

THE PIPETEMANN

NABL ACCREDITED CALIBRATION LABORATORY
ADDING ACCURACY TO YOUR EQUIPMENT

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



CERT. NO. CC - 2317

CALIBRATION CERTIFICATE

CUSTOMER ADDRESS : M/s. MEDITECH DIAGNOSTIC CENTRE,
(ADVANCED CLINICAL LAB),
NEW No.208, OLD No.99/1, LAKE VIEW ROAD,
WEST MAMBALAM,
CHENNAI 600023.
Phone No.: 044 23712378/48638586/9790964478/79.

UNIQUE LAB REPORT NUMBER : ULR-CC231720000002892F	DISCIPLINE : MECHANICAL CALIBRATION
NAME OF EQUIPMENT : MICROPIPETTE	PARAMETER : VOLUME
CERTIFICATE NO : TPMCC200943399	DATE OF ISSUE : 07-09-2020
RECEIPT NO : 9343	TEMPERATURE : 25.4 °C
RECEIPT DATE : 05-09-2020	HUMIDITY : 54 %
JOB CARD NO : TPM847092041822	AIR PRESSURE : 963 hpa
JOB CARD DATE : 05-09-2020	MEDIUM OF WEIGHING : GRADE III WATER
BRAND : BIOHIT PROLINE	DENSITY OF MEDIUM : APPROXIMATELY 1
RANGE : 5 - 50 µl	DENSITY CORRECTION FACTOR [Z] : 1.0039 µl/mg
SERIAL NO : 12565893	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 : TPMCCM20030243
CALIBRATION VALIDITY : 04-03-2021
TRACEABILITY : NATIONAL STANDARDS

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CERTIFICATE NO : TPMCC200943399

CALIBRATED PARAMETER : VOLUME

NO.OF MEASUREMENTS : 10

I) **SELECTED VOLUME** : 50 μ l

50.04 μ l	50.05 μ l	50.05 μ l	50.06 μ l	50.06 μ l	50.07 μ l	50.07 μ l	50.07 μ l	50.07 μ l	50.08 μ l
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MEAN VALUE : 50.06 μ l
SYSTEMATIC ERROR(es) : 0.06 μ l
RANDOM ERROR (Sr) : 0.01 μ l

Standard Limit Value
($\pm 0.5 \mu$ l)
($\pm 0.2 \mu$ l)

II) **SELECTED VOLUME** : 25 μ l

24.91 μ l	24.92 μ l	24.93 μ l	24.94 μ l	24.94 μ l	24.94 μ l	24.95 μ l	24.94 μ l	24.94 μ l	24.95 μ l
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MEAN VALUE : 24.94 μ l
SYSTEMATIC ERROR(es) : -0.06 μ l
RANDOM ERROR (Sr) : 0.01 μ l

Standard Limit Value
($\pm 0.5 \mu$ l)
($\pm 0.2 \mu$ l)

III) **SELECTED VOLUME** : 5 μ l

4.94 μ l	4.94 μ l	4.95 μ l	4.95 μ l	4.96 μ l	4.96 μ l	4.96 μ l	4.97 μ l	4.97 μ l	4.98 μ l
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MEAN VALUE : 4.96 μ l
SYSTEMATIC ERROR(es) : -0.04 μ l
RANDOM ERROR (Sr) : 0.01 μ l

Standard Limit Value
($\pm 0.125 \mu$ l)
($\pm 0.075 \mu$ l)

CALIBRATED ON : 07-09-2020

CALIBRATION DUE ON : 06-09-2021

RESULTS :

RANGE	MEASUREMENT UNCERTAINTY	CMC (approved by NABL)
50 μ l	0.01 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 :

S. Loganathan
(S.LOGANATHAN)

CALIBRATION ENGINEER

APPROVED BY :

K. Bala Mayur Priyan
(K. BALA MAYUR 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**