

|                       | CA               | LIBRATION             | CERT                   | FICAT        | E                       |                |  |  |
|-----------------------|------------------|-----------------------|------------------------|--------------|-------------------------|----------------|--|--|
| CERTIFICATE NO:       | SBS/CL/23/1344   | 4                     | MECHANICAL             |              |                         |                |  |  |
| Issue Date            |                  | 07-10-2               | 2023                   |              |                         | Page No:1 of 1 |  |  |
| SRF No & Date         |                  | SRF/23                | 3/00750-000            | 1 & 07-10-20 | 023                     |                |  |  |
| Receipt Date          |                  | 07-10-2               |                        |              |                         |                |  |  |
| Calibration Date      |                  | 07-10-2               | 2023                   |              |                         |                |  |  |
| Calibration Due       |                  | 06-10-2               | 2024                   |              |                         |                |  |  |
| Customer Name & A     | ddress           |                       |                        |              |                         |                |  |  |
| GOVERNMENT PRIM       | ARY HEALTH CENTR | E,                    |                        |              |                         |                |  |  |
| KARVIZHI-638151,KA    | RUR DISTRICT.    |                       |                        |              |                         |                |  |  |
|                       |                  | Details of Device Und | ler Calibrati          | on (DUC)     |                         |                |  |  |
|                       |                  |                       |                        |              |                         |                |  |  |
| Description :         | CENTRIFUGE       | Make 8                | Model                  | :            | NA & NA                 |                |  |  |
| Range :               | 3500 RPM         | Sr. No                |                        | :            | 20111274                |                |  |  |
| Resolution :          | 1 RPM            | Identific             | ation No               | :            | NA                      |                |  |  |
| DUC Condition :       | Satisfactory     | Locatio               | n                      | :            | LABORATORY              |                |  |  |
|                       | Environment      | al Conditions & Stan  | dard Operat            | ing Proced   | ure Details             |                |  |  |
| Environmental Details |                  | rature: 25.3°C        | Relative Hu            | umidity      | 55% Rh                  |                |  |  |
| Calibration Procedure | No SBS/C         | P/ML/04               | Calibration            | done at      | ONSITE                  |                |  |  |
|                       |                  | Reference Star        | ndards Deta            | ils          |                         |                |  |  |
| S.No Description      |                  | Make/ SI No:          |                        | Certificate  | No                      | Validity       |  |  |
| 1 Digital Tachome     | eter             | LINE SEIKI / 17       | LINE SEIKI / 175-0034V |              | JRPM-CCTR-A&S-2023-0013 |                |  |  |

#### **CALIBRATION RESULTS**

| S.No | DEVICE UNDER CALIBRATION | STANDARD INSTRUMENTS | DEVIATION | EXPANDED UNCERTAINTY |
|------|--------------------------|----------------------|-----------|----------------------|
|      | RPM                      | RPM                  | RPM       | %                    |
| 1    | 1000                     | 999.1                | 0.9       | 4.2                  |
| 2    | 2500                     | 2499.5               | 0.5       | 4.2                  |
| 3    | 3000                     | 2999.6               | 0.4       | 4.2                  |

### **REMARKS**

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- 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)

