



T.B Hospital 3/03/2020

CALIBRATION REPORT

STATUS : PASSED

DESCRIPTION : Variable Volume Pipette VV-100(10-100 μ l)

DEVICE ID : 16308602

CALIBRATION DATE : 3/03/2020 4:56 PM

Method ID : VV/10-100

TERMINAL ID : 20

ENVIRONMENTAL FACTORS

TEMP : 20.00 $^{\circ}$ C **Z FACTOR :** 1.0026 mm³/mg **BARO. PRESSURE :** 80.00 KPa **REL. HUMIDITY :** 60.00%

CALIBRATION STATISTICS

| Vol (μ l) | No | Cum Wt (mg) | Vol (μ l) | Mean (μ l) | SD (μ l) | Inaccuracy E% | | Imprecision CV% | | Status |
|----------------|----|-------------|----------------|-----------------|---------------|---------------|--------|-----------------|--------|--------|
| | | | | | | Actual | Target | Actual | Target | |
| 10.000 | 1 | 10.000 | 10.026 | 9.993 | 0.058 | 0.073 | 6.00 | < 2.00 | 2.00 | PASSED |
| | 2 | 19.900 | 9.926 | | | | | | | |
| | 3 | 29.900 | 10.026 | | | | | | | |
| 50.000 | 1 | 50.000 | 50.130 | 50.097 | 0.058 | 0.193 | 1.20 | < 0.40 | 0.40 | PASSED |
| | 2 | 99.900 | 50.030 | | | | | | | |
| | 3 | 149.900 | 50.130 | | | | | | | |
| 100.000 | 1 | 100.300 | 100.561 | 100.360 | 0.266 | 0.360 | 0.60 | < 0.20 | 0.20 | PASSED |
| | 2 | 200.500 | 100.461 | | | | | | | |
| | 3 | 300.300 | 100.059 | | | | | | | |



| Volume | Above 10 μ l to 100 μ l | Above 100 μ l to 1000 μ l | Above 1 ml to 10 ml | Above 10 ml to 100 ml |
|-------------------|---------------------------------|-----------------------------------|---------------------|-----------------------|
| Uncertainty (k=2) | 0.1 μ l | 0.1 μ l | 0.1 μ l | 4 μ l |

- * Specifications conform to ISO:8655 standards.
- * Each instrument is individually calibrated on electronic balance.
- * 750 mmHg = 99.98 kPa.
- * Weight in mg or g.
- * Volume, Mean & S.D. in ml or μ l.

Reference standard
The instrument is calibrated using a standard electronic balance with calibration traceability to NPL.

The reported expanded uncertainty of measurement is calculated by multiplying the standard uncertainty of measurement by the coverage factor k=2, which for normal distribution corresponds to a coverage probability of approximately 95%.