

# Test Report 測試報告

TWNC00992680 Number

報告號碼

Applicant: Chilisin Electronics Corp. 申請廠商

奇力新電子股份有限公司

No. 270, Nanfeng Road, Pingzhen District,

Taoyuan City Taiwan (R.O.C.) 桃園市平鎮區南豐路 270 號

Issue Date Jun 18, 2021 報告發行日期

Sample Description 樣品敘述:

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

以下測試樣品乃供應商所提供及確認: Sample Description : Power Inductor

樣品名稱

Style / Item No. : BWVS BWVF BWVC BWVT BWVH BWVN BWVI Series (201610~404012)

產品型號

Date Sample Received : Jun 10, 2021

收件日期

Date Test Started

開始測試日期

: Jun 10, 2021

## Test Conducted 測試執行:

As requested by the applicant, for details please refer to attached pages.

依申請商之要求, 細節請參考附頁.

Conclusion 結論:

Tested Sample 測試樣品

Submitted Samples

送檢樣品

Standard 標準

Restriction of Hazardous Substances (RoHS)

危害物質限制

As per applicant's request with reference to 2011/65/EU

and amendment (EU) 2015/863

依據客戶要求參考歐盟指令 2011/65/EU 及其更新指令

(EU) 2015/863

As per applicant's request 依據客戶要求

Beryllium (Be) Content

鈹含量

Antimony (Sb) Content

銻含量

**Phthalates Content** 

可塑劑含量

Halogen Content

鹵素含量

See Test Conducted

Result 結果

Pass 合格

請見測試內容 See Test Conducted

請見測試內容

See Test Conducted

請見測試內容

See Test Conducted

請見測試內容

Authorized By:

On behalf of Intertek Testing Services

Taiwan Limited

Matt Wang Director

Signed by:

Thomas Chou Manager

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Intertek Testing Services Taiwan Ltd. 全國公證檢驗股份有限公司

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Test Conducted 測試內容:

Test Result Summary 測試結里:

Test Result Summary 測試結果:				
			Result 結果	
<u>Test Item</u>	<u>Unit</u>	<u>Test Method</u>	Grey electronic	RL
測試項目	單位	<u>測試方法</u>	component (mixed all	
			<u>parts)</u>	
Heavy Metal 重金屬				ı
		With reference to IEC 62321-		
		5: 2013, by microwave or acid digestion and determined by		
Cadmium (Cd) Content		ICP-OES.		
	ppm	参考 IEC 62321-5: 2013,以微	ND	2
		波或酸液消化法消化樣品並用		
		感應耦合電漿原子發射光譜儀		
		分析。		
		With reference to IEC 62321-		
		5: 2013, by microwave or acid		
Lead (Pb) Content		digestion and determined by ICP-OES.		
鉛含量	ppm	参考 IEC 62321-5: 2013,以微	ND	2
		波或酸液消化法消化樣品並用		
		感應耦合電漿原子發射光譜儀		
		分析。		
		With reference to IEC 62321-		
		4:2013+AMD1:2017, by microwave or acid digestion		
		and determined by ICP-OES.		
Mercury (Hg) Content	ppm	參考 IEC 62321-	ND	2
汞含量		4:2013+AMD1:2017,以微波		
		或酸液消化法消化樣品並用感		
		應耦合電漿原子發射光譜儀分		
		析。 With reference to USEPA 3052,		
		by microwave digestion and		
Beryllium (Be) Content		determined by ICP-OES.	ND	2
<b></b>	ppm	参考 USEPA 3052,以微波消化		
		法並用感應耦合電漿原子發射		
		光譜儀分析。		
		With reference to USEPA 3052,	ND	
Antimony (Sb) Content		by microwave digestion and determined by ICP-OES.		
鎌含量	ppm	参考 USEPA 3052,以微波消化		2
		法並用感應耦合電漿原子發射		
		光譜儀分析。		
		With reference to IEC 62321-		
Chromium VI (Cr(VI)) Content 六價鉻含量		7-2: 2017, organic solvent was	ND	
		used to dissolve or swell sample matrix, followed by		
	ontent ppm	alkaline digestion and		
		determined by UV-Vis		8
		Spectrophotometer.		
		參考 IEC 62321-7-2:2017,以		
		有機溶劑溶解或使樣品基質膨		
		脹,再進行鹼液消化,用紫外 光-可見光分光光度計分析。		
		儿 "兄儿儿兀兀没计刀"		







