

**Test Report** 

號碼(No.): ETR23200639 日期(Date): 17-Feb-2023 頁數(Page): 1 of 24

巨立實業股份有限公司 (JYU LENQ ENTERPRISE CO., LTD.)

台中市大里工業區工業九路158號 (NO. 158, GONGYE 9TH RD., TALI DIST., TAICHUNG CITY, 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 the applicant as):

\_\_\_\_\_\_

送樣廠商(Sample Submitted By)

: 巨立實業股份有限公司 (JYU LENO ENTERPRISE CO., LTD.)

樣品名稱(Sample Name)

: 鎳(電解鎳)NICKEL

收件日(Sample Receiving Date)

: 02-Feb-2023

測試期間(Testing Period)

02-Feb-2023 to 08-Feb-2023

測試需求(Test Requested)

(1) 依據客戶指定·參考RoHS 2011/65/EU Annex II及其修訂指令(EU) 2015/863測試 鎘、鉛、汞、六價鉻、多溴聯苯、多溴聯苯醚, DBP, BBP, DEHP, DIBP。 (As specified by client, with reference to RoHS 2011/65/EU Annex II and amending Directive (EU) 2015/863 to determine Cadmium, Lead, Mercury, Cr(VI), PBBs, PBDEs, DBP, BBP, DEHP, DIBP contents in the submitted sample(s).)

(2) 其他測試項目請見下一頁。 (Please refer to next pages for the other item(s).)

測試結果(Test Results)

請參閱下一頁 (Please refer to following pages.)

結 論(Conclusion)

根據客戶所提供的樣品‧其鎘、鉛、汞、六價鉻、多溴聯苯、多溴聯苯醚, DBP, BBP, DEHP, DIBP的測試結果符合RoHS 2011/65/EU Annex II暨其修訂指令(EU) 2015/863之限值要求。 (Based on the performed tests on submitted sample(s), the test results of Cadmium, Lead, Mercury, Cr(VI), PBBs, PBDEs, DBP, BBP, DEHP, DIBP comply with the limits as set by RoHS Directive (EU) 2015/863 amending Annex II to Directive 2011/65/EU.)

Troy Chang / Department Malager Signed for and on behalf of SGS TAIWAN LTD. Chemical Laboratory - Taipei



PIN CODE: BD39736F



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#### 測試部位敘述 (Test Part Description)

No.1 : 銀色金屬 (SILVER COLORED METAL)

#### 測試結果 (Test Results)

測試項目	測試方法	單位	MDL	結果	限值
(Test Items)	(Method)	(Unit)		(Result)	(Limit)
				No.1	
鎘 (Cd) (Cadmium (Cd))	参考IEC 62321-5: 2013·以感應耦合電漿發射 光譜儀分析。(With reference to IEC 62321-5:	mg/kg	2	n.d.	100
鉛 (Pb) (Lead (Pb))	2013, analysis was performed by ICP-OES.)	mg/kg	2	n.d.	1000
汞 (Hg) (Mercury (Hg))	參考IEC 62321-4: 2013+ AMD1: 2017·以感應 耦合電漿發射光譜儀分析。(With reference to IEC 62321-4: 2013+ AMD1: 2017, analysis was performed by ICP-OES.)	mg/kg	2	n.d.	1000
六價鉻 (Hexavalent Chromium) Cr(VI) (#2)	參考IEC 62321-7-1: 2015 · 以紫外光-可見光分光光度計分析。(With reference to IEC 62321-7-1: 2015, analysis was performed by UV-VIS.)	μg/cm²	0.1	n.d.	-
一溴聯苯 (Monobromobiphenyl)		mg/kg	5	n.d.	-
二溴聯苯 (Dibromobiphenyl)		mg/kg	5	n.d.	-
三溴聯苯 (Tribromobiphenyl)		mg/kg	5	n.d.	-
四溴聯苯 (Tetrabromobiphenyl)		mg/kg	5	n.d.	=.
五溴聯苯 (Pentabromobiphenyl)	參考IEC 62321-6: 2015·以氣相層析儀/質譜儀	mg/kg	5	n.d.	=
六溴聯苯 (Hexabromobiphenyl)	分析。(With reference to IEC 62321-6: 2015,	mg/kg	5	n.d.	-
七溴聯苯 (Heptabromobiphenyl)	analysis was performed by GC/MS.)	mg/kg	5	n.d.	-
八溴聯苯 (Octabromobiphenyl)	]	mg/kg	5	n.d.	-
九溴聯苯 (Nonabromobiphenyl)	]	mg/kg	5	n.d.	-
十溴聯苯 (Decabromobiphenyl)		mg/kg	5	n.d.	-
多溴聯苯總和 (Sum of PBBs)		mg/kg	-	n.d.	1000



