

		CAL	LIBR/	<u> 4TIC</u>	N CE	RTIF	<u>ICA</u>	<u>TE</u>		
CERTIFICATE NO:	SBS/0	CL/23/15028	_		1	MEC	IANIC	AL	Page No:1 of 1	
Issue Date				18-10-2	023					
SRF No & Date				SRF/23	/00926-000	1 & 18-1	)-2023			
Receipt Date				18-10-2	023					
Calibration Date				18-10-2	023					
Calibration Due				17-10-2	024					
Customer Name & A	\ddress									
GOVERNMENT PRI	MARY HE	ALTH CENT	RE,							
EDUMALAI-621007,	RICHY D	ISTRICT.								
			Details of	Device	Under Cal	ibration	(DUC)			
Description :	CENT	RIFUGE		Make &	Model		:	LABOTECH & BDI-	152	
Range :	3500	RPM	].	Sr. No			:	70111922		
Resolution :	1	RPM	Ī	Identifica	ation No		•	NA '		
DUC Condition :	Satisfa	actory		Location	1		:	LABORATORY		
	E	nvironment	al Conditi	ions & S	tandard O	perating	Proce	dure Details		
Environmental Details		Temperatur		_	Relative H			55% Rh		
Calibration Procedure	No	SBS/CP/ML	/04		Calibration	done at		ONSITE		
			Ref	ference	Standards	Details	-			
S.No Description			Make/ SI	No:		Certific	ate No		Validity	
1 Digital Tachom	eter		LINE SE	<del></del>				A&S-2023-0013	09-06-202	
CALIBRATION RESU	ILTS									

S.No	DEVICE UNDER CALIBRATION	STANDARD INSTRUMENTS	DEVIATION	EXPANDED UNCERTAINTY
	RPM	RPM	RPM	%
1	1000	999.9	0.1	43
2	2000	1999.8	0.2	4.2
3	3000	2999.7	0.3	4.2
MAD	Ve			4.2

- 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. 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) K.SATHYAMOORTHY



**Authorised Signatory** (Quality Manager) (Chief Executive) (C.SIVABALAN)

# SUNSHINE BIOMEDICAL SOLUTIONS



			<u></u>	ALIBI	RATION CE	RTIF	ICATE				
Certifica	ate No: SBS/CL/23/15029	<del>,</del>								Page. No: 1 of 1	
Custome	er Name & Address										
						SRF No.			SRF/23/00926-0002		
GOVERI	NMENT PRIMARY HEA	ALTH CENT	rre,			SRF Date			18-10-2023		
EDUMA	LAI-621007,TRICHY DI	STRICT.				Date of Receipt			18-10-2023		
,						Date of Calibration			18-10-2023		
f						Due Date for Calibration			17-10-2024		
ı						Issue Dat	te		18-10-2023		
Details (	of Unit Under Calibratio	on		<del></del>		<u>-1</u>	·	<u> </u>	<u> </u>		
Description MICRO PIPETTE						Make	<del></del> ·		MICROLUX	""	
Range		5-50µl				Model	<del></del>	<del></del>	NA	<del>-</del>	
Resolutio	on	1μ1				Material			PVC		
Serial N	umber	NA			<del></del>	Operating	g Range		10-50µl		
ID Numl	ber	NA				+	n of UUC	·	Good		
Cal. At		Mechanica	ıl Lab			Instrume	nt Location		<del>-</del>		
									LABORATO	<u>KY</u>	
,	E	nvironmen	tal Condition	מנ			Calibra	tion Meth	od Used		
Tempera	ature (°C)	23.7	Humidity (	(%RH)	54	National	/ International Stand	ard	ISO 8655-6:20	)02	
Atmosph	heric Pressure (mbar)	1006	Water Temp	erature (°C)	21.6	Cal Proce	dure No		SBS/CP/ML/0	)8	
Standard	l Used		<b>L</b>			<u> </u>			<u></u>		
SI. No.	Description	ID.No.	/SI. No.		Certificate No.		Make/Model	Trac	ceability	Valid till	
1	Electronic Weighing Balance	1517	12918	т т	TVCSPL22/12/2115-01 A&D & GH-252				National Standards 09-12		

