



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. : 2023/12/1291		Page 1 of 1
ISSUE DATE : 31-Dec-2023		
ULR No.: CC312523000021199F		
1.0 ISSUED TO:	M/s.: KHARIKAMATHANI RH-SA-ICTC Vill. & P.O.: Kharikamathani, P.S.: Nayagram, Jhargram - 721159.	
1.1 Service Request Form No. :	SRF/2023/12/29/02	
1.2 Service Request Date :	29-12-2023	
1.3 Location:	At Lab	



Description identification of item to be calibrated:					
1.4	i Name:	Micro Pipette	ii Make:	BIOHIT	
	iii Model / Type No.:	--	iv S/L No.:	--	
	v I.D.No.:	KMRH-ICTC-MP-05	vi Job Code No.:	2023/12/1291	
	vii Range:	(100 - 1000) µl	viii Resolution:	5 µl	
	ix Accuracy	As Per ISO 8655-6	x End User :	Pathology Lab	

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:	29-Dec-2023	1.8 Date of calibration:	29-Dec-2023
------------------------------	-------------	--------------------------	-------------

1.9 Calibration due on:	28-Dec-2024	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
---------------------------	-----------

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) (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	100	0.09982	0.998141	100.00391	0.00391	0.8	0.033	Pass
2	300	0.29945	0.998141	300.01172	0.01172	4.0	0.033	Pass
3	500	0.49909	0.998141	500.01954	0.01954	4.0	0.033	Pass
4	700	0.69873	0.998141	700.02735	0.02735	8.0	0.033	Pass
5	1000	0.99818	0.998141	1000.03907	0.03907	8.0	0.033	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. Bhattacharya
(Sr. Calibration Engineer)

Checked By :

S. Chowdhury
(Quality Manager)

Approved By :

G. Ghosh
(Technical Director)



END OF CERTIFICATE