SUNSHINE

CALIBRATION CERTIFICATE

Certificate No: SBS/CL/23/14207

Customer Name & Address		
GOVERNMENT PRIMARY HEALTH CENTRE, MUNAIVENDRI,SIVAGANGAI DISTRICT.	SRF No.	SRF/23/00868-0003
	SRF Date	11-10-2023
	Date of Receipt	10-10-2023
	Date of Calibration	11-10-2023
	Due Date for Calibration	10-10-2024
	Issue Date	12-10-2023

Details of Unit Under Calibration			
Description	MICRO PIPETTE	Make	THERMO SCIENTIFIC
Range	10-100µl	Model	FINNPIPETTE F3
Resolution	0.2µl	Material	PVC
Serial Number	NA	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)	23.6	Humidity (%RH)	54	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

Sl. No.	Description	ID.No. / Sl. 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	10.0	9.96	9.95	9.98	9.96	9.97	9.97	-0.03	0.01	0.47
		9.98	9.96	9.97	9.98	9.95				
2	50.0	49.86	49.85	49.87	49.86	49.85	49.91	-0.09	0.05	0.47
		49.95	49.96	49.97	49.95	49.95				
3	100.0	99.78	99.79	99.78	99.78	99.77	99.78	-0.22	0.01	0.47
		99.79	99.78	99.76	99.78	99.78				

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 to Grade 3 as specified in ISO 3696.

Calibrated By,

(Calibration Engineer)
M.RAGUL

SUNSHINE BIOMEDICAL SOLUTIONS Chennai 600 032

Authorised by:

(Quality Manager/Chief Executive)
C.SIVABALAN

SUNSHINE

CALIBRATION CERTIFICATE

CERTIFICATE NO:	SBS/CL/23/18025	MECHANICAL	Page No:1 of 1
Issue Date	23-11-2023		
SRF No & Date	SRF/23/01057-0001 & 22-11-2023		
Receipt Date	22-11-2023		
Calibration Date	22-11-2023		
Calibration Due	21-11-2024		

Customer Name & Address

GOVERNMENT PRIMARY HEALTH CENTRE,
MUNAIVENDRI-623701,SIVAGANGAI DISTRICT

Details of Device Under Calibration (DUC)

Description	CENTRIFUGE	Make & Model	BD INSTRUMENTS & BDI-152
Range	3500 RPM	Sr. No	20111736
Resolution	1 RPM	Identification No	NA
DUC Condition	Satisfactory	Location	LABORATORY

Environmental Conditions & Standard Operating Procedure Details

Environmental Details	Temperature: 26.4°C	Relative Humidity	53% Rh
Calibration Procedure No	SBS/CP/ML/04	Calibration done at	ONSITE

Reference Standards Details

S.No	Description	Make/ Sl No:	Certificate No	Validity
1	Digital Tachometer	LINE SEIKI / 175-0034V	JRPM-CCTR-A&S-2023-0013	09-06-2024

CALIBRATION RESULTS

S.No	DEVICE UNDER CALIBRATION	STANDARD INSTRUMENTS	DEVIATION	EXPANDED UNCERTAINTY
	RPM	RPM	RPM	%
1	1000	998.5	1.5	7.0
2	2000	1999.2	0.8	7.0
3	3500	3499.5	0.5	7.0

REMARKS

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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 The indicated uncertainties are expanded uncertainty estimated for a confidence level of approximately 95% for a coverage factor k=2.00.
6 Equipment used for Calibration were calibrated & traceable to National & International Standards.

Calibrated By
(Calibration Engineer)
M.DINESH

SUNSHINE BIOMEDICAL SOLUTIONS
Chennai
600 032

Authorised Signatory
Quality Manager
(C.SIVABALAN)
Chief Executive

SUNSHINE

CALIBRATION CERTIFICATE

Certificate No: SBS/CL/23/14206

Customer Name & Address		
GOVERNMENT PRIMARY HEALTH CENTRE, MUNAIVENDRI,SIVAGANGAI DISTRICT.	SRF No.	SRF/23/00868-0002
	SRF Date	11-10-2023
	Date of Receipt	10-10-2023
	Date of Calibration	11-10-2023
	Due Date for Calibration	10-10-2024
	Issue Date	12-10-2023

Details of Unit Under Calibration			
Description	MICRO PIPETTE	Make	THERMO SCIENTIFIC
Range	100-1000µl	Model	FINNPIPETTE F3
Resolution	1µl	Material	PVC
Serial Number	NA	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)	23.6	Humidity (%RH)	55	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

Sl. No.	Description	ID.No. / Sl. 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	99.95	99.89	99.87	99.86	99.85	99.87	-0.13	0.03	0.47
		99.86	99.87	99.86	99.87	99.85				
2	500	499.97	499.98	499.95	499.96	499.95	499.95	-0.05	0.02	0.47
		499.92	499.94	499.93	499.94	499.95				
3	1000	999.95	999.97	999.95	999.96	999.97	999.96	-0.04	0.01	0.47
		999.95	999.97	999.96	999.97	999.98				

Remarks

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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 of conforming Grade3 as specified in ISO 3696.

Calibrated By,

(Calibration Engineer)
M.RAGUL

SUNSHINE BIOMEDICAL SOLUTIONS Chennai 600 032

Authorised by:

(Quality Manager/Chief Executive)
C.SIVABALAN