

## 檢測報告 Test Report



報告編號 A2230419541101001E  
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報告抬頭公司名稱 金利精密工業股份有限公司  
Company Name KENLY PRECISION INDUSTRIAL CO., LTD.  
shown on Report

地址 桃園市平鎮區平鎮工業區工業五路四號  
Address NO.4, GONGYE 5TH RD., PINGZHEN INDUSTRIAL DIST., TAOYUAN COUNTY, TAIWAN

以下測試之樣品及樣品資訊由申請者提供並確認

The following sample(s) and sample information was/were submitted and identified by/on the behalf of the applicant

樣品名稱 C1100+化學研磨  
Sample Name C1100+化學研磨  
其他 A-24  
Other A-24  
樣品接收日期 2023.08.23  
Sample Received Date Aug. 23, 2023  
樣品檢測日期 2023.08.23-2023.09.01  
Testing Period Aug. 23, 2023 to Sep. 1, 2023

檢測要求 根據客戶要求，對所提交樣品中的鉛(Pb)，鎘(Cd)，汞(Hg)，六價鉻(Cr(VI))，多溴聯苯(PBBs)，多溴二苯醚(PBDEs)，鄰苯二甲酸酯(DBP, BBP, DEHP, DIBP)，氟(F)，氯(Cl)，溴(Br)，碘(I)，鄰苯二甲酸酯進行測試。

Test Requested As specified by client, to test Lead (Pb), Cadmium (Cd), Mercury (Hg), Hexavalent Chromium (Cr(VI)), Polybrominated Biphenyls (PBBs), Polybrominated Diphenyl Ethers (PBDEs), Phthalates (DBP, BBP, DEHP, DIBP), Fluorine (F), Chlorine (Cl), Bromine (Br), Iodine (I), Phthalates in the submitted sample(s).

檢測依據/檢測結果 請參見下頁。  
Test Method/Test Result(s) Please refer to the following page(s).



徐啟瑞

徐啟瑞

實驗室經理 Laboratory Manager

日期  
Date

2023.09.01

No. R55666612

桃園市蘆竹區南崁路二段9號5樓之6

5F-6, No.9, Sec.2, Nankan Rd, Luzhu Dist., Taoyuan, Taiwan

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**結論 Conclusion**

測試樣品 Tested Sample	依據標準/指令 According to standard/directive	結果 Result
提交樣品 Submitted Sample	歐盟RoHS指令2011/65/EU及其修訂指令(EU) 2015/863 RoHS Directive 2011/65/EU with amendment (EU) 2015/863	符合 PASS

\*\*\*\*\*

符合表示檢測結果滿足歐盟RoHS指令2011/65/EU及其修訂指令(EU) 2015/863要求的限值。

PASS means that the results shown on the report comply with the limits set by RoHS Directive 2011/65/EU with amendment (EU) 2015/863.

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檢測依據 Test Method

測試項目 Test Item(s)	測試方法 Test Method	測試儀器 Measured Equipment(s)
鉛 Lead (Pb)	IEC 62321-5:2013	ICP-OES
鎘 Cadmium (Cd)	IEC 62321-5:2013	ICP-OES
汞 Mercury (Hg)	IEC 62321-4:2013+AMD1:2017 CSV	ICP-OES
六價鉻 Hexavalent Chromium (Cr(VI))	IEC 62321-7-1:2015	UV-Vis
多溴聯苯 Polybrominated Biphenyls (PBBs)	IEC 62321-6:2015	GC-MS
多溴二苯醚 Polybrominated Diphenyl Ethers (PBDEs)	IEC 62321-6:2015	GC-MS
鄰苯二甲酸酯 Phthalates (DBP, BBP, DEHP, DIBP)	IEC 62321-8:2017	GC-MS
氟 Fluorine (F)	參考EN 14582:2016 Refer to EN 14582:2016	IC
氯 Chlorine (Cl)	參考EN 14582:2016 Refer to EN 14582:2016	IC
溴 Bromine (Br)	參考EN 14582:2016 Refer to EN 14582:2016	IC
碘 Iodine (I)	參考EN 14582:2016 Refer to EN 14582:2016	IC
鄰苯二甲酸酯 Phthalates	IEC 62321-8:2017	GC-MS

