

Chemical Markers in Chinese Medicinal Oil



**PROFICIENCY TESTING
SCHEME**

GLHK PT 25-03

FINAL REPORT SUMMARY

16 February 2026



Government Laboratory
Proficiency Testing Scheme (GLHK PT 25-03)
Chemical Markers in Chinese Medicinal Oil

Summary of Results

1. This proficiency testing (PT) scheme (GLHK PT 25-03) was organised by the Government Laboratory of the Government of the Hong Kong Special Administrative Region (GLHK) with the support from the Hong Kong Council for Testing and Certification (HKCTC). The main objectives of the PT scheme are to (i) assist participating laboratories in demonstrating their capabilities in determining five chemical markers in Chinese medicinal oil; and (ii) identify opportunities for improvement.
2. A total of 9 laboratories in Hong Kong enrolled in the PT scheme and all of them returned the analytical results to the organiser on or before the deadline for result submission.
3. The assigned values and standard deviations for proficiency assessment were derived from the robust averages and robust standard deviations of participants' results, respectively. The performance of individual laboratory was expressed in terms of z' scores.
4. The z' scores of the participants are summarised as follows:

Chemical Marker	Number of Participants (Percentage)			Total Number of Participants
	$ z' \leq 2.0$	$2.0 < z' < 3.0$	$ z' \geq 3.0$	
α -Pinene*	8 (100%)	--	--	8
Eucalyptol	8 (89%)	--	1 (11%)	9
Camphor	8 (89%)	1 (11%)	--	9
Menthol	8 (89%)	--	1 (11%)	9
Methyl Salicylate	9 (100%)	--	--	9

* one participant did not test for α -Pinene