



**Test Report** 

號碼(No.): ETR24402570

日期(Date): 22-Apr-2024

頁數(Page): 1 of 5

KIYOMINE METAL INDUSTRY CO., LTD.

SWALLOW TOWER 7F 13-5 KURAMAE 2-CHOME TAITO-KU TOKYO 111-0051 JAPAN

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)

: KIYOMINE METAL INDUSTRY CO., LTD.

樣品名稱(Sample Name)

COPPER

樣品型號(Style/Item No.)

: C5210

收件日(Sample Receiving Date)

15-Apr-2024

測試期間(Testing Period)

15-Apr-2024 to 22-Apr-2024

測試需求(Test Requested)

依據客戶指定,參考RoHS指令2011/65/EU Annex II測試鎘、鉛、汞、六價鉻。 (As specified by client, with reference to RoHS Directive 2011/65/EU Annex II to determine Cadmium, Lead, Mercury, Cr(VI) contents in the submitted

sample(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、六價鉻的測試結果符合RoHS 2011/65/EU Annex II之限值要求。 (Based on the performed tests on submitted sample(s), the test results of Cadmium, Lead, Mercury, Cr(VI) comply with the limits as set

by RoHS Directive 2011/65/EU Annex II.)

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



PIN CODE: 34F22928

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測試部位敘述 (Test Part Description)

No.1

: 銅色金屬 (COPPER 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))	參考IEC 62321-5: 2013 · 以感應耦合電漿	mg/kg	2	n.d.	100
	發射光譜儀分析。(With reference to IEC				
	62321-5: 2013, analysis was performed				
	by ICP-OES.)				
鉛 (Pb) (Lead (Pb))	参考IEC 62321-5: 2013 · 以感應耦合電漿	mg/kg	2	18.3	1000
	發射光譜儀分析。(With reference to IEC				
	62321-5: 2013, analysis was performed				
	by ICP-OES.)				
汞 (Hg) (Mercury (Hg))	參考IEC 62321-4: 2013+ AMD1: 2017,	mg/kg	2	n.d.	1000
	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.)				
六價鉻 (Hexavalent Chromium) Cr(VI)	參考IEC 62321-7-1: 2015 · 以紫外光-可見	μg/cm²	0.1	n.d.	-
(#2)	光分光光度計分析。(With reference to				
	IEC 62321-7-1: 2015, analysis was				
	performed by UV-VIS.)		_		

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#### 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. (#2) =
  - a. 當六價鉻結果大於 $0.13~\mu g/cm^2$ ·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  $0.13~\mu g/cm^2$ . The sample coating is considered to contain Cr(VI).) b. 當六價鉻結果為n.d. (濃度小於 $0.10~\mu g/cm^2$ )·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  $0.10~\mu g/cm^2$ ). The coating is considered a non-Cr(VI) based coating) c. 當六價鉻結果介於  $0.10~\mathrm{Z}$   $0.13~\mu g/cm^2$  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.)
- 6. 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.)

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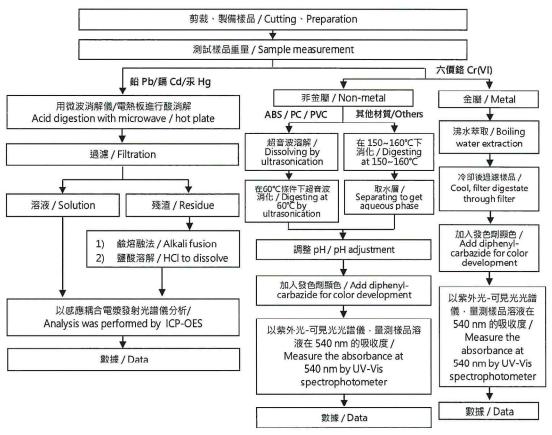
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#### 重金屬流程圖 / Analytical flow chart of heavy metal

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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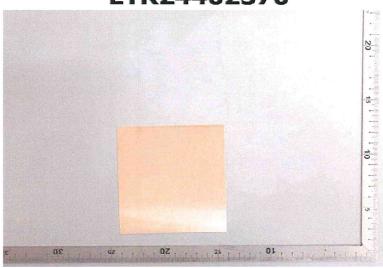
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\* 照片中如有箭頭標示‧則表示為實際檢測之樣品/部位. \* (The tested sample / part is marked by an arrow if it's shown on the photo.)

#### ETR24402570



\*\* 報告結尾 (End of Report) \*\*

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