	<u> </u>	<del></del>		R	esult of Calibrat	ion in µl	-	<u> </u>		Z Factor: 1.003
Sl. No.	Nominal Value			Observed Re	adings		Mean Value	Systemati c Error	Random Error	Measurement Uncertainty (±)
-	10	9.91	9.93	9.92	9.94	9.96	9.94			
	10	9.94	9.95	9.93	9.95	9.95	9.94	-0.06	0.02	0.47
2	30	29.96	29.97	29.98	29.99	29.95		<del>-</del> -		
2 30	30	29.90	29.91	29.93	29.94	29.95	29.95	-0.05	0.03	0.47
3	50	49.85	49.84	49.83	49.85	49.86				<del></del>
3 50	49.86	49.87	49.88	49.89	49.90	49.86	-0.14	0.02	0.47	

- · 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. OMEDIC
  - 7. Calibration Liquid Used: Distilled or Deionized water confo Calibrated By,

M. Delicipant (Calibration Engineer) M.ADHIBAN

Balance

ified in ISO 3696.

Authorised by:

r/Chief Executive)

## **SUNSHINE BIOMEDICAL SOLUTIONS**

Chennai

600 032

No:68, First Floor, Poomagal Main Road, Ekkattuthangal, Chennai - 600 032, Tel: 044 - 2225 2087, E-Mail: calibration@sunshinebiomedical.com, Website: www.sunshinebiomedical.com.



				CALIBR	RATION	CFR'	TIFICATE				
Certif	icate No: SBS/CL/23/150	30			<u> </u>	<u>ULIV</u>	TITICATE				
Custo	ner Name & Address			<del></del>						Page. No: 1 of	
						SRF No	).		<del></del>	<u> </u>	
	RNMENT PRIMARY HI		√TRE,			SRF Da	 ite		SRF/23/00926-0003		
EDUMALAI-621007,TRICHY DISTRICT.						Date of	Receipt		18-10-2023 18-10-2023		
							Calibration		<del></del> -		
							te for Calibration	18-10-2023			
						Issue D		17-10-2024			
)etails	of Unit Under Calibra	tion				18-10-2023					
Descrip	tion	MICRO P	IPETTE			Make					
ange		10-100µl				+			THERMOS	CIENTIFIC	
lesolui	ion	0.2µl				Model				TE F3	
erial N	lumber	NA NA		<del></del>		Material			PVC		
) Nun	ıber	NA NA				+	ng Range	10-100µl			
al. At		Mechanica	17.4			+	Condition of UUC			Good	
		Iviectianica	Lab			Instrument Location			LABORATORY		
	Env	ironmental	Condition			<del>T</del>	C-10.		<del></del>		
emper	ature (°C)	23.9	Humidity	(%RH)	55	NT-4'- 1		ion Metho	od Used		
tmosp	heric Pressure (mbar)	1006	<del></del>		<del> </del>	National	/ International Standa		ISO 8655-6:2	002	
		1006	Water Tem	ter Temperature (°C) 21.6			Cal Procedure No			SBS/CP/ML/08	
	Used								L	<del></del>	
I. No.	Description	ID.No.	/ SI. No.		ertificate No.		Make/Model	T	and the		
1	Electronic Weighing Balance				SPL22/12/2115	-01		- Irac	eability	Valid till	
barance		15112918 TVCSPL22/12/2115-0				~1	A&D & GH-252	Nationa	l Standards	00.12.2022	

		т——		R	esult of Calib	ration in µl			<del></del> -	Z Factor: 1.003	
Sl. No.	Nominal Value	01- 15						Systematic Error	Random Error	Measurement Uncertainty (±)	
1	10.0	9.91	9.92	9.90	9.92	9.93			<del>   </del>		
		9.92	9.93	9.92	9.93	9.91	9.92	-0.08	0.01	0.47	
2	50.0	49.95	49.96	49.95	49.95	49.96		-0.04		0.47	
		49.96	49.97	49.98	49.97	49.96	49.96		0.01		
3	100.0	99.89	99.88	99.89	99.87	99.88					
		99.88	99.87	99.85	99.86	99.87	99.87	-0.13	0.01	0.47	

### 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
- 7. Calibration Liquid Used: Distilled or Deionized water co orming Grade3 as specified in ISO 3696.