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**檢測結果 Test Result(s)**

測試項目 Tested Item(s)	結果 Result	方法檢出限 MDL	限值 Limit
	001		
鉛 Lead (Pb)	N.D.	2 mg/kg	1000 mg/kg
鎘 Cadmium (Cd)	N.D.	2 mg/kg	100 mg/kg
汞 Mercury (Hg)	N.D.	2 mg/kg	1000 mg/kg
六價鉻 Hexavalent Chromium (Cr(VI))	N.D. ▼	0.10 µg/cm <sup>2</sup> (LOQ)	1000 mg/kg

測試項目 Tested Item(s)	結果 Result	方法檢出限 MDL	限值 Limit
	001		
<b>多溴聯苯 Polybrominated Biphenyls (PBBs)</b>			
一溴聯苯 Monobromobiphenyl	N.D.	5 mg/kg	1000 mg/kg
二溴聯苯 Dibromobiphenyl	N.D.	5 mg/kg	
三溴聯苯 Tribromobiphenyl	N.D.	5 mg/kg	
四溴聯苯 Tetrabromobiphenyl	N.D.	5 mg/kg	
五溴聯苯 Pentabromobiphenyl	N.D.	5 mg/kg	
六溴聯苯 Hexabromobiphenyl	N.D.	5 mg/kg	
七溴聯苯 Heptabromobiphenyl	N.D.	5 mg/kg	
八溴聯苯 Octabromobiphenyl	N.D.	5 mg/kg	
九溴聯苯 Nonabromobiphenyl	N.D.	5 mg/kg	
十溴聯苯 Decabromobiphenyl	N.D.	5 mg/kg	

測試項目 Tested Item(s)	結果 Result	方法檢出限 MDL	限值 Limit
	001		
<b>多溴二苯醚 Polybrominated Diphenyl Ethers (PBDEs)</b>			
一溴二苯醚 Monobromodiphenyl ether	N.D.	5 mg/kg	1000 mg/kg
二溴二苯醚 Dibromodiphenyl ether	N.D.	5 mg/kg	
三溴二苯醚 Tribromodiphenyl ether	N.D.	5 mg/kg	
四溴二苯醚 Tetrabromodiphenyl ether	N.D.	5 mg/kg	
五溴二苯醚 Pentabromodiphenyl ether	N.D.	5 mg/kg	
六溴二苯醚 Hexabromodiphenyl ether	N.D.	5 mg/kg	
七溴二苯醚 Heptabromodiphenyl ether	N.D.	5 mg/kg	
八溴二苯醚 Octabromodiphenyl ether	N.D.	5 mg/kg	
九溴二苯醚 Nonabromodiphenyl ether	N.D.	5 mg/kg	
十溴二苯醚 Decabromodiphenyl ether	N.D.	5 mg/kg	

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**檢測結果 Test Result(s)**

測試項目 Tested Item(s)	結果 Result	方法檢出限 MDL	限值 Limit
	001		
<b>鄰苯二甲酸酯 Phthalates (DBP, BBP, DEHP, DIBP)</b>			
鄰苯二甲酸丁基苄基酯 Butyl benzyl phthalate (BBP) CAS#:85-68-7	N.D.	50 mg/kg	1000 mg/kg
鄰苯二甲酸二(2-乙基)己酯 Di-(2-ethylhexyl) phthalate (DEHP) CAS#:117-81-7	N.D.	50 mg/kg	1000 mg/kg
鄰苯二甲酸二丁酯 Dibutyl phthalate (DBP) CAS#:84-74-2	N.D.	50 mg/kg	1000 mg/kg
鄰苯二甲酸二異丁酯 Diisobutyl phthalate (DIBP) CAS#:84-69-5	N.D.	50 mg/kg	1000 mg/kg
測試項目 Tested Item(s)	結果 Result	方法檢出限 MDL	
	001		
氟 Fluorine (F)	N.D.	50 mg/kg	
氯 Chlorine (Cl)	N.D.	50 mg/kg	
溴 Bromine (Br)	N.D.	50 mg/kg	
碘 Iodine (I)	N.D.	50 mg/kg	
測試項目 Tested Item(s)	結果 Result	方法檢出限 MDL	
	001		
<b>鄰苯二甲酸酯 Phthalates</b>			
鄰苯二甲酸二異壬酯 Di-isononyl phthalate (DINP) CAS#:28553-12-0,68515-48-0	N.D.	50 mg/kg	

