

THE PIPETEMANN

NABL ACCREDITED CALIBRATION LABORATORY
ADDING ACCURACY TO YOUR EQUIPMENT

MASS - VOLUME - THERMAL - SPEED - PRESSURE - TIMER - ELECTRO TECHNICAL



CALIBRATION CERTIFICATE

CUSTOMER ADDRESS : M/s. THE MEDICAL OFFICER(TPM 380/3)
GOVT PRIMARY HEALTH CENTRE,
DHALAVAIPATTINAM,
DHARAPURAM,
TIRUPUR 638672
Phone No.: 9994305928

UNIQUE LAB REPORT NUMBER : ULR-CC231722000001455F

DISCIPLINE : MECHANICAL CALIBRATION

NAME OF EQUIPMENT : MICROPIPETTE

PARAMETER : VOLUME

CERTIFICATE NO : TPMCC220451524

DATE OF ISSUE : 09-04-2022

RECEIPT NO : 10774

TEMPERATURE : 23.6 °C

RECEIPT DATE : 06-04-2022

HUMIDITY : 56 %

JOB CARD NO : TPM380042249947

AIR PRESSURE : 966 hpa

JOB CARD DATE : 06-04-2022

MEDIUM OF WEIGHING : GRADE III WATER

BRAND : FINNPIPETTE - F3

DENSITY OF MEDIUM : APPROXIMATELY 1

RANGE : 10 - 100 µl

DENSITY CORRECTION
FACTOR [Z] : 1.0033 µl/mg

SERIAL NO : RW10978

CALIBRATION METHOD : ISO 8655:2002 PART - 6

TIPS USED : 200 µl

WEIGHING BALANCE : SEMI MICRO BALANCE

SCOPE OF ACCREDITATION : VOLUME - MICROPIPETTE (1 µl - 10000 µl)

DETAILS OF MASTER EQUIPMENTS USED FOR CALIBRATION

MASTER EQUIPMENT : SHIMADZU
SL.NO : D450020184
RESOLUTION : 0.00001g upto 82g & above is 0.0001g
CALIBRATED BY : THE PIPETEMANN (MASS), COIMBATORE
CERTIFICATE NUMBER : TPMCCM22020355
CALIBRATION VALIDITY : 03-02-2023
TRACEABILITY : NATIONAL STANDARDS

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NABL ACCREDITED CALIBRATION LABORATORY
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MASS - VOLUME - THERMAL - SPEED - PRESSURE - TIMER - ELECTRO TECHNICAL



CERTIFICATE NO : TPMCC220451524

CALIBRATED PARAMETER : VOLUME

NO.OF MEASUREMENTS : 10

I) SELECTED VOLUME : 100 µl

99.94 µl	99.74 µl	99.94 µl	99.94 µl	99.82 µl	99.54 µl	99.74 µl	99.89 µl	99.74 µl	99.93 µl
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MEAN VALUE : 99.82 µl
 SYSTEMATIC ERROR(es) : -0.18 µl
 RANDOM ERROR (Sr) : 0.13 µl

Standard Limit Value
 (±0.8 µl)
 (±0.3 µl)

II) SELECTED VOLUME : 50 µl

49.77 µl	49.88 µl	49.77 µl	49.77 µl	49.57 µl	49.72 µl	49.77 µl	49.77 µl	49.86 µl	49.77 µl
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MEAN VALUE : 49.76 µl
 SYSTEMATIC ERROR(es) : -0.24 µl
 RANDOM ERROR (Sr) : 0.08 µl

Standard Limit Value
 (±0.5 µl)
 (±0.2 µl)

III) SELECTED VOLUME : 10 µl

9.97 µl	9.97 µl	9.99 µl	9.98 µl	9.99 µl	9.93 µl	9.98 µl	9.99 µl	9.97 µl	9.97 µl
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MEAN VALUE : 9.97 µl
 SYSTEMATIC ERROR(es) : -0.03 µl
 RANDOM ERROR (Sr) : 0.02 µl

Standard Limit Value
 (±0.12 µl)
 (±0.08 µl)

CALIBRATED ON : 09-04-2022

CALIBRATION DUE ON : 08-10-2022

RESULTS :

RANGE	MEASUREMENT UNCERTAINTY	CMC (approved by NABL)
100 µl	0.09 µl	0.04 µl
50 µl	0.01 µl	0.01 µl
10 µl	0.01 µl	0.01 µl

With coverage factor k is 2 for effective degrees of freedom is ∞ and the confidence level is 95%

CALIBRATED BY :

(M.VINOTH KUMAR)
 DEPUTY TECHNICAL MANAGER

APPROVED BY :

(K.BALA MAJUR PRIYAN)
 TECHNICAL MANAGER

- NOTE :
- 1.Master equipments used for calibration are traceable to National standards
 - 2.The calibration reported are valid at the time of and under the stated conditions of the measurement
 - 3.Results presented in this certificate relate only to the item mentioned & calibrated at THE PIPETEMANN
 - 4.This certificate shall not be reproduced except in full without written approval of THE PIPETEMANN

