INORGANIC ARSENIC IN AQUATIC PRODUCT

PROFICIENCY TESTING SCHEME

GLHK PT 24-07

FINAL REPORT SUMMARY

25 April 2025



Government Laboratory of Hong Kong Proficiency Testing Scheme (GLHK PT 24-07) Inorganic Arsenic in Aquatic Product

Summary of Results

- 1. This proficiency testing (PT) scheme (GLHK PT 24-07) was organised by the Government Laboratory of the Government of the Hong Kong Special Administrative Region (GLHK) with support from the Hong Kong Council for Testing and Certification (HKCTC). The main objective of the PT scheme is to provide a platform to evaluate the testing capability of participating laboratories in analysing inorganic arsenic in aquatic product.
- 2. A total of 7 laboratories enrolled in the scheme and all of them returned the analytical results to the organiser on or before the deadline of result submission.
- 3. The mass fraction of inorganic arsenic determined by GLHK using ion chromatography inductively coupled plasma mass spectrometry with gravimetric standard additions was used as the assigned value for proficiency assessment (x_{pt}). The standard deviation for proficiency assessment (σ_{pt}) was derived from the Horwitz equation. The performance of the participants was evaluated using *z*-scores.
- 4. The z-scores of the participants are summarized as follows:-

z-score	Number of participants (Percentage)
$ z \le 2.0$	7 (100%)
2.0 < z < 3.0	0 (0%)
$ z \ge 3.0$	0 (0%)
Total:	7 (100%)