

			<u>(</u>	CALIBI	<u>RATION C</u>	<u>ERTIF</u>	<u>ICATE</u>					
Certificate	e No: SBS/CL/23/13936			<u> </u>					1	Page. No : 1 of 1		
Customer	Name & Address											
		-				SRF No.			SRF/23/00639	-0003		
GOVERN	MENT PRIMARY HEA	LTH CENT	RE,		SRF Date	SRF Date			06-10-2023			
TOMBHUCHERY-625582,THENI DISTRICT.							Date of Receipt			05-10-2023		
						Date of C	alibration		06-10-2023			
						Due Date	for Calibration		05-10-2024			
						Issue Date	e		07-10-2023			
Details of	Unit Under Calibratio	n										
Description	on	MICRO PI	PETTE			Make			THERMO SCIENTIFIC			
Range		100-1000µ1					Model			FINNPIPETTE F3		
Resolutio	n	1µl				Material	Material					
Serial Nu	mber	RW12814				Operating	Operating Range					
ID Number		NA				Condition	Condition of UUC					
Cal. At		Mechanical Lab				Instrumer	Instrument Location		LABORATORY			
		nvironmen	tal Conditio	on			Calibrat	ion Metho	d Used			
Temperat	ture (°C)	23.6	Humidity ((%RH)	55	National /	National / International Standard		ISO 8655-6:2002			
Atmospheric Pressure (mbar)		1006	Water Temperature (°C)		21.6	Cal Proce	Cal Procedure No		SBS/CP/ML/08			
Standard	Used					•			<u> </u>			
SI. No.	SI. No. Description		/ SI. No.		Certificate No.		Make/Model		ceability	Valid till		
1	Electronic Weighing Balance	1511	12918	1	TVCSPL22/12/2115-01		A&D & GH-252 Na		National Standards 09-12-202			
		-							Z Factor:	1.00319		

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	Result of Calibration in µl										
Sl. No.	Nominal Value			Observed Re	eadings	Mean Value	Systematic Error	Random Error	Measurement Uncertainty (±)		
	100	99.95	99.89	99.87	99.86	99.85	99.87	-0.13	0.03	0.47	
1		99.86	99.87	99.86	99.87	99.85				0.49	
	500	499.89	499.87	499.89	499.86	499.85	499.85	-0.15	0.04	0.47	
2		499.85	499.76	499.85	499.86	499.85					
	1000	999.78	999.79	999.78	999.77	999.79	999.78	-0.22	0.01	0.47	
3	1000	999.75	999.76	999.78	999.78	999.78				0.4/	

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

7. Calibration Liquid Used: Distilled or Deionized water conformation Liquid Used: Distilled or Deionized water conformation in ISO 3696.

Calibrated By,

(Calibration Engineer)

Chennai 600 032

Authorised by:

C.SIVABALAN

SUNSHINE BIOMEDICAL SOLUTIONS

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



			(CALIB	RATION	CERTIF	-ICATE				
Certificate 1	No: SBS/CL/23/13937									Page. No:1 of 1	
Customer N	iame & Address										
					•	SRF No.			SRF/23/00639	-0004	
GOVERNM	ENT PRIMARY HEA	LTH CENTR	ξE,		SRF Dat	SRF Date			06-10-2023		
TOMBHUCI	HERY-625582,THEN	I DISTRICT.			Date of I	Receipt		05-10-2023			
						Date of (Calibration		06-10-2023		
						Due Dat	te for Calibration		05-10-2024		
						Issue Da	ite		07-10-2023		
Details of U	Init Under Calibratio	in .									
Description		MICRO PIP	ETTE			Make	Make			THERMO SCIENTIFIC	
Range		10-100µl				Model	Model			FINNPIPETTE F3	
Resolution		لىز0.2				Material	Material				
Serial Numb	ber	RW09296				Operation	Operating Range				
ID Number		NA				Conditio	Condition of UUC				
Cal. At		Mechanical Lab				Instrume	Instrument Location			LABORATORY	
		Environment	-1 Conditio			·	C-111	· . M.4.	1773		
		1 1			Т			tion Metho	T		
Temperature	.e (°C)	23.6 J	Humidity (%RH)		55	National	itional / International Standard		ISO 8655-6:2002		
Atmospheri	ic Pressure (mbar)	1006	Water Temperature (°C)		21.6	Cal Proce	Cal Procedure No		SBS/CP/ML/08		
Standard Us	sed						-		-		
SI. No.	Description ID.No. / SI. No. C		Certificate No.		Make/Model Ti		Traceability Vali				
1 E	Electronic Weighing Balance	15112	1918	7	TVCSPL22/12/211	15-01	A&D & GH-252	National Standards		09-12-2023	
								<u> </u>	Z Factor:	1 00319	

	Result of Calibration in μl											
Sl. No.	Nominal Value	Observed Readings						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		
1		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			
2		49.95	49.96	49.97	49.95	49.95			0.05	0.47		
_	100.0	99.98	99.97	99.98	99.96	99.98	99.96	-0.04				
3	100.0	99.95	99.96	99.94	99.95	99.96			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 coverage factor k=2.00.
- 7. Calibration Liquid Used: Distilled or Deionized water conforming Grade3 as specified in ISO 3696.

Calibrated By,

M. Adhiban (Calibration Engineer) M.ADHIBAN Chennai O

Authorised by:

(Quality Manager/Cruef Executive)

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.