



## CALIBRATION CERTIFICATE

In accordance with ISO / IEC-17025 : 2017

F10-CC-03

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<b>Certificate No. : SIMCO/2012/403/MVL/02</b>	<b>Issue Date : 23/12/2020</b>
<b>1. Customer Name &amp; Address:</b> <b>M/s. Aswini Diagnostics</b> 29-12-4, Venkataratnam Street, Suryaraopet, Vijayawada-520 002.	<b>ULR- CC 280620200002485F</b>
	Reference Date : 22/12/2020 Calibration Date : 23/12/2020 Calibration Due Date : 22/12/2021

### 2. Details of Instrument Under Calibration:

Description : Micro Pipette	S.No : 365066
Make : P'fact	
Range : 10-100 µl	

### 3. Details of Standard Instruments Used :

Instrument Used	Serial/ID. No.	Valid up to	Certificate No.
Semi Micro Balance	SL/PMM/SMB/01	31/05/2021	SIMCO/2006/192/MVL/02

### 4. Environmental Conditions:

Standard Temperature : (23±2)°C

Relative Humidity : (50±10)% Rh

Air Pressure : (900-1100)hpa

Actual Temperature : 23.4 °C

Actual Relative Humidity : 52.4 % Rh

Actual Air Pressure : (953)hpa

### 5. Calibration Procedure : SOP-MP-01

### 6. Mechanical Calibration (Mass & Volume)

### 7. Calibration Results:

Sl. No.	Instrument Reading (µl)	Measured Value (µl)	Systematic Error (µl)	Random Error (µl)	Maximum Permissible Error (±µl)		Expanded Uncertainty (±µl)
					Systematic	Random	
1	10	9.65	-0.35	0.1	0.8	0.3	0.07
2	50	49.82	-0.18	0.1	0.8	0.3	0.07
3	100	99.75	-0.25	0.1	0.8	0.3	0.07

### 8. Remarks:

- The instrument was received in good condition and was calibrated at lab.
- This certificate pertains only to the item calibrated.
- The calibration results reported in this certificate are valid at the time of and at the stated environmental conditions.
- The calibration interval is determined based on customer's requirements.
- The calibration is traceable to National standards as per traceability details given in the certificate.
- This calibration certificate shall not be reproduced in full, except with prior written approval of Managing Director, SIMCO Calibration Laboratory.
- This calibration certificate is meant for scientific and industrial purpose only.
- The NABL Symbol is used as per NABL guidelines in NABL-133.
- The Measurement Uncertainty is reported approximately at 95% confidence level with coverage factor  $k = 2$ .
- Random Error are taken as round up value.
- To use this instrument at other temperatures use the formula given below

$$V_{27} = V_T (1 - \gamma (t-27))$$

where,  $V_T$  = Volume measured at temperature  $t^\circ\text{C}$  (ml),  $V_{27}$  = Volume measured at  $27^\circ\text{C}$  (ml)

$\gamma$  = coefficient of cubical expansion of Pipette tips (0.00024 /°C)

Mounika  
Calibrated by

N.V. Kameswara Rao  
Technical Manager  
AUTHORISED SIGNATORY