



TMSCC

TESTING MACHINE SERVICE AND CALIBRATION CENTRE
Precision is Our Destination.....

An ISO 9001 : 2015 Certified company
Calibration of Various Instruments & Testing Machines...



CC - 3125

Form No.: TMSCC/R/23

CALIBRATION CERTIFICATE

CALIBRATION CERTIFICATE NO.:	2024/07/734	Page 1 of 1
ISSUE DATE :	17-Jul-2024	
ULR No.:	CC312524000013633P	
1.0 ISSUED TO:	M/s.: Vinayaka Clinic 9A, B.M Mandal Road, Santoshpur, Kolkata - 700075	
1.1 Service Request Form No. :	SRF/2024/07/01/05	
1.2 Service Request Date :	01-07-2024	
1.3 Location:	At Lab	

Description identification of item to be calibrated:					
1.4	i Name:	Micro Pipette	ii Make:	Flexipet	
	iii Model / Type No.:	--	iv S/L No.:	RG653351	
	v I.D.No.:	--	vi Job Code No:	2024/07/734	
	vii Range:	(5 - 50) µl	viii Resolution:	0.5 µl	
	ix Accuracy	As Per ISO 8655-6	x End User :	--	

1.5 Full / Partial Calibration:	Partial Calibration
1.6 Applicable specification of item to be calibrated: Accuracy / permissible limit:	Not Specified.

1.7 Date of receipt of item:	1-Jul-2024	1.8 Date of calibration:	1-Jul-2024
1.9 Calibration due on:	30-Jun-2025	2.0 Frequency of calibration once in:	12 Months

2.1 Environmental condition during calibration	Temperature:	20.3 °C
	Humidity:	52 % RH

2.2 Basis of calibration:	SOP/04/02
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2.3 Traceability : Standards used for calibration are traceable to National Standards through NABL accredited Laboratory.

Name of the Instrument	Sl. No./ Id No.	Certificate No.	Lab Certificate No.	Calibrated On	Due On
Digital Weighing Balance	(TMSCC/EB/01) (Sl. No.- 14255716)	TC/23-24/4262-04	CC - 2230	09-11-2023	08-11-2024
Digital Temperature Indicator with Sensor(RTD)	(Indicator Sl. No.- 18K588073) (Sensor Id No.- TMSCC/RTD/01)	TSC/23-24/13010-4	CC - 2231	09-11-2023	08-11-2024

CALIBRATION RESULTS

Sl. No.	Denomination Volume in µl	Observed Reading at Ref. Std. Balance in g (Avg. of five readings)	Density of De ionized Water in g/ml	Actual volume in µl	Error in µl	MPE in ± µl	Measurement Uncertainty in ± µl	Acceptance Criteria
1	20	0.01999	0.998141	20.02251	0.02251	0.2	0.039	Pass
2	30	0.02998	0.998141	30.03376	0.03376	0.5	0.039	Pass
3	40	0.03997	0.998141	40.04501	0.04501	0.5	0.039	Pass
4	50	0.04996	0.998141	50.05627	0.05627	0.5	0.039	Pass

Measurement Uncertainty at 95% confidence level where coverage factor, k=2

Remarks: The above DUC has been calibrated over its above range & the readings observed are tabulated above. The reference standard used is traceable to National Standard.

DUC: Device Under Calibration

Physical status of the Instrument : Ok

Calibrated By :

J. Bhattacharjee
(Sr. Calibration Engineer)

Checked By :

S. Chowdhury
(Quality Manager)

Approved By :

C. Ghosh
(Technical Director)



END OF CERTIFICATE