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測試項目	測試方法	單位	MDL	結果	限值
(Test Items)	(Method)	(Unit)		(Result)	(Limit)
				No.1	
一溴聯苯醚 (Monobromodiphenyl ether)	ł	mg/kg	5	n.d.	-
二溴聯苯醚 (Dibromodiphenyl ether)		mg/kg	5	n.d.	-
三溴聯苯醚 (Tribromodiphenyl ether)		mg/kg	5	n.d.	-
四溴聯苯醚 (Tetrabromodiphenyl ether)		mg/kg	5	n.d.	-
五溴聯苯醚 (Pentabromodiphenyl ether)	参考IEC 62321-6: 2015 · 以氣相層析儀/質譜儀	mg/kg	5	n.d.	-
六溴聯苯醚 (Hexabromodiphenyl ether)	分析。(With reference to IEC 62321-6: 2015,	mg/kg	5	n.d.	-
七溴聯苯醚 (Heptabromodiphenyl ether)	analysis was performed by GC/MS.)	mg/kg	5	n.d.	-
八溴聯苯醚 (Octabromodiphenyl ether)		mg/kg	5	n.d.	-
九溴聯苯醚 (Nonabromodiphenyl ether)		mg/kg	5	n.d.	-
十溴聯苯醚 (Decabromodiphenyl ether)		mg/kg	5	n.d.	-
多溴聯苯醚總和 (Sum of PBDEs)		mg/kg	ı	n.d.	1000
鄰苯二甲酸丁苯甲酯 (BBP) (Butyl benzyl phthalate (BBP))		mg/kg	50	n.d.	1000
鄰苯二甲酸二丁酯 (DBP) (Dibutyl phthalate (DBP))		mg/kg	50	n.d.	1000
鄰苯二甲酸二(2-乙基己基)酯 (DEHP) (Di- (2-ethylhexyl) phthalate (DEHP))		mg/kg	50	n.d.	1000
鄰苯二甲酸二異丁酯 (DIBP) (Diisobutyl phthalate (DIBP))	参考IEC 62321-8: 2017・以氣相層析儀/質譜儀	mg/kg	50	n.d.	1000
鄰苯二甲酸二異癸酯 (DIDP) (Diisodecyl phthalate (DIDP)) (CAS No.: 26761-40-0, 68515-49-1)	分析。(With reference to IEC 62321-8: 2017, analysis was performed by GC/MS.)	mg/kg	50	n.d.	-
鄰苯二甲酸二異壬酯 (DINP) (Diisononyl phthalate (DINP)) (CAS No.: 28553-12-0, 68515-48-0)		mg/kg	50	n.d.	-
鄰苯二甲酸二正辛酯 (DNOP) (Di-n-octyl phthalate (DNOP)) (CAS No.: 117-84-0)		mg/kg	50	n.d.	-



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測試項目	測試方法	單位	MDL	結果	限值
(Test Items)	(Method)	(Unit)		(Result)	(Limit)
				No.1	
六溴環十二烷及所有主要被辨別出的異構物 (HBCDD) ( $\alpha$ - HBCDD, $\beta$ - HBCDD, $\gamma$ - HBCDD) (Hexabromocyclododecane (HBCDD) and all major diastereoisomers identified ( $\alpha$ - HBCDD, $\beta$ - HBCDD, $\gamma$ - HBCDD)) (CAS No.: 25637-99-4, 3194-55-6 (134237-51-7, 134237-50-6, 134237-52-8))	參考IEC 62321-9: 2021 · 以氣相層析儀/質譜儀分析。(With reference to IEC 62321-9: 2021, analysis was performed by GC/MS.)	mg/kg	20	n.d.	-
氟 (F) (Fluorine (F)) (CAS No.: 14762-94-8)		mg/kg	50	n.d.	-
氯 (Cl) (Chlorine (Cl)) (CAS No.: 22537- 15-1)	参考BS EN 14582: 2016·以離子層析儀分析。 (With reference to BS EN 14582: 2016,	mg/kg	50	n.d.	-
溴 (Br) (Bromine (Br)) (CAS No.: 10097- 32-2)	analysis was performed by IC.)	mg/kg	50	n.d.	-
碘 (I) (Iodine (I)) (CAS No.: 14362-44-8)		mg/kg	50	n.d.	-
全氟辛烷磺酸 (PFOS) (Perfluorooctane sulfonates (PFOS)) (CAS No.: 1763-23-1)	參考CEN/TS 15968: 2010 · 以液相層析串聯質 譜儀分析。(With reference to CEN/TS 15968: 2010, analysis was performed by LC/MS/MS.)	mg/kg	0.01	n.d.	-
全氟辛基磺酸鉀 (PFOS-K) (Potassium Perfluorooctanesulfonate (PFOS-K)) (CAS No.: 2795-39-3)	由全氟辛烷磺酸測試結果計算得之。 (Calculated from the result of PFOS.)	mg/kg	0.01▲	n.d.	-
全氟辛基磺酸鋰 (PFOS-Li) (Perfluorooctanesulfonic acid, lithium salt (PFOS-Li)) (CAS No.: 29457-72-5)	由全氟辛烷磺酸測試結果計算得之。 (Calculated from the result of PFOS.)	mg/kg	0.01▲	n.d.	-
全氟辛基磺酸銨 (PFOS-NH4) (Perfluorooctanesulfonic acid, ammonium salt (PFOS-NH4)) (CAS No.: 29081-56-9)	由全氟辛烷磺酸測試結果計算得之。 (Calculated from the result of PFOS.)	mg/kg	0.01▲	n.d.	-
全氟辛基磺酸二乙醇銨 (PFOS-NH(OH)2) (Perfluorooctane sulfonate diethanolamine salt (PFOS-NH(OH)2)) (CAS No.: 70225-14-8)	由全氟辛烷磺酸測試結果計算得之。 (Calculated from the result of PFOS.)	mg/kg	0.01 🛦	n.d.	-



