



ADARSH.4 CALIBRATION SERVICES

NABL ACCREDITED CALIBRATION LABORATORY

Plot No.18,19, Survey No-118, Byraveshwara Nagar, Manganahalli Cross, Ullal Main Road,
Ullal (P), Bangalore-560056, Ph: +91-80-2324 0578, Mob: +91-9945086171/172/173

CC-2722

E: acscalib@gmail.com / enquiry@adarshacalibrations.com W: o'wiv.adarshacalibrations.com



CERTIFICATE OF CALIBRATION

Page 1 of 1

Certificate Number: ACS/MC/20-21/102575-01 ULR Number: ULR-CC-27222000003444F

M/s.Dr. Raju's Blooms Diagnostics Centre,
Customer Name & Address: GangammaGudi Road, Beside Lakkainma Doddainuniyappa
Kalyanamantappa, Chikkaballapur-562101s

Date Of SRF: 18-08-2021 Calibrated At: Mechanical Lab
Date of Calibration: 19-08-2021 Calibration WI No: W/1MC/13
Next Cal Due: 18-08-2022 Date of Issue: 20-08-2021

Environmental Conditions: Temperature °C: 20.24 Humidity % R.H : 52.6
Atmospheric Pressure hpa : 915.4 Water Temp °C : 20.2

DETAILS OF DEVICE UNDER CALIBRATION

Nomenclature: Micro Pipette Serial to: Y 1 9959
Make & Model: ERBA & NA ID No : NA
Range : 100-1000 µl Resolution: 5 µl
Location: NA

DETAILS OF STANDARD INSTRUMENT USED

Nomenclature: Weighing Balance Serial. No: D450026316
Make / Model : SHIMADZU/AUW220D Cal DueDate: 12-06-2022
Range : 1mg to 220g
Certificate No: RMTL/01/320100904-A1

CALIBRATION RESULTS.

Parameter: Volume

Sl.No.	DUC Set	Standard value	Systematic Error	Systematic Acceptable Error	Random Error	Random Acceptable Error	Expanded Measurement Uncertainty
	µl	µl	µl	µl		µl	
1	100	102.85	-2.85	8.0	0.15	3.0	1.40
2	250	253.12	-3.12	8.0	0.33	3.0	1.40
3	500	504.88	-4.88	8.0	0.17	3.0	1.40
4	750	755.58	-5.58	8.0	0.34	3.0	1.40
	1000	1006.32	-6.32	8.0	0.18	3.0	1.40

REMARKS & CONCLUSION:

- Reported Values of DUC are Average of 10 Measuring Series.
- The Measurement Uncertainty is estimated at a confidence level of 95.45 % with a coverage factor k=2.0.
Calibration certificate issued for Pipette is used for scientific or industrial purpose only
- Calibration is done as per Reference Standard ISO:8655-6 Guidelines.
- Acceptable error is given as per Reference Standard ISO:8655-2:2002(E) Guidelines
- Next Calibration Due Date mentioned as per customer requirement.

Systematic Error $e_s = V - V_s$

Random Error $S_r = \sqrt{\sum(V_i - V)^2 / n - 1}$

V=Mean Volume, V_s =Selected Test volume, $V_i = m_i * z$

Calibrated By

Sai Prabhu N

Calibration Engineer



Authorised Signatory

Manjunath I

Manjunath I

Technical Manager