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**樣品/部位描述 Sample/Part Description**

序號	CTI樣品ID	描述
No.	CTI Sample ID	Description
1	001	銅色金屬 Cupreous metal

**備註:** 對於檢測鉛, 鎘, 汞之樣品已消解完全。  
-N.D. = 未檢出 (小於方法檢出限或定量限)  
-mg/kg = ppm = 百萬分之一  
-1000 mg/kg = 0.1%  
-LOQ = 定量限, 六價鉻的定量限為0.10 µg/cm<sup>2</sup>  
-▼六價鉻濃度小於0.10 µg/cm<sup>2</sup>, 樣品未檢出六價鉻。

**Remark:** **The sample(s) had been dissolved totally tested for Lead, Cadmium, Mercury.**

-MDL = Method Detection Limit

-N.D. = Not Detected (<MDL or LOQ)

-mg/kg = ppm = parts per million

-1000 mg/kg = 0.1%

-LOQ = Limit of Quantification, The LOQ of Hexavalent chromium is 0.10 µg/cm<sup>2</sup>

-▼The sample is negative for Cr(VI) – The Cr(VI) concentration is below 0.10 µg/cm<sup>2</sup>.  
The coating is considered a non-Cr(VI) based coating.

**注釋:** 本報告中的資料結果供科研、教學、企業內部品質控制、企業產品研發等目的用。

**Note:** **The testing data and result(s) in this report is(are) just for scientific research, education, internal quality control and product development etc.**

# 檢測報告 Test Report

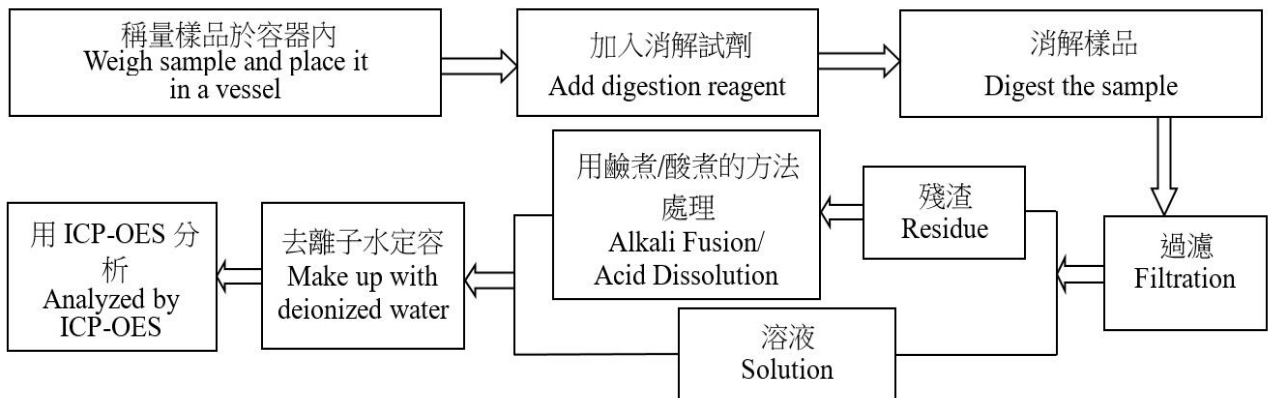
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## 檢測流程 Test Process