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測試項目 (Test Items)	測試方法 (Method)	單位 (Unit)	MDL	結果 (Result) No.1	限值 (Limit)
全氟辛基磺酸四乙基銨 (PFOS-N(C2H5)4) (Perfluorooctanesulfonic acid,tetraethylammonium salt (PFOS- N(C2H5)4)) (CAS No.: 56773-42-3)	由全氟辛烷磺酸測試結果計算得之。 (Calculated from the result of PFOS.)	mg/kg	0.01 🛦	n.d.	-
全氟辛基磺酸二癸二甲基銨 (PFOS-DDA) (N-decyl-N,N-dimethyldecan-1-aminium 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluorooctane-1-sulfonate (PFOS-DDA)) (CAS No.: 251099-16-8)	由全氟辛烷磺酸測試結果計算得之。 (Calculated from the result of PFOS.)	mg/kg	0.01 🛦	n.d.	-
全氟辛基磺醯氟 (POSF) (Perfluorooctane sulfonyl fluoride (POSF)) (CAS No.: 307- 35-7)	由全氟辛烷磺酸測試結果計算得之。 (Calculated from the result of PFOS.)	mg/kg	0.01▲	n.d.	-
全氟辛基磺酸鎂 (PFOS-Mg) (Perfluorooctanesulfonic acid, magnesium salt (PFOS-Mg)) (CAS No.: 91036-71-4)	由全氟辛烷磺酸測試結果計算得之。 (Calculated from the result of PFOS.)	mg/kg	0.01▲	n.d.	-
全氟辛基磺酸鈉 (PFOS-Na) (Perfluorooctanesulfonic acid, sodium salt (PFOS-Na)) (CAS No.: 4021-47-0)	由全氟辛烷磺酸測試結果計算得之。 (Calculated from the result of PFOS.)	mg/kg	0.01 🛦	n.d.	-
N-乙基全氟正辛磺醯胺 (EtFOSA) (N-ethylperfluoro-1-octanesulfonamide (EtFOSA)) (CAS No.: 4151-50-2)	參考CEN/TS 15968: 2010 · 以液相層析串聯質 譜儀分析。(With reference to CEN/TS 15968: 2010, analysis was performed by LC/MS/MS.)	mg/kg	0.01	n.d.	-
N-甲基全氟正辛磺醯胺 (N-Me-FOSA) (N-Methyl-Perfluoroctanesulfonamide (N-Me-FOSA)) (CAS No.: 31506-32-8)	參考CEN/TS 15968: 2010 · 以液相層析串聯質 譜儀分析。(With reference to CEN/TS 15968: 2010, analysis was performed by LC/MS/MS.)	mg/kg	0.01	n.d.	-
N-乙基全氟辛基磺醯胺乙醇 (N-Et-FOSE alcohol) (N-Ethyl- Perfluoroctanesulfonamidoethanol (N-Et- FOSE alcohol)) (CAS No.: 1691-99-2)	參考CEN/TS 15968: 2010 · 以液相層析串聯質 譜儀分析。(With reference to CEN/TS 15968: 2010, analysis was performed by LC/MS/MS.)	mg/kg	0.01	n.d.	-



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(Test Items)	(Method)	(Unit)		(Result)	(Limit)
				No.1	
N-甲基全氟辛基磺醯胺乙醇 (N-Me-FOSE alcohol) (N-Methyl- Perfluoroctanesulfonamidoethanol (N-Me- FOSE alcohol)) (CAS No.: 24448-09-7)	參考CEN/TS 15968: 2010 · 以液相層析串聯質 譜儀分析。(With reference to CEN/TS 15968: 2010, analysis was performed by LC/MS/MS.)	mg/kg	0.01	n.d.	-
全氟辛基磺醯胺 (PFOSA) (Perfluoroctanesulfonamide (PFOSA)) (CAS No.: 754-91-6)	參考CEN/TS 15968: 2010 · 以液相層析串聯質 譜儀分析。(With reference to CEN/TS 15968: 2010, analysis was performed by LC/MS/MS.)	mg/kg	0.01	n.d.	-
全氟辛酸(PFOA) (Perfluorooctanoic Acid (PFOA)) (CAS No.: 335-67-1)	參考CEN/TS 15968: 2010.以液相層析串聯質 譜儀分析。(With reference to CEN/TS 15968: 2010, analysis was performed by LC/MS/MS.)	mg/kg	0.01	n.d.	-
全氟辛酸鈉 (PFOA-Na ) (Sodium perfluorooctanoate (PFOA-Na )) (CAS No.: 335-95-5)	由全氟辛酸測試結果計算得之。(Calculated from the result of PFOA.)	mg/kg	0.01▲	n.d.	-
全氟辛酸鉀 (PFOA-K ) (Potassium perfluorooctanoate (PFOA-K)) (CAS No.: 2395-00-8)	由全氟辛酸測試結果計算得之。(Calculated from the result of PFOA.)	mg/kg	0.01▲	n.d.	-
全氟辛酸銀 (PFOA-Ag ) (Silver perfluorooctanote (PFOA-Ag)) (CAS No.: 335-93-3)	由全氟辛酸測試結果計算得之。(Calculated from the result of PFOA.)	mg/kg	0.01▲	n.d.	-
全氟辛氟 (PFOA-F) (Perfluorooctanoyl fluoride (PFOA-F)) (CAS No.: 335-66-0)	由全氟辛酸測試結果計算得之。(Calculated from the result of PFOA.)	mg/kg	0.01▲	n.d.	-
全氟辛酸銨 (APFO) (Ammonium pentadecafluorooctanoate (APFO)) (CAS No.: 3825-26-1)	由全氟辛酸測試結果計算得之。(Calculated from the result of PFOA.)	mg/kg	0.01▲	n.d.	-
1H,1H,2H,2H-全氟癸磺酸 (8:2 FTS) (1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)) (CAS No.: 39108-34-4)	參考CEN/TS 15968: 2010.以液相層析串聯質 譜儀分析。(With reference to CEN/TS 15968: 2010, analysis was performed by LC/MS/MS.)	mg/kg	0.01	n.d.	-
全氟辛酸甲酯 (Me-PFOA) (Methyl perfluorooctanoate (Me-PFOA)) (CAS No.: 376-27-2)	參考CEN/TS 15968: 2010 · 以氣相層析儀/質譜 儀分析。(With reference to CEN/TS 15968: 2010, analysis was performed by GC/MS.)	mg/kg	0.1	n.d.	-



