

CALIBRATION CERTIFICATE

Page 1 of 2

EQN/FT/7.8/01	EQN/CRF/2202124	Date of Calibration	22-Mar-22
CRF No	2021-22/EQN/2202124-46	Recom. Due Date	21-Mar-23
Certificate No	CC27602200003065F		
ULR No			
Customer Details:		Calibrated at	Lab
THE CHIEF MEDICAL OFFICER		Date of Receipt	22-Mar-22
Government Primary Health Centre,		Cond. On Receipt	Satisfactory
ICTC, Singanailur, Corporation of Coimbatore.		Date of Issue	25-Mar-22
Coimbatore - 641 005			
Details of Test Instrument:			
Description	Micropipette	Model	-
Range	100 - 1000µl	Serial No	-
Least Count	10µl	Identification No.	PIP/SINGA/02
Make	Microlux	Accuracy	As per Manual
Working range	-	Location	ICTC
Details of Standard Used			
Name	Electronic SemiMicro Balance	Certificate No.	2021-22/EQN/MASTER-256
		Valid upto	07-May-22
		Traceability	EQN, Chennai.
CP No.	EQN/CP/MS-03	(Reference Standard ISO 8655-6)	
Environmental Details	Temperature 25±2 °C	Relative Humidity 50±10 % RH	
MECHANICAL CALIBRATION (Volume)			
Calibration Results			
1. Lower Volume :	100 µl	No. of Measurements : 10	
	100.22	100.29	100.23
	100.20	100.34	100.37
	100.14	100.19	100.18
			100.16
Mean Value :	100.23 µl		
Error Limits(±)			
Systematic Error :	0.23 µl	0.80 µl	
Systematic Error :	0.23 %	0.80 %	
Random Error :	0.08 µl	0.30 µl	
Random Error :	0.08 %	0.30 %	
Measurement Uncertainty :	± 0.36 µl		

Calibrated by
SANGEETHA K P
(Calibration Engineer)



Authorized by
V. RAJKARTHICK
(QM)

CALIBRATION CERTIFICATE

CRF No. : EQN/CRF/2202124
ULR No. : CC276022000003065F

Page 2 of 2

MECHANICAL CALIBRATION (Volume)					
2. Middle Volume :			500 μ l		
501.72	501.73	501.90	501.83	No. of Measurements : 10	
501.88	501.91	501.96	501.80		
501.79	501.76				
Mean Value :	501.83	μ l			
Systematic Error :	1.83	μ l	Error Limits(\pm)		
Systematic Error :	0.37	%	4.00	μ l	
Random Error :	0.08	μ l	0.80	%	
Random Error :	0.02	%	1.50	μ l	
Random Error :			0.30	%	
Measurement Uncertainty :		\pm	0.36 μ l		
3. Nominal Volume :			1000 μ l		
1000.47	1000.42	1000.25	1000.53	No. of Measurements : 10	
1000.59	1000.63	1000.57	1000.56		
1000.58	1000.60				
Mean Value :	1000.52	μ l			
Systematic Error :	0.52	μ l	Error Limits(\pm)		
Systematic Error :	0.05	%	8.00	μ l	
Random Error :	0.11	μ l	0.80	%	
Random Error :	0.01	%	3.00	μ l	
Random Error :			0.30	%	
Measurement Uncertainty :		\pm	0.36 μ l		

Remarks

- The reported Expanded Uncertainty is calculated at 95.45 % C.I. with coverage factor k=2
- The Above Results are within the maximum permissible Error

Calibrated by
[Signature]
SANGHERAJ K P
(Calibration Engineer)



Checked by
[Signature]
V. RAIKANTHICK
(QM)