## **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.



|        |                      |          | CAL                    | IBRAT         | 101           | I CERT        | TIFICA         | ATE  |                |
|--------|----------------------|----------|------------------------|---------------|---------------|---------------|----------------|--|----------------|
| CER    | TIFICATE NO: SB      | S/CL/23/ | 13445                  |               |               | M             | EDICAL D       | DEVICES  | Page No:1 of 1 |
| Issue  | Date                 |          |                        |               | 07-10         | 0-2023        |                |  |                |
| SRF    | No & Date            |          |                        |               | SRF           | 23/00750-00   | 02 & 07-1      | 0-2023   |                |
| Rece   | eipt Date            |          |                        |               | 07-10         | 0-2023        |                |  |                |
| Calib  | ration Date          |          |                        |               | 07-10         | 0-2023        |                |  |                |
| Calib  | ration Due           |          |                        |               | 06-10         | 0-2024        |                |  |                |
| Cust   | omer Name & Ado      | lress    |                        |               |               |               |                |  |                |
| GOV    | ERNMENT PRIMA        | RY HEA   | LTH CENTRE             | =,            |               |               |                |  |                |
| KAR    | VIZHI-638151,KAR     | UR DIST  | RICT.                  |               |               |               |                |  |                |
|        |                      |          |                        | Details of De | vice U        | nder Calibra  | tion (DUC)     |  |                |
| Desci  | ription :            |          | RICAL SAFET<br>DSCOPE) | Υ             | Make          | & Model       | :              | LABOTECH & NA  |                |
| Rang   | e :                  | MULTI    |                        |               | Sr. N         | 0             | :              | 3989   |                |
| Reso   | lution :             | MULTI    |                        |               | Identi        | fication No   | :              | NA   |                |
| DUC    | Condition :          | SATISE   | ACTORY                 |               | Locat         | ion           | :              | LABORATORY   |                |
|        |                      |          | Environr               | mental Condi  | tions         | & Calibration | Procedur       | e Details  |                |
| Envir  | onmental Details     |          | Temperature:           | 25.6 ° C      |               | Relative Hun  | nidity         | 52% RH   |                |
| Calibi | ration Procedure No  |          | SBS/CP/MD/2            | 29            |               | Calibration d | one at         | ONSITE   |                |
|        |                      |          |                        | Refere        | nce S         | tandards Det  | ails           | 34-55 c - 1994 (19 |                |
| S.No   | Description          |          |                        | Make/ SI No:  |               |               | Certificate No |  | Validity       |
| 1      | Electrical Safety An | alyser   |                        | Rigel Medica  | al & 44L-1059 |               | M-230809       | 9-16-4   | 10-08-202      |

#### **ELECTRICAL SAFETY**

| S.no | SPECIFICATION          | MEASURED VALUES       | EXPANDED UNCERTAINTY (±) |
|------|------------------------|-----------------------|--------------------------|
| 1    | Insulation Resisitance | Measured values in MΩ | Uncertainty in % (±)     |
|      | >20MΩ                  | 99                    | 13.92                    |
| 2    | Earth Leakage          | Measured values in µA | Uncertainty in % (±)     |
|      | <5000µAfor B,BF,CF     | 165                   | 7.6                      |
| 3    | Enclosure Leakage      | Measured values in µA | Uncertainty in % (±)     |
|      | <500µAfor B,BF,CF      | 225                   | 7.2                      |

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- 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