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(Test Items)	(Method)	(Unit)		(Result) No.1	(Limit)
全氟辛酸乙酯 (Et-PFOA) (Ethyl perfluorooctanoate (Et-PFOA)) (CAS No.: 3108-24-5)	參考CEN/TS 15968: 2010 · 以氣相層析儀/質譜 儀分析。(With reference to CEN/TS 15968: 2010, analysis was performed by GC/MS.)	mg/kg	0.1	n.d.	-
1H,1H,2H,2H-全氟-1-癸醇 (8:2 FTOH) (1H,1H,2H,2H-Perfluorodecan-1-ol (8:2 FTOH)) (CAS No.: 678-39-7)	參考CEN/TS 15968: 2010.以氣相層析儀/質譜儀分析。(With reference to CEN/TS 15968: 2010, analysis was performed by GC/MS.)	mg/kg	0.1	n.d.	-
1H,1H,2H,2H-全氟癸基丙烯酸酯 (8:2 FTA) (1H,1H,2H,2H-Perfluorodecyl acrylate (8:2 FTA)) (CAS No.: 27905-45-9)	參考CEN/TS 15968: 2010 · 以氣相層析儀/質譜儀分析。(With reference to CEN/TS 15968: 2010, analysis was performed by GC/MS.)	mg/kg	0.1	n.d.	-
1H,1H,2H,2H-全氟癸基甲基丙烯酸鹽 (8:2 FTMA) (1H,1H,2H,2H-Perfluorodecyl methacrylate (8:2 FTMA)) (CAS No.: 1996- 88-9)	参考CEN/TS 15968: 2010 · 以氣相層析儀/質譜 儀分析。(With reference to CEN/TS 15968: 2010, analysis was performed by GC/MS.)	mg/kg	0.1	n.d.	-
全氟辛基碘烷 (PFOI) (Perfluoro-1-iodooctane (PFOI)) (CAS No.: 507-63-1)	參考CEN/TS 15968: 2010.以氣相層析儀/質譜儀分析。(With reference to CEN/TS 15968: 2010, analysis was performed by GC/MS.)	mg/kg	0.1	n.d.	-
多氯聯苯 (PCBs) (Polychlorinated biphenyls (PCBs))	參考US EPA 3550C: 2007·以氣相層析儀/質譜 儀分析。(With reference to US EPA 3550C: 2007, analysis was performed by GC/MS.)	mg/kg	0.5	n.d.	-
多氯奈 (PCNs) (Polychlorinated naphthalene (PCNs))	參考US EPA 3550C: 2007·以氣相層析儀/質譜 儀分析。(With reference to US EPA 3550C: 2007, analysis was performed by GC/MS.)	mg/kg	5	n.d.	-
多氯三聯苯 (PCTs) (Polychlorinated terphenyls (PCTs))	參考US EPA 3550C: 2007·以氣相層析儀/質譜 儀分析。(With reference to US EPA 3550C: 2007, analysis was performed by GC/MS.)	mg/kg	0.5	n.d.	-
短鏈氯化石蠟(C10-C13) (SCCP) (Short Chain Chlorinated Paraffins(C10-C13) (SCCP)) (CAS No.: 85535-84-8)	參考ISO 18219-1: 2021·以氣相層析儀/質譜儀分析。(With reference to ISO 18219-1: 2021, analysis was performed by GC/MS.)	mg/kg	50	n.d.	-



