
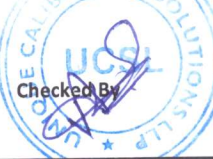



CALIBRATION CERTIFICATE											
ULR NO :		CC310224000001044F			CERTIFICATE No. :			UCSL/04-24/088_06			
Customer Name & Address:					Instrument receipt Date			15.04.2024			
M/s. MICRO HEALTH LABORATORIES -ENDO BIOLAB					SRF No.			088			
THANNEER PANDAL BUS STOP,PATHAIKKARA					Calibration Date			17.04.2024			
PERINTHALMANNA,679322					Next calibration date (As per customer request)			17.04.2025			
					Certificate Issue date			19.04.2024			
Identification on DUC (Device Under Calibration)											
Instrument Name		MICROPIPETTE			Make		LAB QUEST				
Range		100 - 1000 µl			Model		LAB QUEST				
Least count		5 µl			Instrument Condition		OK				
Serial No.		RG652359			Calibration Performed at		Mass & Volume Lab				
ID No.		MHL-E/C/4			Location		---				
Environmental Condition				Avg. Temperature (°C)		Avg. RH (%)		Avg. Atmospheric Pressure (hpa)			
				24.0		56		1010			
Equipment & Master Used For calibration											
Instrument Used		Calibrated By		ID No:		Certificate No		Valid Upto		Sr No.	Accreditation No
Weighing Balance		UCSL		UCSL-WB-01		UCSL/10-23/311_01		14.10.2024		0037905909	CC-3102
Method Used :					Gravimetric method			Discipline & Category : Mechanical - Volume			
Calibration Reference Standard					ISO-8655-6 & ISO /TR 20461			Calibration Procedure			
								UCSL/SOP/01-MPT			
CALIBRATION RESULTS @27°C:-											
1. Lower Volume		100 µl									
1	2	3	4	5	6	7	8	9	10	Mean Volume V	
100.42	100.30	101.25	100.47	100.60	100.61	100.50	100.90	100.71	100.73	100.65	
Systematic Error es µl :				-0.65		Error Limits (± 8 µl)		Random Error in sr µl :		0.27	
Systematic Error es in % :				-0.65		(± 8.0%)		Random Error in Cv in % :		0.27	
2. Middle Volume		500 µl									
1	2	3	4	5	6	7	8	9	10	Mean Volume V	
500.05	500.09	500.19	500.01	500.16	500.22	500.49	500.35	500.26	500.19	500.20	
Systematic Error es µl :				-0.20		Error Limits (± 8 µl)		Random Error in sr µl :		0.14	
Systematic Error es in % :				-0.04		(± 1.6%)		Random Error in Cv in % :		0.03	
3. Nominal Volume		1000 µl									
1	2	3	4	5	6	7	8	9	10	Mean Volume V	
999.91	999.95	1000.02	1000.21	999.72	999.99	999.96	999.92	999.55	1000.01	999.92	
Systematic Error es µl :				0.08		Error Limits (± 8.0 µl)		Random Error in sr µl :		0.18	
Systematic Error es in % :				0.01		(± 0.80 %)		Random Error in Cv in % :		0.02	
Decision Rule is Applied or Not									Yes		No
											✓
Conclusion /Remarks:											
The Reported Uncertainty upto 100 µl is 0.12µl and from 100 to 1000 µl is 0.6 µl at ,Coverage Factor K=2,which corresponds to a confidence level at approximately 95 %											
1. The calibration results reported in this certificate are valid at the time of and the stated condition of measurement.											
2. This report is valid for Scientific & Industrial Purpose Only											
3. This report should not be reproduced except in full without our prior permission in writing.											
4. Calibration certificate without signature are not valid.											
5. All the measurements are traceable to SI units through unbroken chain of calibration from the competent laboratories as per ISO/IEC/17025 standard requirements.											
6. This Calibration Certificate relates only to the above DUC											
7. DUC : Device under calibration											
Calibrated by		Checked By			Issued / Approved By						
											
					(APPU K MANI)						
					Technical Director						

