


<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 - 2543</small>
	<b>CALIBRATION CERTIFICATE OF</b> <b>MICRO PIPETTE</b>	
<b>CALIBRATION CERTIFICATE NO.: MTL / CNCI / R13 / 06 - 21</b>		<b>ULR - CC254521000009820F</b>
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**1.0 Service Request No.:** MTL / 08A / 06 / 21 - 22

**1.1 Issued to:** M/s. Chittaranjan National Cancer Institute,  
 Street No. 299, DJ Block (Newtown),  
 Action Area - I, Newtown, West Bengal - 700156.

<b>1.2 Description &amp; Identification of item to be Calibrated:</b>	<b>a) Name:</b>	Micro Pipette	<b>b) Code No.:</b>	MP - 01
	<b>c) Sl. No.:</b>	N.S.	<b>d) Make:</b>	Micropet
	<b>e) Model / Type:</b>	N.S.	<b>f) Range:</b>	50 µl (Fixed)
	<b>g) Sensor:</b>	N.A.	<b>h) Resolution:</b>	N.A.
	<b>i) End User:</b>	Hematology	<b>j) Accuracy:</b>	N.S.
	<b>k) Calibration done at:</b>	On Site / √ In House		

<b>1.3 Date of receipt of item :</b>	08-06-21	<b>1.4 Physical Condition of DUC :</b>	OK
<b>1.5 Date of calibration :</b>	08-06-21	<b>1.6 Recommended date of next calibration :</b>	08-06-22
<b>1.7 Date of Issue :</b>	10-06-21		

**1.8 Environmental Conditions During Calibration:**

<b>Temperature:</b>	23 °C ± 2 °C
<b>Humidity:</b>	50 % RH ± 10 % RH
<b>Pressure:</b>	1004.8 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) 1 mg to 200 g 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 - 2020 - 0795 (JRPM, Chennai) (Cal. Date: 01/09/20, Due Date: 31/08/21)
  - iii) RTD (PT - 100) Cal. Certificate No. TL / 020 / 891.2.1 (TEMPESENS, Udaipur) (Cal. Date: 27/10/20, Due Date: 26/10/21)

**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	49.7858	49.9849	-0.0151	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:

*S. Manapatra*  
 Testing Engineer  
 Measure Techno Lab  
 Kolkata

Checked / Approved by  
  
 Quality & Technical Manager  
 S. Pandey