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測試項目	測試方法	單位	MDL	結果	限值
(Test Items)	(Method)	(Unit)		(Result)	(Limit)
				No.1	
三苯基錫 (TPT) (Triphenyl tin (TPT))	   參考ISO 17353: 2004·以氣相層析儀/火焰光度	mg/kg	0.03	n.d.	-
三丁基錫 (TBT) (Tributyl tin (TBT))	資本   17333. 2004 ・ 以来相層   1 成	mg/kg	0.03	n.d.	-
二辛基錫 (DOT) (Dioctyl tin (DOT))	2004, analysis was performed by GC/FPD.)	mg/kg	0.03	n.d.	=
二丁基錫 (DBT) (Dibutyl tin (DBT))		mg/kg	0.03	n.d.	-
氧化雙三丁基錫 (TBTO) (Bis(tributyltin) oxide (TBTO)) (CAS No.: 56-35-9)	由三丁基錫測試結果計算得之。(Calculated from the result of Tributyl Tin (TBT).)	mg/kg	0.03 🛦	n.d.	-
偶氮染料 (AZO Dyes)					
4-氨基二苯 (4-aminodiphenyl) (CAS No.: 92-67-1)	參考EN ISO 14362-1: 2017·以氣相層析質譜儀及高效液相層析儀/二極體陣列偵測器分析。(With reference to EN ISO 14362-1: 2017, analysis was performed by GC/MS and HPLC/DAD.)	mg/kg	3	n.d.	-
聯苯胺 (Benzidine) (CAS No.: 92-87-5)	参考EN ISO 14362-1: 2017 · 以氣相層析質譜儀及高效液相層析儀/二極體陣列偵測器分析。(With reference to EN ISO 14362-1: 2017, analysis was performed by GC/MS and HPLC/DAD.)	mg/kg	3	n.d.	-
4-氯鄰甲苯胺 (4-chloro-o-toluidine) (CAS No.: 95-69-2)	參考EN ISO 14362-1: 2017 · 以氣相層析質譜儀及高效液相層析儀/二極體陣列偵測器分析。(With reference to EN ISO 14362-1: 2017, analysis was performed by GC/MS and HPLC/DAD.)	mg/kg	3	n.d.	-
2-萘胺 (2-naphthylamine) (CAS No.: 91-59-8)	參考EN ISO 14362-1: 2017 · 以氣相層析質譜儀及高效液相層析儀/二極體陣列偵測器分析。(With reference to EN ISO 14362-1: 2017, analysis was performed by GC/MS and HPLC/DAD.)	mg/kg	3	n.d.	-
鄰-胺基偶氮甲苯 (o-aminoazotoluene) (CAS No.: 97-56-3)	參考EN ISO 14362-1: 2017·以氣相層析質譜儀及高效液相層析儀/二極體陣列偵測器分析。(With reference to EN ISO 14362-1: 2017, analysis was performed by GC/MS and HPLC/DAD.)	mg/kg	3	n.d.	-
2-胺基-4-硝基甲苯 (5-nitro-o-toluidine) (CAS No.: 99-55-8)	參考EN ISO 14362-1: 2017 · 以氣相層析質譜儀及高效液相層析儀/二極體陣列偵測器分析。(With reference to EN ISO 14362-1: 2017, analysis was performed by GC/MS and HPLC/DAD.)	mg/kg	3	n.d.	-



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巨立實業股份有限公司 (JYU LENQ ENTERPRISE CO., LTD.) 台中市大里工業區工業九路158號 (NO. 158, GONGYE 9TH RD., TALI DIST., TAICHUNG CITY, TAIWAN (R. O. C.))

測試項目	測試方法	單位	MDL	結果	限值
(Test Items)	(Method)	(Unit)		(Result)	(Limit)
4-氯苯胺 (4-chloroaniline) (CAS No.: 106- 47-8)	參考EN ISO 14362-1: 2017 · 以氣相層析質譜儀及高效液相層析儀/二極體陣列偵測器分析。(With reference to EN ISO 14362-1: 2017, analysis was performed by GC/MS and HPLC/DAD.)	mg/kg	3	No.1 n.d.	-
2,4-二氨基苯甲醚 (2,4-diaminoanisole) (CAS No.: 615-05-4)	參考EN ISO 14362-1: 2017 · 以氣相層析質譜儀及高效液相層析儀/二極體陣列偵測器分析。(With reference to EN ISO 14362-1: 2017, analysis was performed by GC/MS and HPLC/DAD.)	mg/kg	3	n.d.	-
4,4'-二胺基二苯甲烷 (4,4'-diaminodiphenylmethane (MDA)) (CAS No.: 101-77-9)	參考EN ISO 14362-1: 2017 · 以氣相層析質譜儀及高效液相層析儀/二極體陣列偵測器分析。(With reference to EN ISO 14362-1: 2017, analysis was performed by GC/MS and HPLC/DAD.)	mg/kg	3	n.d.	-
3,3'-二氯聯苯胺 (3,3'-dichlorobenzidine) (CAS No.: 91-94-1)	參考EN ISO 14362-1: 2017 · 以氣相層析質譜儀及高效液相層析儀/二極體陣列偵測器分析。(With reference to EN ISO 14362-1: 2017, analysis was performed by GC/MS and HPLC/DAD.)	mg/kg	w	n.d.	-
3,3'-二甲氧基聯苯胺 (3,3'-dimethoxybenzidine) (CAS No.: 119-90-4)	参考EN ISO 14362-1: 2017 · 以氣相層析質譜儀及高效液相層析儀/二極體陣列偵測器分析。(With reference to EN ISO 14362-1: 2017, analysis was performed by GC/MS and HPLC/DAD.)	mg/kg	3	n.d.	-
3,3'-二甲基聯苯胺 (3,3'-dimethylbenzidine) (CAS No.: 119-93-7)	參考EN ISO 14362-1: 2017 · 以氣相層析質譜儀及高效液相層析儀/二極體陣列偵測器分析。(With reference to EN ISO 14362-1: 2017, analysis was performed by GC/MS and HPLC/DAD.)	mg/kg	3	n.d.	-
3,3'-二甲基-4,4'-二胺基二苯甲烷 (3,3'-dimethyl-4,4'-diaminodiphenylmethane) (CAS No.: 838-88-0)	參考EN ISO 14362-1: 2017 · 以氣相層析質譜儀及高效液相層析儀/二極體陣列偵測器分析。(With reference to EN ISO 14362-1: 2017, analysis was performed by GC/MS and HPLC/DAD.)	mg/kg	3	n.d.	-
2-甲氧基-5-甲基苯胺 (2-methoxy-5-methylaniline) (CAS No.: 120-71-8)	參考EN ISO 14362-1: 2017 · 以氣相層析質譜儀及高效液相層析儀/二極體陣列偵測器分析。(With reference to EN ISO 14362-1: 2017, analysis was performed by GC/MS and HPLC/DAD.)	mg/kg	3	n.d.	-



