



## CALIBRATION CERTIFICATE

Certificate No: SBS/CL/23/11775

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Customer Name & Address

|  |                          |                   |
|--|--------------------------|-------------------|
| GOVERNMENT PRIMARY HEALTH CENTRE,<br>NEIKUPPAI-621117. | SRF No.                  | SRF/23/00412-0001 |
|  | SRF Date                 | 26-09-2023        |
|  | Date of Receipt          | 25-09-2023        |
|  | Date of Calibration      | 26-09-2023        |
|  | Due Date for Calibration | 25-09-2024        |
|  | Issue Date               | 27-09-2023        |

Details of Unit Under Calibration

|               |                |                     |            |
|---------------|----------------|---------------------|------------|
| Description   | MICRO PIPETTE  | Make                | MICROLUX   |
| Range         | 10-100µl       | Model               | NA         |
| Resolution    | 1µl            | 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)            | 23.2 | Humidity (%RH)         | 53   | 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

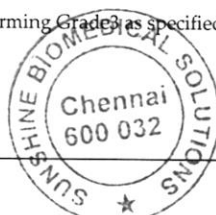
| Result of Calibration in µl |               |                   |       |       |       |       |            |                  |              |                             |  |
|-----------------------------|---------------|-------------------|-------|-------|-------|-------|------------|------------------|--------------|-----------------------------|--|
| Sl. No.                     | Nominal Value | Observed Readings |       |       |       |       | Mean Value | Systematic Error | Random Error | Measurement Uncertainty (±) |  |
| 1                           | 10            | 9.94              | 9.93  | 9.94  | 9.92  | 9.94  | 9.93       | -0.07            | 0.01         | 0.47                        |  |
|                             |               | 9.92              | 9.92  | 9.94  | 9.94  | 9.94  |            |                  |              |                             |  |
| 2                           | 50            | 49.87             | 49.88 | 49.87 | 49.88 | 49.87 | 49.87      | -0.13            | 0.01         | 0.47                        |  |
|                             |               | 49.88             | 49.86 | 49.87 | 49.86 | 49.87 |            |                  |              |                             |  |
| 3                           | 100           | 99.86             | 99.87 | 99.88 | 99.87 | 99.88 | 99.87      | -0.13            | 0.01         | 0.47                        |  |
|                             |               | 99.87             | 99.86 | 99.86 | 99.88 | 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 Grades as specified in ISO 3696.

Calibrated By,

(Calibration Engineer)  
 M.RAGUL



Authorised by:

(Quality Manager/Chief Executive)  
 C.SIVABALAN

## 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.



## CALIBRATION CERTIFICATE

Certificate No: SBS/CL/23/11776

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Customer Name & Address

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|--|--------------------------|-------------------|
| GOVERNMENT PRIMARY HEALTH CENTRE,<br>NEIKUPPAI-621117. | SRF No.                  | SRF/23/00412-0002 |
|  | SRF Date                 | 26-09-2023        |
|  | Date of Receipt          | 25-09-2023        |
|  | Date of Calibration      | 26-09-2023        |
|  | Due Date for Calibration | 25-09-2024        |
|  | Issue Date               | 27-09-2023        |

Details of Unit Under Calibration

|               |                |                     |            |
|---------------|----------------|---------------------|------------|
| Description   | MICRO PIPETTE  | Make                | MICROLUX   |
| Range         | 100-1000µl     | Model               | NA         |
| Resolution    | 10µl           | 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)            | 23.2 | Humidity (%RH)         | 53   | 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         | TVCSP22/12/2115-01 | 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           | 99.94             | 99.92  | 99.93  | 99.92  | 99.93  | 99.92      | -0.08            | 0.01         | 0.47                        |
|         |               | 99.91             | 99.90  | 99.92  | 99.91  | 99.92  |            |                  |              |                             |
| 2       | 500           | 499.89            | 499.92 | 499.88 | 499.87 | 499.88 | 499.87     | -0.13            | 0.02         | 0.47                        |
|         |               | 499.86            | 499.87 | 499.85 | 499.86 | 499.85 |            |                  |              |                             |
| 3       | 1000          | 999.69            | 999.72 | 999.75 | 999.74 | 999.72 | 999.72     | -0.28            | 0.02         | 0.47                        |
|         |               | 999.73            | 999.74 | 999.71 | 999.72 | 999.71 |            |                  |              |                             |

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. 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 Grade 3 as specified in ISO 3696.

Calibrated By,

(Calibration Engineer)  
 M.RAGUL



Authorised by:

(Quality Manager/Chief Executive)  
 C.SIVABALAN

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