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Test Conducted 測試內容:

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T . T		<b>+</b>	Result 結果	
<u>Test Item</u>	<u>Unit</u>	<u>Test Method</u>	Grey electronic	RL
測試項目	單位	<u>測試方法</u>	component (mixed all	
			<u>parts)</u>	
Polybrominated Biphenyls (PBE	3s) 多溴聯	苯		ı
Monobrominated Biphenyls	ppm		ND	5
(MonoBB) 單溴聯苯	PP	-	2	
Dibrominated Biphenyls	ppm		ND	5
(DiBB) 二溴聯苯		-		
Tribrominated Biphenyls	ppm	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	ND	5
(TriBB) 三溴聯苯 Tetrabrominated Biphenyls		With reference to IEC 62321-		
(TetraBB) 四溴聯苯	ppm	6: 2015, by solvent extraction and determined by GC-MS and	ND	5
Pentabrominated Biphenyls		further HPLC-DAD confirmation		
(PentaBB) 五溴聯苯	ppm	when necessary.	ND	5
Hexabrominated Biphenyls		参考 IEC 62321-6: 2015,以溶		
(HexaBB) 六溴聯苯	ppm	劑萃取並用氣相層析質譜儀分	ND	5
Heptabrominated Biphenyls		析,必要時會以高效液相層析		_
(HeptaBB) 七溴聯苯	ppm	議光二極體陣列偵測儀進行確 	ND	5
Octabrominated Biphenyls		認。	ND	-
(OctaBB) 八溴聯苯	ppm	HG.	ND	5
Nonabrominated Biphenyls		]	ND	5
(NonaBB) 九溴聯苯	ppm		ND	Э
Decabrominated Biphenyl	ppm		ND	5
(DecaBB) 十溴聯苯			ND	J
Polybrominated Diphenyl Ether	s (PBDE	5) 多溴聯苯醚		
Monobrominated Diphenyl Ethers	ppm		ND	5
(MonoBDE) 單溴聯苯醚	PPIII			
Dibrominated Diphenyl Ethers	ppm		ND	5
(DiBDE) 二溴聯苯醚	P P ···	-		
Tribrominated Diphenyl Ethers	ppm		ND	5
(TriBDE) 三溴聯苯醚		With reference to IEC 62321-		
Tetrabrominated Diphenyl Ethers	ppm	6: 2015, by solvent extraction	ND	5
(TetraBDE) 四溴聯苯醚 Pentabrominated Diphenyl Ethers		and determined by GC-MS and further HPLC-DAD confirmation		
(PentaBDE) 五溴聯苯醚	ppm	when necessary.	ND	5
(Pendabbe) 立溪聯本版   Hexabrominated Diphenyl Ethers	1	參考 IEC 62321-6: 2015,以溶		
(HexaBDE) 六溴聯苯醚	ppm	劑萃取並用氣相層析質譜儀分	ND	5
Heptabrominated Diphenyl Ethers		析,必要時會以高效液相層析		
(HeptaBIDE) 七溴聯苯醚	ppm	(最光二極體陣列偵測儀進行確)	ND	5
Octabrominated Diphenyl Ethers				_
(OctaBDE) 八溴聯苯醚	ppm		ND	5
Nonabrominated Diphenyl Ethers		<del> </del>	ND	-
(NonaBDE) 九溴聯苯醚	ppm		ND	5
Decabrominated Diphenyl Ether		1	ND	г
(DecaBDE) 十溴聯苯醚	ppm		ND	5







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### Test Conducted 測試內容:

