


<b>MEASURE TECHNO LAB</b> <b>2, B.T. ROAD (JAYANTI CINEMA COMPLEX)</b> <b>BARRACKPORE, KOLKATA - 700120, W.B.</b> <b>Phone : 033 - 2215 - 0032, 2215 - 9687, 8100875519,</b> <b>Mobile: 9831190974 , LAB:- 8100143376,</b> <b>E-mail: measuretechno@yahoo.co.in</b>	Form No. - MTL/22/2006	 <b>NABL ACCREDITED LABORATORY</b> <small>Certificate No. CC - 2545</small>
	<b>CALIBRATION CERTIFICATE OF</b> <b>MICRO PIPETTE</b>	
<b>CALIBRATION CERTIFICATE NO.: MTL / MMC&amp;H(HIV) / R08 / 02 - 22</b>		<b>ULR - CC254522000006782F</b>
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**1.0 Service Request No.:** MTL / 23B / 02 / 21 - 22

**1.1 Issued to:** In - Charge HIV Testing Laboratory,  
 Department of Microbiology,  
 Midnapore Medical College & Hospital,  
 Paschim Medinipur, West Bengal - 721101.

**1.2 Description & Identification of item to be Calibrated:**

a) Name:	Micro Pipette	b) Code No.:	MMC / MICRO / SERO / MP - 04
c) Sl. No.:	17314077	d) Make:	Microlit
e) Model / Type:	N.S.	f) Range:	50 µl (Fixed)
g) Sensor:	N.A.	h) Resolution:	N.A.
i) End User:	Serology	j) Accuracy:	N.S.
k) Calibration done at:	On Site / <input checked="" type="checkbox"/> In House		

**1.3 Date of receipt of item :** 23-02-22      **1.4 Physical Condition of DUC :** OK  
**1.5 Date of calibration :** 24-02-22      **1.6 Recommended date of next calibration :** 24-02-23  
**1.7 Date of Issue :** 26-02-22

**1.8 Environmental Conditions During Calibration:**

<b>Temperature:</b>	23 °C ± 2 °C
<b>Humidity:</b>	50 % RH ± 10 % RH
<b>Pressure:</b>	1013.3 mbar

**1.9 Method of Calibration:** SOP / MASS / 02 ( As Per ISO : 8655 - 6 : 2002)

**2.0 Traceability :**

a) Standards used for calibration are traceable to National standards through NABL Accredited Laboratory.

b) The following standards / Equipment have been used.

- i) Weight Box (E1) Cal. Certificate No. WI / May / 19 / 010 (WEIGH INDIA, New Delhi) (Cal. Date: 17/05/19, Due Date: 17/05/22)
- ii) Data Acquisition Switch Unit Cal. Certificate No. JRPM - CCTR - ET - 2021 - 1227 (JRPM, Chennai) (Cal. Date: 26/08/21, Due Date: 25/08/22)
- iii) RTD (PT - 100) Cal. Certificate No. TL / 021 / 1091.2.1 (TEMPSENS, Udaipur) (Cal. Date: 25/10/21, Due Date: 24/10/22)

**2.1 Result :**

**Mechanical Calibration**

Sl. No.	Parameter/ Range	Nominal Value µl	Mass of Water mg	Volume of Water at 20 °C µl	Error µl	Measurement Expanded Uncertainty ± µl
1.	Volume 50 µl (Fixed)	50	50.1244	50.3249	0.3249	0.39

Remarks: i) Cubical Expansion co - efficient of pipette material taken as 10<sup>-5</sup> µl / °k.

- ii) This result has an expanded uncertainty with a coverage factor k=2 at approximately 95% confidence level.
- iii) The calibration certificate issued for this instrument is to be used for scientific or industrial purposes only.

DUC - Device Under Calibration

N.S. - Not Specified

N.A. - Not Applicable

Opinions and Interpretations			
Calibrated	✓	Accepted / Valid for use	
Limited Use		Rejected / Out of use	

Calibrated by  
*Testing Engineer*  
**K. Barat**  
 Testing Engineer

*MB*  
*26/02/22*

Checked / Approved by:

Quality & Technical Manager

