



TMSCC

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



An NABL Accredited Calibration Laboratory
A Constituent Board of Quality Council of India
An ISO 9001 : 2015 Certified company
Calibration of Various Instruments & Testing Machines...

CC - 3125

Form No.: TMSCC/R/23

CALIBRATION CERTIFICATE

CALIBRATION CERTIFICATE NO.:		2023/06/97		Page 1 of 1				
ISSUE DATE :		5-Jun-2023						
ULR No.:		CC312523000007014F						
1.0	ISSUED TO:	M/s.: Suraha Speciality Laboratory 167, Beharapara, H.C. Sarani, Sonarpur, 24.Parganas(S), Kolkata - 700150						
1.1	Service Request Form No. :	SRF/2023/06/02/02						
1.2	Service Request Date :	02-06-2023						
1.3	Location:	At Lab						
Description identification of item to be calibrated:								
1.4	i Name:	Micro Pipette	ii Make:	Mispa-i2				
	iii Model / Type No.:	--	iv S/L No.:	YN211AG0005480				
	v I.D.No.:	--	vi Job Code No:	2023/06/97				
	vii Range:	(20 - 200) µl	viii Resolution:	1 µl				
	ix Accuracy	As Per ISO 8655-6	x End User :	--				
	1.5	Full / Partial Calibration:	Full Calibration					
1.6	Applicable specification of item to be calibrated: Accuracy / permissible limit:			Not Specified.				
1.7	Date of receipt of item:	2-Jun-2023	1.8	Date of calibration:	2-Jun-2023			
1.9	Calibration due on:	1-Jun-2024	2.0	Frequency of calibration once in:	12 Months			
2.1	Environmental condition during calibration	Temperature:	20.3 °C					
		Humidity:	54 % RH					
2.2	Basis of calibration:	SOP/04/02						
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)	TSC/22-23/12101-25	CC - 2231	15-11-2022	15-11-2023		
Digital Temperature Indicator with Sensor(RTD)		Sl. No.- 18K588073 (Sensor Sl. No.- 19102403)	TSC/22-23/12095-36	CC - 2231	17-11-2022	17-11-2023		
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	0.01998	0.998141	20.02097	0.02097	0.20	1.95	Pass
2	50	0.04996	0.998141	50.05242	0.05242	0.50	1.95	Pass
3	70	0.06994	0.998141	70.07339	0.07339	0.80	1.95	Pass
4	100	0.09992	0.998141	100.10485	0.10485	0.80	1.95	Pass
5	200	0.19984	0.998141	200.20970	0.20970	1.60	1.95	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