Test Item 測試項目	Unit 單位	<u>Test Method</u> <u>測試方法</u>	Result 結果 Grey electronic component (mixed all parts)	<u>RL</u>
Phthalates 鄰苯二甲酸酯		1		
Di(2-ethylhexyl) Phthalate (DEHP) 鄰苯二甲酸二(2-乙基己基)酯	ppm		ND	50
Dibutyl Phthalate (DBP) 鄰苯二甲酸二丁酯	ppm	With reference to IEC 62321-8:2017, by solvent extraction and determined by GC-MS. 参考 IEC 62321-8:2017,以溶劑萃取並用氣相層析質譜儀分析。	ND	50
Benzyl Butyl Phthalate (BBP) 鄰苯二甲酸苯基丁酯	ppm		ND	50
Di-(Iso-Nonyl) Phthalate (DINP) 鄰苯二甲酸二異壬酯	ppm		ND	50
Di-(Iso-Decyl) Phthalate (DIDP) 鄰苯二甲酸二異癸酯	ppm		ND	50
Di-(N-Octyl) Phthalate (DNOP) 鄰苯二甲酸二辛酯	ppm		ND	50
Diisobutyl Phthalate (DIBP) 鄰苯二甲酸二異丁酯	ppm		ND	50
Halogen Content 鹵素含量				
Fluorine (F) 氟	ppm	With reference to EN 14582:2016 by combustion	ND	50
Chlorine (CI) 氯	ppm	bomb with oxygen and determined by Ion Chromatography. 参考 EN 14582:2016,以氧彈	ND	50
Bromine (Br) 溴	ppm		ND	50
Iodine (I) 碘	ppm	燃燒集氣法並用離子層析儀分 析。	ND	50

Remarks: ppm = Parts per million based on weight of tested sample = mg/kg

備註

百萬分之一,依據測試樣品重量計算 = 毫克/公斤

ND = Not detected 未檢測出

RL = Reporting limit, quantitation limit of analyte in sample

報告極限,測試樣品之定量偵測極限

Responsibility of Chemist 分析人員 : Melody Lee/ Vita Fu

Date Sample Received 樣品收件日期 : Jun 10, 2021

Test Period 樣品測試期間 : Jun 10, 2021 to Jun 17, 2021





: TWNC00992680

Test Conducted 測試內容:

### RoHS Limit RoHS 限值

Restricted Substances 限用物質	<u>Limits 限值</u>
Cadmium (Cd) content 鎘含量	0.01% (100ppm)
Lead (Pb) content 鉛含量	0.1% (1000ppm)
Mercury (Hg) content 汞含量	0.1% (1000ppm)
Chromium VI (Cr(VI)) content 六價鉻含量	0.1% (1000ppm)
Polybrominated Biphenyls (PBBs) 多溴聯苯	0.1% (1000ppm)
Polybrominated Diphenyl Ethers (PBDEs) 多溴聯苯醚	0.1% (1000ppm)
Di(2-ethylhexyl) Phthalate (DEHP) 鄰苯二甲酸二(2-乙基己基)酯	0.1% (1000ppm)
Dibutyl Phthalate (DBP) 鄰苯二甲酸二丁酯	0.1% (1000ppm)
Benzyl Butyl Phthalate (BBP) 鄰苯二甲酸苯基丁酯	0.1% (1000ppm)
Diisobutyl Phthalate (DIBP) 鄰苯二甲酸二異丁酯	0.1% (1000ppm)

The limits were quoted from Annex II of 2011/65/EU and Amendment (EU) 2015/863 for homogeneous material. 本限值是依據歐盟指令 2011/65/EU 及其更新指令(EU) 2015/863 之附錄二針對均質材質所訂定。







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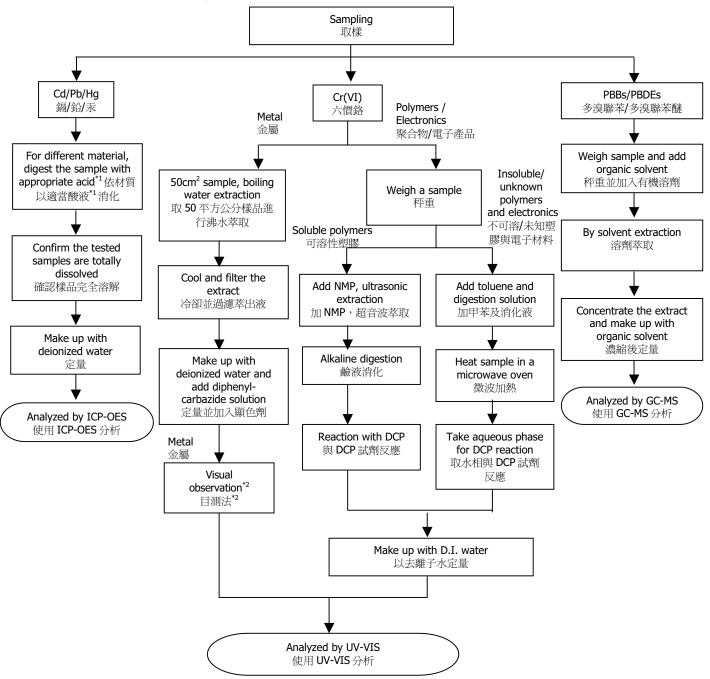
### Test Conducted 測試內容:

#### Measurement Flowchart 測試流程圖:

Test for Cd/Pb/Hg/Chromium (VI)/PBBs/PBDEs Content RoHS 六項測試

Reference Method 参考方法:Cd/Pb: IEC 62321-5:2013; Hg: IEC 62321-4:2013+AMD1:2017; Chromium (VI): IEC 62321-7-1:2015 (boiling water extraction); Chromium (VI): IEC 62321-7-2:2017 (solvent and alkaline extraction);

PBBs/PBDEs: IEC 62321-6:2015









Number : TWNC00992680

報告號碼

Test Conducted 測試內容:

### Remark 備註:

\*1: List of Appropriate Acid 各材質添加酸液如下表:

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Material 材質	Acid Added for Digestion 添加酸液種類		
Polymers 聚合物	$HNO_{3,}HCI,HF,H_{2}O_{2,}H_{3}BO_{3}$ 硝酸、鹽酸、氫氟酸、雙氧水、硼酸		
Metals 金屬	HNO <sub>3,</sub> HCI,HF 硝酸、鹽酸、氫氟酸		
Electronics 電子產品	HNO <sub>3,</sub> HCl,H <sub>2</sub> O <sub>2,</sub> HBF <sub>4</sub> 硝酸、鹽酸、雙氧水、氟硼酸		

\*2: If sample solution is significantly more intense than 0.13 µg/cm² equivalent comparison standard, Chromium VI would be determined as detected, the result of visual observation is positive.

當待測樣品溶液顏色明顯比 0.13 µg/cm² 深,採用目測法判定六價鉻結果爲陽性。







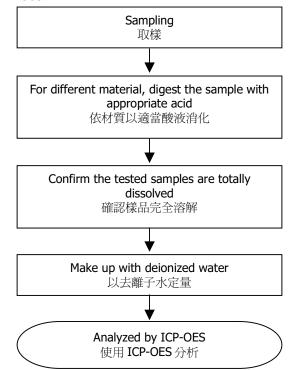
: TWNC00992680

Test Conducted 測試內容:

Measurement Flowchart 測試流程圖:

Test for Heavy Metal (Sb,Be) Contents 重金屬(銻,鈹)

Reference Method 參考方法: USEPA 3052







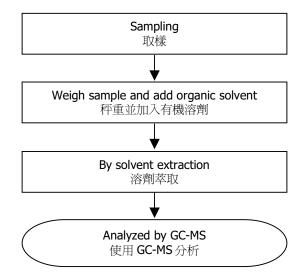


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Test Conducted 測試內容:

Measurement Flowchart 測試流程圖:

Test for Phthalates Content 鄰苯二甲酸酯測試 Reference Method 參考方法: IEC 62321-8:2017









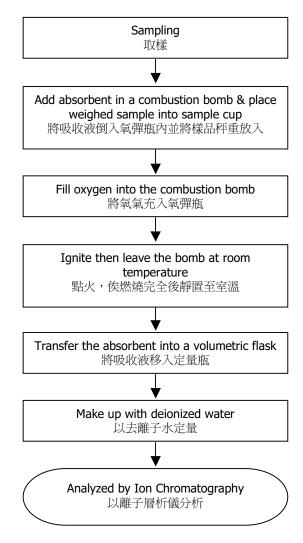
: TWNC00992680

Test Conducted 測試內容:

Measurement Flowchart 測試流程圖:

Test for Halogen Content 鹵素測試

Reference Method 參考方法: EN 14582:2016



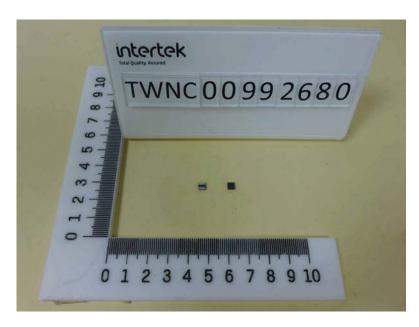


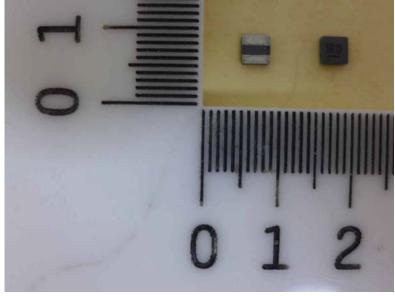




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### Sample photo 樣品照片:





End of Report

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Reporting Statements of Conformity: Please note that the test results contain statement of conformity with the decision rules which are based on the specifications of customers, regulations and standards, and does not consider measurement uncertainty.