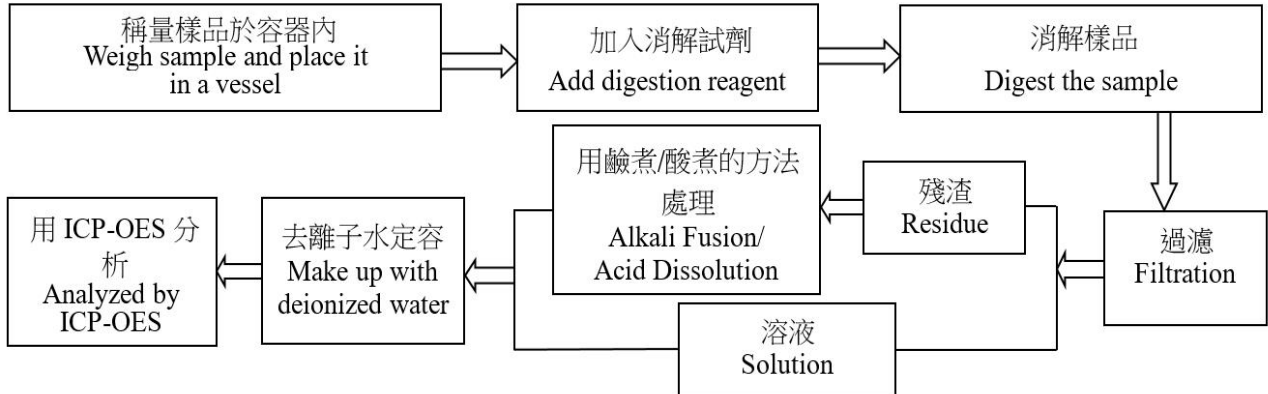
### 1. 鉛(Pb)， 鎘(Cd)

#### Lead (Pb), Cadmium (Cd)



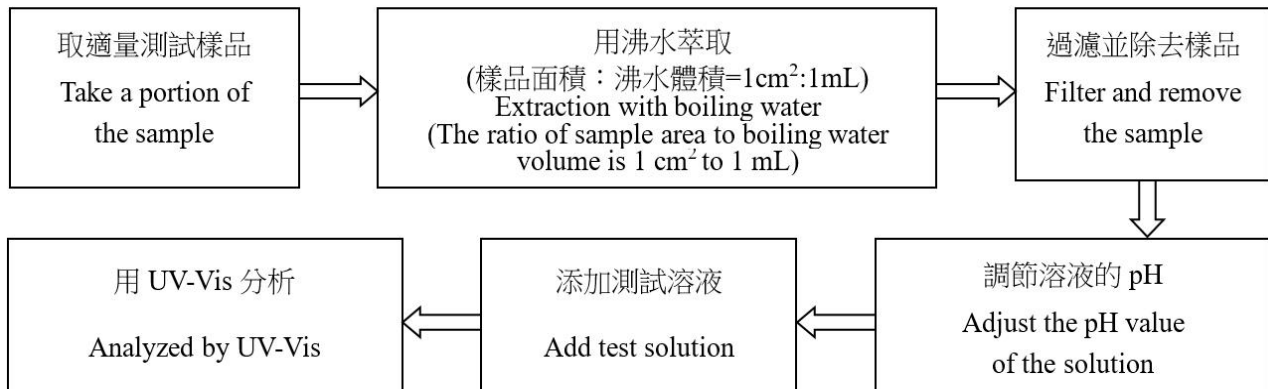
### 2. 汞(Hg)