Authorised Signatory

(Calibration Engineer) K.SATHYAMOORTHY



| Technical Manager |
|-------------------|
| C.SHANMUGARAJ     |

Chief Executive



|                                   |                                 |            | C          | ALIBRA       | ATION (         | CERTI     | FICATE                  |            |               | ·                |  |
|-----------------------------------|---------------------------------|------------|------------|--------------|-----------------|-----------|-------------------------|------------|---------------|------------------|--|
| Certifica                         | te No: SBS/CL/23/13446          | j          |            |              |                 |           |                         |            |               | Page. No: 1 of 1 |  |
| Custome                           | er Name & Address               |            |            |              |                 |           |                         |            |               |                  |  |
|                                   |                                 |            |            |              |                 | SRF No.   |                         |            | SRF/23/0075   | 0-0003           |  |
| GOVERNMENT PRIMARY HEALTH CENTRE, |                                 |            |            |              | SRF Date        | ,         |                         | 07-10-2023 |               |                  |  |
| KARVIZ                            | KARVIZHI-638151,KARUR DISTRICT. |            |            |              |                 | Date of R | eceipt                  |            | 06-10-2023    |                  |  |
| Date of Calibration               |                                 |            |            |              |                 |           | 07-10-2023              |            |               |                  |  |
|                                   |                                 |            |            |              |                 | Due Date  | for Calibration         |            | 06-10-2024    |                  |  |
|                                   |                                 |            |            |              |                 | Issue Dat | e                       |            | 07-10-2023    |                  |  |
| Details o                         | of Unit Under Calibratio        | on         |            |              |                 |           |                         |            |               |                  |  |
| Descript                          | Pescription MICRO PIPETTE       |            |            |              |                 | Make      |                         |            | THERMO FISHER |                  |  |
| Range                             |                                 | 10-100µl   |            |              |                 | Model     |                         |            | NA            |                  |  |
| Resoluti                          | on                              | 0.2μ1      |            |              |                 | Material  |                         |            | PVC           |                  |  |
| Serial N                          | umber                           | RW01272    |            |              |                 | Operating | g Range                 |            | 10-100μ1      | 10-100µl         |  |
| ID Num                            | ber                             | NA         |            |              |                 | Condition | n of UUC                |            | Good          |                  |  |
| Cal. At                           |                                 | Mechanica  | l Lab      |              |                 | Instrume  | nt Location             |            | LABORATO      | RY               |  |
|                                   | Env                             | ironmental | Condition  |              |                 |           | Calibratio              | on Metho   | d Used        |                  |  |
| Гетрега                           | ture (°C)                       | 23.9       | Humidity   | (%RH)        | 55              | National  | / International Standar | d          | ISO 8655-6:2  | 002              |  |
| Atmosph                           | neric Pressure (mbar)           | 1006       | Water Temp | erature (°C) | 21.6            | Cal Proce | dure No                 |            | SBS/CP/ML/    | 08               |  |
| Standard                          | Used                            |            | 1          |              | 1               | 1         |                         |            |               |                  |  |
| SI. No.                           | Description                     | ID.No.     | / SI. No.  | (            | Certificate No. |           | Make/Model              | Trac       | eability      | Valid till       |  |
| 1                                 | Electronic Weighing<br>Balance  | 1511       | 2918       | TVC          | SPL22/12/2115   | -01       | A&D & GH-252            | Nationa    | al Standards  | 09-12-202        |  |

Z. Factor: 1.00319

|         |                  |                   |       | Res   | sult of Calibr | ation in µl   |                     |                 |                                |      |
|---------|------------------|-------------------|-------|-------|----------------|---------------|---------------------|-----------------|--------------------------------|------|
| Sl. No. | Nominal<br>Value | Observed Readings |       |       |                | Mean<br>Value | Systematic<br>Error | Random<br>Error | Measurement<br>Uncertainty (±) |      |
| 1       | 10.0             | 9.96              | 9.97  | 9.96  | 9.97           | 9.96          | 0.07                |                 | 0.01                           | 0.47 |
| 1       | 10.0             | 9.97              | 9.96  | 9.97  | 9.96           | 9.95          | 9.96                | -0.04           |                                |      |
| 2       | 50.0             | 49.85             | 49.86 | 49.85 | 49.85          | 49.84         | 40.04               | 0.17            | 0.04                           | 0.47 |
|         | 30.0             | 49.82             | 49.83 | 49.85 | 49.86          | 49.82         | 49.84               | -0.16           | 0.01                           |      |
| 3       | 100.0            | 99.77             | 99.76 | 99.75 | 99.74          | 99.76         | 99.75               | 0.25            | 0.00                           | 0.47 |
| 3       | 100.0            | 99.76             | 99.75 | 99.74 | 99.73          | 99.72         |                     | -0.25           | 0.02                           |      |

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- $5.\ Equipment\ used\ for\ Calibration\ were\ calibrated\ \&\ traceable\ to\ National\ \&\ International\ Standards$
- $6. The indicated uncertainties are expanded uncertainty estimated for a confidence level of approximately \ 95\% \ for \ a$ coverage factor k=2.00.

Chennai

600 032

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)