Calibrated By,

(Calibration Engineer) M.ADHIBAN

Chennai

Authorised by:

National Standards

09-12-2023

# SUNSHINE BIOMEDICAL SOLUTIONS

No:68, First Floor, Poomagal Main Road, Ekkattuthangal, Chennai - 600 032, Tel: 044 - 2225 2087, E-Mail: calibration@sunshinebiomedical.com, Website: www.sunshinebiomedical.com.



		<u>C</u>	ALIBI	RATION	CERT	IFICATE	
Certificate No: SBS/CL/23/15	031					III TOATIL	
Customer Name & Address							Page. No : 1 of 1
		<u> </u>			SRF No.		SRF/23/00926-0004
GOVERNMENT PRIMARY H		TRE,			SRF Dat	te	18-10-2023
EDUMALAI-621007,TRICHY	DISTRICT.				Date of	Receipt	18-10-2023
					Date of	Calibration	18-10-2023
					Due Dat	e for Calibration	17-10-2024
Details of Unit Under Calibra					Issue Da	te	18-10-2023
		<u></u> _					
Description	<del></del>	MICRO PIPETTE					THERMO SCIENTIFIC
Range	100-1000µ	100-1000µl					FINNPIPETTE F3
Resolution	1µi				Material	<u> </u>	PVC
erial Number	NA				Operatin	g Range	100-1000µl
D Number	NA				Conditio	n of UUC	Good
Cal. At	Mechanica	l Lab			Instrume	nt Location	LABORATORY
En	vironmental	Condition				0.13	
emperature (°C)	23.9	Humidiby (	(9/ DU)	T	-		Method Used
<del></del>	<del> </del>	Humidity (%RH)		55	National / International Standard		ISO 8655-6:2002
tmospheric Pressure (mbar)	1006	Water Temperature (°C) 2		21.6	Cal Proce	dure No	SBS/CP/ML/08
landard Used			·				
I. No. Description	ID.No.	SI. No.		Certificate No.		Make/Model	Traceability Valid till

	51. No.	Description	ID.No. / SI. No.	Certificate No.	Make/Model		<del></del>	_
		Electronic Weighing			Make/Model	Traceability	Valid till	ı
	<u></u>	Balance	1511 <b>2</b> 918	TVCSPL22/12/2115-01	A&D & GH-252	National Standards	09-12-2023	ĺ
ı				<u> </u>				ſ

		r		Re	sult of Calib	ration in µl				Z Factor: 1.003
Sl. No.	Nominal Value		0	bserved Read	dings	Mean Value	Systematic Error	Random Error	Measurement Uncertainty (±)	
1 100	100	99.85 99.86 99.87	99.85	99.84				<del></del>		
		99.83	99.82	99.85	99.81	99.82	99.84	-0.16	0.02	0.47
2	500	499.88	499.87	499.86	499.85	499.84				
		499.85	499.87	499.85	499,84	499.83	499.85	-0.15	0.02	0.47
3	3 1000	999.95	999.97	999.95	999.94	999.93	<u> </u>			
1000	999.92	999.91	999.93	999.94	999.95	999.94	-0.06	0.02	0.47	

### 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 states as specific

Calibrated By,

(Calibration Engineer) M.ADHIBAN

ed in ISO 3696. Chennai 600 032

Authorised by:

## **SUNSHINE BIOMEDICAL SOLUTIONS**

No:68, First Floor, Poomagal Main Road, Ekkattuthangal, Chennai - 600 032, Tel: 044 - 2225 2087,  $\textbf{E-Mail: calibration} @ sunshine biomedical.com, \\ \bar{\textbf{Website: www.sunshine biomedical.com.}} \\$