#### Mercury (Hg)



### 3. 六價鉻(Cr(VI))

#### Hexavalent Chromium (Cr(VI))





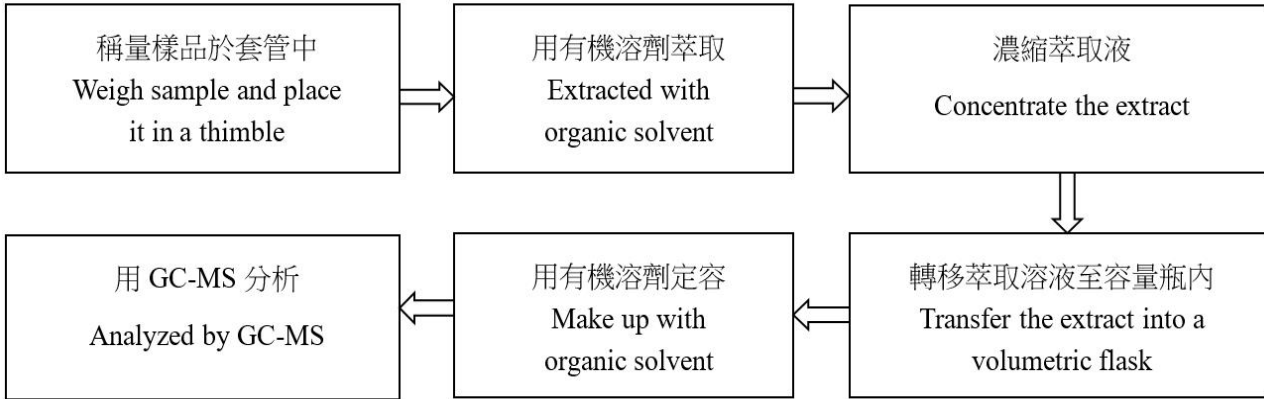
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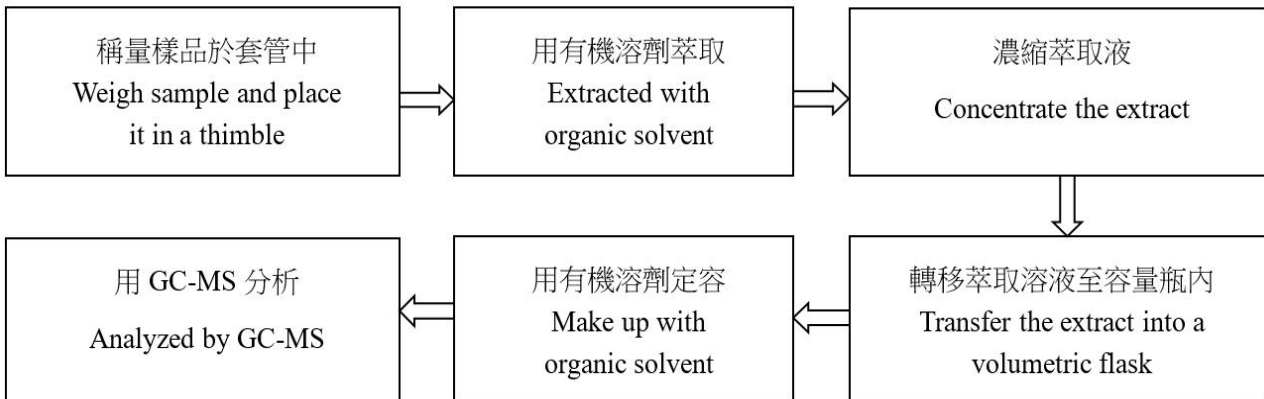
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4. 多溴聯苯(PBBs), 多溴二苯醚(PBDEs)