## 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.



|                                   |  |            | C         | ALIBRA | ATION (                       | CERTI                             | FICATE          |          |               |                  |  |
|-----------------------------------|--|------------|-----------|--------|-------------------------------|-----------------------------------|-----------------|----------|---------------|------------------|--|
| Certifica                         | te No: SBS/CL/23/13447   | ,          |           |        |                               |                                   |                 |          |               | Page. No: 1 of 1 |  |
| Custome                           | er Name & Address  |            |           |        |                               |                                   |                 |          |               |                  |  |
|                                   |  | _          |           |        |                               | SRF No.                           |                 |          | SRF/23/00750  | )-0004           |  |
| GOVERNMENT PRIMARY HEALTH CENTRE, |  |            |           |        |                               | SRF Date                          | ·               |          | 07-10-2023    |                  |  |
| KARVIZHI-638151,KARUR DISTRICT.   |  |            |           |        |                               | Date of R                         | eceipt          |          | 06-10-2023    |                  |  |
|                                   |  |            |           |        |                               | Date of C                         | Calibration     |          | 07-10-2023    |                  |  |
|                                   |  |            |           |        |                               | Due Date                          | for Calibration |          | 06-10-2024    |                  |  |
|                                   |  |            |           |        |                               | Issue Dat                         | e               |          | 07-10-2023    |                  |  |
| Details o                         | of Unit Under Calibrati  | on         |           |        |                               |                                   |                 |          |               |                  |  |
| Descript                          | ion  | MICRO PI   | PETTE     |        |                               | Make                              |                 |          | THERMO FISHER |                  |  |
| Range                             |  | 100-1000μ  | 1         |        |                               | Model                             |                 |          | NA            |                  |  |
| Resoluti                          | on   | 1μl        |           |        |                               | Material                          |                 |          | PVC           |                  |  |
| Serial N                          | umber  | RW02908    |           |        |                               | Operating                         | g Range         |          | 100-1000µl    | 100-1000μl       |  |
| ID Num                            | ber  | NA         |           |        |                               | Condition                         | n of UUC        |          | Good          |                  |  |
| Cal. At                           |  | Mechanica  | ıl Lab    |        |                               | Instrume                          | nt Location     |          | LABORATO      | RY               |  |
|                                   | Env  | ironmental | Condition |        |                               |                                   | Calibrati       | on Metho | d Used        |                  |  |
| Tempera                           | nture (°C)   | 23.9       | Humidity  | (%RH)  | 55                            | National / International Standard |                 |          | ISO 8655-6:20 | 002              |  |
| Atmosph                           | Atmospheric Pressure (mbar) 1006 Water Temperature (°C) 21.6 Cal Pro |            |           |        | Cal Procedure No SBS/CP/ML/08 |                                   |                 | 08       |               |                  |  |
| Standard                          | d Used   |            |           |        | 1                             | 1                                 |                 |          | 1             |                  |  |
| SI. No.                           | Description  | ID.No.     | / SI. No. |        | Certificate No.               |                                   | Make/Model Tra  |          | ceability     | Valid till       |  |
| 1                                 | Electronic Weighing<br>Balance                                       | 1511       | 12918     | TVC    | CSPL22/12/2115                | The country (                     |                 |          |               | 09-12-2023       |  |

Z Factor: 1.00319

|         |                  |                     |        | Res    | sult of Calibr | ation in µl         |                 |                                |      |      |
|---------|------------------|---------------------|--------|--------|----------------|---------------------|-----------------|--------------------------------|------|------|
| Sl. No. | Nominal<br>Value | l Observed Readings |        |        | Mean<br>Value  | Systematic<br>Error | Random<br>Error | Measurement<br>Uncertainty (±) |      |      |
| 1       | 1 100            | 99.81               | 99.82  | 99.83  | 99.81          | 99.83               | 00.02           | 0.45                           | 0.02 | 0.47 |
| •       | 100              | 99.82               | 99.83  | 99.84  | 99.85          | 99.87               | 99.83           | -0.17                          |      |      |
| 2       | 500              | 499.95              | 499.96 | 499.95 | 499.96         | 499.97              | 400.07          | 0.04                           | 0.01 | 0.47 |
|         | 300              | 499.96              | 499.97 | 499.98 | 499.98         | 499.96              | 499.96          | -0.04                          |      |      |
| 3       | 1000             | 999.85              | 999.86 | 999.87 | 999.88         | 999.85              | 000.86          | 0.14                           | 0.01 | 0.47 |
| ,       | 1000             | 999.87              | 999.85 | 999.86 | 999.87         | 999.86              | 999.86          | -0.14                          |      |      |

#### Remarks

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- $6. The indicated uncertainties are expanded uncertainty estimated for a confidence level of approximately 95\% for a coverage factor k=2.00 \ .$

Chennal

600 032

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

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