



Cert No. CC-2543



Medical Engineering & Services

Things Beyond Thoughts

(An ISO/IEC 17025:2005 NABL Accredited Calibration Laboratory)

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CALIBRATION CERTIFICATE

Certificate Number : MES/280121/C4 ULR Number : CC254321000000053P

Customer Details : Nucleus Healthcare Laboratory & ECG, Irikkur

Date of Calibration : 29/01/2021 Date of SRF : 28/01/2021

Next Calibration Due : 28/01/2022 Date of Issue : 30/01/2021

DETAILS OF DEVICE UNDER CALIBRATION (DUC)

Nomenclature : Micropipette Serial No. : HH96696
Make / Model : Thermo Scientific / Finnpiette F3 ID No. : -
Equipment Condition : Good Resolution : 0.1 μ L
Range : 5-50 μ L Location : -

DETAILS OF MASTER EQUIPMENT USED

Nomenclature : Electronic Precision Balance Range : 0 - 210 gm
Make : Boeco Readability : 0.01/0.1 mg
Model : BBC-22 Serial No. : 27104178
Certificate No. : MES/210114/EB/C1 Calibration Due Date : 14.01.2022

ENVIRONMENTAL CONDITIONS

Temperature($^{\circ}$ C)	Relative Humidity (%)	Atmospheric Pressure (mbar)	Water Temperature($^{\circ}$ C)
29.2	42	1009	29.4

CALIBRATION RESULTS

Discipline		Mechanical			Parameter		Volume	
Sl. No.	Set Volume	Standard Value	Systematic Error	Acceptable Systematic Error	Random Error	Acceptable Random Error	Expanded Uncertainty	
	μ l	μ l	μ l	$\pm \mu$ l	μ l *	$\pm \mu$ l	$\pm \mu$ l	
1	5	5.00	0.00	0.13	0.03	0.08	0.102	
2	25	24.93	0.07	0.50	0.06	0.20	0.160	
3	50	49.91	0.09	0.50	0.06	0.20	0.161	

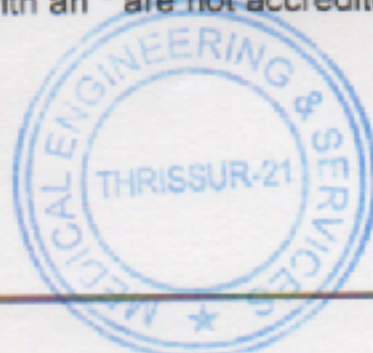
Notes:-

- The results in this certificate are only related to DUC submitted calibration and valid at the time of calibration under stated condition of measurements
- The measurement uncertainty is estimated at a confidence level of 95.45% with coverage factor k=2.
- Results in this certificate shall not be reproduced except in full without the written approval of this centre.
- Next calibration due date is mentioned as per customer requirement.
- Calibration certificate issued for scientific or industrial purpose only.
- Acceptable error limit is given as per ISO 8655-2:2002(E) Guidelines
- Calibration is carried out as per ISO 8655-6 Guidelines; MES work procedure: MES/WP/VOLUME.
- The tests and /or Calibration marked with an * are not accredited by NABL

Calibrated by

Prabin K P

(Calibration Engineer)



Authorized Signatory

Binoj Thomas

(Technical Manager)