

THE PIPETEMANN

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



CERTIFICATE NO : TPMCC230156015

CALIBRATED PARAMETER : VOLUME
NO.OF MEASUREMENTS : 10

I) **SELECTED VOLUME** : 100 µl

99.91 µl	100.03 µl	99.96 µl	100.08 µl	99.96 µl	100.03 µl	99.91 µl	99.95 µl	99.96 µl	99.92 µl
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MEAN VALUE : 99.97 µl
 SYSTEMATIC ERROR(es) : -0.03 µl
 RANDOM ERROR (Sr) : 0.06 µl

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

II) **SELECTED VOLUME** : 50 µl

49.88 µl	49.77 µl	49.91 µl	49.85 µl	49.88 µl	49.81 µl	49.88 µl	49.84 µl	49.89 µl	49.85 µl
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MEAN VALUE : 49.86 µl
 SYSTEMATIC ERROR(es) : -0.14 µl
 RANDOM ERROR (Sr) : 0.04 µl

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

III) **SELECTED VOLUME** : 10 µl

9.98 µl	9.95 µl	9.96 µl	9.99 µl	10 µl	9.94 µl	9.98 µl	9.97 µl	10 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 : 23-01-2023

CALIBRATION DUE ON : 22-01-2024

RESULTS :

RANGE	MEASUREMENT UNCERTAINTY	CMC (approved by NABL)
100 µl	0.04 µl	0.04 µl
50 µl	0.03 µl	0.03 µl
10 µl	0.03 µl	0.03 µl

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

CALIBRATED BY :

P. Vignesh
 (P.VIGNESH)
 CALIBRATION ENGINEER

APPROVED BY :

K. Balamayurpriyan
 (K.BALAMAYURPRIYAN)
 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**