# Test Report 測試報告

TWNC00995994 Number

報告號碼

Applicant: Chilisin Electronics Corp.

中請廠商 奇力新電子股份有限公司

No. 270, Nanfeng Road, Pingzhen District,

Taoyuan City Taiwan (R.O.C.) 桃園市平鎮區南豐路 270 號

Issue Date Jun 24, 2021 報告發行日期

Sample Description 樣品敘述:

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

以下測試樣品乃供應商所提供及確認: Sample Description : Power Inductor

樣品名稱

: BWVS BWVF BWVC BWVT BWVT BWVH BWVN SERIES (404015~808040) Style / Item No.

產品型號

Date Job Applied : Jun 23, 2021

申請日期

Test Conducted 測試執行:

As requested by the applicant, for details please refer to attached pages.

依申請商之要求,細節請參考附頁.

Conclusion 結論: <u>Tested Sample 測試樣品</u>

**Submitted Samples** 

送檢樣品

Standard 標準

Restriction of Hazardous Substances (RoHS)

危害物質限制

As per applicant's request with reference to 2011/65/EU and amendment (EU) 2015/863

依據客戶要求參考歐盟指令 2011/65/EU 及其更新指令

(EU) 2015/863

As per applicant's request 依據客戶要求

Beryllium (Be) Content 鈹含量 Antimony (Sb) Content 銻含量

Phthalates Content 可塑劑含量 Halogen Content

Result 結果 Pass 合格

See Test Conducted 請見測試內容 See Test Conducted 請見測試內容 See Test Conducted

請見測試內容 See Test Conducted 請見測試內容

Remarks 備註:

Results were transferred from report No. TWNC00992680 dated Jun 18, 2021.

鹵素含量

分析結果是由 TWNC00992680, 日期 Jun 18, 2021 的報告轉載。

Authorized By:

On behalf of Intertek Testing Services

Taiwan Limited

Matt Wang Director

Signed by:

Thomas Chou Manager

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Test Conducted 測試內容:

Test Result Summary 測試結果:

Test Result Summary 測試結果:				1
<u>Test Item</u> <u>測試項目</u>	<u>Unit</u> 單位	<u>Test Method</u> <u>測試方法</u>	Result 結果 Grey electronic component (mixed all parts)	<u>RL</u>
Heavy Metal 重金屬	•			
Cadmium (Cd) Content 鎘含量	ppm	With reference to IEC 62321-5: 2013, by microwave or acid digestion and determined by ICP-OES. 参考 IEC 62321-5: 2013,以微波或酸液消化法消化樣品並用感應耦合電漿原子發射光譜儀分析。	ND	2
Lead (Pb) Content 鉛含量	ppm	With reference to IEC 62321-5: 2013, by microwave or acid digestion and determined by ICP-OES. 参考 IEC 62321-5: 2013,以微波或酸液消化法消化樣品並用感應耦合電漿原子發射光譜儀分析。	ND	2
Mercury (Hg) Content 汞含量	ppm	With reference to IEC 62321-4:2013+AMD1:2017, by microwave or acid digestion and determined by ICP-OES. 参考 IEC 62321-4:2013+AMD1:2017,以微波或酸液消化法消化樣品並用感應耦合電漿原子發射光譜儀分析。	ND	2
Beryllium (Be) Content 鈹含量	ppm	With reference to USEPA 3052, by microwave digestion and determined by ICP-OES. 参考 USEPA 3052,以微波消化法並用感應耦合電漿原子發射光譜儀分析。	ND	2
Antimony (Sb) Content 銻含量	ppm	With reference to USEPA 3052, by microwave digestion and determined by ICP-OES. 参考 USEPA 3052,以微波消化法並用感應耦合電漿原子發射光譜儀分析。	ND	2
Chromium VI (Cr(VI)) Content 六價鉻含量	ppm	With reference to IEC 62321-7-2: 2017, organic solvent was used to dissolve or swell sample matrix, followed by alkaline digestion and determined by UV-Vis Spectrophotometer. 参考 IEC 62321-7-2:2017,以有機溶劑溶解或使樣品基質膨脹,再進行鹼液消化,用紫外光-可見光分光光度計分析。	ND	8