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測試項目	測試方法	單位	MDL	結果	限值
(Test Items)	(Method)	(Unit)		(Result)	(Limit)
				No.1	
4,4'-亞甲雙(2-氯苯胺) (4,4'-methylene-bis- (2-chloroaniline)) (CAS No.: 101-14-4)	參考EN ISO 14362-1: 2017 · 以氣相層析質譜儀及高效液相層析儀/二極體陣列偵測器分析。(With reference to EN ISO 14362-1: 2017, analysis was performed by GC/MS and HPLC/DAD.)	mg/kg	ന	n.d.	-
4,4'-二胺基二苯醚 (4,4'-oxydianiline) (CAS No.: 101-80-4)	參考EN ISO 14362-1: 2017 · 以氣相層析質譜儀及高效液相層析儀/二極體陣列偵測器分析。(With reference to EN ISO 14362-1: 2017, analysis was performed by GC/MS and HPLC/DAD.)	mg/kg	ന	n.d.	-
4,4'-硫二苯胺 (4,4'-thiodianiline) (CAS No.: 139-65-1)	參考EN ISO 14362-1: 2017 · 以氣相層析質譜儀及高效液相層析儀/三極體陣列偵測器分析。(With reference to EN ISO 14362-1: 2017, analysis was performed by GC/MS and HPLC/DAD.)	mg/kg	ന	n.d.	-
鄰-甲苯胺 (o-toluidine) (CAS No.: 95-53-4)	參考EN ISO 14362-1: 2017 · 以氣相層析質譜儀及高效液相層析儀/二極體陣列偵測器分析。(With reference to EN ISO 14362-1: 2017, analysis was performed by GC/MS and HPLC/DAD.)	mg/kg	3	n.d.	-
2,4-甲苯二胺 (2,4-diaminotoluene) (CAS No.: 95-80-7)	參考EN ISO 14362-1: 2017 · 以氣相層析質譜儀及高效液相層析儀/二極體陣列偵測器分析。(With reference to EN ISO 14362-1: 2017, analysis was performed by GC/MS and HPLC/DAD.)	mg/kg	3	n.d.	-
2,4,5-三甲苯胺 (2,4,5-trimethylaniline) (CAS No.: 137-17-7)	參考EN ISO 14362-1: 2017 · 以氣相層析質譜儀及高效液相層析儀/二極體陣列偵測器分析。(With reference to EN ISO 14362-1: 2017, analysis was performed by GC/MS and HPLC/DAD.)	mg/kg	3	n.d.	-
鄰-甲氧基苯胺 (o-anisidine) (CAS No.: 90-04-0)	參考EN ISO 14362-1: 2017 · 以氣相層析質譜儀及高效液相層析儀/二極體陣列偵測器分析。(With reference to EN ISO 14362-1: 2017, analysis was performed by GC/MS and HPLC/DAD.)	mg/kg	3	n.d.	-



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測試項目 (Test Items)	測試方法 (Method)	單位 (Unit)	MDL	結果 (Result) No.1	限值 (Limit)
4-苯基偶氮基苯胺 (4-aminoazobenzene) (CAS No.: 60-09-3)	參考EN ISO 14362-1: 2017 or/and EN ISO 14362-3: 2017 · 以氣相層析質譜儀及高效液相層析儀/二極體陣列偵測器分析。(With reference to EN ISO 14362-1: 2017 or/and EN ISO 14362-3: 2017, analysis was performed by GC/MS & HPLC/DAD.)	mg/kg	ന	n.d.	-
2,4-二甲基苯胺 (2,4-xylidine) (CAS No.: 95-68-1)	參考EN ISO 14362-1: 2017 · 以氣相層析質譜儀及高效液相層析儀/二極體陣列偵測器分析。(With reference to EN ISO 14362-1: 2017, analysis was performed by GC/MS and HPLC/DAD.)	mg/kg	3	n.d.	-
2,6-二甲基苯胺 (2,6-xylidine) (CAS No.: 87-62-7)	參考EN ISO 14362-1: 2017 · 以氣相層析質譜儀及高效液相層析儀/二極體陣列偵測器分析。(With reference to EN ISO 14362-1: 2017, analysis was performed by GC/MS and HPLC/DAD.)	mg/kg	3	n.d.	-
聚氯乙烯 (Polyvinyl chloride) (PVC)	參考ASTM E1252: 2021·以傅立葉轉換紅外線 光譜儀及焰色法分析。(With reference to ASTM E1252: 2021, analysis was performed by FT-IR and Flame Test.)	**	-	Negative	-
雙酚A (Bisphenol A) (CAS No.: 80-05-7)	參考RSTS-CHEM-239-1.以液相層析串聯質譜 儀分析。(With reference to RSTS-CHEM-239- 1, analysis was performed by LC/MS/MS.)	mg/kg	1	n.d.	-
砷 (As) (Arsenic (As)) (CAS No.: 7440- 38-2)	參考US EPA 3052: 1996 · 以感應耦合電漿發射 光譜儀分析。(With reference to US EPA 3052: 1996, analysis was performed by ICP-OES.)	mg/kg	2	n.d.	-
鈹 (Be) (Beryllium (Be)) (CAS No.: 7440- 41-7)	參考US EPA 3052: 1996 · 以感應耦合電漿發射 光譜儀分析。(With reference to US EPA 3052: 1996, analysis was performed by ICP-OES.)	mg/kg	2	n.d.	-
銻 (Sb) (Antimony (Sb)) (CAS No.: 7440-36-0)	參考US EPA 3052: 1996 · 以感應耦合電漿發射 光譜儀分析。(With reference to US EPA 3052: 1996, analysis was performed by ICP-OES.)	mg/kg	2	n.d.	-



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台中市大里工業區工業九路158號 (NO. 158, GONGYE 9TH RD., TALI DIST., TAICHUNG CITY, TAIWAN (R. O. C.))