THE PIPETEMANN

**NABL ACCREDITED CALIBRATION LABORATORY
ADDING ACCURACY TO YOUR EQUIPMENT**

MASS - VOLUME - THERMAL - SPEED - PRESSURE - TIMER - ELECTROTECHNICAL



CALIBRATION CERTIFICATE

CUSTOMER ADDRESS : M/s. THE MEDICAL OFFICER (TPM 380), GOVT. PRIMARY HEALTH CENTRE, DHALAVAIPATTINAM, DHARAPURAM, TIRUPUR 638672 Phone No.: 9994305928	
UNIQUE LAB REPORT NUMBER : ULR-CC231722000001456F	DISCIPLINE : MECHANICAL CALIBRATION
NAME OF EQUIPMENT : MICROPIPETTE	PARAMETER : VOLUME
CERTIFICATE NO : TPMCC220451525	DATE OF ISSUE : 09-04-2022
RECEIPT NO : 10774	TEMPERATURE : 23.6 °C
RECEIPT DATE : 06-04-2022	HUMIDITY : 58 %
JOB CARD NO : TPM380042249948	AIR PRESSURE : 960 hpa
JOB CARD DATE : 06-04-2022	MEDIUM OF WEIGHING : GRADE III WATER
BRAND : FINNPIPETTE - F3	DENSITY OF MEDIUM : APPROXIMATELY 1
RANGE : 100 - 1000 µl	DENSITY CORRECTION FACTOR [Z] : 1.0035 µl/mg
SERIAL NO : PW01834	CALIBRATION METHOD : ISO 8655:2002 PART - 6
TIPS USED : 1000 µl	WEIGHING BALANCE : SEMI MICRO BALANCE
SCOPE OF ACCREDITATION : VOLUME - MICROPIPETTE (1 µl - 10000 µl)	

DETAILS OF MASTER EQUIPMENTS USED FOR CALIBRATION

MASTER EQUIPMENT : SHIMADZU
SL.NO : D450020184
RESOLUTION : 0.00001g upto 82g & above is 0.0001g
CALIBRATED BY : THE.PIPETEMANN (MASS), COIMBATORE
CERTIFICATE NUMBER : TPMCCM22020355
CALIBRATION VALIDITY : 03-02-2023
TRACEABILITY : NATIONAL STANDARDS

THE PIPETEMANN

NABL ACCREDITED CALIBRATION LABORATORY
ADDING ACCURACY TO YOUR EQUIPMENT
MASS - VOLUME - THERMAL - SPEED - PRESSURE - TIMER - ELECTRO TECHNICAL



CERTIFICATE NO : TPMCC220451525

CALIBRATED PARAMETER : VOLUME

NO.OF MEASUREMENTS : 10

I) SELECTED VOLUME : 1000 μ l

1001.1 μ l	1001.2 μ l	1001.1 μ l	1001.1 μ l	1001.09 μ l	1000.9 μ l	1000.99 μ l	1000.9 μ l	1001.1 μ l	1001.18 μ l
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MEAN VALUE : 1001.07 μ l

SYSTEMATIC ERROR(es) : 1.07 μ l

RANDOM ERROR (Sr) : 0.1 μ l

Standard Limit Value

(\pm 8.0 μ l)

(\pm 3.0 μ l)

II) SELECTED VOLUME : 500 μ l

499.35 μ l	499.35 μ l	499.39 μ l	499.35 μ l	499.35 μ l	499.39 μ l	499.35 μ l	499.43 μ l	499.44 μ l	499.35 μ l
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MEAN VALUE : 499.38 μ l

SYSTEMATIC ERROR(es) : -0.62 μ l

RANDOM ERROR (Sr) : 0.04 μ l

Standard Limit Value

(\pm 4.0 μ l)

(\pm 1.5 μ l)

III) SELECTED VOLUME : 100 μ l

100.04 μ l	100.07 μ l	100.04 μ l	99.76 μ l	99.91 μ l	99.76 μ l	99.95 μ l	100.05 μ l	99.96 μ l	99.76 μ l
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MEAN VALUE : 99.93 μ l

SYSTEMATIC ERROR(es) : -0.07 μ l

RANDOM ERROR (Sr) : 0.13 μ l

Standard Limit Value

(\pm 0.8 μ l)

(\pm 0.3 μ l)

CALIBRATED ON : 09-04-2022

CALIBRATION DUE ON : 08-10-2022

RESULTS :

RANGE	MEASUREMENT UNCERTAINTY	CMC (approved by NABL)
1000 μ l	0.07 μ l	0.07 μ l
500 μ l	0.10 μ l	0.10 μ l
100 μ l	0.04 μ l	0.04 μ l

