



**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



**CALIBRATION CERTIFICATE OF MICRO PIPETTE**

CALIBRATION CERTIFICATE NO.: MTL / IPGME&RSSKM / R04 / 11 - 23      ULR - CC254523000040557F

Page: 1 of 1

CC - 2545

1.0 Service Request No.: MTL / 29 / 11 / 23 - 24

1.1 Issued to: Office of The Medical Superintendent,  
 ICTG, IPGME&R SSKM Hospital,  
 244, A.J.C Bose Road,  
 Kolkata - 700020.

1.2 Description & Identification of item to be Calibrated: a) Name: Micro Pipette      b) Code No.: SSKM / ICTC / MP - 01  
 c) Sl. No.: 19215187      d) Make: Microlit  
 e) Model / Type: N.S.      f) Range: 20 µl to 200 µl  
 g) Sensor: N.A.      h) Resolution: 1 µl  
 i) End User: ICTC      j) Accuracy: N.S.  
 k) Calibration done at: On Site / ✓ In House

1.3 Date of receipt of item : 28-11-23      1.4 Physical Condition of DUC : OK

1.5 Date of calibration : 29-11-23      1.6 Recommended date of next calibration : 29-11-24

1.7 Date of Issue : 30-11-23

1.8 Environmental Conditions During Calibration: Temperature: 20 °C ± 2 °C  
 Humidity: 30 % RH to 75 % RH  
 Pressure: 1011 mbar

1.9 Method of Calibration: SOP / MASS / 02 ( As Per ISO : 8655 - 6 : 2022)

**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) Weights Cal. Certificate No. NC-210 (NSTAR, Ahmedabad) (Cal. Date: 16/05/22, Due Date: 15/05/25)
- ii) Digital Thermometer With Sensor Cal. Certificate No. MTL / TH / DTM / R01 / 09 - 23 (MTL, Barrackpore) (Cal. Date: 15/09/23, Due Date: 15/09/24)

**2.1 Result :**

Mechanical Calibration: (Mass & Volume)

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	20	19.5921	19.6705	-0.3295	0.32
2.	20 µl to 200 µl	100	100.0313	100.4314	0.4314	0.38
3.		200	199.6443	200.4429	0.4429	0.42

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.
- iv) Calibrations are carried out without any adjustment or repair.

DUC - Device Under Calibration

N.S. - Not Specified

N.A. - Not Applicable

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

*Calibration Engineer*  
 Measure Techno Lab  
 K. Barakat Kolkata

Checked & Approved by:  
  
 Quality / Technical Manager

S. Pandey





**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



CC - 2545

Page: 1 of 1

**CALIBRATION CERTIFICATE OF MICRO PIPETTE**

CALIBRATION CERTIFICATE NO.: MTL / IPGME&RSSKM / R05 / 11 - 23      ULR - CC254523000040558F

1.0 Service Request No.: MTL / 29 / 11 / 23 - 24

1.1 Issued to: Office of The Medical Superintendent,  
ICTC, IPGME&R SSKM Hospital,  
244, A.J.C Bose Road,  
Kolkata - 700020.

1.2 Description & Identification of item to be Calibrated:	a) Name: Micro Pipette c) SI. No.: 19215186 e) Model / Type: N.S. g) Sensor: N.A. i) End User: ICTC	b) Code No.: SSKM / ICTC / MP - 02 d) Make: Microliht f) Range: 20 µl to 200 µl h) Resolution: 1 µl j) Accuracy: N.S.
--	---	---

1.3 Date of receipt of item : 28-11-23      1.4 Physical Condition of DUC : OK

1.5 Date of calibration : 29-11-23      1.6 Recommended date of next calibration : 29-11-24

1.7 Date of Issue : 30-11-23

1.8 Environmental Conditions During Calibration:  
Temperature: 20 °C ± 2 °C  
Humidity: 30 % RH to 75 % RH  
Pressure: 1011 mbar

1.9 Method of Calibration: SOP / MASS / 02 (As Per ISO : 8655 - 6 : 2022)

**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) Weights Cal. Certificate No. NC-210 (NISTAR, Ahmedabad) (Cal. Date: 16/05/22, Due Date: 15/05/25)

ii) Digital Thermometer With Sensor Cal. Certificate No. MTL / TH / DTM / R01 / 09 - 23 (MTL, Barrackpore) (Cal. Date: 15/09/23, Due Date: 15/09/24)

**2.1 Result :**

Mechanical Calibration: (Mass & Volume)

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	20	20.2336	20.3145	0.3145	0.33
2.	20 µl to 200 µl	100	100.0866	100.4869	0.4869	0.37
3.		200	199.9714	200.7713	0.7713	0.41

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.

iv) Calibrations are carried out without any adjustment or repair.

DUC - Device Under Calibration

N.S. - Not Specified

N.A. - Not Applicable

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

Calibrated by:  
Measure Techno Lab  
K.Barrakolkata K.Barak

Checked / Approved by:  
Quality / Technical Manager  
S.Pandey