#### 備註(Note):

- 1. mg/kg = ppm; 0.1wt% = 0.1% = 1000ppm
- 2. MDL = Method Detection Limit (方法偵測極限值)
- 3. n.d. = Not Detected (未檢出); 小於MDL / Less than MDL
- 4. "-" = Not Regulated (無規格值)
- 5. \*\*= Qualitative analysis (No Unit) 定性分析(無單位)
- 6. Negative = Undetectable 陰性(未偵測到); Positive = Detectable 陽性(已偵測到)
- 7. (#2) =
  - a. 當六價鉻結果大於0.13 μg/cm²,表示樣品表層含有六價鉻。(The sample is positive for Cr(VI) if the Cr(VI) concentration is greater than 0.13 μg/cm². The sample coating is considered to contain Cr(VI).)
  - b. 當六價鉻結果為n.d. (濃度小於0.10 μg/cm²)·表示表層不含六價鉻。(The sample is negative for Cr(VI) if Cr(VI) is n.d. (concentration less than 0.10 μg/cm²). The coating is considered a non-Cr(VI) based coating)
  - c. 當六價鉻結果介於 0.10 及 0.13  $\mu g/cm^2$  時,無法確定塗層是否含有六價鉻。(The result between 0.10  $\mu g/cm^2$  and 0.13  $\mu g/cm^2$  is considered to be inconclusive unavoidable coating variations may influence the determination.)
- 8. ▲: MDL是針對元素/測試化合物之評估。(The MDL was evaluated for element / tested substance.)

換算公式 (Conversion Formula): AX = A × F

1X 37 42 V (Conversion Formala) . I		
AX	А	F
氧化雙三丁基錫 (Bis(tributyltin)oxide) (TBTO)	三丁基錫 (Tributyl Tin) (TBT)	1.0276

參數換算表 (Parameter Conversion Table):

https://eecloud.sgs.com/Region\_TW/DocDownload.aspx?name=Others

9. 除非另有說明,參照ILAC-G8:09/2019,採用簡單二元(w=0)允收規則進行符合性判定;根據此規則,符合性結果之判定係以測試結果與限值做比較。(Unless otherwise stated, the decision rule for conformity reporting is based on Binary Statement for Simple Acceptance Rule (w=0) stated in ILAC-G8:09/2019. According to this rule, the judgement of conformity is based on the comparing test results with limits.)



## **Test Report**

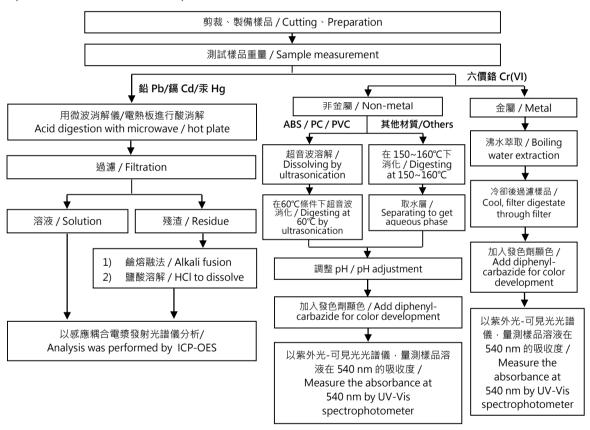
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#### 重金屬流程圖 / Analytical flow chart of heavy metal

根據以下的流程圖之條件,樣品已完全溶解。(六價鉻測試方法除外)

These samples were dissolved totally by pre-conditioning method according to below flow chart. ( $Cr^{6+}$  test method excluded)



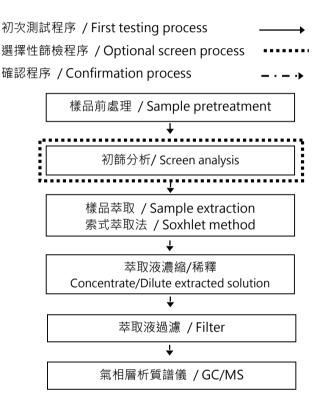


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#### 多溴聯苯/多溴聯苯醚分析流程圖 / Analytical flow chart - PBBs/PBDEs





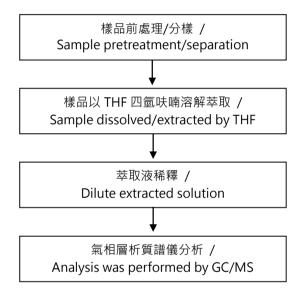
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可塑劑分析流程圖 / Analytical flow chart - Phthalate

【測試方法/Test method: IEC 62321-8】



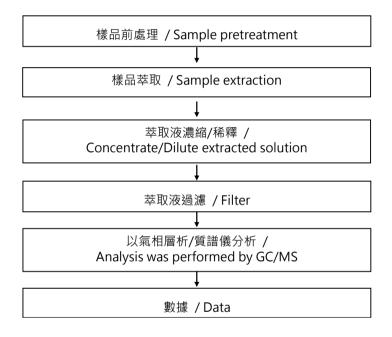


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#### 六溴環十二烷分析流程圖 / Analytical flow chart - HBCDD



