



ISO/IEC 17025:2005  
Certificate No.: CC-2705

3/03/2020

## CALIBRATION REPORT STATUS : PASSED

**DESCRIPTION :** Fixed Volume Pipette FV-500(500  $\mu$ l)

**DEVICE ID :** 16411891

**CALIBRATION DATE :** 3/03/2020 5:15 PM

**Method ID :** FV/500

**TERMINAL ID :** 20

### ENVIRONMENTAL FACTORS

**TEMP :** 20.00  $^{\circ}$ C    **Z FACTOR :** 1.0026 mm<sup>3</sup>/mg    **BARO. PRESSURE :** 80.00 KPa    **REL. HUMIDITY :** 60.00%

### CALIBRATION STATISTICS

| Vol ( $\mu$ l) | No | Cum Wt (mg) | Vol ( $\mu$ l) | Mean ( $\mu$ l) | SD ( $\mu$ l) | Inaccuracy E% |        | Imprecision CV% |        | Status |
|----------------|----|-------------|----------------|-----------------|---------------|---------------|--------|-----------------|--------|--------|
|                |    |             |                |                 |               | Actual        | Target | Actual          | Target |        |
| 500.000        | 1  | 497.700     | 498.994        | 498.593         | 0.695         | 0.281         | 0.60   | < 0.20          | 0.20   | PASSED |
|                | 2  | 994.200     | 497.791        |                 |               |               |        |                 |        |        |
|                | 3  | 1491.900    | 498.994        |                 |               |               |        |                 |        |        |



| Volume            | Above 10 $\mu$ l to 100 $\mu$ l | Above 100 $\mu$ l to 1000 $\mu$ l | Above 1 ml to 10 ml | Above 10 ml to 100 ml | Based on data in the records. |
|-------------------|---------------------------------|-----------------------------------|---------------------|-----------------------|-------------------------------|
| Uncertainty (k=2) | 0.1 $\mu$ l                     | 0.1 $\mu$ l                       | 0.1 $\mu$ l         | 4 $\mu$ 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  $\mu$ 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%.