: TWNC00995994

## Test Conducted 測試內容:

<u>Test Item</u> <u>測試項目</u>	<u>Unit</u> 單位	<u>Test Method</u> <u>測試方法</u>	Result 結果 Grey electronic component (mixed all parts)	<u>RL</u>
Polybrominated Biphenyls (PBE	<b>Bs)</b> 多溴聯	苯		
Monobrominated Biphenyls (MonoBB) 單溴聯苯	ppm	With reference to IEC 62321-	ND	5
Dibrominated Biphenyls (DiBB) 二溴聯苯	ppm		ND	5
Tribrominated Biphenyls (TriBB) 三溴聯苯	ppm		ND	5
Tetrabrominated Biphenyls (TetraBB) 四溴聯苯	ppm	6: 2015, by solvent extraction and determined by GC-MS and	ND	5
Pentabrominated Biphenyls (PentaBB) 五溴聯苯	ppm	further HPLC-DAD confirmation when necessary.	ND	5
Hexabrominated Biphenyls (HexaBB) 六溴聯苯	ppm	參考 IEC 62321-6: 2015,以溶 劑萃取並用氣相層析質譜儀分	ND	5
Heptabrominated Biphenyls (HeptaBB) 七溴聯苯	ppm	析,必要時會以高效液相層析 儀光二極體陣列偵測儀進行確 認。	ND	5
Octabrominated Biphenyls (OctaBB) 八溴聯苯	ppm		ND	5
Nonabrominated Biphenyls (NonaBB) 九溴聯苯	ppm		ND	5
Decabrominated Biphenyl (DecaBB) 十溴聯苯	ppm		ND	5
<b>Polybrominated Diphenyl Ether</b>	s (PBDE	s) 多溴聯苯醚		
Monobrominated Diphenyl Ethers (MonoBDE) 單溴聯苯醚	ppm		ND	5
Dibrominated Diphenyl Ethers (DiBDE) 二溴聯苯醚	ppm		ND	5
Tribrominated Diphenyl Ethers (TriBDE) 三溴聯苯醚	ppm	With reference to IEC 62321-	ND	5
Tetrabrominated Diphenyl Ethers (TetraBDE) 四溴聯苯醚	ppm	6: 2015, by solvent extraction and determined by GC-MS and	ND	5
Pentabrominated Diphenyl Ethers (PentaBDE) 五溴聯苯醚	ppm	further HPLC-DAD confirmation when necessary.	ND	5
Hexabrominated Diphenyl Ethers (HexaBDE) 六溴聯苯醚	ppm	參考 IEC 62321-6: 2015,以溶 劑萃取並用氣相層析質譜儀分	ND	5
Heptabrominated Diphenyl Ethers (HeptaBDE) 七溴聯苯醚	ppm	析,必要時會以高效液相層析 儀光二極體陣列偵測儀進行確	ND	5
Octabrominated Diphenyl Ethers (OctaBDE) 八溴聯苯醚	ppm	認。	ND	5
Nonabrominated Diphenyl Ethers (NonaBDE) 九溴聯苯醚	ppm		ND	5
Decabrominated Diphenyl Ether (DecaBDE) 十溴聯苯醚	ppm		ND	5







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Test Conducted 測試內容:

Test Item 測試項目	<u>Unit</u> 單位	<u>Test Method</u> <u>測試方法</u>	Result 結果 Grey electronic component (mixed all parts)	<u>RL</u>
Phthalates 鄰苯二甲酸酯 Di(2-ethylhexyl) Phthalate (DEHP)				
鄰苯二甲酸二 <b>(2-</b> 乙基己基 <b>)</b> 酯	ppm		ND	50
Dibutyl Phthalate (DBP) 鄰苯二甲酸二丁酯	ppm	With reference to IEC 62321-8:2017, by solvent extraction and determined by GC-MS. 参考 IEC 62321-8:2017,以溶劑萃取並用氣相層析質譜儀分析。	ND	50
Benzyl Butyl Phthalate (BBP) 鄰苯二甲酸苯基丁酯	ppm		ND	50
Di-(Iso-Nonyl) Phthalate (DINP) 鄰苯二甲酸二異壬酯	ppm		ND	50
Di-(Iso-Decyl) Phthalate (DIDP) 鄰苯二甲酸二異癸酯	ppm		ND	50
Di-(N-Octyl) Phthalate (DNOP) 鄰苯二甲酸二辛酯	ppm		ND	50
Diisobutyl Phthalate (DIBP) 鄰苯二甲酸二異丁酯	ppm		ND	50
Halogen Content 鹵素含量				
Fluorine (F) 氟	ppm	With reference to EN 14582:2016 by combustion	ND	50
Chlorine (CI) 氯	ppm	bomb with oxygen and determined by Ion	ND	50
Bromine (Br) 溴	ppm	Chromatography. 参考 EN 14582:2016,以氧彈	ND	50
Iodine (I) 碘	ppm	燃燒集氣法並用離子層析儀分 析。	ND	50

Remarks: ppm = Parts per million based on weight of tested sample = mg/kg

備註

百萬分之一,依據測試樣品重量計算 = 毫克/公斤

ND = Not detected 未檢測出

RL = Reporting limit, quantitation limit of analyte in sample

報告極限,測試樣品之定量偵測極限

Responsibility of Chemist 分析人員 : Melody Lee/ Vita Fu

Date Sample Received 樣品收件日期 : Jun 10, 2021

Test Period 樣品測試期間 : Jun 10, 2021 to Jun 17, 2021





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Test Conducted 測試內容:

### RoHS Limit RoHS 限值

· · · · ·	
Restricted Substances 限用物質	<u>Limits 限值</u>
Cadmium (Cd) content 鎘含量	0.01% (100ppm)
Lead (Pb) content 鉛含量	0.1% (1000ppm)
Mercury (Hg) content 汞含量	0.1% (1000ppm)
Chromium VI (Cr(VI)) content 六價鉻含量	0.1% (1000ppm)
Polybrominated Biphenyls (PBBs) 多溴聯苯	0.1% (1000ppm)
Polybrominated Diphenyl Ethers (PBDEs) 多溴聯苯醚	0.1% (1000ppm)
Di(2-ethylhexyl) Phthalate (DEHP) 鄰苯二甲酸二(2-乙基己基)酯	0.1% (1000ppm)
Dibutyl Phthalate (DBP) 鄰苯二甲酸二丁酯	0.1% (1000ppm)
Benzyl Butyl Phthalate (BBP) 鄰苯二甲酸苯基丁酯	0.1% (1000ppm)
Diisobutyl Phthalate (DIBP) 鄰苯二甲酸二異丁酯	0.1% (1000ppm)

The limits were quoted from Annex II of 2011/65/EU and Amendment (EU) 2015/863 for homogeneous material. 本限值是依據歐盟指令 2011/65/EU 及其更新指令(EU) 2015/863 之附錄二針對均質材質所訂定。







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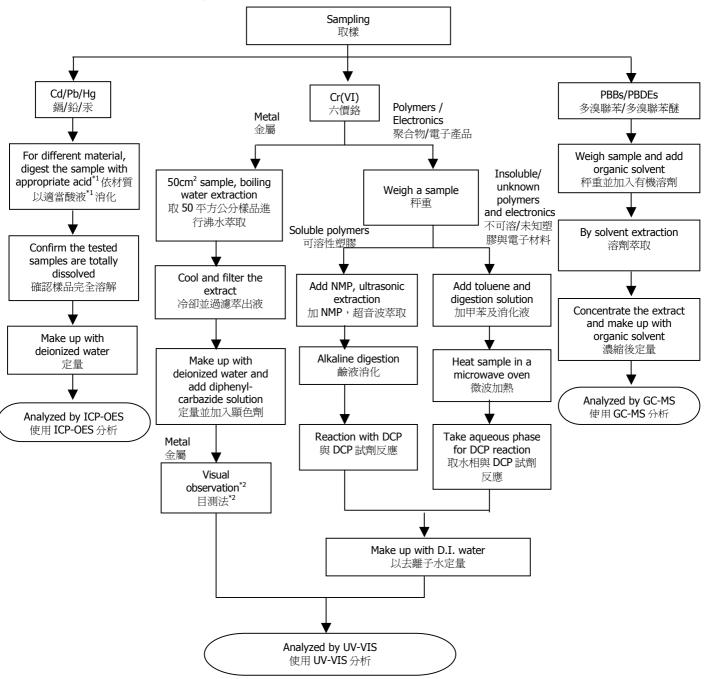
### Test Conducted 測試內容:

#### Measurement Flowchart 測試流程圖:

Test for Cd/Pb/Hg/Chromium (VI)/PBBs/PBDEs Content RoHS 六項測試

Reference Method 参考方法:Cd/Pb: IEC 62321-5:2013; Hg: IEC 62321-4:2013+AMD1:2017; Chromium (VI): IEC 62321-7-1:2015 (boiling water extraction); Chromium (VI): IEC 62321-7-2:2017 (solvent and alkaline extraction);

PBBs/PBDEs: IEC 62321-6:2015









Number

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Test Conducted 測試內容:

### Remark 備註:

\*1: List of Appropriate Acid 各材質添加酸液如下表:

or representation of the control of		
Material 材質	Acid Added for Digestion 添加酸液種類	
Polymers 聚合物	HNO <sub>3,</sub> HCl,HF,H <sub>2</sub> O <sub>2,</sub> H <sub>3</sub> BO <sub>3</sub> 硝酸、鹽酸、氫氟酸、雙氧水、硼酸	
Metals 金屬	HNO <sub>3,</sub> HCl,HF 硝酸、鹽酸、氫氟酸	
Electronics 電子產品	HNO <sub>3,</sub> HCl,H <sub>2</sub> O <sub>2,</sub> HBF <sub>4</sub> 硝酸、鹽酸、雙氧水、氟硼酸	

\*2: If sample solution is significantly more intense than 0.13 µg/cm² equivalent comparison standard, Chromium VI would be determined as detected, the result of visual observation is positive.

當待測樣品溶液顏色明顯比 0.13 μg/cm² 深,採用目測法判定六價鉻結果爲陽性。







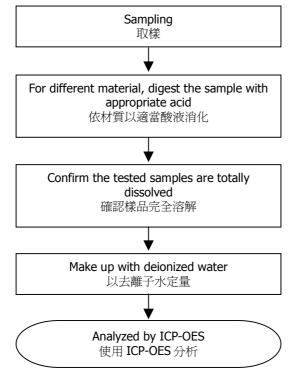
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Test Conducted 測試內容:

Measurement Flowchart 測試流程圖:

Test for Heavy Metal (Sb,Be) Contents 重金屬(銻,鈹)

Reference Method 參考方法: USEPA 3052







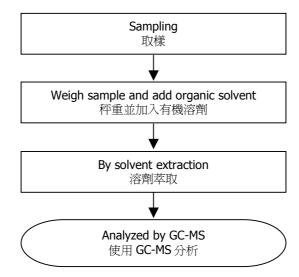


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Test Conducted 測試內容:

Measurement Flowchart 測試流程圖:

Test for Phthalates Content 鄰苯二甲酸酯測試 Reference Method 參考方法: IEC 62321-8:2017









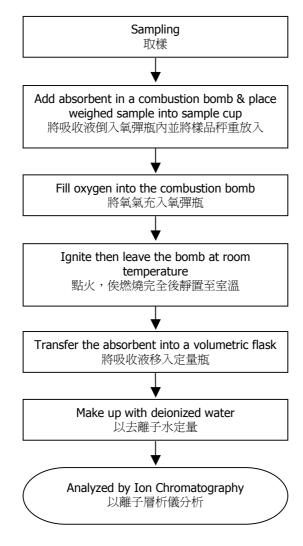
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Test Conducted 測試內容:

Measurement Flowchart 測試流程圖:

Test for Halogen Content 鹵素測試

Reference Method 參考方法: EN 14582:2016





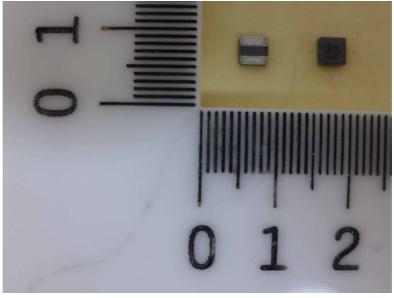




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### Sample photo 樣品照片:





End of Report

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