With coverage factor k is 2 for effective degrees of freedom is ∞ and the confidence level is 95%

CALIBRATED BY :

(M.VINOTH KUMAR)

DEPUTY TECHNICAL MANAGER

APPROVED BY :

(K.BALA MAYUR PRIYAN)

TECHNICAL MANAGER

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MASS - VOLUME - THERMAL - SPEED - PRESSURE - TIMER - ELECTRO TECHNICAL



CALIBRATION CERTIFICATE

CUSTOMER ADDRESS : M/s. THE MEDICAL OFFICER (TPM 380),
GOVT. PRIMARY HEALTH CENTRE,
DHALAVAIPATTINAM,
DHARAPURAM,
TIRUPUR 638672
Phone No.: 9994305928

UNIQUE LAB REPORT NUMBER : ULR-CC231722000001454F	DISCIPLINE : MECHANICAL CALIBRATION
NAME OF EQUIPMENT : MICROPIPETTE	PARAMETER : VOLUME
CERTIFICATE NO : TPMCC220451523	DATE OF ISSUE : 09-04-2022
RECEIPT NO : 10774	TEMPERATURE : 23.6 °C
RECEIPT DATE : 06-04-2022	HUMIDITY : 58 %
JOB CARD NO : TPM380042249946	AIR PRESSURE : 962 hpa
JOB CARD DATE : 06-04-2022	MEDIUM OF WEIGHING : GRADE III WATER
BRAND : FINNPIPETTE - F3	DENSITY OF MEDIUM : APPROXIMATELY 1
RANGE : 5 - 50 µl	DENSITY CORRECTION FACTOR [Z] : 1.0035 µl/mg
SERIAL NO : PW03000	CALIBRATION METHOD : ISO 8655:2002 PART - 6
TIPS USED : 200 µl	WEIGHING BALANCE : MICRO BALANCE
SCOPE OF ACCREDITATION : VOLUME - MICROPIPETTE (1 µl - 10000 µl)	

DETAILS OF MASTER EQUIPMENTS USED FOR CALIBRATION

MASTER EQUIPMENT : SARTORIUS MICRO BALANCE
SL.NO : 28001417
RESOLUTION : 0.000001g upto 6.1g
CALIBRATED BY : THE PIPETEMANN(MASS),COIMBATORE
CERTIFICATE NUMBER : TPMCCM22030365
CALIBRATION VALIDITY : 28-02-2023
TRACEABILITY : NATIONAL STANDARDS

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MASS - VOLUME - THERMAL - SPEED - PRESSURE - TIMER - ELECTRO TECHNICAL



CERTIFICATE NO : TPMCC220451523

CALIBRATED PARAMETER : VOLUME

NO.OF MEASUREMENTS : 10

I) SELECTED VOLUME : 50 μ l

49.84 μ l	49.85 μ l	49.8 μ l	49.78 μ l	49.79 μ l	49.83 μ l	49.84 μ l	49.82 μ l	49.84 μ l	49.85 μ l
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MEAN VALUE : 49.82 μ l
SYSTEMATIC ERROR(es) : -0.18 μ l
RANDOM ERROR (Sr) : 0.03 μ l

Standard Limit Value
(± 0.5 μ l)
(± 0.2 μ l)

II) SELECTED VOLUME : 25 μ l

24.76 μ l	24.77 μ l	24.76 μ l	24.77 μ l	24.76 μ l	24.76 μ l	24.76 μ l	24.77 μ l	24.76 μ l	24.78 μ l
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MEAN VALUE : 24.76 μ l
SYSTEMATIC ERROR(es) : -0.24 μ l
RANDOM ERROR (Sr) : 0.01 μ l

Standard Limit Value
(± 0.5 μ l)
(± 0.2 μ l)

III) SELECTED VOLUME : 5 μ l

4.96 μ l	4.98 μ l	4.97 μ l	4.98 μ l	4.96 μ l	4.97 μ l	4.98 μ l	4.99 μ l	4.98 μ l	4.97 μ l
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MEAN VALUE : 4.97 μ l
SYSTEMATIC ERROR(es) : -0.03 μ l
RANDOM ERROR (Sr) : 0.01 μ l

Standard Limit Value
(± 0.125 μ l)
(± 0.075 μ l)

CALIBRATED ON : 09-04-2022

CALIBRATION DUE ON : 08-10-2022

RESULTS :

RANGE	MEASUREMENT UNCERTAINTY	CMC (approved by NABL)
50 μ l	0.02 μ l	0.01 μ l
25 μ l	0.01 μ l	0.01 μ l
5 μ l	0.01 μ l	0.01 μ l

With coverage factor k is 2 for effective degrees of freedom is ∞ and the confidence level is 95%

CALIBRATED BY :

(M.VINOTH KUMAR)
DEPUTY TECHNICAL MANAGER

APPROVED BY :

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