

## CALIBRATION CERTIFICATE

Page. No : 1 of 1

Certificate No: SBS/CL/23/12451

Customer Name & Address

GOVERNMENT PRIMARY HEALTH CENTRE, ARANGALDURGAM-635811.	SRF No.	SRF/23/00538-0001
	SRF Date	27-09-2023
	Date of Receipt	26-09-2023
	Date of Calibration	27-09-2023
	Due Date for Calibration	26-09-2024
	Issue Date	28-09-2023

**Details of Unit Under Calibration**

Description	MICRO PIPETTE	Make	THERMO SCIENTIFIC
Range	100-1000µl	Model	FINNPIPETTE F3
Resolution	1µl	Material	PVC
Serial Number	QW10307	Operating Range	100-1000µl
ID Number	NA	Condition of UUC	Good
Cal. At	Mechanical Lab	Instrument Location	LABORATORY

Environmental Condition				Calibration Method Used	
Temperature (°C)	23.7	Humidity (%RH)	50	National / International Standard	ISO 8655-6:2002
Atmospheric Pressure (mbar)	1006	Water Temperature (°C)	21.6	Cal Procedure No	SBS/CP/ML/08

**Standard Used**

SI. No.	Description	ID.No. / SI. No.	Certificate No.	Make/Model	Traceability	Valid till
1	Electronic Weighing Balance	15112918	TVCSPL22/12/2115-01	A&D & GH-252	National Standards	09-12-2023

**Z Factor: 1.00319**

Result of Calibration in µl										
Sl. No.	Nominal Value	Observed Readings					Mean Value	Systematic Error	Random Error	Measurement Uncertainty (±)
		1	100	100.51	100.52	100.53				
2	500	100.49	100.48	100.49	100.49	100.48	500.43	0.43	0.02	0.47
		500.40	500.42	500.43	500.44	500.46				
3	1000	1001.24	1001.26	1001.23	1001.22	1001.22	1001.22	1.22	0.03	0.47
		1001.18	1001.17	1001.20	1001.24	1001.26				


**Remarks**

1. This Calibration certificate shall not be reproduced except in full, without written approval of the laboratory.
2. The user should determine the suitability of the instrument for its intended use.
3. The recalibration interval should be determined on the user requirement.
4. The results stated in this certificate relate only to the item calibrated.
5. Equipment used for Calibration were calibrated & traceable to National & International Standards
6. The indicated uncertainties are expanded uncertainty estimated for a confidence level of approximately 95% for a coverage factor k=2.00.
7. Calibration Liquid Used: Distilled or Deionized water conforming Grade3 as specified in ISO 3696.

Calibrated By,

  
 (Calibration Engineer)  
 M.ADHIBAN

Authorised by:

  
 (Quality Manager/Chief Executive)  
 C.SIVABALAN

## CALIBRATION CERTIFICATE

Certificate No: SBS/CL/23/12452

Page No: 1 of 1

**Customer Name & Address**

GOVERNMENT PRIMARY HEALTH CENTRE, ARANGALDURGAM-635811.	SRF No.	SRF/23/00538-0002
	SRF Date	27-09-2023
	Date of Receipt	26-09-2023
	Date of Calibration	27-09-2023
	Due Date for Calibration	26-09-2024
	Issue Date	28-09-2023

**Details of Unit Under Calibration**

Description	MICRO PIPETTE	Make	THERMO SCIENTIFIC
Range	10-100µl	Model	FINNPIPETTE F3
Resolution	0.2µl	Material	PVC
Serial Number	QW10083	Operating Range	10-100µl
ID Number	NA	Condition of UUC	Good
Cal. At	Mechanical Lab	Instrument Location	LABORATORY

**Environmental Condition**

**Calibration Method Used**

Temperature (°C)	23.7	Humidity (%RH)	50	National / International Standard	ISO 8655-6:2002
Atmospheric Pressure (mbar)	1006	Water Temperature (°C)	21.6	Cal Procedure No	SBS/CL/ML/08

**Standard Used**

SI. No.	Description	ID.No. / SI. No.	Certificate No.	Make/Model	Traceability	Valid till
1	Electronic Weighing Balance	15112918	TVCSP22/12/2115-01	A&D & GH-252	National Standards	09-12-2023

Z Factor: 1.00319

**Result of Calibration in µl**

SI. No.	Nominal Value	Observed Readings					Mean Value	Systematic Error	Random Error	Measurement Uncertainty (±)
1	10.0	9.88	9.87	9.86	9.87	9.86	9.87	-0.13	0.01	0.47
		9.87	9.88	9.87	9.86	9.88				
2	50.0	49.76	49.77	49.78	49.76	49.77	49.77	-0.23	0.01	0.47
		49.77	49.76	49.76	49.77	49.78				
3	100.0	99.84	99.86	99.87	99.88	99.87	99.86	-0.14	0.01	0.47
		99.86	99.87	99.86	99.87	99.86				

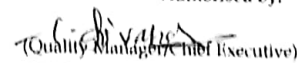
**Remarks**

- 1.This Calibration certificate shall not be reproduced except in full, without written approval of the laboratory.
- 2.The user should determine the suitability of the instrument for its intended use.
- 3.The recalibration interval should be determined on the user requirement.
- 4.The results stated in this certificate relate only to the item calibrated.
5. Equipment used for Calibration were calibrated & traceable to National & International Standards
- 6.The indicated uncertainties are expanded uncertainty estimated for a confidence level of approximately 95% for a coverage factor k=2.00 .
7. Calibration Liquid Used: Distilled or Deionized water conforming Grade3 as specified in ISO 3696.

Calibrated By,

  
 (Calibration Engineer)  
 MADHIBAN

Authorized by:

  
 (Quality Management Executive)  
 C.SIVABALAN