

STATUS PASSED

CALIBRATION REPORT

DEVICE ID 18518177
METHOD ID VQ100

DESCRIPTION Variable Volume 10-100ul
DATE 12/09/2018

ENVIRONMENTAL FACTORS

TEMP. 20.00 C BARO.PRESSURE 750.00 mmHg REL.HUMIDITY 30.00 %
AIR DENSITY 0.001200 g/cm3 Z. FACTOR 1.002899 cm3/g CUBIC EXP. 0.0000cm3/deg C

SAMPLE				INACCURACY E%							
Vol	No	Wt.	Vol	Vol	Mean	SD	Actual	Target	Status	Imprecision	CV %
10.00	1	10.02	10.05	10.00	10.01	0.105	0.10	8.00	PASSED	<	3.00
10.00	2	10.08	10.11	50.00	49.78	0.707	0.44	1.60	PASSED	<	0.60
10.00	3	9.84	9.87	100.0	100.4	1.746	0.49	0.80	PASSED	<	0.30
50.00	1	49.70	49.84								
50.00	2	50.30	50.45								
50.00	3	48.90	49.04								
100.00	1	101.20	101.4								
100.00	2	98.20	98.48								
100.00	3	101.40	101.6								

Checked by

Approved by

Inspector Q-C

Incharge Q-C



Volume	Above 10 µl to 100 µl	Above 100 µl to 1000 µl	Above 1 ml to 10 ml	Above 10 ml to 100 ml	Based on data in the records.
Uncertainty (k=2)	0.1 µl	0.1 µl	0.1 µl	4 µl	

- * 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 µl.

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%.