



Cert No. CC-2543



# Medical Engineering & Services

*Things Beyond Thoughts*

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## CALIBRATION CERTIFICATE

Certificate Number : MES/010922/C4      ULR Number : CC254322000000758F  
Customer Details : DOCTORS LAB, PAYYOLI, KOZHIKODE.  
Date of Calibration : 01/09/2022      Date of SRF : 01/09/2022  
Next Calibration Due : 31/08/2023      Date of Issue : 01/09/2022

### DETAILS OF DEVICE UNDER CALIBRATION(DUC)

Nomenclature : Micropipette      Serial No. : QW08282  
Make / Model : AGAPPE/MISPA-i      ID No. :  
Equipment Condition : Good      Resolution : 0.2 µl  
Range : 20-200 µL      Location : BIOCHEMISTRY

### 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. : TVSPL21/10/227-01      Calibration Due Date : 05.10.2022

### ENVIRONMENTAL CONDITIONS


Temperature(°C)	Relative Humidity (%)	Atmospheric Pressure (mbar)	Water Temperature(°C)
27.7	56	1003	27.8

### CALIBRATION RESULTS

Sl. No.	Discipline : Mechanical			Parameter : Volume			
	Set Volume µl	Standard Value µl	Systematic Error µl	Acceptable Systematic Error ± µl	Random Error µl	Acceptable Random Error ± µl	Expanded Uncertainty ± µl
1	20	19.99	0.01	0.20	0.07	0.10	0.226
2	100	100.36	-0.36	0.80	0.06	0.20	0.220
3	200	200.01	-0.01	1.60	0.24	0.60	0.731

- 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/WR/VOLUME.

Calibrated by  
  
Prabin KP  
(Calibration Engineer)

Authorized Signatory  
  
Binoj Thomas  
(Technical Manager)

