (CAS No.: 28553-12-0; 68515-48-0)		%	0.01	n.d.	0.1
★鄰苯二甲酸二異癸酯 (正庚烷, 25°C, 1小時) / DIDP (Diisodecyl phthalate) (CAS No.: 26761-40-0; 68515-49-1) (n-Heptane, 25°C, 1 hr)	衛生福利部107.10.04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。 / Methods of Test for Food Utensils, Containers and Packages - Test of Plastics (MOHW Food No. 1071901983 announced, October 04, 2018).	ppm	0.5	n.d.	9
★鄰苯二甲酸二(2-乙基己基)酯 (正庚烷, 25°C, 1小時) / DEHP (Di-(2-ethylhexyl) phthalate) (CAS No.: 117-81-7) (n-Heptane, 25°C, 1 hr)		ppm	0.05	n.d.	1.5
★鄰苯二甲酸二丁酯 (正庚烷, 25°C, 1小時) / DBP (Di-n-butyl phthalate) (CAS No.: 84-74-2) (n-Heptane, 25°C, 1 hr)		ppm	0.05	n.d.	0.3
★己二酸二(2-乙基己基)酯 (正庚烷, 25°C, 1小時) / DEHA (Di-2-ethylhexyl Adipate) (CAS No.: 103-23-1) (n-Heptane, 25°C, 1 hr)		ppm	0.05	n.d.	18
★鄰苯二甲酸二異壬酯 (正庚烷, 25°C, 1小時) / DINP (Diisononyl phthalate) (CAS No.: 28553-12-0; 68515-48-0) (n-Heptane, 25°C, 1 hr)		ppm	0.5	n.d.	9
★鄰苯二甲酸丁苯甲酯 (正庚烷, 25°C, 1小時) / BBP (Butyl Benzyl phthalate) (CAS No.: 85-68-7) (n-Heptane, 25°C, 1 hr)		ppm	0.05	n.d.	30

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com.tw/Terms-and-Conditions> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com.tw/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

# 測試報告 Test Report

報告編號(No.): HKF23200103

報告日期(DATE): 2023/03/08

頁數(PAGE): 4 of 7

瑞洋塑膠工業股份有限公司 ( SUIYO PLASTICS INDUSTRIAL CO., LTD. )

臺南市安定區海寮里155-3號 ( NO. 155-3, HAILIAO, ANDING DIST., TAINAN CITY 745, TAIWAN, R. O. C. )

## 備註(Note) :

1. 檢驗報告僅就委託者之委託事項提供檢驗結果，不對產品合法性做判斷。(The test report merely reflects the test results of the consigned matters of the client and is not a certification of the legitimacy of the related products.)
2. 本檢驗報告之所有檢驗內容，均依委託事項執行檢驗，如有不實，願意承擔完全責任。(All contents in the test report are conducted according to the customer-specified items. If there is any falsehood, we are willing to take corresponding responsibility.)
3. 本報告不得分離或擷錄使用。(The report is invalid if it is partly reproduced or used.)
4. mg/kg = ppm ; 0.1wt% = 1000 ppm
5. LOQ = 定量極限，若該測試項目屬於定量分析則以「LOQ」表示；LOD = 偵測極限，若該測試項目屬於定性分析則以「LOD」表示。(LOQ = Limit of Quantification, for quantitative analyses; LOD = Limit of Detection, for qualitative analyses.)
6. n.d. = Not Detected (未檢出) = Less than (小於) LOQ/LOD
7. "-" = Not Regulated (無規格值)
8. 測試項目名稱旁有★者，為本實驗室通過衛生福利部認證項目。(The test method marked with ★ is accredited by MOHW.)
9. 法規標準值係依據衛生福利部112年01月11日部授食字第1111303439號令 食品器具容器包裝衛生標準之法規限值。(The limit value(s) is/are according to "Sanitation Standard for Food Utensils, Containers and Packages (MOHW Food No. 1111303439, amended on 2023/01/11)", Ministry of Health and Welfare of Taiwan.)

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com.tw/Terms-and-Conditions> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com.tw/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

## 測試報告 Test Report

報告編號(No.): HKF23200103

報告日期(DATE): 2023/03/08

頁數(PAGE): 5 of 7

瑞洋塑膠工業股份有限公司 ( SUIYO PLASTICS INDUSTRIAL CO., LTD. )

臺南市安定區海寮里155-3號 ( NO. 155-3, HAILIAO, ANDING DIST., TAINAN CITY 745, TAIWAN, R. O. C. )

\* 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.)

### HKF23200103



\*\* 報告結尾 (End of Report) \*\*

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com.tw/Terms-and-Conditions> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com.tw/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

# 測試報告 Test Report

報告編號(No.): HKF23200103

報告日期(DATE): 2023/03/08

頁數(PAGE): 6 of 7

瑞洋塑膠工業股份有限公司 ( SUIYO PLASTICS INDUSTRIAL CO., LTD. )

臺南市安定區海寮里155-3號 ( NO. 155-3, HAILIAO, ANDING DIST., TAINAN CITY 745, TAIWAN, R. O. C. )

以下為申請廠商委託測試項目、測試方法、定量/偵測極限：  
( The information requested from client is shown as below : )  
HKF23200103