**Polybrominated Biphenyls (PBBs), Polybrominated Diphenyl Ethers (PBDEs)**

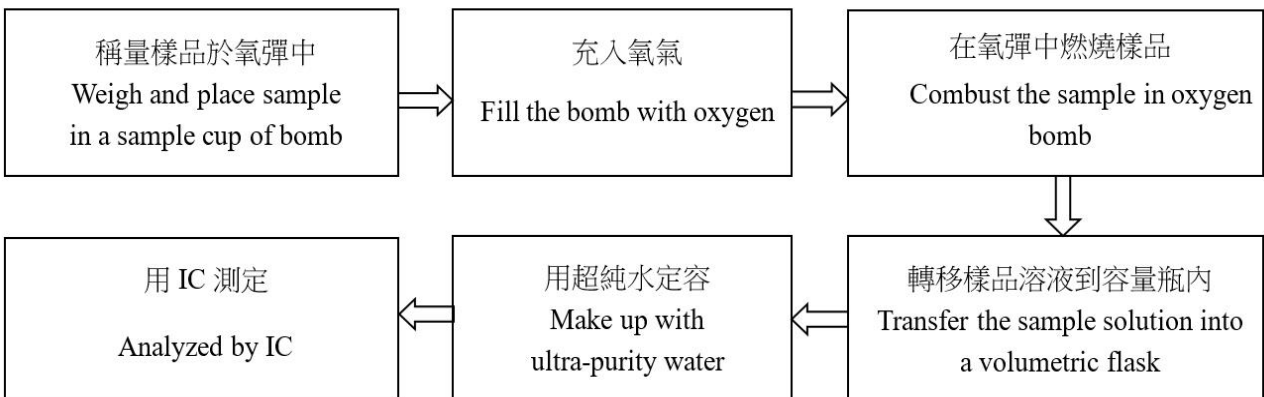


5. 鄰苯二甲酸酯(DBP, BBP, DEHP, DIBP), 鄰苯二甲酸酯  
Phthalates (DBP, BBP, DEHP, DIBP), Phthalates



6. 氟(F), 氯(Cl), 溴(Br), 碘(I)

**Fluorine (F), Chlorine (Cl), Bromine (Br), Iodine (I)**



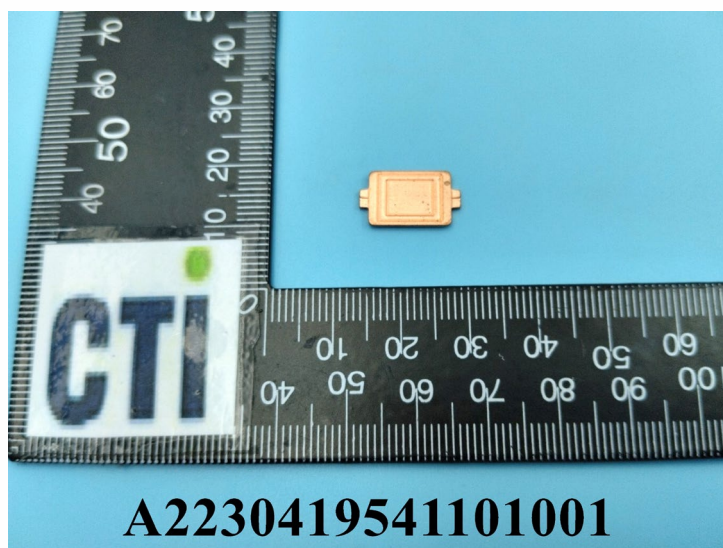


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## 樣品圖片 Photo(s) of the sample(s)



### 聲明Statement :

1. 檢測報告無批准人簽字、“專用章”及報告騎縫章無效；  
This report is considered invalid without approved signature, special seal and the seal on the perforation;
2. 報告抬頭公司名稱及位址、樣品及樣品資訊由申請者提供，申請者應對其真實性負責，CTI未核實其真實性；  
The Company Name shown on Report and Address, the sample(s) and sample information was/were provided by the applicant who should be responsible for the authenticity which CTI hasn't verified;
3. 本報告檢測結果僅對受測樣品負責；  
The result(s) shown in this report refer(s) only to the sample(s) tested;
4. 未經CTI書面同意，不得部分複製本報告；  
Without written approval of CTI, this report can't be reproduced except in full;
5. 如檢測報告中的英文內容與中文內容有差異，以中文為準。  
In case of any discrepancy between the English version and Chinese version of the testing reports (if generated), the Chinese version shall prevail.

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\*\*\* End of report \*\*\*