

Analysis Report

Case No. : C221124026

Report Date : 2022/11/24

Prepared by

Hsiao-wen Kuo

HSIAO-WEN KUO

Engineer,

Chemical Analysis Division

- +886-3-6116678 ext. 4513
- E-mail: ms@ma-tek.com

Reviewed by

Yen-an Tsai

YEN-AN TSAI

Assistant Manager,

Chemical Analysis Division

- +886-3-6116678 ext. 4514
- E-mail: ms@ma-tek.com

Approved by

Yu-Teh Chung

YU-TEH CHUNG

Vice Director, Chemical Analysis Division

- +886-3-6116678 ext. 3275
- E-mail: ms@ma-tek.com

閱康科技
Materials Analysis Technology Inc.



實驗室管理公正性聲明 | Impartiality

為維護實驗室的公正性，保護檢測活動的獨立性，本實驗室聲明：

1. 遵守國家法律、法規和認可機構的要求，執行分析檢測服務
2. 堅持獨立檢測、獨立判斷，保持和發展認可的分析檢測能力
3. 堅持公平、公正、對所有客戶一視同仁的分析檢測服務原則
4. 不從事與客戶送檢產品相關的研發、生產、銷售等活動
5. 不接受有違分析檢測公正性的投資贊助和代理要求，不介入客戶之間的市場競爭和利益衝突
6. 維護客戶的權利，保護客戶的所有權和專利權不受侵犯

保護客戶機密訊息和所有權的承諾 | Confidentiality

實驗室承諾保護客戶的機密訊息和所有權。客戶提供的分析檢測方法、技術要求和圖面文件、說明書以及委託合約和協議等與分析檢測有關的所有文件及受檢樣品、檢測結果均列入實驗室保密範疇，以及保護客戶所有權的完整性。在主持能力驗證和分包檢測時，也為參加實驗室及客戶的檢測數據及結果保密。

Impartiality

In order to maintain the impartiality of the laboratory and protect the independence of testing activities, the laboratory statement:

1. Comply with the requirements of national laws, regulations and accreditation agencies, and implement analytical testing services.
2. Adhere to independent detection, independent judgment, maintain and develop recognized analytical and testing capabilities.
3. We should adhere to the principle of fair, impartial and equal treatment for all customers.
4. Do not engage in research and development, production, sales and other activities related to customer inspection products.
5. Do not accept investment sponsorship and agency requirements that violate the impartiality of analysis and testing, and do not intervene in market competition and conflict of interests among customers.
6. To safeguard the rights of customers and protect their ownership and patent rights from infringement.

Confidentiality

The laboratory promises to protect the confidential information and ownership of its customers. All documents related to analytical testing, such as analytical testing methods, technical requirements and graphic documents, instructions, commission contracts and agreements provided by customers, as well as samples and test results, are included in the scope of laboratory confidentiality, and the integrity of customer ownership is protected. In the process of proficiency verification and subcontracting testing, the testing data and results of participating laboratories and customers are also kept confidential.

Sample Description & Analytical Requests

A. Background Information

- Client: 蔡永昌 先生

B. Specimen Description

- Sample 水溶液 (測B)
- Quantity : 1 ea

C. Analysis Requirement

- 感應耦合電漿質譜儀 定性半定量檢測

Tools & Engineers

A. Tools

- (a) ICP-MS measurement
 - Model : Agilent 7700x
- (b) Sample Preparation
 - 樣品以0.22 um PTFE filter過濾後，再經過適當的稀釋，以ICP-MS進行分析檢測。

B. Engineers in-charge

- (a) Sample Preparation
Hsiao-Wen Kuo
- (b) ICP-MS measurement
Hsiao-Wen Kuo
- (c) Contact Window
Hsiao-Wen Kuo
03-611-6678#4513 | ms@ma-tek.com

Summary – 定性半定量 (Unit – ppb, ng/ml) (1/2)

Case no.	Sample Name	B	Na	Mg	Al	Cr	Fe	Ni
C221107009	<u>baseline</u> 基A	ND	243	5.20	ND	0.36	ND	ND
	測A	ND	252	1.65	0.34	0.34	ND	0.10
C221124026	<u>Specimen</u> 測B	1.38	793	3.05	0.45	0.47	0.97	0.07
	MDL	1.00	0.50	0.10	0.10	0.05	0.20	0.05

Case no.	Sample Name	Cu	Zn	Rb	Sb	Ba	Ce	Ir
C221107009	基A	ND	0.46	ND	0.11	ND	ND	ND
	測A	0.09	4.33	0.11	ND	ND	ND	ND
C221124026	測B	ND	5.77	0.11	0.06	0.14	0.09	0.13
	MDL	0.05	0.05	0.05	0.05	0.05	0.05	0.05

*:MDL: Method Detection Limit(方法偵測極限); ND: Not Detectable。

**：未列出元素為未檢出，參閱page 6。

***：定性/半定量所得濃度主要是用以評估待測元素其濃度級數(order)，非用以精準定量，若需精準濃度需以定量方法為準。

Summary – 定性半定量之MDL (Unit – ppb, ng/ml) (2/2)

元素	MDL	元素	MDL	元素	MDL	元素	MDL
Li	0.10	Cu	0.05	In	0.05	Tm	0.05
Be	0.10	Zn	0.05	Sn	0.05	Yb	0.05
B	1.00	Ga	0.05	Sb	0.05	Lu	0.05
Na	0.50	Ge	0.05	Te	0.20	Hf	0.05
Mg	0.10	As	0.10	Cs	0.05	Ta	0.10
Al	0.10	Se	1.00	Ba	0.05	W	0.10
Si	50.0	Rb	0.05	La	0.05	Re	0.05
K	25.0	Sr	0.05	Ce	0.05	Os	0.05
Ca	25.0	Y	0.05	Pr	0.05	Ir	0.05
Sc	0.05	Zr	0.05	Nd	0.05	Pt	0.02
Ti	0.10	Nb	0.05	Sm	0.05	Au	0.05
V	0.05	Mo	0.20	Eu	0.05	Hg	0.05
Cr	0.05	Ru	0.05	Gd	0.05	Tl	0.05
Mn	0.05	Rh	0.05	Tb	0.05	Pb	0.05
Fe	0.20	Pd	0.05	Dy	0.05	Bi	0.05
Co	0.05	Ag	0.20	Ho	0.05	Th	0.05
Ni	0.05	Cd	0.05	Er	0.05	U	0.05

MA-tek, The Best R&D Partner

1A3, No.1, Li-Hsin Rd.I, Science-Based Industrial Park,
Hsinchu City, Taiwan 30078 R.O.C

TEL | +886-3-611-6678

FAX | +886-3-563-0777

MAIL | sales@ma-tek.com



Your comments shall be welcome and appreciated.