


MEASURE TECHNO LAB 2, B.T. ROAD (JAYANTI CINEMA COMPLEX) BARRACKPORE, KOLKATA - 700120, W.B. Phone : 033 - 2215 - 0032, 2215 - 9687, 8100875519, Mobile: 9831190974 , LAB:- 8100143376, E-mail: measuretechno@yahoo.co.in	Form No. - MTL/22/2006	 NABL ACCREDITED LABORATORY <small>Certificate No. CC - 2543</small>
	CALIBRATION CERTIFICATE OF MICRO PIPETTE	
CALIBRATION CERTIFICATE NO.: MTL / CNCI / R14 / 06 - 21		ULR - CC254521000009821F

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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.

1.2 Description & Identification of item to be Calibrated:

a) Name:	Micro Pipette	b) Code No.:	N.S.
c) Sl. No.:	PF 553040	d) Make:	Hipette
e) Model / Type:	N.S.	f) Range:	100 µl (Fixed)
g) Sensor:	N.A.	h) Resolution:	N.A.
i) End User:	Hematology	j) Accuracy:	N.S.
k) Calibration done at:	On Site / √ In House		

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

1.8 Environmental Conditions During Calibration:

Temperature:	23 °C ± 2 °C
Humidity:	50 % RH ± 10 % RH
Pressure:	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 (TEMPSENS, 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 100 µl (Fixed)	100	99.5832	99.9815	-0.0185	0.39

Remarks: i) Cubical Expansion co-efficient of pipette material taken as 10⁻⁵ 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
 S. Malapatra
 Testing Engineer
 10/06/21

Checked & Approved by:

 Quality & Technical Manager
 S. Pandey