測試項目 (Test Items)	測試方法 (Method)	LOQ/LOD
★鉛 / Lead (Pb)	衛生福利部107.09.27衛授食字第1071901895號公告修正食品器具、容器、包裝檢驗方法-聚碳酸酯塑膠類之檢驗。 / Methods of Test for Food Utensils, Containers and Packages - Test of Polycarbonate Plastic Products (MOHW Food No. 1071901895 announced, September 27, 2018).	詳見測試結果之定量/偵測極限。(Please refer to the result table above.)
★鎘 / Cadmium (Cd)		
★高錳酸鉀消耗量-(水, 95°C, 30分鐘) / Potassium permanganate consumption-(water, 95°C, 30 min)		
★重金屬(以鉛計)-(4%醋酸, 60°C, 30分鐘) / Heavy metal (as Pb)-(4% acetic acid, 60°C, 30 min)		
★蒸發殘渣-(水, 95°C, 30分鐘) / Evaporation residue-(water, 95°C, 30 min)		
★蒸發殘渣-(4%醋酸, 60°C, 30分鐘) / Evaporation residue-(4% acetic acid, 60°C, 30 min)		
★雙酚A-(水, 95°C, 30分鐘) / Bisphenol A - (water, 95°C, 30 min)		
★雙酚A-(4%醋酸, 60°C, 30分鐘) / Bisphenol A - (4% acetic acid, 60°C, 30 min)		
★鄰苯二甲酸二丁酯 / DBP (Di-n-butyl phthalate) (CAS No.: 84-74-2)	CNS 15138-1 · Z8139-1：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。 / CNS 15138-1 Z8139-1 Method of test for determination of phthalates plasticizers in plastic products - Part 1: Gas chromatography/mass spectrometry.	
★鄰苯二甲酸二(2-乙基己基)酯 / DEHP (Di-(2-ethylhexyl) phthalate) (CAS No.: 117-81-7)		
★鄰苯二甲酸丁苯甲酯 / BBP (Butyl Benzyl phthalate) (CAS No.: 85-68-7)		
★鄰苯二甲酸二異癸酯 / DIDP (Diisodecyl phthalate) (CAS No.: 26761-40-0; 68515-49-1)		
★鄰苯二甲酸二乙酯 / DEP (Diethyl phthalate) (CAS No.: 84-66-2)		

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com.tw/Terms-and-Conditions> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com.tw/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

# 測試報告 Test Report

報告編號(No.): HKF23200103

報告日期(DATE): 2023/03/08

頁數(PAGE): 7 of 7

瑞洋塑膠工業股份有限公司 ( SUIYO PLASTICS INDUSTRIAL CO., LTD. )

臺南市安定區海寮里155-3號 ( NO. 155-3, HAILIAO, ANDING DIST., TAINAN CITY 745, TAIWAN, R. O. C. )

以下為申請廠商委託測試項目、測試方法、定量/偵測極限：  
( The information requested from client is shown as below : )  
HKF23200103

測試項目 (Test Items)	測試方法 (Method)	LOQ/LOD
★鄰苯二甲酸二正辛酯 / DNOP (Di-n-octyl phthalate) (CAS No.: 117-84-0)	CNS 15138-1 · Z8139-1：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。 / CNS 15138-1 Z8139-1 Method of test for determination of phthalates plasticizers in plastic products - Part 1: Gas chromatography/mass spectrometry.	詳見測試結果之定量/偵測極限。(Please refer to the result table above.)
★鄰苯二甲酸二甲酯 / DMP (Dimethyl phthalate) (CAS No.: 131-11-3)		
★鄰苯二甲酸二異壬酯 / DINP (Diisononyl phthalate) (CAS No.: 28553-12-0; 68515-48-0)		
★鄰苯二甲酸二異癸酯 (正庚烷, 25°C, 1小時) / DIDP (Diisodecyl phthalate) (CAS No.: 26761-40-0; 68515-49-1) (n-Heptane, 25°C, 1 hr)	衛生福利部107.10.04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。 / Methods of Test for Food Utensils, Containers and Packages - Test of Plastics (MOHW Food No. 1071901983 announced, October 04, 2018).	
★鄰苯二甲酸二(2-乙基己基)酯 (正庚烷, 25°C, 1小時) / DEHP (Di-(2-ethylhexyl) phthalate) (CAS No.: 117-81-7) (n-Heptane, 25°C, 1 hr)		
★鄰苯二甲酸二丁酯 (正庚烷, 25°C, 1小時) / DBP (Di-n-butyl phthalate) (CAS No.: 84-74-2) (n-Heptane, 25°C, 1 hr)		
★己二酸二(2-乙基己基)酯 (正庚烷, 25°C, 1小時) / DEHA (Di-2-ethylhexyl Adipate) (CAS No.: 103-23-1) (n-Heptane, 25°C, 1 hr)		
★鄰苯二甲酸二異壬酯 (正庚烷, 25°C, 1小時) / DINP (Diisononyl phthalate) (CAS No.: 28553-12-0; 68515-48-0) (n-Heptane, 25°C, 1 hr)		
★鄰苯二甲酸丁苯甲酯 (正庚烷, 25°C, 1小時) / BBP (Butyl Benzyl phthalate) (CAS No.: 85-68-7) (n-Heptane, 25°C, 1 hr)		

測試項目名稱旁有★者，為本實驗室通過衛生福利部認證項目。(The test method marked with ★ is accredited by MOHW.)

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com.tw/Terms-and-Conditions> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com.tw/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instruction, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced, except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.