



Asia Pacific Laboratory Accreditation Cooperation



MELAMINE IN MILK

PROFICIENCY TESTING PROGRAM

APLAC T071

FINAL REPORT

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Summary of Results

1. The objective of this proficiency test program (APLAC T071) was to evaluate the capability of participants on the quantitative analysis of melamine in milk. Two lyophilized test materials (Sample I and II) containing melamine at different concentrations were given to participants and they were instructed to reconstitute the dried samples to liquid milk with distilled water prior to analysis.
2. A total of 76 laboratories from 28 economies registered the program and 68 laboratories returned the results to the organizers within the scheduled timeline. An interim report containing participants' data and the respective z-score results was issued to participants and their ABs on 30 September 2009. Participants were requested to confirm the correctness of their submitted analytical data (before 23 October 2009) prior to the issuance of the Final Report by the organizers.
3. The exact quantities of melamine that gravimetrically spiked into material were used as the assigned reference values. The performance standard deviation was determined by Horwitz equation, and z-score was used to assess the performance of participants in this program.

4. Summary of participants' results:

	Sample I	Sample II
Data submitted	68	68
Valid numeric data	67	67
Robust mean (mg kg ⁻¹)	1.120	2.286
Median (mg kg ⁻¹)	1.090	2.260
Range (mg kg ⁻¹)	0.286 – 2.02	0.146 – 4.95
Between-laboratory variation	18.1%	13.9%
Horwitz SD (%)	15.5%	13.8%

5. Summary of participants' z-scores:

Performance	Number of participants (Percent)	
	Sample I	Sample II
$ z \leq 2$	58 (86.6%)	57 (85.1%)
$2 < z < 3$	5 (7.4%)	3 (4.5%)
$ z \geq 3$	4 (6.0%)	7 (10.4%)
Total:	67 (100%)	67 (100%)