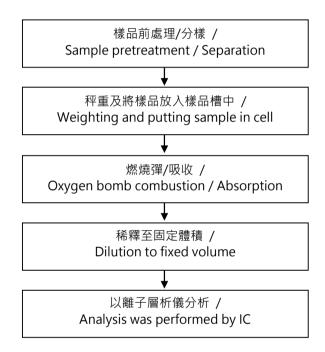


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#### 鹵素分析流程圖 / Analytical flow chart - Halogen



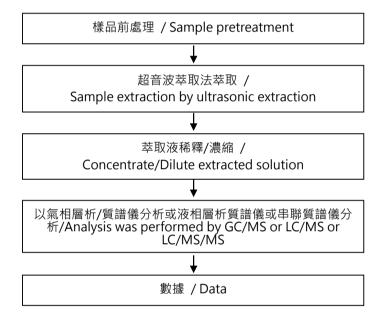


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全氟化合物(包含全氟辛酸/全氟辛烷磺酸/其相關化合物等等)分析流程圖 / Analytical flow chart – PFAS (including PFOA/PFOS/its related compound, etc.)





# **Test Report**

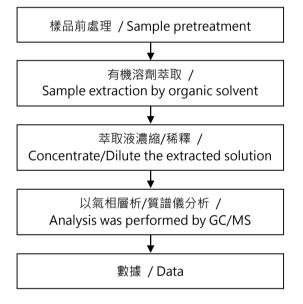
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#### 分析流程圖 / Analytical flow chart

【適用於:多氯聯苯、多氯奈、多氯三聯苯、滅蟻靈、氯化石蠟、DBBT】

\*Apply to: PCBs, PCNs, PCTs, Mirex, Chlorinated Paraffins, DBBT



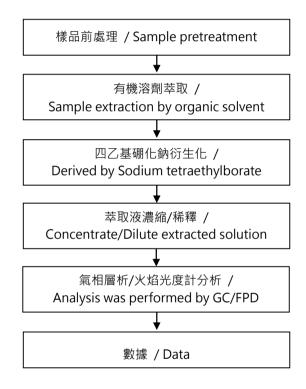


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#### 有機錫分析流程圖 / Analytical flow chart - Organic-Tin



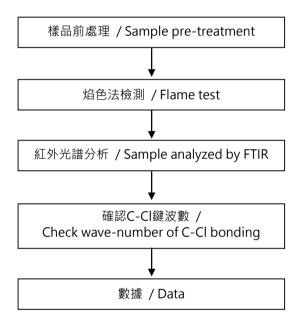


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#### 聚氯乙烯物質判定分析流程圖 / Analysis flow chart - PVC



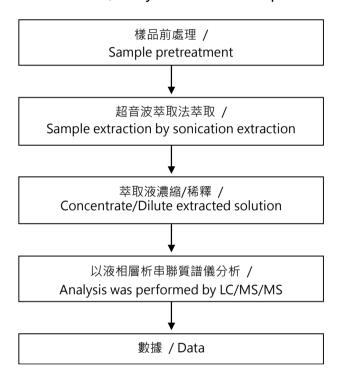


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#### 雙酚A分析流程圖 / Analytical flow chart - Bisphenol A





# **Test Report**

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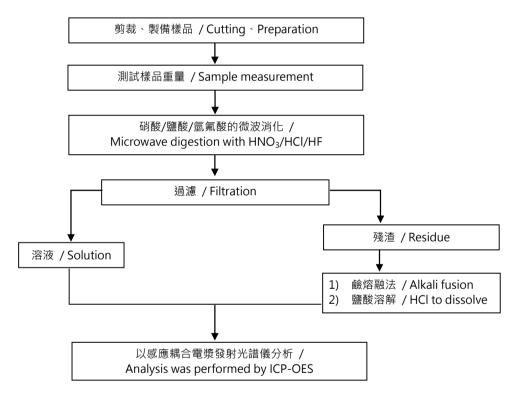
巨立實業股份有限公司 (JYU LENQ ENTERPRISE CO., LTD.) 台中市大里工業區工業九路158號 (NO. 158, GONGYE 9TH RD., TALI DIST., TAICHUNG CITY, TAIWAN (R. O. C.))

#### 元素(含重金屬)分析流程圖 / Analytical flow chart of elements (Heavy metal included)

根據以下的流程圖之條件,樣品已完全溶解。

These samples were dissolved totally by pre-conditioning method according to below flow chart.

【參考方法/Reference method: US EPA 3051A、US EPA 3052】



\* US EPA 3051A 方法未添加氫氟酸 / US EPA 3051A method does not add HF.

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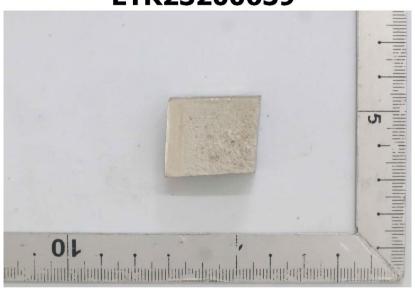
## **Test Report**

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巨立實業股份有限公司 (JYU LENQ ENTERPRISE CO., LTD.) 台中市大里工業區工業九路158號 (NO. 158, GONGYE 9TH RD., TALI DIST., TAICHUNG CITY, 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.)

#### ETR23200639



\*\* 報告結尾 (End of Report) \*\*